

This article was downloaded by: [Tomsk State University of Control Systems and Radio]

On: 20 February 2013, At: 11:50

Publisher: Taylor & Francis

Informa Ltd Registered in England and Wales Registered Number: 1072954

Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



Molecular Crystals and Liquid Crystals

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/gmcl16>

Liquid Crystals: A Bibliography for 1980

W. Fehrenbach^a, A Stieb^a & G. Meier^a

^a Fraunhofer-Institut fuer Angewandte Festkoerperphysik, Eckerstr, 4, 0-7800, Freiburg, W.-Germany

Version of record first published: 28 Mar 2007.

To cite this article: W. Fehrenbach, A Stieb & G. Meier (1985): Liquid Crystals: A Bibliography for 1980, *Molecular Crystals and Liquid Crystals*, 126:2-4, 299-364

To link to this article: <http://dx.doi.org/10.1080/00268948508084798>

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: <http://www.tandfonline.com/page/terms-and-conditions>

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae, and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand, or costs or damages

whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

Liquid Crystals

A Bibliography for 1980[†]

W. FEHRENBACH, A. STIEB and G. MEIER

*Fraunhofer-Institut fuer Angewandte Festkoerperphysik,
Eckerstr. 4, D-7800 Freiburg, W.-Germany*

Compiled on 07/07/1983

References

1. Abraham, D. B., and Heilmann, O. J., *J. Phys. A.*, **13** 1051 (1980), Interacting dimers on the simple cubic lattice as a model for liquid-crystals.
2. Achard, M. F., Sigaud, G., and Hardouin, F., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 149, Springer-Verlag, 1980, Influence of a smectic phase on the thermodynamical behavior of the nematic to isotropic phase transition.
3. Acimis, M., and Reeves, L. W., *Can J. Chem.*, **58** 1533 (1980), A type-II aqueous cholesteric lyomesophase.
4. Adamski, P., Holwek, A., Dylik-Gro., L. A. and Wojciecho., M., *Molec. Cryst.* **60** 53 (1980), Influence of cyclohexanone admixture on molecular arrangement order S of cholesteryl nonanoate.
5. Adamski, P., Dylik-Gro., L. A. and Wojciecho., M., *Molec. Cryst.* **62** 155 (1980), An extrapolation method of determining the polarizability anisotropy of solid state cholesteryl esters.
6. Adeleke, S. A., *Int. J. Sol. St.*, **16** 199 (1980), On material symmetry in mechanics.
7. Aftergut, S., and Cole, H. S., *Sid. Dig.*, **11** 190 (1980), Optical performance of a black-and-white reflective dichroic liquid-crystal display.
8. Aharoni, S. M., *Molec. Cryst.*, **56** 237 (1980), Rigid Backbone Polymers .13. Effects of the nature of the solvent on the lyotropic mesomorphism of cellulose-acetate.
9. Aharoni, S. M., *Ferroelectr.*, **30** 227 (1980), Rigid backbone polymers .15. Phase transitions in polyisocyanate solution.

[†]Bibliography was compiled by using mainly material from the Citation Service ASCA of the Institute for Scientific Information, Philadelphia, Pennsylvania 19106, U.S.A. Period after author indicates abbreviation of name due to limited length available during compilation.

10. Aharoni, S. M., *Polymer*, **21** 1413 (1980), Rigid backbone polymers .17. Solution viscosity of polydisperse systems.
11. Aharoni, S. M., *Polymer*, **21** 21 (1980), Rigid backbone polymers .6. Ternary phase relationships of polyisocyanates.
12. Akahane, T., Hashimoto, T., and Tako, T., *Jap. J. A. Phys.*, **19** 1419 (1980), Interference method using polychromatic light for the determination of refractive indexes and birefringence of liquid-crystals.
13. Akiyama, R., Saito, Y., Fukuda, A., Kuze, E., and Goto, N., *Jap. J. A. Phys.*, **19** 1937 (1980), Dependence of Rayleigh line intensity on scattering angle in aligned nematic liquid-crystals.
14. Albertini, G., Dubini, B., Melone, S., Ponziboss., M. G., Puiti, P., and Rustichell., F., *Nuov. Cim. B.*, **58** 157 (1980), Temperature dependence of lattice parameters in solid, smectic BC and metastable phases of TBBA.
15. Albertini, G., Dubini, B., Melone, S., Ponziboss., M. G., and Rustichell., F., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 52, Springer-Verlag, 1980, Investigation of a smectic-H smectic-C phase transition by x-ray diffraction.
16. Albertini, G., Dubini, B., Melone, S., Rustichell., F., and Torquati, G., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 53, Springer-Verlag, 1980, X-ray diffraction study of the mesophase of octaphenylcyclotetrasiloxane.
17. Albrand, J. P., and Robert, J. B., *Pur. A. Chem.*, **52** 1047 (1980), Nuclear magnetic resonance of organophosphorus molecules oriented in liquid-crystal.
18. Aliev, D. F., and Zeinaly, A. K., *Zh. Eksp. Teo.*, **78** 2349 (1980), (RS) A novel electro-optical effect in the smectic C phase of liquid-crystal.
19. Aliev, D. F., Akhundov, G., and Zeinaly, A. K., *Sov. Te. Ph. L.*, **6** 583 (1980), Behavior of the smectic C2 phase in an electric field.
20. Aliev, F. M., Baushev, V. N., Dulnev, G. N., Meshkovs., I. K., and Prokhorov, A. M., *D. A. N. SSSR*, **253** 598 (1980), (RS) Optoelectronic cell based on thermally controllable light-scattering in the heterogeneous system of porous glass and liquid-crystal.
21. Alpay, M. H., Schroeder, D. C., and Schroeder, J. P. *Molec. Cryst.*, **62** 81 (1980), Liquid-crystals .8. Nematogenic compounds with a terminal dimethyl-aminoethoxy group.
22. Als-Nielsen, J., Litster, J. D., Birgeneau, R. J., Kaplan, M., Safinya, C. R., Lindegaa., A., and Mathies., S., *Phys. Rev. B*, **22** 312 (1980), Observation of algebraic decay of positional order in a smectic liquid-crystal.
23. Als-Nielsen, J., Litster, J. D., Birgeneau, R. J., Kaplan, M., and Safinya, C. R., *Ordering in Strongly Fluctuating Condensed Matter Systems*, p. 57, Plenum, N.Y., 1980, Lower marginal dimensionality. X-ray scattering from the smectic-A phase of liquid-crystals.
24. Amaral, L. Q., and Tavares, M. R., *Molec. Cryst.*, **56** 203 (1980), On the possible formation of macromicelles in a lyomesophase.
25. Andersson, L., and Norden, B., *Chem. P. Lett.*, **75** 398 (1980), On the use of moments for describing the molecular orientation distribution.
26. Andre, Y. B., Chambare., J. P., Lamourou., E. L., and Prade, B. S., *Infrar. Phys.*, **20** 341 (1980), Transient thermal behavior of a liquid-crystal target.
27. Aneva, N., Petrov, A. G., Sokerov, S., and Stoylov, S. P., *Molec. Cryst.*, **60** 1 (1980), Dynamics of the Fredericksz transition in the electric field in non-ideally oriented nematic layers at sub-threshold and above threshold voltages.
28. Anisimov, M. A., Mamnitsk., V. M., and Sorkin, E. L., *J. Eng. Phys.*, **39** 1385 (1980), Anomalies of the specific heat in the vicinity of the phase transition from isotropic liquid to nematic liquid-crystal.
29. Arakelya., S. M., Eritsyan, O. S., Karayan, A. S., and Chilinga., Y. S., *Sov. J. Q. El.*, **10** 547 (1980), Optical characteristics of a layer of a cholesteric liquid-crystal between dielectric plates of finite thickness and an analysis for a loaded Fabry-Perot resonator.
30. Arakelya., S. M., Lyakhov, G. A., and Chilinga., Y. S., *Sov. Phys. Usp.*, **23** 245 (1980), Non-linear optics of liquid-crystals.

31. Arakelya., S. M., Tabiryan, N. V., and Chilinga., Y. S., *Sov. Ph. Tp. R.*, **25** 764 (1980), Generation of second harmonic in a nematic liquid-crystal.
32. Arakelya., S. M., Galstyan, S. R., Garibyan, O. V., Karayan, A. S., and Chilinga., Y. S., *Jetp. Letter*, **32** 543 (1980), Strong, non-linear optical activity in the nematic phase of a liquid-crystal.
33. Araya, K., and Matsunag., Y., *B. Chem. S. Jap.*, **53** 989 (1980), Liquid-crystal formation in binary-systems. 1. An interpretation of the phase diagrams of the azoxydianisole Schiff base systems.
34. Araya, K., and Matsunag., Y., *B. Chem. S. Jap.*, **53** 3079 (1980), Liquid-crystal formation in binary-systems. 2. Induction of nematic and smectic phases by electron donor acceptor interaction between the para-dimethylamino and paranitro derivatives of n-benzylideneaniline.
35. Armitage, D., *J. Appl. Phys.*, **51** 2552 (1980), Alignment of liquid-crystals on obliquely evaporated silicon-oxide films.
36. Armitage, D., *Appl. Optics*, **19** 2235 (1980), Liquid-crystal voltage controlled retardation display.
37. Armitage, D., and Cox, R. J., *Molec. Cryst.*, **64** 41 (1980), Liquid-crystal blue phase to isotropic transition and electric field response.
38. Aronishi., S. N., Dmitrienko, V., Khoshtar., D. G., and Chilaya, G. S., *JETP Letter*, **32** 17 (1980), Circular dichroism in absorbing mixtures with a cholesteric structure.
39. Arora, V. P., Agarwal, V. K., and Mansingh, A., *Nat. Ac. Sci. I*, **3** 339 (1980), Dielectric behavior of EBBA in the temperature range -30 degrees C to $+25$ degrees C.
40. Arslan, P., Beltrame, M., and Muscate., U., *Micron*, **11** 115 (1980), Ultrastructural characterization of cardiolipin liquid-crystalline structures in the absence and the presence of divalent cations.
41. Asada, T., Muramats., H., Watanabe, R., and Onogi, S., *Macromolec.*, **13** 867 (1980), Rheooptical studies of racemic poly(gamma-benzyl glutamate) liquid-crystals.
42. Auderer, G., *Feinw. Messt.*, **88** 60 (1980), (GE) Liquid-crystal display elements.
43. Auguie, D., Oberlin, M., Oberlin, A., and Hyvernart, P., *Carbon*, **18** 337 (1980), Microtexture of mesophase spheres as studied by high resolution conventional transmission electron microscopy (CTEM).
44. Averyano., E. M., Denite, Y., Korets, A. Y., Sorokin, A. V., and Shabanov, V. F., *Kristallogr.*, **25** 319 (1980), (RS) Orientational-statistical properties of a pure and impure liquid-crystal of amyloxycyanobiphenyl.
45. Averyano., E. M., Korets, A. Y., and Shabanov, V. F., *Zh. Eksp. Teo.*, **78** 2374 (1980), (RS) Investigation of the conformational mobility of mesophase molecules by the optical probing technique.
46. Averyano., E. M., *Sov. Ph. S. S. R.*, **22** 1088 (1980), Inversion of the splitting in the spectrum of a nematic induced by the local field anisotropy.
47. Averyano., E. M., Zhuikov, V. A., Korets, A. Y., Shabanov, V. F., and Adomenas, P. V., *JETP Letter*, **31** 480 (1980), Critical increase of the bending fluctuations of molecules and the nematic to isotropic liquid phase transition.
48. Azaroff, L. V., *Molec. Cryst.*, **60** 73 (1980), X-ray diffraction by liquid-crystals.
49. Azaroff, L. V., *P. Nat. A. S. US*, **77** 1252 (1980), X-ray scattering by cybotactic nematic mesophases.
50. Bacalog., R., Moraru, A., Nutiu, M., Iluc, S., Scunderl., C., and Lungu, E., *Rev. Ro. Chim.*, **25** 921 (1980), (GE) Liquid-crystals .2. Synthesis of para-alkyl anilines for benzilidene-aniline liquid-crystals.
51. Bach, D., Sela, B., and Miller, I. R., *Bioch. Pharm.*, **29** 849 (1980), Thermotropic properties of brain lipids in the presence and absence of local anesthetics.
52. Bacon, R., *Phi. T. Roy. A.*, **294** 437 (1980), Carbon fibers from mesophase pitch.
53. Baird, D. G., *J. Rheol.*, **24** 465 (1980), Rheological properties of liquid-crystalline solutions of poly-p-phenyleneterephthalamide in sulfuric acid.

54. Baisa, D. F., Ovcharen, Trofimov, A. S., and Chesnoko., E. D., *Ukr. Fiz. Zh.*, **25** 1089 (1980), (RS) Proton spin-lattice relaxation in cholesteric liquid-crystals.
55. Balibi, C., Bianchi, E., Ciferri, A., Tealdi, A., and Krigbaum, W. R., *J. Pol. Sc. P. P.*, **18** 2037 (1980), Equilibria of extended-chain polymers exhibiting crystalline and liquid-crystalline phases.
56. Ball, J. E., *Phys. Educ.*, **15** 108 (1980), Liquid-crystals.
57. Baraff, D. R., Boynton, R., Gribbon, B., Long, J. R., Maclaurin, B. K., Miner, C. J., Serinken, N. M., Streater, R. W., and Westwood, W. D., *Sid. Dig.*, **18** 200 (1980), The application of metal-insulator-metal nonlinear devices in multiplexed liquid-crystal displays.
58. Baranova, N. B., and Zeldovich, B. Y., *JETP Letter*, **32** 622 (1980), Enhanced transmission of an unoriented mesophase of nematics for the ordinary wave.
59. Barbarin., F., Boulet, E., Chausse, J. P., Fabre, C., and Germain, J. P., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 148, Springer-Verlag, 1980, Electron spin resonance: Structure of CBOOA and BOBOA.
60. Barbero, G., Malvano, R., and Strigazz., A., *Nouv. Cim. B*, **59** 367 (1980), Planar deformation induced in a homeotropic nematic liquid-crystal by simultaneously applied magnetic and electric fields.
61. Barbero, G., *Lett. Nuov. C.*, **29** 553 (1980), Surface geometry and induced orientation of a nematic liquid-crystal.
62. Barboy, B., and Gelbart, W. M., *J. Stat. Phys.* **22** 685 (1980), Hard-particle fluids. I. General scaled-particle-like descriptions.
63. Bardeen, J., *Ann. R. Mater.*, **10** 1 (1980), Unity of concepts in the structure of matter.
64. Barili, P. L., Veracini, C. A., and Longeri, M., *Inor. Ch. A. A.*, **40** 92 (1980), Solute-solute interactions by NMR of molecules dissolved in liquid-crystal solvents. Pyridine-iodine molecular complex in nematic phase.
65. Barnik, M. I., Ivashche., A. V., Kostylev, K. A., Malofeev, V. S., and Shtykov, N. M., *Sov. J. Opt.*, **47** 281 (1980), High-speed light modulator employing the twist effect in nematic liquid-crystals.
66. Barratt, P. J., and Bramley, J. S., *J. Phys. C*, **13** 535 (1980), Analysis of thermal instabilities in a layer of nematic liquid-crystal with oblique orientation at the boundaries.
67. Bartolino, R., and Simoni, F., *Optica Acta*, **27** 1179 (1980), Rotatory power of cholesteric liquid-crystals. Effects of electric fields.
68. Bartolino, R., Malthete, J., and Barra, O., *J. Physique*, **41** 365 (1980), Molecular structure and elastic behavior of smectic-A liquid-crystals.
69. Bauman, D., and Wrobel, D., *Biophys. Ch.*, **12** 83 (1980), Dichroism and polarized fluorescence of chlorophyll-A, chlorophyll-C and bacteriochlorophyll-A dissolved in liquid-crystals.
70. Baur, G., *Physics and Chemistry of Liquid-Crystal Devices*, p. 61, Plenum, N.Y., 1980, Optical characteristics of liquid-crystal displays.
71. Bechtold, W., Long, R. C., and Goldstein, J. H., *J. Magn. Res.*, **40** 361 (1980), The NMR-spectrum and proton structure of naphthalene in lyotropic mesophase.
72. Beckmann, P. A., *Can. J. Phys.*, **58** 1544 (1980), A deuterium nuclear magnetic resonance study of chain disorder in lamellar potassium palmitate: The effect of long and short chain guests.
73. Belotski., E. D., Lev, B. I., and Tomchuk, P. M., *JETP Letter*, **31** 539 (1980), Effective ion mass in a liquid-crystal.
74. Bena, R., Cuculescu, I., Enache, A., and Baci, I., *B. I. Po. Buc. E.*, **42** 19 (1980), (RU) Transmission and electrical properties of the compensated cholesteric mixture cholesteryl chloride and cholesteryl nonanoate.
75. Bennattar, J. J., Moussa, F., Lambert, M., and Germain, C., *C. R. Ac. Sci. B*, **291** 283 (1980), (FR) Two types of two-dimensional order: Smectic-F and smectic-I phases.
76. Bennattar, J. J., Moussa, F., and Lambert, M., *J. Physique*, **41** 1371 (1980), Two-dimensional order in the smectic-F phase.

77. Bennattar, J. J., Moussa, F., Lambert, M., and Levelut, A. M., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 49, Springer-Verlag, 1980, Two-dimensional order in the SMF phase.
78. Benguigui, L., *J. Physique*, **41** 341 (1980), Dielectric anisotropy in the smectic phases of liquid-crystals.
79. Benguigui, L., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 71, Springer-Verlag, 1980, Dielectric properties and structure of the smectic phases.
80. Benicewi, B. C., Huang, S. J., and Johnson, J. F., *Abs. Pap. Acs.*, **180** 100 (1980), Keto-enamine model compounds for liquid-crystalline polymers.
81. Benjamin, R., *Radio El. En.*, **50** 165 (1980), An analysis of possible drive schemes for complex liquid-crystal displays.
82. Benjamin, R., *Radio El. En.*, **50** 281 (1980), Matrix-addressed liquid-crystal displays.
83. Beresnev, L. A., Blinov, L. M., and Purvanet., G. V., *JETP Letter*, **31** 37 (1980), Critical behavior of a liquid-crystal near the phase transition between two ferro-electric phases.
84. Berges, J., and Perrin, H., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 77, Springer-Verlag, 1980, Theoretical conformational study of alkyl and alkoxy chains in MBBA, EBBA and TBBA.
85. Berman, A. L., and Kramer, G., *P. Sid.*, **21** 67 (1980), A method for constructing very large light-field pleochroic liquid-crystal displays.
86. Berman, A. L., and Oh, C. S., *Physics and Chemistry of Liquid-Crystal Devices*, p. 241, Plenum, N.Y., 1980, The role of shadows in the viewability of twisted nematic liquid-crystal displays.
87. Bermejo, F. J., *An. Quimica*, **76** 40 (1980), ESR studies of slow tumbling spin labels: Application to the study of molecular interactions in a model system of bilayer membranes.
88. Bernasco., J., Strassle., S., and Zeller, H. R., *Phys. Rev. A*, **22** 276 (1980), Vander-waals contribution to the surface and anchoring energies of nematic liquid-crystals.
89. Berreman, D. W., and Heffner, W. R., *Appl. Phys. L.*, **37** 109 (1980), New bistable cholesteric liquid-crystal display.
90. Berreman, D. W., *Physics and Chemistry of Liquid-Crystal Devices*, p. 1, Plenum, N.Y., 1980, Surface orientation and compliance effects on twist-cell performance.
91. Bhattach., S., and Letcher, S. V., *Phys. Rev. L.*, **44** 414 (1980), Flow behavior of an oriented reentrant nematic liquid-crystal.
92. Bhattach., S., Stroschio, J. A., and Letcher, S. V., *B. Am. Phys. S.*, **25** 674 (1980), Dynamic study of a reentrant nematic liquid-crystal.
93. Bheda, J., Fellers, J. F., and White, J. L., *Abs. Pap. Acs.*, **179** 7 (1980), Phase-transitions and structure of liquid-crystalline solutions of cellulose derivatives.
94. Bheda, J., Fellers, J. F., and White, J. L., *Colloid P. S.*, **258** 1335 (1980), Phase behavior and structure of liquid-crystalline solutions of cellulose derivatives.
95. Biering, A., Demus, D., Richter, L., Sackmann, H., Wiegeleb., A., and Zaschke. H., *Molec. Cryst.*, **62** 1 (1980), Polymorphism in the homologous series of the 2-(4-alkylphenyl)-5-(4-alkyloxyphenyl)-pyrimidines.
96. Bilibin, A. Y., Shepelev., A. A., Frenkel, S. Y., and Skorokho, S. S., *Vyso. Soed. B.*, **22** 739 (1980), (RS) Poly-(alkilen-phenylen)di-oxy-benzoates. Poly-meric nematic crystals.
97. Billard, J., *B. Mineral*, **103** 444 (1980), (FR) The mesophases and their orientation by solid surfaces.
98. Billard, J., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 383, Springer-Verlag, 1980, Discotic mesophases: A review.
99. Birecki, J., and Kahn, F. J., *J. Appl. Phys.*, **51** 1950 (1980), The optics of twisted nematic liquid-crystal displays.
100. Birecki, H., and Kahn, F. J., *Physics and Chemistry of Liquid-Crystal Devices*, p. 115, Plenum, N.Y., 1980, Accurate optical measurement of small tilt angles in thin twisted nematic layers.

101. Birecki, H., and Kahn, F. J., *Physics and Chemistry of Liquid-Crystal Devices*, p. 125, Plenum, N. Y., 1980, Effects of cell and material properties on multiplexing levels of twisted nematic liquid-crystal displays.
102. Biswas, A. B., Deshpand., D. D., and Rao, A. V., *Polymer*, **21** 548 (1980), Radiation polymerization of methyl-methacrylate in the presence of liquid-crystals.
103. Blackburn, W. J., *J. Phys. D*, **13** 1785 (1980), On the exploitation of the cholesteric to nematic phase change effect for multiplexed liquid-crystal displays.
104. Blinc, R., Kozelj, M., Rutar, V., Zupanici, I., Zecs, B., Arend, H., Kind, R., and Chapuis, G., *Faraday Dis.*, **58** (1980), C-13 nuclear magnetic-resonance study of phase transitions in a lipid bilayer embedded in a crystalline matrix. (C10H21NH3)2CdCl4 and (C10H21NH3)CuCl4.
105. Blinc, R., Luzar, M., Seliger, J., Vilfan, M., and Rutar, V., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 34, Springer-Verlag, 1980, Magnetic resonance of chiral and achiral smectics.
106. Blume, A., *Biochem.*, **19** 4908 (1980), Thermotropic behavior of phosphatidylethanolamine-cholesterol and phosphatidylethanolamine-phosphatidylcholine-cholesterol mixtures.
107. Blume, A., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 352, Springer-Verlag, 1980, Differential scanning calorimetric studies of mixtures of cholesterol with phosphatidyl-ethanolamine and phosphatidylethanolamine-phosphatidylcholine mixtures.
108. Blumstei., A., Sivarama, K. N., Vilasagar, S., Blumstei., R. B., and Clough, S. B., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 252, Springer-Verlag, 1980, Thermotropic polymeric liquid-crystals: Polymers with mesogenic elements and flexible spacers in the main chain.
109. Bobylev, Y. U. P., Bobylev, B., Vasilev., A. S., Sonin, A. S., and Slepков, I. A., *Sov. Ph. S. S. R.*, **22** 1011 (1980), Domains in MBBA subjected to a transverse electric field.
110. Bock, M., Heppke, G., Kohne, B., and Praefcke, K., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 78, Springer-Verlag, 1980, Refractive indices and dielectric constants of the nematic and smectic phases of O-, S-, Se- and Te-4-pentylphenyl-4-alkyloxychalcogenbenzoates.
111. Boden, N., McMullen, K. J., Holmes, M. C., and Tiddy, G. J. T., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 299, Springer-Verlag, 1980, Reorientation of the director of an amphiphilic nematic mesophase in a static magnetic field.
112. Bodmann, H. W., Knoll, P. M., and Rickleffs, U., *Molec. Cryst.*, **56** 243 (1980), Light transmission of nematic liquid-crystals.
113. Boero, J. F. R., and Wargon, J. A., *Carbon*, **18** 37 (1980), Study of the AlCl3 catalytic activity on aromatic hydrocarbons. 2. Mesophase formation.
114. Bogdanov, D. L., Gevorkya., E. V., and Lagunov, A. S., *Sov. Ph. Ac. R.*, **26** 14 (1980), Acoustical properties of liquid-crystals in a rotating magnetic field.
115. Bonekamp, J., Eguchi, T., and Jonas, J., *Chem. P. Lett.*, **75** 360 (1980), NA-23 NMR-study of ionic mesophases in molten sodium carboxylates.
116. Borkowsk., L., Stecki, J., and Nagel, J. F., *Molec. Phys.*, **40** 333 (1980), Nematic ordering in monomer-dimer system with attractive interactions on a square lattice.
117. Bos, P. J., Shetty, A. N., Doane, J. W., and Neubert, M. E., *J. Chem. Phys.*, **73** 733 (1980), Molecular and relative segmental order in the nematic and smectic C-phases. A nuclear magnetic resonance study.
118. Bouchet, F. R., and Cladis, P. E., *Mol. Cryst.*, **64** 81 (1980), Density measurements of alloys exhibiting the re-entrant nematic phase.
119. Bouligand, Y., *J. Physique*, **41** 49 (1980), Topology of symmetry defects.
120. Bouligand, Y., *J. Physique*, **41** 1297 (1980), Geometry of (non smectic) hexagonal mesophases.
121. Bouligand, Y., *Dislocations in Solids*, Vol. 5, p. 299, North-Holland, 1980, Defects and textures in liquid-crystals.

122. Bouligand, Y., *J. Physique*, **41** 1307 (1980), Defects and textures of hexagonal discotics.
123. Bowen, J. M., Crone, T. A., Hermann, A. C., and Purdie, N., *Analyt. Chem.*, **52** 2436 (1980), Circular dichroism spectra of opium-alkaloids in a cholesteric liquid-crystalline solvent system.
124. Boyd, G. D., Cheng, J., and Ngo, P. D. T., *Appl. Phys. L.*, **36** 556 (1980), Liquid-crystal orientational bistability and nematic storage effects.
125. Bradshaw, W. G., and Mamone, V. P., *Carbon*, **18** 41 (1980), Mesophase formation as affected by pitch chemistry and impregnation pressure.
126. Brand, H., and Pleiner, H., *J. Physique*, **41** 553 (1980), Non-linear reversible hydrodynamics of liquid-crystals and crystals.
127. Brand, H., and Schenzle, A., *J. Ph. Soc. Jap.*, **48** 1382 (1980), Comment of effect of white noise on electrohydro-dynamic instabilities in nematics.
128. Brochard, F., *C. R. Ac. Sci. B.*, **290** 485 (1980), Flexible polymers in solution in a nematic limit of strong perturbations.
129. Brog, T. K., and Collings, P. J., *Molec. Cryst.*, **60** 65 (1980), Optical activity in the blue phase of a cholesteric liquid-crystal.
130. Broude, V. L., and Dolganov, V. K., *Molec. Cryst.*, **57** 163 (1980), Inelastic neutron scattering by deuterated para-azoxy-phenetole.
131. Brown, G. H., *Abs. Pap. Acs.*, **180** 86 (1980), Color in chiral liquid-crystalline compounds.
132. Brownsey, G. J., and Leadbetter, A., *Phys. Rev. L.*, **44** 1608 (1980), Incommensurate coexistent density fluctuations in liquid-crystal phases of cyano compounds.
133. Bryan, R. F., and Forcier, P. G., *Molec. Cryst.*, **60** 157 (1980), Crystal structure basis for the absence of thermal mesomorphism in p-hydroxy-trans-cinnamic acid.
134. Bryan, R. F., and Forcier, P. G., *Molec. Cryst.*, **60** 133 (1980), Contrasting solid-state structures for two nematogenic benzylideneanilines. Crystal structure of p-((p-ethoxybenzylidene)amino)-benzonitrile and p-((p-methoxybenzylidene)amino)-phenyl acetate.
135. Bryan, R. F., and Hartley, P., *Molec. Cryst.*, **62** 259 (1980), An x-ray study of the n-alkoxybenzoic acids .5. Crystal-structures of the nematogenic acids having 3 and 5 alkyl-chain carbon atoms.
136. Bryan, R. F., Hartley, P., Miller, R. W., and Shen, M. S., *Molec. Cryst.*, **62** 281 (1980), An x-ray study of the p-n-alkoxybenzoic acids .6. Isotopic crystal structures of four smectogenic acids having seven, eight, nine and ten alkyl chain carbon atoms.
137. Bryan, R. F., Hartley, P., and Miller, R. W., *Molec. Cryst.*, **62** 281 (1980), An x-ray study of the p-n-alkoxybenzoic acids .7. Crystal structures of related forms of p-n-hexoxy- and p-n-octoxy-benzoic acids.
138. Bryan, R. F., and Hartley, P., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 79, Springer-Verlag, 1980, Crystal structures of smectogenic p-n-alkoxybenzoic-acids.
139. Budianu, G., *B. I. Po. Buc. C.*, **42** 11 (1980), On some electrical properties of the cells with nematic liquid-crystals having different doped electrodes.
140. Buechler, M., Ng, C. B., and White, J. L., *Carbon*, **18** 43 (1980), Needlelike coke prepared by deformation of carbonaceous mesophase.
141. Buechler, M., Ng, C. B., and White, J. L., *Am. Ceram. S.*, **59** 820 (1980), Hot-stage observations of disclination reactions in carbonaceous mesophase.
142. Buka, A., Bata, L., and Kresse, L., *Hu. Ac. Sc. Bu. KFKI*, **4** 8 (1980), Reorientation of the long molecular axis in smectic phases.
143. Bull, H. B., and Breese, K., *Arch. Bioch.*, **202** 116 (1980), Protein solubility and the lyotropic series of ions.
144. Bunning, J. D., Goodby, J. W., Gray, G. W., and Lydon, J. E., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 397, Springer-Verlag, 1980, The classification of mesophase of di-I-butyl-silanediol.

145. Burnell, E. E., *J. Magn. Res.*, **39** 461 (1980), Effects of interaction between molecular internal motions and reorientation on NMR of anisotropic liquids.
146. Burnell, E. E., and Delange, C. A., *Chem. P. Lett.*, **76** 268 (1980), On the average orientation of molecules undergoing large-amplitude conformational changes in anisotropic liquids.
147. Byron, D. J., Keating, D. A., O'Neill, M. T., Wilson, R. C., Goodby, J. W., and Gray, G. W., *Molec. Cryst.*, **58** 179 (1980), The effect of the reversal of the central schiffs base linkage on liquid-crystal properties: The 4-phenylbenzilidene-4-alkoxyanilines and 4-(4-alkoxybenzylideneamino)-biphenyls.
148. Byron, D. J., Lacey, D., and Wilson, R. C., *Molec. Cryst.*, **62** 103 (1980), Properties of the liquid-crystals formed by certain 4-(2-pyridyl)phenyl and 4-(4-pyridyl)phenyl 4-n-alkoxybenzoates.
149. Cagnon, M., and Durand, G., *Phys. Rev. L.*, **45** 1418 (1980), Mechanical shear of layers in smectic-A and smectic-B liquid crystal.
150. Caille, A., Pink, D., Deverteu, F., and Zuckerman, M. J., *Can. J. Phys.*, **58** 581 (1980), Theoretical models for quasi-two-dimensional mesomorphic monolayers and membrane bilayers.
151. Calder, I. D., Sarma, B. K., Cheng, B. Y., and Ketterso., J. B., *B. Am. Phys. S.*, **25** 213 (1980), Acoustic evidence for quasi-two-dimensional behavior of the smectic-A smectic-B phase transition in 4O.8.
152. Calder, I. D., Sarma, B. K., Cheng, B. Y., and Ketterso., J. B., *Phys. Rev. A*, **22** 2133 (1980), Unusual melting behavior in smectic liquid-crystal.
153. Candau, F., and Wittmann, J. C., *Molec. Cryst.*, **56** 171 (1980), Experimental evidence of mesomorphic phases in quaternary systems in containing amphiphilic macro-molecules.
154. Candau, S., Ferre, A., Peters, A., Waton, G., and Pieranski, P., *Molec. Cryst.*, **61** 7 (1980), Acoustical streaming in a film of nematic liquid-crystal.
155. Castellano, J., and Harrison, K. J., *Physics and Chemistry of Liquid-Crystal Devices*, p. 263, Plenum, N.Y., 1980, Liquid-crystal materials for display devices.
156. Castleber., D. E., and Levinson, L. M., *SID Dig.*, **11** 198 (1980), A 2" x 5" varistor-controlled liquid-crystal matrix display.
157. Catalano, D., Marcolin., L., Veracini, C. A., Chidichi., G., and Longeri, M., *Inor. Ch. A. A.*, **40** 88 (1980), Solute solvent interactions by NMR of molecules dissolved in liquid-crystal solvents.
158. Chaban, I. A., *Biofizika*, **25** 989 (1980), (RS) Phase transition in lyotropic liquid-crystals: Stability of bilayers and micelles.
159. Chadwick, A. V., and Paykary, M., *Molec. Phys.*, **39** 637 (1980), Radiotracer study of self-diffusion in the smectic phases iso-butyl 4-(4-phenylbenzylidene-amino) cinnamate (IBPBAC).
160. Chardras., S., and Madhusud., N. V., *Ann. R. Mater.*, **10** 133 (1980), Liquid-crystals.
161. Chang, I. F., *P. Sid.*, **21** 45 (1980), Recent advances in display technologies.
162. Channin, D. J., and Sussman, A., *T. Appl. Phys.*, **40** 151 (1980), Liquid-crystal displays, LCD.
163. Chanzy, H., Peguy, A., Chaunis, S., and Monzie, P., *J. Pol. Sc. P. P.*, **18** 1137 (1980), Oriented cellulose films and fibers from a mesophase system.
164. Chapoy, L. L., and Lacour, N. F., *Rheol. Act.*, **19** 731 (1980), A rheological investigation of a semi-stiff chain aromatic polyamidehydrazide in dilute solution. Ultrahigh modulus fibers and liquid-crystalline polymer solutions.
165. Charvolin, J., and Hendrikz, Y., *J. Physique L.*, **41** 597 (1980), Superstructures in magnetically oriented lyotropic nematics.
166. Charvolin, J., and Hendrikz, Y., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 265, Springer-Verlag, 1980, Lyotropic nematic phases of amphiphilic compounds.
167. Chaure, A., *Int. J. Eng. S.*, **18** 761 (1980), Non-linear stability of the motion of a nematic liquid-crystal.

168. Chavel, P., Sawchuk, A. A., Strand, T. C., Tanguay, A. R., and Soffer, B. H., *Optics Lett.* **5** 398 (1980), Optical logic with variable-grating-mode liquid crystal devices.
169. Cheng, J., Boyd, G. D., and Storz, F. G., *Appl. Phys. L.* **37** 716 (1980), A scanning electron microscope study of columnar topography and liquid-crystal alignment on obliquely deposited oxide surfaces at low rates.
170. Cheng, J., and Boyd, G. D., *Appl. Phys. L.*, **37** 1072 (1980), Threshold and switching characteristics of a bistable nematic liquid-crystal storage display.
171. Cherkash., R. M., Tolmache., A. V., and Tishchen., V. G., *Zh. Fiz. Khim.*, **54** 2381 (1980), (RS) Influence of anisotropy of molecular polarizability on temperature of phase transitions of cholesteric mesophase.
172. Chidichi, G., Lilj, F., Longeri, M., Russo, N., and Veracini, C. A., *J. Magn. Res.*, **41** 35 (1980), Complete R-alpha structure of selenophene partially oriented in a nematic liquid-crystal phase by H-1-NMR spectra including Se-77 and C-13 satellites.
173. Chistyakov, I. G., Vistin, L. K., Chumakov., S. P., and Radzhabov., Z. B., *Sov. Ph. Cr. R.*, **25** 372 (1980), Resonance of domain boundaries in a liquid-crystal ferroelectric.
174. Chou, L. S., *Chin. J. Phys.* **18** 114 (1980), Ultrasonic propagation in the liquid-crystal phases of p-alkoxybenzoic acids.
175. Chu, K. C., Chen, C. K., and Shen, Y. R., *Am. Phys. S.*, **25** 214 (1980), Measurement of refractive indices and study of isotropic nematic phase transition by surface-plasmon technique.
176. Chu, K. C., Chen, C. K., and Shen, Y. R., *Molec. Cryst.*, **59** 97 (1980), Measurement of refractive indices and study of isotropic nematic phase transition by the surface-plasmon technique.
177. Chung, S. C., Perhsan, P. S., Sorensen, L. B., and Peterson, M. A., *B. Am. Phys. S.*, **25** 213 (1980), Light scattering study of two-dimensional liquid-crystal films.
178. Chuvyrov, A. N., *Sov. Ph. Cr. R.* **25** 188 (1980), The influence of spontaneous polarization on the mechanical stability of nematic liquid-crystals.
179. Chuvyrov, A. N., and Lachinov, A. N., *Sov. Ph. Cr. R.* **25** 455 (1980), The investigation of spontaneous polarization of nematic liquid-crystals using the methods of piezo-, magneto-, and pyroelectric reflection of light.
180. Cioranes., D., and Dias, J. P., *J. Math. Anal.*, **73** 252 (1980), A time dependent coupled system related to the tridimensional equations of a nematic liquid-crystal.
181. Ciosek, M., Witkiewicz, Z., and Dabrowski, R., *Chem. Anal.*, **25** 567 (1980), Direct gas-chromatographic determination of 2-naphthylamine in 1-naphthylamine on liquid-crystalline stationary phases.
182. Cladis, P. E., Guillon, D., Finn, P., Daniels, W. B., and Griffin, A. C., *Molec. Cryst.*, **64** 93 (1980), Incommensurate and commensurate smectic-A phases with pressure-induced nematic phases.
183. Clark, M. G., Raynes, E. P., Smith, R. A., and Tough, R. J. A., *J. Phys. D.* **13** 2151 (1980), Measurement of the permittivity of nematic liquid-crystals in magnetic and electric fields using extrapolation procedures.
184. Clark, M. G., Harrison, K. F., and Raynes, E. P., *Phys. Tech.* **11** 232 (1980), Liquid-crystal material and devices.
185. Clark, N. A., and Lagerwall, S. T., *B. Am. Phys. S.*, **25** 214 (1980), Microsecond bistable electro-optic switching in liquid-crystals.
186. Clark, N. A., and Lagerwall, S. T., *Appl. Phys. L.*, **36** 899 (1980), Submicrosecond bistable electro-optic switching in liquid-crystals.
187. Clark, N. A., Rothschi., K. J., Luippold, D. A., and Simon, B. A., *Biophys. J.*, **31** 65 (1980), Surface-induced lamellar orientation of multilayer membrane arrays: Theoretical analysis and a new method with application to purple membrane fragments.

188. Clark, N. A., and Lagerwall, S. T., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 222, Springer-Verlag, 1980, A microsecond-speed, bistable, threshold-sensitive liquid-crystal device.
189. Clinard, C., Guet, J.M., and Tchoubar, D., B. *Mineral*, **103** 463 (1980), (FR) The acenaphthalen carbonaceous mesophase.
190. Cogne, A., Grand, A., Laugier, J., Robert, J. B., and Wiesenfe., L., *J. Am. Chem. S.*, **102** 2238 (1980), Anisotropy of the IJ(PSE) spin-spin coupling: X-ray and liquid-crystal NMR-study of $\text{Se} = \text{P}(\text{CH}_3)_3$.
191. Cogne, A., Wiesenfe., L., Robert, J. B., and Tyka, R., *Omr. Org. Mag.*, **13** 72 (1980), P-31 and C-13 NMR-study of tribenzoylphosphine $\text{P}(\text{CO}-\text{C}_6\text{H}_5)_3$ oriented in a liquid-crystal.
192. Coles, H. J., and Straziell., C., *Abs. Pap. Acs.*, **180** 168 (1980), Depolarized light scattering studies of liquid-crystals: Isotropic nematic (or smectic).
193. Constant, J., and Raynes, E. P., *Molec. Cryst.*, **62** 115 (1980), Flow aligned viscosities of cyanobiphenyls.
194. Cornell, B. A., *Chem. P. Lett.*, **72** 462 (1980), The dynamics of the carbonyl groups in phospholipid bilayers from a study of their ^{13}C chemical shift anisotropy.
195. Corrigan, O. I., Higuchi, W. I., and Hofmann, A.F., *J. Pharm Sci.* **69** 869 (1980), Mesophase formation during cholesterol dissolution in ursodeoxycholate-lecithin solutions: New mechanism for gallstone dissolution in humans.
196. Courtieu, J., Jullien, J., Lai, N. T., Guillois, A., Gonord, P. Kan, S.K., Mayne, C. L., and Nguyen, T. L., *J. Chem. Phys.*, **72** 953 (1980), Relaxation in an A2 coupled spin system dissolved in a perdeuterated liquid-crystal: Intermolecular dipolar random field cross relaxation term.
197. Courtieu, J., Gounelle, Y., Jullien, J., Balavoin., G., and Fan, M., *Omr. Org. Mag.*, **14** 55 (1980), Deformation of methylenecyclopropane in solution: NMR-study in the nematic phase at 240 and 400 MHz.
198. Cox, R. J., Muellerw., U.T., and Nazzal, A., *IBM T. Disc. B.*, **22** 5052 (1980), Nematic transition metal complex with strong IR absorption.
199. Cox, R. J., *Physics and Chemistry of Liquid-Crystal Devices*, p. 295, Plenum, N.Y., 1980, Preparation and characterization of a series of liquid-crystalline diesters.
200. Craven, B. M., Sawzik, P., and Guerina, N. G., *Molec. Cryst.*, **64** 1 (1980), Birefringence and the molecular arrangement in crystals of cholesteryl laurate.
201. Crooker, P. P., and Laidlaw, W. G., *Phys. Rev. A*, **21** 2174 (1980), Pretransitional viscosity in the isotropic phase of cholesteric liquid-crystals.
202. Croxton, C. A., *Molec. Cryst.*, **59** 219 (1980), Statistical thermodynamics of the liquid-crystal surface. Smectic, nematic and isotropic systems.
203. Cser, F., Nyitrai, K., and Hardy, G., *Magy. Kem. Fo.*, **86** 390 (1980), (HU) Polymerization in liquid-crystals .7.
204. Cuculescu, I., Florea, C., Enache, A., and Baci, I., *Displays*, **2** 86 (1980), Guest host interaction in the compensated cholesteric mixture of cholesteryl chloride and cholesteryl laurate 74-26-percent molar.
205. Cuculescu, I., Bena, R., Popa, E., and Savin, O., *Displays* **2** 143 (1980), Dynamic scattering in binary compensated cholesteric mixture with pleochoric dye added.
206. Cuculescu, I., Florea, C., and Iorgules., R., *Rev. Ro. Phys.*, **25** 967 (1980), Laser and DC electric field induced effects on light diffraction patterns and texture changes in a compensated cholesteric mixture.
207. Curran, J. H., and Carroll, M. M., *Int. J. Eng. S.* **18** 971 (1980), Sinusoidal shearing of liquid-crystals.
208. Cushley, R. J. Gorrisen, H., and Wassall, S. R., *Can. J. Chem.*, **58** 2433 (1980), Deuterium and phosphorus-31 nuclear magnetic resonance of cholesteryl palmitate in dipalmityl-phosphatidylcholine model membranes.
209. Cviki, B., Srebotnjak, E., Dusic, M., Dimic, V., and Kristol, E., *phys. St. S. B.*, **101** 411 (1980), Random torsional oscillation model for rotational molecular

- motion. Cold neutron scattering investigation of cholesteryl propionate, nonanoate and myristate.
210. Dabrowski, R., Witkiewicz, Z., and Kenig, K., *Molec. Cryst.*, **58** 251 (1980), A new simple method of obtaining 4-n-alkyl-4-cyano-biphenyl.
 211. Dabrowski, R., Kenig, K., Raszewski, Z., Kedzierski, J., and Sadowska, K., *Molec. Cryst.*, **61** 61 (1980), Synthesis and some physical properties of unsymmetrical 4,4-dialkylazoxybenzenes.
 212. Dabrowski, R., Adamska, G., Stolarzo, Z., Konarzew., A., and Wacławek, W., *Pol. J. Chem.*, **54** 1233 (1980), Liquid-crystalline and spectral properties of position isomers of 4-cyano-4-alkoxyazoxybenzenes.
 213. Daniels, W. B., Cladis, P. E., and Keyes, P. H., *High Pressure Science and Technology*, p. 655, Pergamon, 1980, Liquid-crystals and plastic crystals at high pressure.
 214. Dave, J. S. Kurian, G., and Patel, N.R., *Ind. J. Chem. A*, **19** 1161 (1980), Effect of terminal substituents on liquid-crystallinity of some Schiff-base esters.
 215. Davey, A. B., *Electr. Pow.*, **26** 458 (1980), Electro-optic applications of liquid-crystals.
 216. David, C., and Baeyensv., D., *Molec. Cryst.*, **59** 181 (1980), Absorption and fluorescence spectra of 4-cyanobiphenyl and 4-alkyl or 4-alkoxy-substituted liquid-crystalline derivatives.
 217. Davies, D., Fischer, W., Force, G., Harrison, K. F., and Lu, S., *Electronics*, **53** 151 (1980), Practical liquid-crystal display forms 40 characters.
 218. Davis, P. J., Coolbear, K. P., and Keough, K. M. W., *Can. J. Bioch.*, **58** 851 (1980), Differential scanning calorimetric studies of the thermotropic phase behavior of membranes composed of dipalmitoyllecithin and mixed-acid unsaturated lecithins.
 219. De Gennes, P. G., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 231, Springer-Verlag, 1980, Weak nematic gels.
 220. De Jeu, W. H., *Physical Properties of Liquid-Crystalline Materials*, Gordon Breach, 1980.
 221. Deblieck, R., Lekkerke., H. N. W., *J. Physique L.*, **41** 351 (1980), Phase transition in a solution of rodlike particles with different lengths.
 222. Decoster, D., and Depret, J., *Molec. Cryst.*, **56** 151 (1980), (FR) Determination of order parameter of some nematic compounds using submillimeter laser.
 223. Decoster, D., and Bouamra, M., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 81, Springer-Verlag, 1980, Use of the far infrared spectroscopy for the determination of the order parameter of nematic compounds.
 224. Dehoff, R. J., Brisbin, D., and Johnson, D. L., *B. Am. Phys. S.*, **25** 547 (1980), Thermodynamics of the nematic smectic-A smectic-C multicritical point.
 225. Deloche, B., and Charvolin, J., *J. Physique L.*, **41** 39 (1980), Deuteron magnetic resonance in liquid-crystals: The interplay of molecular ordering and conformational changes.
 226. Demiray, H., *Arch. Mech.*, **32** 213 (1980), A nonlocal theory for nematic liquid-crystals.
 227. Demus, D., Marzotko, D., Sharma, N. K., and Wiegeleb., A., *Krist. Tech.*, **15** 331 (1980), The polymorphism of some liquid-crystalline 4-n-alkyloxy-3-nitro-biphenylcarboxylic acids.
 228. Demus, D., Pelzl, G., Wiegeleb., A., and Weissflo., W., *Molec. Cryst.*, **56** 289 (1980), A new liquid-crystalline substance exhibiting a reentrant nematic phase and two low-temperature smectic phases.
 229. Demus, D., Goodby, J. W., Gray, G. W., and Sackmann, H., *Molec. Cryst.*, **56** 311 (1980), Recommendation for the use of the code letters G and H for smectic phases.
 230. Demus, D., Goodby, J. W., Gray, G. W., and Sackmann, H., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 31, Springer-Verlag, 1980, Recommendation for the use of the code letters G and H for smectic phases.

231. Denham, J. Y., Luckhurst, G. R., Zannoni, C., and Lewis, J. W., *Molec. Cryst.*, **60** 185 (1980), Computer simulation studies of anisotropic systems .3. Two-dimensional nematic liquid-crystals.
232. Denisov, Y. V., Kizel, V. A., Orlov, V. A., and Perevozcz., N. F., *Kvan. Elektr.*, **7** 2482 (1980), (RS) Properties of the radiation from a laser with liquid-crystal reflectors.
233. Derossi, D., Benassi, A., Labbate, A., and Dario, P., *J. Biomed. En.*, **2** 257 (1980), A new fiberoptic liquid-crystal catheter for oxygen-saturation and blood-flow measurements in the coronary sinus.
234. Deshpand., D. D., and Rao, A. V., *Polym. Bull.*, **2** 485 (1980), Spontaneous polymerization studies on methyl-methacrylate and vinyl-acetate in the presence of a cholesteric liquid-crystal, cholesteryl 2-(ethoxy ethoxy) ethyl carbonate.
235. Destrade, C., Malthete, J., Tinh, N. H., and Gasparoux, H., *Phys. Lett. A*, **78** 82 (1980), Truxene derivatives: Temperature inverted nematic-columnar sequence in disc-like mesogens.
236. Destrade, C., Tinh, N. H., Malthete, J., and Jacques, J., *Phys. Lett. A*, **79** 189 (1980), On a cholesteric phase in disc-like mesogens.
237. Destrade, C., Tinh, N. H., and Gasparoux, H., *Molec. Cryst.*, **59** 273 (1980), Mesogenic and nonmesogenic central rigid cores (depolarized Raman scattering study).
238. Deutscher, H. J., Altmann, H., and Schubert, H., *Z. Chem*, **20** 192 (1980), (GE) Low-melting liquid-crystals with alkylcyclohexane fragments: Trans-4-alkylcyclohexyl-trans-4-alkylcyclohexane-carboxylate.
239. Dewey, A. G., *Physics and Chemistry of Liquid-Crystal Devices*, p. 219, Plenum, N.Y., 1980, Projection storage displays using laser-addressed smectic liquid-crystals.
240. Dianoux, A. J., and Volino, F., *J. Physique*, **41** 1147 (1980), Molecular conformational changes in the smectic-C, smectic-A and nematic phases of TBBA.
241. Dianoux, A. J., and Volino, F., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 50, Springer-Verlag, 1980, Molecular conformational changes in the mesophases of TBBA.
242. Dias, J. P., *Bifurcation Phenomena in Mathematical Physics and Related Topics*, p. 535, Reidel, Dordr., 1980, Nonlinear problems arising in the study of nematic liquid-crystals.
243. Diele, S., Kresse, H., and Demus, D., *Z. Phys. Ch. L.*, **261** 759 (1980), (GE) Diamagnetic behavior of liquid-crystal phases of trans-4-n-alkylcyclohexane carbonic acids.
244. Diele, S., Demus, D., and Sackmann, H., *Molec. Cryst.*, **56** 217 (1980), X-ray studies in the n-pentyl-4-(4-n-dodecyloxy-benzylidene amino)cinnamate in the S1 phase.
245. Diepquan., H., and Ueberrei., K., *Colloid P.S.*, **258** 1055 (1980), Monolayers of some liquid-crystal forming compounds.
246. Dimitrow., K., Hauschil., J., Zschke, H., and Schubert, H., *J. Prak. Chem.*, **322** 933 (1980), (GE) Liquid-crystalline 1.3.4-thiadiazoles, .1. Biphenyl and terphenyl analogous 1.3.4-thiadiazoles.
247. Diogo, A. C., and Martins, A. F., *Port. Phys.*, **11** 47 (1980), Correlation between twist viscosity and dielectric relaxation in nematic liquid-crystals.
248. Diogo, A. C., and Martins, A. F., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 108, Springer-Verlag, 1980, Molecular statistical model for twist viscosity in smectic-C liquid-crystals.
249. Dion, J. L., Simard, R., Jacob, A. D., and Leblanc, A., *IEEE Son. Ul.*, **27** 158 (1980), The acoustooptical effect in liquid-crystals due to anisotropic attenuation: New developments and applications.
250. Dmitrienko, V., and Belyakov, V. A., *Zh. Eksp. Teo.*, **78** 1568 (1980), On the structure of chiral smectics in an electric field.
251. Doane, J. W., Bos., P. J., Vaz, N. A. P., and Shetty, A. N., *Ferroelctr.*, **24** 203 (1980), Liquid-crystals: As observed by NMR.

252. Doi, M., *Ferroelectr.*, **30** 247 (1980), Rheological properties of rodlike polymers in isotropic and liquid-crystalline phases.
253. Dolganov, V. K., Krylova, S. P., and Filyov, V. M., *Zh. Eksp. Teo.*, **78** 2343 (1980), (RS) Pretransitional optical rotation in the isotropic phase of a cholesteric liquid-crystal.
254. Dolganov, V. K., Kroo, N., Rosta, L., and Sheka, E. F., *Molec. Cryst.* **64** 115 (1980), Structural and spectral studies of glassy MBBA.
255. Dombi, G., Amrein, J., and Diehl, P., *Orm. Org. Mag.*, **13** 224 (1980), The R-alpha-structure of partially oriented 1.2.3.5-tetrachlorobenzene determined from its H-1-NMR spectra with natural-abundance C-13-labeled satellites: A demonstration of the combined use of spectra obtained from molecules dissolved in several different liquid-crystals as solvent for spin systems not having enough dipolar coupling constants to determine the molecular structure.
256. Dong, R. Y., *Phys. Rev. A.*, **21** 1064 (1980), Application of the Landau-De-Gennes theory to the nematic phase of p-azoxyanisole.
257. Dong, R. Y., Lewis, J. S., Tomchuk, E., and Bock, E., *Sol. St. Comm.* **34** 595 (1980), Rotating frame spin-lattice relaxation in the nematic phase of MBBA-D13.
258. Dong, R. Y., *J. Chem. Phys.*, **72** 5014 (1980), Intermolecular and intramolecular contributions to proton relaxation in p-methoxy-D3-benzylidene-D1-p-n-butyl-D9-aniline.
259. Doniach, S., *B. Am., Phys. S.*, **25** 187 (1980), Crossover between 2 and 3 dimensional melting in smectic liquid-crystals.
260. Dorfler, H. D., Erezsin, G., and Hoffmann, S., *Stud. Biophy.*, **80** 59 (1980), (GE) Energetics of the phase transition of liquid-crystalline estrogens.
261. Douy, A., Gervais, M., and Gallot, B., *Makrom Chem.*, **181** 1199 (1980), Synthesis and mesomorphic structures of new amphipathic liposaccarides.
262. Dowell, F., *B. Am. Phys. S.*, **25** 213 (1980), Lattice model for liquid-crystal smectic-A and reentrant nematic phases.
263. Dozov, I. N., and Penchev, I. I., *J. Luminesc.*, **22** 69 (1980), Effect of the rotational depolarization in fluorescent measurements of the nematic order parameters.
264. Dubault, A., Casgran, C., Veysie, M., and Deloche, B., *Phys. Rev. L.*, **45** 1645 (1980), Pseudo clearing temperature in binary polymer nematic solutions.
265. Dunmur, D. A., and Miller, W. H., *Molec. Cryst.*, **60** 281 (1980), Dipole-dipole correlation in a nematic liquid-crystal.
266. Dunn, S. G., and Lubensky, T. C., *B. Am. Phys. S.*, **25** 249 (1980), Critical properties of the De Gennes model for the nematic to smectic-A phase transition in liquid-crystals using the 1-N expansion.
267. Dupre, D. B., and Chapoy, L. L., *J. Chem. Phys.*, **73** 3021 (1980), Comment on photoselection in uniaxial liquid-crystals: The effect of rotational Brownian motion on measurements of orientational distribution functions.
268. Dupre, D. B., and Patel, D. L., *Abs. Pap. Acs.*, **180** 25 (1980), On the relationship between the optical rotatory power and helical twist of a polymer liquid-crystal.
269. Durand, G., and Martinoty, P., *Ferroelectr.*, **24** 89 (1980), Physical properties of ferroelectric liquid-crystals.
270. Durand, G., Bartolino, R., and Cagnon, M., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 107, Springer-Verlag, 1980. AC and DC mechanical response of smectic liquid-crystals.
271. Dutchak, Y. I., Fedyshe, M. I., Mikityuk, Z. M., and Kricheve, Y. M., *Sov. Ph. Cr. R.*, **25** 250 (1980), The study of a joint effect of electric and magnetic fields on the substructure of a nematic liquid-crystal.
272. Dylik-Gro, L. A., and Wojciecho, M., *Mol. Cryst.*, **62** 155 (1980), An extrapolation method of determining the polarizability anisotropy of solid state cholesteryl esters.
273. Dzyalosh, I. E., and Volovik, G. E., *Ann. Physics*, **125** 67 (1980), Poisson brackets in condensed matter physics.

274. Ebina, Y., and Miike, H., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 211, Springer-Verlag, 1980, Restabilized planar texture in homogeneously aligned cholesterics and its application to a color display device.
275. Elwensp., M., Boroske, E., and Helfrich, W., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 368, Springer-Verlag, 1980, Osmotic shrinkage of giant egg-lecithen vesicles.
276. Emsley, J. W., Veracini, C. A., and Barili, P. L., *J. Chem. S. P.* 2 816 (1980), An investigation into the structure and conformation of n-(4-bromophenyl)-n-Maleimide by H-1 nuclear magnetic resonance spectroscopy of liquid-crystalline solutions.
277. Emsley, J. W., Luckhurst, G. R., Timimi, B. A., and Vilorio, F. R., *Inor. Ch. A. A.*, 40 52 (1980), The orientational and spatial distribution of solutes in thermotropic liquid-crystals.
278. Emsley, J. W., and Luckhurst, G. R., *Molec. Phys.*, 41 19 (1980), The effect of internal motion on the orientational order parameters for liquid-crystalline systems.
279. Epand, R. M., and Epand, R. F., *Chem. Phys. L.*, 27 139 (1980), Studies of thermotropic phospholipid phase transitions using scanning densitometry.
280. Eriksson, P., and Lindblom, G., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 290, Springer-Verlag, 1980, Aggregate structure and ion binding in amphiphilic systems studied by NMR diffusion method.
281. Eritsyan, O. S., *Sov. Ph. S. S. R.* 22 2157 (1980), Passage of radiation through a gradual interface in a cholesteric liquid-crystal.
282. Eshelby, J. D., *Phil. Mag. A*, 42 359 (1980), The force on a disclination in a liquid-crystal.
283. Faber, T. E., *P. Roy. Soc. A*, 370 509 (1980), A continuum theory of disorder in nematic liquid-crystals .4. Application to lattice models.
284. Fedak, I., Pringle, R. D., and Curtis, G. H., *Molec. Cryst.*, 64 69 (1980), Electric field induced changes in the selective reflection band of cholesteric liquid-crystals.
285. Fehrenbach, W., Dreher, R., and Meier, G., *Molec. Cryst.*, 61 79 (1980), Liquid-crystals: A bibliography for 1978.
286. Fekete, D., Auyeung, J., and Yariv, A., *Optics Lett.*, 5 51 (1980), Phase-conjugate reflection by degenerate four-wave mixing in a nematic liquid-crystal in the isotropic phase.
287. Feldman, L., and Alfassi, Z. B., *Radiat Ph. C.*, 15 687 (1980), Radiolysis of cholesteric and cholestanic esters in CCl₄ solutions.
288. Fellers, J. F., White, J. L., Onogi, Y., Flood, J., Aoki, H., Hancock, T. A., and Spruiell, J. E., *Abs. Pap. Acs.* 179 46 (1980), Orientation development in flow, and fiber and film formation from liquid-crystalline polymer solutions.
289. Felstein, J., Gertner, I., Benguigui, L., and Opher, R., *Chem. P. Lett.*, 76 445 (1980), Compton-scattering study in the liquid-crystal and solid phases of DHAB.
290. Feng, K. E., *Act. Phys. Sin.*, 29 511 (1980), (CH) The anomalous properties in viscosity near N-SA transition point of liquid-crystals.
291. Feng, K. E., *Act. Phys. Sin.*, 29 1437 (1980), (CH) Anomalous sound attenuation near the nematic smectic-A phase transition of a liquid-crystal.
292. Finkelmann, H., and Rehage, G., *Makro. Ch. Rc.*, 1 31 (1980), Investigations on liquid-crystalline polysiloxanes .1. Synthesis and characterization of linear polymers.
293. Finkelmann, H., and Rehage, G., *Makro. Ch. Rc.*, 1 733 (1980), Investigations on liquid-crystalline polysiloxanes .2. Optical properties of cholesteric phases and influence of the flexible spacer on the mobility of the mesogenic groups.
294. Finkelmann, H., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 238, Springer-Verlag, 1980, Thermotropic liquid-crystalline polymers.
295. Fisch, M. R., and Pershan, P. S., *B. Am. Phys. S.* 25 213 (1980), Light scattering from free-surface smectic-A liquid-crystals.

296. Fisch, M. R., Sorensen, L. B., and Pershan, P. S., *Ultrasonic Symposium Proceedings*, p. 1009, IEEE, N.Y., 1980, Low frequency shear elastic properties of smectic-A liquid-crystals.
297. Florea, C., *B. I. Po. Buc. E.*, **42** 39 (1980), Kirkwoods method for nematic mesomorphism.
298. Flory, P. J., *Abs. Pap. Acs.*, **179** 1 (1980), Theory of nematic phases in systems of rigid chain molecules.
299. Flory, P. J., *Ferroelectr.* **30** 1 (1980), Crystalline and mesomorphic phases in polymers.
300. Forrest, B. J., Hecker, L., and Reeves, L. W., *Molec. Cryst.*, **58** 223 (1980), Conformational studies of a carboxylic acid incorporated into lyotropic liquid-crystalline systems. A deuterium nuclear magnetic resonance investigation.
301. Forrest, B. J., and Reeves, L. W., *Molec. Cryst.*, **58** 233 (1980), Micelle motion in lyotropic nematic phases.
302. Frank, F. C., and Chandras., S., *J. Physique*, **41** 1285 (1980), Evidence of a tilted columnar structure for mesomorphic phases of benzene-hexa-n-alkanoates.
303. Franes, E. I., Puig, J. E., Talmon, Y., Miller, W. G., Seriven, L. E., and Davis, H. T., *J. Phys. Chem*, **84** 1547 (1980), Roles of liquid-crystals and micelles in lowering interfacial tension.
304. Freidzon, Y., S., Shibaev, V. P., Kustova, N. N., and Peate, N. A., *Vyso. Soed. A*, **22** 1083 (1980), (RS) A comparative study of liquid-crystalline cholesterol-containing acrylic and methacrylic polymers.
305. Frenzel, J., and Rehage, G., *Makro. Ch. Rc.*, **1** 129 (1980), PVT measurements on liquid-crystalline polymers.
306. Friberg, S. E., *Abs. Pap. Acs.*, **179** 4 (1980), Case of changed liquid-crystalline structure during polymerization.
307. Friel, J. J., Mehta, S., Mitchell, G. D., and Karpinsk., J. K., *Fuel*, **59** 610 (1980), Direct observation of the mesophase in coal.
308. Fronza, G., Mondelli, R., Lelj, F., Randall, E. W., and Veracini, C. A., *J. Magn. Res.*, **37** 275 (1980), Structural changes induced in the NH₂ group of aniline by substituents: Structure and orientation of p-bromo-nitroaniline and p-nitroaniline in nematic liquid-crystal solvents by NMR.
309. Frost, J. C., Leadbetter, A., and Richards., R. M., *Phi. T. Roy, B*, **290** 567 (1980), Molecular crystals and liquid-crystals: New results for tert-butyl chloride.
310. Fujiwara, F. Y., and Reeves, L. W., *J. Phys. Chem.*, **84** 653 (1980), Mesophase behavior and structure of the type-I lyotropic liquid-crystals.
311. Fujiwara, F. Y., and Reeves, L. W., *Can. J. Chem.*, **58** 1550 (1980), An investigation of the dilute solutions of lauric acid and laurate ion in cationic and anionic bilayers of disk miscelles.
312. Fujiwara, H., Takahash., K., and Sasaki, Y., *J. Magn. Res.* **41** 171 (1980), H-1-NMR spectra of trimethyltin chloride partially oriented in a nematic phase.
313. Furlow, T. W., *Stroke*, **11** 569 9180, Liquid-crystal thermography: Comments on technique.
314. Gallot, B., *B. Mineral.*, **103** 457 (1980), (FR) Mesomorphic structures of block co-polymers: Study techniques and observed structures.
315. Garland, C. W., Kasting, G. B., and Lushingt., K. J., *B. Am. Phys. S.*, **25** 214 (1980), Critical heat capacity of cyanobiphenyls near the nematic smectic-A transition.
316. Gaspard, S., Hochapfel, A., and Vovy, R., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 298, Springer-Verlag, 1980. A lyotropic phase from tetracarboxylated copperphthalocyanines.
317. Gasparoux, H., Destrade, C., and Fug, G., *Molec. Cryst.*, **59** 109 (1980), Carbonaceous mesophase and disc-like liquid-crystals.
318. Gasparoux, H., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 373, Springer-Verlag, 1980, Carbonaceous mesophase and disk-like molecules.
319. Gelbart, W. M., and Barboy, B., *Acc. Chem. Re.*, **13** 290 (1980), A Van-der-Waals picture of the isotropic nematic liquid-crystal phase transition.

320. Gelerinter E., Devries, A., and Stefanov, M. E., *Molec. Cryst.*, **60** 293 (1980), Comments concerning the observation of bi-dimensional textures.
321. George, A. K., Vora, R. A., and Padmini, A. R. K., *Molec Cryst.*, **60** 297 (1980), Investigation of ultrasonic velocity and related parameters in liquid-crystalline mixtures.
322. Gerber, P. R., *Z. Naturfo A*, **35** 619 (1980), On the determination of the cholesteric screw sense by the Grandjean-Cano-method.
323. Gerber, P. R., *Phys. Lett. A*, **78** 285 (1980), Compensation of temperature dependence of transmission characteristics of twisted nematic displays by cholesteric dopands.
324. Gerber, P. R., and Schadt, M., *Z. Naturfo A*, **35** 136 (1980), On the measurement of elastic constants in nematic liquid-crystals: Comparison of different methods.
325. Gevorkya., E. V., *Sov. Phys. J.*, **23** 189 (1980), Structure function of smectic liquid-crystals.
326. Gharadje., F., and Saurer, E., *IEEE Device*, **27** 2063 (1980), A novel type of inverted dichroic display employing a positive dielectric anisotropy liquid-crystal.
327. Ghosh, S. K., Tettaman., E., and Panatta, A., *Phys. Rev. B*, **21** 1194 (1980), Dynamic critical behavior in nematic liquid-crystals above the nematic isotropic transition.
328. Ghosh, S. K., and Tettaman., E., *Chem. P. Lett.* **69** 403 (1980), Molecular self-diffusion in the isotropic phase close to the nematic isotropic transition of the homologous series of para-azoxyanisole.
329. Ghosh, S. K., Tettaman., E., and Panatta, A., *Molec. Cryst.*, **58** 161 (1980), Proton spin-lattice relaxation in the critical regime of a nematic liquid-crystal.
330. Giroud, A. M., Nazzal, A., and Muellerw., U. T., *Molec. Cryst.*, **56** 225 (1980), Mesomorphic transition-metal complexes. 3. Smectic and nematic nickel dithienes.
331. Goodby, J. W., Gray, G. W., Leadbetter, A., and Mazid, M. A., *J. Physique*, **41** 591 (1980), The unclassified smectic phase of n-(4-n-pentyloxybenzylidene)-4-n-hexylaniline (SO.6).
332. Goodby, J. W., Robinson, P. S., Teo, B. K., and Cladis, P. E., *Molec. Cryst.*, **56** 303 (1980), The discotic phase of uro-porphyrin I octa-n-dodecyl ester.
333. Goodby, J. W., Gray, G. W., Leadbetter, A., and Mazid, M. A., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 3, Springer-Verlag, 1980, The smectic phases of the n-(4-n-alkoxybenzylidene-4-n-alkylanilines (NO.M): Some problems of phase identification and structure.
334. Gottarel., G., and Samori, E., *Inor. Ch. A. A.*, **40** 10 (1980), Some applications of liquid-crystals in organic chemistry.
335. Grasselli, J. G., Snavey, M. K., and Bulkin, B. J., *Phys. Rep. Ne.*, **65** 231 (1980), Applications of Raman spectroscopy.
336. Grauel, A., *Liquid-Crystals of One-and Two-Dimensional Order*, p. 353, Springer-Verlag, 1980, A two-dimensional thermodynamic field theory.
337. Gray, G. W., *Chimia*, **34** 47 (1980), Dyestuffs and liquid-crystals.
338. Gray, G. W., and Kelly, S. M., *J. Chem. S. Ch.*, **1980** 465 (1980), Low-melting bicyclo(2.2.2)octane esters with wide-range nematic phases.
339. Gray, G. W., *S. Afr. J. Sci.*, **76** 250 (1980), Bright outlook for liquid-crystals.
340. Gray, G. W., *Elettrotecn.*, **67** 755 (1980), (IT) Great prospects for liquid-crystals.
341. Grebel, V., and Levanon, H., *Chem. P. Lett.*, **72** (218) (1980), EPR study of oriented photo-excited triplets of porphyrins and chlorophylls in a liquid-crystal.
342. Griffin, A. C., and Havens, S. J., *J. Pol. Sc. Pl.*, **18** 259 (1980), Phase studies of polymer small-molecule liquid-crystalline mixtures by differential scanning calorimetry.
343. Griffin, A. C., Buckley, N. W., Cox, R. J., and Johnson, J. F., *Abs. Pap. Acs.*, **180** 320 (1980), Binary liquid-crystal phase diagrams.
344. Griffin, A. C., and Havens, S. J., *Abs. Pap. Acs.* **180** 99 (1980), Thermal behavior of some nematic polyesters.

345. Griffin, A. C., Buckley, N. W., Havens, S. J., Johnson, F. G., Bertolin, G., and Thomas L., *Physics and Chemistry of Liquid-Crystal Devices*, p. 305, Plenum, N.Y., 1980, Effect of molecular structure on mesomorphism .10. Design of materials having smectic-isotropic maxima in binary mixtures.
346. Gritsenk., N. I., and Moshel, N. V., *Ukr. Fiz. Zh.*, **25** 1830 (1980), (RS) Conductivity, diffusion and mobility of a charge carrier in nematic liquid-crystal.
347. Grosberg, A. Y., *Vyso. Soed. A* **22** 90 (1980), (RS) Oriented ordered liquid-crystalline state of polymeric globule.
348. Grosberg, A. Y., *Sov. Ph. Dokl.* **25** 638 (1980), Theory of the cholesteric mesophase in a solution of chiral macromolecules.
349. Guazzelli, E., *C. R. Ac. Sci. B* **291** 9 (1980), Homogeneous nucleation of a pair of defects in a periodic convective structure.
350. Gudgin, E. F., Kruus, P., and Munro, P. N., *J. Chem. Phys.* **72** 594 (1980), Ultrasonic studies of nematic isotropic phase transitions.
351. Guet, J. M., Clinard, C., and Tchoubar, D., *Carbon*, **18** 41 (1980), Structure of mesophases obtained from some definite aromatic molecules.
352. Guillon, D., Cladis, P. E., Aadsen, D., and Daniels, W. B., *Phys. Rev. A*, **21** 658 (1980), X-ray investigation of the smectic-A reentrant nematic transition under pressure (CBOOA).
353. Gunther, L., Imry, Y., and Lajzerow, J., *Phys. Rev. A*, **22** 1733 (1980), X-ray-scattering in smectic-A liquid-crystals.
354. Haas, W. E., *Appl. Optics*, **19** 3268 (1980), Liquid-Crystals, 8th International Conference, Kyoto, 30 June-4 July 1980.
355. Haase, W., and Paulus, H., *Z. Anal. Chem.* **304** 275 (1980), (GE), Crystal structures of some mesogenic molecules and possible statements on the liquid-crystalline state.
356. Hacker, H., Kwon, Y., Lontz, R., and Lefkowitz, I., *Appl. Optics*, **19** 1278 (1980), Characteristics of liquid-crystal devices with improved response times.
357. Hacker, H., Lefkowitz, I., and Lontz, R., *Appl. Optics*, **19** 3257 (1980), Liquid-crystal reflection cell with improved response times.
358. Hagston, W. E., and Holmes, B. J., *J. Phys. B*, **13** 3505 (1980), Matrix methods for spin Hamiltonians of low symmetry.
359. Hansen, J., and Jacobsen, J. P., *J. Magn. Res.*, **41** 381 (1980), H-1, H-2, and C-13 NMR-spectra of acetic-acid in nematic phases.
360. Hardouin, F., Levelut, A. M., Benattar, J. J., and Sigaud, G., *Sol. St. Comm.* **33** 337 (1980), X-rays investigations of the smectic-A1 smectic-A2 transition.
361. Hardouin, F., and Levelut, A. M., *J. Physique*, **41** (1980), X-ray study of the reentrant polymorphism N-SA-N-SA in a pure liquid-crystal compound.
362. Hardouin, F., Sigaud, G., Achard, M. F., and Gasparoux, H., *Molec. Cryst.*, **58** 155 (1980), Effects of disc-like solute size on the orientational order of a nematogen.
363. Hardouin, F., Levelut, A. M., Benattar, J. J., and Sigaud, G., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 147, Springer-Verlag, 1980, X-ray investigations of the smectic A1 - smectic A2 transition.
364. Hardouin, F., and Levelut, A. M., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 154, Springer-Verlag, 1980, X-ray studies of reentrant nematic and smectic A phases in pure compounds at atmospheric pressure.
365. Hardy, G., Cser, F., Nyitrai, K., Samay, G., and Kallo, A., *J. Cryst. Gr.*, **48** 191 (1980), Polymerization in liquid-crystals. 6. Investigation of the mesomorphic structure of p-alkoxy-phenyl-p-acryloxy benzoate polymers.
366. Hardy, G., Cser, F., Nyitrai, K., Samay, G., and Kallo, A., *Margy. Kem. Fo.*, **86** 456 (1980), (HU) Polymerization in liquid-crystals .6. Investigation of the mesomorphic structure of p-alkoxy-phenyl-p-acryloxy benzoate polymers.
367. Hashimoto, T., Ebisu, S., and Kawai, H., *J. Pol. Sc. Pl.*, **18** 569 (1980), A novel technique for characterizing the sense of twisting in cholesteric liquid-crystals.

368. Hata, Y., Shigematsu, H., and Insul, W., *Jap. Circ. J.* **44** 46 (1980), Cholesteryl ester-rich lipid inclusions from human aortic fatty streak and fibrous plaque lesions of arteriosclerosis .2. Physical properties of swelling, resiliency and lyotropicity as liquid-crystal.
369. Hata, Y., *Molec. Cryst.*, **62** 251 (1980), Application of infrared ATR spectroscopy to liquid-crystals .4. A comparison of molecular alignments of nematic EBCA in bulk and boundary layers under an external DC electric field.
370. Hauck, G. *Phys. St. S. A*, **62** 123 (1980), Liquid-crystal pretilt angles induced by a double oblique evaporation of SIO.
371. Hayamizu, K., and Yamamoto, O., *J. Magn. Res.*, **41** 94 (1980), H-1 and H-2 High-resolution NMR spectra of selectively deuterated PAA in the nematic state.
372. Hayes, C. F., *Molec. Cryst.*, **59** 317 (1980), Evidence of acoustic streaming in the nematic acousto-optic effect.
373. Hedge, R. M., Thomas, R. K., Mortimer, M. and White, J. W. *J. Chem. S. F. I*, **76** 236 (1980), Structure of the lamellar lyotropic liquid-crystal tetramethylammonium perfluoro-octanoate + water; determined by neutron diffraction.
374. Heffner, W. R., Berreman, D. W., Sammon, M., and Meiboom, S., *Appl. Phys. L.* **36** 144 (1980), Liquid-crystal alignment on surfactant treated obliquely evaporated surfaces.
375. Heldman, M. A., and Gibson, D. F. R., *Can. J. Chem.*, **58** 2246 (1980), Spin-lattice relaxation in MBBA and MBBA carbon tetrachloride mixtures.
376. Helmkamp, G. M., and Kasper, A. M., *Fed. Proc.*, **39** 1989 (1980), Protein-catalyzed phospholipid exchange between gel and liquid-crystalline phospholipid vesicles.
377. Henderso., G. L., Johnson, D. L., and Allender, D. W., *B. Am. Phys. S.*, **25** 548 (1980), Effects of surface ordering in the isotropic nematic phase transition.
378. Hendriks, Y., and Charvolin, J., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 281, Springer-Verlag, 1980, Structural relations between lyotropic phases in the vicinity of the "nematic" state.
379. Hentschel, M., and Hosemann, R., *Z. Naturfo. A* **25A** 659 (1980), Direct x-ray study of the molecular tilt in dipalmitoyl lecithin bilayers.
380. Hentschel, M., Hosemann, R., and Helfrich, W., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 369, Springer-Verlag, 1980, Direct x-ray study of the molecular tilt in dipalmitoyl lecithin bilayers.
381. Heppke, G., Hopf, R., Kohne, B., and Praefcke, K., *Z. Naturfo. B*, **35** 1384 (1980), (GE) 4-(4-alkyloxybenzoyloxy)-4-cyanoazobenzenes: A homologous series of liquid-crystals exhibiting the unusual phase sequence smectic-A, nematic, smectic-A.
382. Herrmann, J., Sandrock, R., Spratte, W., and Schneider, G. M., *Molec. Cryst.*, **56** 183 (1980), Differential thermal analysis (DTA) and differential scanning calorimetry (DSC): Measurements on the tricritical behaviour of the smectic-A cholesteric phase transition of cholesteryl myristate.
383. Herrmann, J., Kleinhans, H. D., Quednau, J., and Schneider, G. M., *Molec. Cryst.*, **64** 109 (1980), Phase behaviour of TBBA under high pressure by differential thermal analysis (DTA).
384. Herrmann, J., Spratte, W., and Schneider, G. M., *High Pressure Science and Technology*, p. 673, Pergamon, 1980, Smectic polymorphism of some bis-(4,4-n-alkoxy-benzylidene)-1,4-phenylenediamines up to 3 kbar by differential thermal analysis (DTA).
385. Herrmann, J., Quednau, J., and Schneider, G. M., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 51, Springer-Verlag, 1980, Smectic polymorphism of some bis-(4,4-n-alkoxy-benzylidene)-1, 4-phenylenediamines up to 3 kbar by differential thermal analysis.
386. Hess, S., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 275, Springer-Verlag, 1980, Viscoelasticity and flow alignment of dilute aqueous detergent solutions.

387. Hilbert, M., and Solladie, G., *J. Org. Chem.*, **45** 5393 (1980), Contribution of pitch and solute solvent interactions to the photoasymmetric synthesis of hexahelicene in cholesteric liquid-crystals.
388. Hida, K., *Prog. T. Ph. Jp.*, **64** 1082 (1980), The phase separation and the diffusive instabilities accompanied by the nematic isotropic transition of the liquid-crystalline mixtures .2. The coupling between the diffusive instabilities and the director field.
389. Hilsun, C., and Sauders, F. C., *Molec. Cryst.*, **64** 25 (1980), Modified Williams domains in liquid-crystals.
390. Hiltrop, K., and Stegemeyer, H., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 359, Springer-Verlag, 1980, On the orientation of liquid-crystals by monolayers of amphiphilic molecules.
391. Hiltrop, K., and Stegemeyer, H., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 360, Springer-Verlag, 1980, Influence of phase transitions of amphiphilic monolayers on the orientation of liquid-crystals.
392. Hinov, H. P., and Sainov, S., *Rev. Phys. Ap.*, **15** 1307 (1980), Total internal reflection from nematic liquid-crystals.
393. Hiroshim., K., and Mochizuk., M., *Jap. J. A. Phys.*, **19** 567 (1980), Influence of SIO film-thickness on liquid-crystal orientation.
394. Hložek, V., and Gutwilli., H., *Chromatogr.*, **13** 234 (1980), New ester phase with nematic working range for GLC.
395. Hochbaum, A., Yu, L. J., and Labes, M. M., *J. Appl. Phys.*, **51** 867 (1980), Fluorescence of guest molecules in a scattering state of a liquid-crystal.
396. Hola, O., and Surka, S., *Act. F. R. N. Cz.* **21** 89 (1980), EPR studies of nematic liquid-crystals.
397. Hola, O., and Surka, S., *Act. F. R. N. Cz.* **21** 79 (1980), Determination of rotational time of nitroxide radicals in nematic liquid-crystals.
398. Holmes, B. J., *J. Phys. B*, **13** 3505 (1980), Matrix methods for spin Hamiltonians of low symmetry.
399. Honciuc, M., and Motoc, C., *Rev. Ro. Phys.*, **25** 97 (1980), Polymorphic behaviour of cholesteryl-laurate cholesteryl-caprylate mixture (25:75% by weight).
400. Hoover, D. S., and Spackman, W., *Carbon*, **18** 40 (1980), Use of cinematography in a study of mesophase formation.
401. Horio, M., Asada, T., and Onogi, S., *Abs. Pap. Acs.*, **179** 3 (1980), Flow mechanisms of liquid-crystalline solutions of cellulose derivatives.
402. Hornreich, R. M., and Shtrikman, S., *J. Physique*, **41** 335 (1980), A body-centered cubic structure for the cholesteric blue phase.
403. Hornreich, R. M., and Shtrikman, S., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 185, Springer-Verlag, 1980, Theory of BCC orientational order in chiral liquids: The cholesteric blue phase.
404. Howard, J. A. K., and Sherwood, M., *Molec. Cryst.*, **56** 271 (1980), Molecular and crystal structure of P-ethoxybenzylidene-p-n-butylaniline (EBBA). Preliminary data on p-methoxybenzylidene-cyanoaniline (MBCA).
405. Hub, H. H., Hupfer, B., and Ringsdorf, H., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 253, Springer-Verlag, 1980, Polymerization of lipid and lysolipid-like diacetylenes in monolayers and liposomes.
406. Hubbard, R. L., *Physics and Chemistry of Liquid-Crystal Devices*, p. 331, Plenum, N.Y., 1980, The analysis of liquid-crystal mixtures.
407. Hung, P. L. K., and Bloom, A., *Molec. Cryst.*, **59** 1 (1980), Order parameters of Schiff base azo dyes in nematic liquid-crystalline hosts.
408. Ikeda, M., *Phot. Sci. Eng.*, **24** 277 (1980), Thermodynamic and NMR studies on silver salts of fatty acids.
409. Ilchishi., I. P., and Tikhonov, E. A., *Ukr. Fiz. Zh.*, **25** 1257(1980), (RS) Peculiarities of absorption and fluorescence-spectra of polymethine dye solutions in liquid-crystals.

410. Ilchishi., I. P., Tikhonov, E. A., Tishchen., V. G., and Shpak, M. T., *JEPT Letter*, **32** 24 (1980), Generation of a tunable radiation by impurity cholesteric liquid-crystals.
411. Imada, K., *Kobun Ron. Jp.*, **37** 717 (1980), (JP) Textures of poly(L-glutamic acid) in concentrated solutions and in the solid films.
412. Imamura, T., and Nakamizo, M., *Carbon*, **18** 37 (1980), Mesophase formation from decacyclene.
413. Ioffe, I. V., and Lembriko., B. I., *Sov. Ph. S. S. R.*, **22** 204 (1980), Theory of the excitation of second sound in liquid-crystal.
414. Isaert, N., Berthaul., J. P., and Billard, J., *J. Optics* **11** 17 (1980), (FR) Apparent rotatory power of cholesterics.
415. Ito, K. I., Kajiyama, T., and Takayana., M., *Polym. J.*, **12** 305 (1980), Aggregated states and solidifying process of alpha-helical molecular chains of poly(gamma methyl glutamate).
416. Jackson, W. J., and Kuhfuss, H. F., *J. Appl. Poly.* **25** 1685 (1980), Liquid-crystal polymers .3. Preparation and properties of poly(ester amides) from paraaminobenzoic acid and poly(ethylene-terephthalate).
417. Jacobs, R. E., and Oldfield, E., *Prog. Nuc. Res.*, **113** (1980), NMR of membranes.
418. Jacobsen, J. P., *J. Magn. Res.*, **37** 365 (1980), Assignment of relative signs of dipole-dipole couplings in nematic phase by use of selective spin population transfer.
419. Jazdyn, J., and Labno, W., *Chem. P. Lett.*, **73** 307 (1980), Volumetric studies of the nematic isotropic phase transition in p,p-n-heptyl-cyanobiphenyl + isotropic solute systems.
420. Jaehnig, F., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 344, Springer-Verlag, (1980), Lipid-protein interaction in membranes.
421. Janini, G. M., Manning, W. B., Zielinsk., W. L., and Muschik, G. M., *J. Chromat.*, **193** 444 (1980), Gas-liquid-chromatographic separation of bile-acids and steroids on a nematic liquid-crystal.
422. Janini, G. M., Sato, R. I., and Muschik, G. M., *Analyt. Chem.*, **52** 2417 (1980), High-temperature nematic liquid-crystal for gas-liquid-chromatography.
423. Janossy, I., *J. Physique*, **41** 437 (1980), Shear flow induced propagating domains in cholesterics.
424. Jerman, R. S., and Baird, D. G., *J. Rheol.*, **24** 879 (1980), Capillary rheometry studies of polyesters with liquid-crystalline order.
425. Johansson, L. B., and Lindblom, G., *Q. Rev. Bioph.*, **13** 63 (1980), Orientation and mobility of molecules in membranes studied by polarized-light spectroscopy.
426. Johnson, D. L., Flack, J. H., and Crooker, P. P., *Phys. Rev. L.*, **45** 641 (1980), Structure ANF properties of the cholesteric blue phases.
427. Jokisaar., J., Raisanen, K., Kuonanoj., J., Pyykko, P., and Lajunen, L., *Molec. Phys.*, **39** 715 (1980), R-alpha structure and anisotropy of the Hg-C indirect coupling constant of methylmercury nitrate dissolved in nematic and lyotropic liquid-crystals.
428. Jokisaar., J., and Diehl, P., *Omr. Org. Mag.*, **13** 359 (1980), The R-alpha-structure and the H-1 and Hg-199 shielding anisotropies of dimethylmercury as determined in nematic and smectic liquid-crystal solvents.
429. Jokisaar., J., and Kuonanoj., J., *J. Mol. Struc.*, **68** 173 (1980), H-1, C-13 and Hg-199 NMR-study on the spin-spin coupling constants and R-alpha structure of CF₃HgCH₃ in isotropic and nematic phases.
430. Jones, F., and Reeve, T. J., *Molec. Cryst.*, **60** 99 (1980), Order parameters of dyes in a biphenyl terphenyl liquid-crystal mixture.
431. Jones, J. B., Barr, J. B., and Smith, R. E., *J. Mater. Sci.*, **15** 2455 (1980), Analysis of flaws in high-strength carbon fibers from mesophase pitch.
432. Jonsson, B., and Wennerst., H., *Chem. Scr.*, **15** 40 (1980), Ion condensation in lamellar liquid-crystals: The effect of added inorganic salt.

433. Jonsson, B., Wennerst., H., and Halle, B., *Inor. Ch. A. A.*, **40** 39 (1980), Ion distributions and energetics in lamellar liquid-crystals: A comparison between different theoretical approaches.
434. Jonsson, B., Wennerst., H., and Halle, B., *J. Phys. Chem.*, **84** 2179 (1980), Ion distributions in lamellar liquid-crystals: A comparison between results from Monte-Carlo simulations and solutions of the Piosson-Boltzmann equation.
435. Kahn, F. J., and Birecki, H., *Physics and Chemistry of Liquid-Crystal Devices*, p. 79, Plenum, N. Y., (1980), Multiplexing limits of twisted nematic liquid-crystal displays and implications for the future of high information content LCDs.
436. Kaluzny, J., and Konecny, M., *Cesk. C. Fys. A*, **30** 369 (1980), Ultrasonic fields imaging by means of liquid-crystals.
437. Kamensky, V. G., and Kats, E. I., *Zh. Eksp. Teo.*, **78** 1606 (1980), (RS) Inelastic scattering of light by biaxial and longitudinal fluctuations of the order parameter in nematic liquid-crystals.
438. Kamikawa, T., *SID Dig.*, **11** 196 (1980), Double-layer-electrode LCDs.
439. Kaneko, T., Torii, Y., *Opt. Commun.*, **32** 220 (1980), Liquid-crystal polarization rotator: Optical element for intermodulation spatial bandwidth reduction in holography.
440. Kapustin, A. P., and Akchurin, S. M., *Sov. Ph. Cr. R.*, **25** 110 (1980), Filamentary structures in mesophases.
441. Kapustin., O. A., Lupanov, V. N., and Shoshin, V. M., *Sov. Ph. Ac. R.*, **26** 406 (1980), Kinetic characteristics of the acoustooptic effect in the smectic-A phase.
442. Kasting, G. B., Lushingt., K. J., and Garland, C. W., *Phys. Rev. B*, **22** 321 (1980), Critical heat capacity near the nematic smectic-A transition in octyloxycyanobiphenyl in the range 1-2000 bar.
443. Kasting, G. B., Garland, C. W., and Lushingt., K. J., *J. Physique*, **41** 879 (1980), Critical heat capacity of octylcyanobiphenyl (8CB) near the nematic smectic-A transition.
444. Kato, K., and Bito, Y., *Microb. Immu.*, **24** 703 (1980), Gel to liquid-crystalline phase transitions of lipids and membranes isolated from escherichia-coli cells.
445. Katz, S., and Masterfa., T., *Ann. N.Y. Acad.*, **335** 484 (1980), A preliminary report on the clinical testing of a new elastomeric liquid-crystal film.
446. Kawakami, H., Hanmura, H., and Kaneko, E., *SID Dig.*, **11** 28 (1980), Brightness uniformity in liquid-crystal displays.
447. Kaye, W., *Physics and Chemistry of Liquid-Crystal Devices*, p. 143, Plenum, N. Y., (1980), Sensitive measurements of twist in LCDs.
448. Kazan, B., *Science*, **208** 927 (1980), Materials aspects of display devices.
449. Kelker, H., and Hatz, R., *Handbook of Liquid-Crystals*, Verlag Chemie, (1980).
450. Keller, P., Zann, A., Dubois, J. C., and Billard, J., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 57, Springer-Verlag, (1980), A chiral smectic F phase.
451. Kerllene., B., and Coche, A., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 210, Springer-Verlag, (1980), New simple model of a liquid-crystal light valve.
452. Kerszber., M., *J. Non-Equ. Th.*, **5** 165 (1980), Dynamic stability of phase boundaries in first-order phase transitions.
453. Khairetd., I. A., and Chuvyrov, A. N., *D. A. N. SSSR*, **255** 437 (1980), (RS) Interaction of the mineral electrical field with liquid-crystals.
454. Khoo, I. C., *B. Am. Phys. S.*, **25** 565 (1980), Observation of a new non-linear scattering process in a nematic liquid-crystal above electric Freederiks transition.
455. Khoo, I. C., and Zhuang, S. L., *Appl. Phys. L.*, **37** 3 (1980), Non-linear optical amplification in a nematic liquid-crystal above the Freederiks transition.
456. Khoo, I. C., and Zhuang, S. L., *J. Opt. Soc.*, **70** 1400 (1980), Non-linear light amplification in a nematic liquid-crystal using low-power CW lasers.
457. Kolmonto., Y., and Kilmonto., B., *Zh. Eksp. Teo.*, (1980), Effect of fluctuation in the critical region during a phase transition of the second kind of nonequilibrium phase transition.

458. Kini, U. D., *Pramana*, **14** 463 (1980), Steady low shear rate cholesteric flow normal to the helical axis.
459. Kini, U. D., *Pramana*, **15** 231 (1980), Effect of destabilizing fields on hydrodynamic instabilities in nematics.
460. Kirdte, B., and Kurreck, H., *Appl. Spectr.* **34** 305 (1980), Electron nuclear double-resonance (ENDOR) investigations of organic doublet radicals in the nematic and smectic phase of liquid-crystals.
461. Kirov, N., and Fontana, M. P., *Molec. Cryst.*, **56** 195 (1980), Determination of orientational order parameter S_2 in glassy liquid-crystals by means of IR dichroism.
462. Kirov, N., Fontana, M. P., and Cavatorta, F., *J. Mol. Struc.*, **59** 147 (1980), Spectroscopic and thermodynamic investigation of the polymorphism of the solid state of liquid-crystals.
463. Kirov, N., Simova, P., and Ratajczak, H., *Molec. Cryst.*, **58** 285 (1980), Influence of AC electric field on infrared absorption spectra of liquid-crystals and determination of orientational order parameter by infrared dichroism .1. Molecules with strong positive dielectric anisotropy.
464. Kirov, N., Simova, P., and Ratajczak, H., *Molec. Cryst.*, **58** 299 (1980), Influence of AC electric field on infrared absorption spectra of liquid-crystals and determination of orientational order parameter by infrared dichroism .2. Molecules with weak negative dielectric anisotropy.
465. Kirste, B., Kurreck, H., Lubitz, W., and Zimmermann, H., *J. Am. Chem. S.*, **102** 817 (1980), H-1, H-2 and C-13 ENDOR studies of labeled bis-(biphenyl-enyl)propenyl type radicals in isotropic solutions and in liquid-crystals.
466. Kirste, B., Kurreck, H., and Schubert, K., *Tetrahedron*, **36** 1985 (1980), H-1, H-2, C-13 and N-14 ENDOR studies of Coppinger radicals in liquid solutions and in liquid-crystals.
467. Kirste, B., and Kurreck, H., *J. Am. Chem. S.*, **102** 6180 (1980), First successful ENDOR studies of organic radical ions in liquid-crystals.
468. Kirste, B., and Kurreck, H., *Appl. Spectr.*, **34** 305 (1980), Electron nuclear double resonance investigations of organic doublet radicals in the nematic and smectic phase of liquid-crystals.
469. Kiss, G., and Porter, R. S., *Molec. Cryst.*, **60** 267 (1980), Rheo-optical studies of liquid-crystalline solutions of helical polypeptides.
470. Kiss, G., and Porter, R. S., *J. Pol. Sc. P. P.*, **18** 361 (1980), Rheology of concentrated solution of helical polypeptides.
471. Klausner, R. D., Kumar, N., Blumenth., R., Flavin, M., and Weinstein, J. N., *Eur. J. Cell.*, **22** 219 (1980), Insertion of purified tubulin into phospholipid vesicles at the liquid-crystalline phase transition.
472. Kleman, M., *J. Physique*, **41** 737 (1980), Developable domains in hexagonal liquid-crystals.
473. Kleman, M., and Lejcek, L., *Phil. Mag. A*, **42** 671 (1980), Screw dislocation in the smectic-C phase of liquid-crystals.
474. Kleman, M., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 97, Springer-Verlag, (1980), Curvature defects in smectic-A and canonic liquid-crystals.
475. Kleman, M., *Dislocations in Solids, Vol. 5. Other Effects of Dislocations: Diclinations*, p. 421, North-Holland, (1980), The general theory of disclinations.
476. Klimontovi., Y., *Zh. Eksp. Teo.*, **78** 2384 (1980), Effect of fluctuations in the critical region during a phase transition of the second kind of nonequilibrium phase transitions.
477. Klug, D. D., and Whalley, E., *High Pressure Science and Technology*, p. 669, Pergamon, (1980), Elliptic phase boundaries between nematic and smectic phases.
478. Kmetz, A. R., *P. SID*, **21** 63 (1980), A single-polarizer twisted nematic display.
479. Kmetz, A. R., and Nehring, J., *Physics and Chemistry of Liquid-Crystal Devices*, p. 105, Plenum, N.Y., (1980), Ultimate limits for RMS matrix addressing.
480. Kodon, M., Takenaka, S., and Kusabaya., S., *Chem. Lett.*, **1980** 471 (1980), Mesomorphic properties of some cholesteryl acrylbenzoates.

481. Kohler, A., *Z. Chem.*, **20** 72 (1980), (GE) A new method for the characterization of nonsingular disclinations in nematic Schlieren textures.
482. Kohler, A., *Z. Chem.*, **20** 355 (1980), (GE) Characterization of foreign layer on the surface of glasses by liquid-crystals.
483. Kojima, T., *SID Dig.*, **11** 22 (1980), Recent flat-panel display developments in Japan.
484. Kolbe, A., and Kraus, G., *J. Chromat.*, **202** 369 (1980), Correlation between gas-chromatographic and infrared spectroscopic behaviour in nematic phases.
485. Kolennik., P. I., and Guk, A. V., *Instr. Exp. T.*, **23** 92 (1980), A writing and erasing unit for a liquid-crystal controlled transparency.
486. Kolinsky, P. V., and Jennings, B. R., *Molec. Phys.*, **40**, 979 (1980), Optical Kerr effect in the isotropic phase of various alkylcyanobiphenyl homologues.
487. Kondo, K., Kobayashi, F., Takezoe, H., Fukuda, A., and Kuze, E., *Jap. J. A. Phys.*, **19** 2293 (1980), Temperature variation of helical pitches in chiral smectic-C liquid-crystals as observed with an optical microscope.
488. Koopman, D. E., *Ann. N.Y. Acad.*, **335** 475, (1980), Cholesteric plate thermography: The state of the art.
489. Kopp, F., and Cuendet, P. A., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 361, Springer-Verlag, (1980), Infrared spectroscopy and ultrastructural studies of a hydrophobic membrane protein in a monolayer.
490. Korte, E. H., Chingduang, P., and Richter, W. J., *Ber. Buns. Ges.*, **84** 45 (1980), (GE) Experimental investigation of approximate chirality functions at the example of induced cholesteric solutions (III): Induction by chiral 2.2-spirobiindane derivatives.
491. Korte, E. H., and Chingduang, P., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 212, Springer-Verlag, (1980), Orientation of the chiral solutes in induced cholesteric solutions.
492. Kothe, G., Berthold, T. and Ohmes, E., *Molec. Phys.*, **40** 1441 (1980), Orientational order of triradical spin probes in nematic liquid-crystals: An electron resonance investigation of angular-dependent lineshapes.
493. Kothe, G., Wassmer, K. H., Ohmes, E., Portugall, M., and Ringsdorf, H., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 259, Springer-Verlag, (1980), Spin probe studies of oriented liquid-crystalline polymers.
494. Kozhevni., E. N., *Sov. Ph. Ac. R.*, **26** 488 (1980), Instability of the orientation of nematic liquid-crystals in a sound field in the absence of squeeze-flow.
495. Kresse, H., and Peitzl, G., *Phys. St. S. A.*, **57** 149 (1980), Dielectric relaxation and DAP effect on a nematic substance with negative dielectric anisotropy.
496. Kresse, H., Wiegeleb., A., and Demus, D., *Krist. Tech.*, **15** 341 (1980), Dielectric relaxation in nematic, smectic-A and smectic-C phases in the MHz region.
497. Kresse, H., Demus, D., Wrobel, S., Moscicki, J. K., and Urban., S., *Act. Ph. Pol. A*, **57** 699 (1980), Microwave dielectric relaxation 4-n-octyloxyphenyl 4-n-pentyloxybenzoate.
498. Krigbaum, W. R., Lader, H. J., and Ciferri, A., *Abs. Pap. Acs.*, **179** 45 (1980), Electrohydrodynamic instabilities in thermotropic nematic polymers.
499. Krigbaum, W. R., and Ciferri, A., *J. Pol. Sc. Pl.*, **18** 253 (1980), Depression of the melting temperature for lyotropic liquid-crystals.
500. Krigbaum, W. R., Lader, H. J., and Ciferri, A., *Macromolec.* **13** 554 (1980), Electrohydrodynamic instabilities in thermotropic nematic polymers.
501. Krigbaum, W. R., and Lader, H. J., *Molec. Cryst.*, **62** 87 (1980), Electric field induced flow instabilities in low molecular weight and polymeric nematics.
502. Kuball, H. G., Altschuh, J., and Schonhof., A., *Chem. Phys.*, **49** 247 (1980), Optical activity of oriented molecules .6. Orientational distribution coefficients for oriented systems, e.g., a liquid-crystal matrix.
503. Kuczynski, W., and Stegemeyer, H., *Chem. P. Lett.*, **70** 123 (1980), Ferroelectric properties of smectic-C liquid-crystals with induced helical structure.
504. Kuczynski, W., and Stegemeyer, H., *Naturwissen.*, **67** 310 (1980), Grandjean-Cano steps in a wedge-shaped sample of liquid-crystalline blue phase.

505. Kuczynski, W., Bergmann, K., and Stegemeyer, H., *Molec. Cryst.*, **56** 283 (1980), A model of the blue phase of cholesteryl esters.
506. Kulagina, T. P., and Kuznetso., A. N., *Kristallogr.*, **25** 1303 (1980), (RS) The modeling of EPR-spectra of spin probes when investigating the magnetohydro-dynamical effect in nematic liquid-crystals.
507. Kurik, M. V., and Rudenko, A. A., *Opt. Spektro.*, **49** 1136 (1980), (RS) Optical properties of Beta-CI-cholesteryl-propionate.
508. Kurup, M. B., Sharma, R. P., and Thosar, B. V., *J. Phys. C.*, **13** 1617 (1980), Positron lifetimes and phase transitions in a cholesteric liquid-crystal.
509. Kuschel, F., and Demus, D., *Krist. Tech.*, **15** K28 (1980), Homotropic layers of nematic liquid-crystals induced by carboxylic acids.
510. Kwolek, S. L., *Abs. Pap. Acs.*, **179** 49 (1980), Liquid-crystalline polymers.
511. Lachinov, A. N., Chuvyrov, A. N., and Gilmanov., N. K., *Sov. Ph. Tp. R.*, **25** 113 (1980), Pyroelectric effect on nematic liquid-crystals.
512. Lagerwall, S. T., and Stebler, B., *Phys. Bull. G. B.*, **31** 349 (1980), Imaging submicroscopic dislocations in smectic liquid-crystals.
513. Lagerwall, S. T., and Stebler, B., *Ordering in Strongly Fluctuating Condensed Matter Systems*, p. 383, Plenum, N.Y., (1980), Dislocations and disclinations in smectic systems.
514. Laidlaw, W. G., *Molec. Cryst.*, **59** 13 (1980), Response of a nematic liquid-crystal to an acoustic field.
515. Lakkad, S. C., *J. Chem. Phys.*, **73** 4707 (1980), Dynamic aspects of order disorder phenomena.
516. Lalanne, J. R., Lemaire, B., Rouch, J., Vaucamps, C., and Proutier., A., *J. Chem. Phys.*, **73** 1927 (1980), The even-odd effect in liquid-crystals: A collective or intrinsic molecular property.
517. Laprice, W. J., and Uhrich, D. L., *J. Chem. Phys.* **72** 678 (1980), Moessbauer temperature study of two cold smectic (B and H) liquid-crystals.
518. Larin, V. B., and Komarov, V. S., *D. A. N. BSSR*, **24** 1011 (1980), (RS) The influence of defects in the structures of oblique evaporated films on the liquid-crystal alignment.
519. Larsen, D. W., Friberg, S. E., and Christen., H., *J. Am. Chem. S.*, **102** 6565 (1980), Mobility of solvent molecules in a non-aqueous lyotropic liquid-crystal.
520. Laurent, M., Hochapfel, A., and Viovy, R., *Liquid-Crystals of One- and Two-Dimensional Order*, p.282, Springer-Verlag, (1980), Optical properties of ly-tropic nematic phases.
521. Leadbetter, A., Mazid, M. A., and Malik, K. M. A., *Molec. Cryst.*, **61** 39 (1980), The crystal and molecular structure of isobutyl 4-(4-phenylbenzylidene-amino) cinnamate (IBPBAC) and the crystal smectic-E transition.
522. Lebedev., V. I., and Tomilin, M. G., *Sov. J. Opt. T.*, **47** 45 (1980), Possibilities of using liquid-crystal elements in optical instrument manufacturing.
523. Lee, Y., Reeves, L. W., and Tracey, A. S., *Can. J. Chem.*, **58** 110 (1980), Studies in membrane processes. 9. The bilayer structure in mixed dodecanoate-decyltri-methylammonium micelles of a novel type-II mesophase.
524. Legrance, J. D., and Mochel, J. M., *B. Am. Phys. S.*, **25** 214 (1980), High resolution heat capacity studies near the nematic smectic-A transition of octyl-oxycyanobiphenyl.
525. Legrance, J. D., and Mochel, J. M., *Phys. Rev. L.*, **45** 35 (1980), High-resolution heat-capacity studies near the nematic smectic-A transition in octyloxycyanobi-phenyl (8OCB).
526. Lekkerke., H. N. W., and Deblieck, R., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 289, Springer-Verlag, (1980), Phase transitions in a so-lution of rod-like particles with different lengths.
527. Lelj, F., Russo, N., and Chidichi., G., *Chem. P. Lett.*, **69** 530 (1980), Confor-mational study of bipyrimidines: Theoretical ab initio and experimental PMR study of 2,2-bipyrimidine dissolved in a nematic solvent.

528. Lemanska, G., and Narebska, A., *J. Pol. Sc. P. P.*, **18** 917 (1980), Quantitative determination of mesomorphic regions in oriented polymers from wide-angle x-ray diffraction.
529. Lemke, G., and Schulze, H., *Ann. Physik*, **37** 437 (1980), (GE) Principal refractive indices of the crystalline phase as starting points for the determination of the order parameter of a mesogenic substance.
530. Leon, V., Bales, B. L., and Villoria, F., *Molec. Cryst.*, **56** 229 (1980), On the flexibility gradient of fatty acid spin labels.
531. Lesniak, M., Labno, W., Szwajcza., E., and Szymansk., A. *Molec. Cryst.*, **61** 241 (1980), Determination of ionic mobility in mesomorphic materials.
532. Lester, R., and Hall, D. R., *J. Chromat.*, **190** 35 (1980), 4-(p-methoxycinnamyl)-4-methoxyazobenzene: A nematic liquid-crystal for the gas-liquid-chromatographic analysis of the stereochemistry of lepidopterous sexpheromones and related unsaturated fatty alcohols and derivatives.
533. Levelut, A. M., Moussa, F., Lambert, M., and Dorner, B., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 62, Springer-Verlag, (1980), Coherent neutron scattering study of the SMV-SMVI transition in TBBA.
534. Levelut, A. M., Hardouin, F., Gasparoux, H., Destrade, C., and Tinh, N. H., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 396, Springer-Verlag, (1980), X-ray investigations and magnetic field effects of a fluid mesophase of disk-like molecules.
535. Levstik, A., Zeks, B., Levstik, I., Blinc, R., and Filipic, C., *Molec. Cryst.*, **56** 145 (1980), Dielectric dispersion in DOBAMBC.
536. Li, T. S., and Dai, Q. H., *Kexue Tongba*, **25** 838 (1980), Synthesis of liquid-crystals containing oxazole ring.
537. Liebert, L. and Martinet, A., *IEEE Magnet.*, **16** 266 (1980), Ferronematic lyotropic.
538. Liebert, L., Strzelec, L., Van Luyen, D. and Levelut, A. M., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 262, Springer-Verlag, (1980), Nematic thermotropic polyester.
539. Lim, K. C., Ho, J. T., and Neubert, M. E., *Molec. Cryst.*, **58** 245 (1980), Critical behaviour of birefringence in two smectic-A pentylbenzenethio-alkoxybenzoates near the smectic-C phase.
540. Limmer, S., Schmiedel, H., Hillner, B., Losche, A., and Grande, S., *J. Physique*, **41** 869 (1980), Ordering and intramolecular mobility in the nematic phase of PAA investigated by means of NMR lineshape analysis and computer simulations of the lineshape.
541. Lin, L., and Wang, X. Y., *Act. Phys. Sin.*, **29** 1427 (1980), (CH) Landau-de-Gennes model of the first order phase transitions: Gaussian approximation.
542. Lin, L., *Wuli*, **9** 8 (1980), (CH) Simple derivation of free energy in liquid-crystals.
543. Lin, W. J., Keyes, P. H., and Daniels, W. B., *J. Physique*, **41** 633 (1980), The nematic isotropic transition at high pressure .2. Turbidity measurements.
544. Lipari, G., and Szabo, A., *Biophys. J.*, **30** 489 (1980), Effect of librational motion on fluorescence depolarization and nuclear magnetic resonance relaxation in macromolecules and membranes.
545. Lisetski., L. N., and Antonyan, T. P., *Zh. Fiz. Khim.*, **54** 1151 (1980), (RS) Theoretical analysis of cholesteric systems with nonmesogenic component.
546. Litster, J. D., Birgeneau, R. J., Kaplan, M., Safinya, C. R., and Als-Nielsen, J., *Ordering in Strongly Fluctuating Condensed Matter Systems*, p. 357, Plenum, N. Y., 1980, Order and fluctuations in smectic liquid-crystals.
547. Litster, J. D., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 65, Springer-Verlag, (1980), High resolution x-ray scattering from smectic A, B and C phase.
548. Liu, J. G., and Lin, L., *Kexue Tongba*, **25** 17 (1980), Nonlinear liquid-crystals.
549. Livingst., G. K., *Radiat. Env.*, **17** 233 (1980), Thermometry and dosimetry of heat with specific reference to the liquid-crystal optical fiber temperature probe.

550. Lochmuel., C. H., and Hinshaw, J. V., *J. Chromat.*, **202** 363 (1980), Direct gas-chromatographic resolution of enantiomers on optically-active mesophases .5. Model chiral 3-aminopropylmethylsiloxane systems.
551. Loewenst., A., and Brenman, M., *J. Phys. Chem.*, **84** 340 (1980), Sodium quadrupolar splitting in a non-aqueous liquid-crystalline solvent.
552. Loewenst., A., and Goldsmit., A. D., *J. Magn. Res.*, **41** 222 (1980), NMR study of nitromethane dissolved in a liquid-crystal.
553. Lohar, J. M., and Mashru, U., *J. Indian Ch.*, **57** 904 (1980), Mesomorphic behaviour of some esters: Ethyl-(alkoxycinnamoyloxy)benzoates.
554. Long, R. C., Babcock, E. E., and Goldstein, J. H., *Molec. Phys.*, **39** 1423 (1980), Proton distance ratios and order tensor elements for several halobenzenes obtained in a lyotropic potassium laurate mesophase.
555. Loseva, M. V., Ostrovsk., B. I., Rabinovi., A. Z., Sonin, A. S., and Chernova, N. I., *Sov. Ph. S. S. R.*, **22** 551 (1980), Variation of spontaneous polarization in homologous series of chiral smectic liquid-crystals.
556. Lozovik, Y. E., Apenko, S. M., and Klyuchnik, A. V., *Sol. St. Comm.*, **36** 485 (1980), Two-dimensional electron crystal in magnetic field: Topological phase transitions and stability region.
557. Luckhurst, G. R., Smith, K. J., and Timimi, B. A., *Molec. Phys.*, **56** 315 (1980), The orientation order of a re-entrant nematic phase: An electron resonance investigation.
558. Luckhurst, G. R., and Romano, S., *Molec. Phys.*, **40** 129 (1980), Computer simulation studies of anisotropic systems .2. Uniaxial and biaxial nematics formed by non-cylindrically symmetric molecules.
559. Lupinacc., D., Frosini, V., and Magagnin., P. L., *Makro. Ch. R. C.*, **1** 671 (1980), Mesomorphic structure of a homopolymer of n-(4-biphenyl)acrylamide and of co-polymers with 4-biphenyl acrylate.
560. Lushingt., K. J., Kasting, G. B., and Garland, C. W., *J. Physique L.*, **41** 419 (1980), Calorimetric study of phase transitions in the liquid-crystal butyloxybenzylidene octylaniline (4O.8).
561. Lushingt., K. J., and Kasting, G. B., *Phys. Rev. B*, **22** 2569 (1980), Calorimetric investigation of a reentrant nematic liquid-crystal mixture.
562. Luzar, M., Rutar, V., Seliger, J., Burgar, M., Blinc, R., *Ferroelectr.*, **24** 215 (1980), C-13 NMR-study of the ferroelectric liquid-crystal DOBAMBC.
563. Lyakhov, G. A., and Makarov, V. A., *Opt. Spektro.*, **49** 1008 (1980), (RS) Non-linear optical activity in the isotropic phase of a cholesteric liquid-crystal.
564. Lydon, J. E., *Molec. Cryst.*, **64** 19 (1980), New models for the mesophases of disodium-chromoglycate (INTAL).
565. Macnaugh., W., and Macdonal., A. G., *Bioc. Biop. A*, **597** 193 (1980), Effects of gaseous anesthetics and inert gases on the phase transition in smectic mesophases of dipalmitoyl phosphatidylcholine.
566. Madhusud., N. V., *Molec. Cryst.*, **59** 117 (1980), Polarization field and orientational order in liquid-crystals.
567. Magalins., V. B., and Glushkov, N. A., *Sov. Ph. Cr. R*, **25** 634 (1980), Temperature dependence of the pitch of the cholesteric helix in a twisted nematic.
568. Maier, A. A., Sukhorukov, A., and Kuzmin, R. N., *Sov. Ph. Tp. L.*, **6** 500 (1980), Coupled-wave method in the theory of Bragg diffraction in cholesteric liquid-crystals.
569. Makhotil., A. P., and Tishchen., V. G., *J. Appl. Chem.*, **53** 2069 (1980), Color-temperature characteristics of liquid-crystal heat indicators based on cholesterol n-alkanoates.
570. Makow, D. M., *Appl. Optics*, **19** 1274 (1980), Peak reflectance and color gamut of superimposed left-handed and right-handed cholesteric liquid-crystals.
571. Maksimov, V. I., and Kirichen., G. B., *Opt. Spektro*, **48** 983 (1980), (RS) Experimental study on electrically controllable color optical filters of nematic liquid-crystals.

572. Maksimov, V. I., and Kirichen., G. B., *Sov. Ph. Tp. R.*, **25** 1453 (1980), Pulse response of liquid-crystal films.
573. Malraison, B., Poggi, Y., and Guyon, E., *Phys. Rev. A.*, **21** 1012 (1980), Nematic liquid-crystals in high magnetic field: quenching of the transverse fluctuations.
574. Marcerou, J. P., and Prost, J., *Molec. Cryst.* **58** 259 (1980), The different aspects of flexoelectricity in nematics.
575. Marchess., R. H., and Dube, M., *Abs. Pap. Acs.*, **179** 5 (1980), Nematic crystalline structures in chemically modified native cellulose fibers and microfibril systems.
576. Markovit., D., Mathis, A., Simon, J., Wittmann, J. C., and Lemoigne, J., *Molec. Cryst.* **64** 121 (1980), Annelide. 5. A new type of lyotropic mesomorphic phase.
577. Marsh, H., Geruspia., I., and Grint, A., *Fuel*, **59** 343 (1980), Carbonization and liquid-crystal (mesophase) development. 14. Co-carbonization of coals with A240 Ashland petroleum pitch: effects of conditions of carbonization upon optical textures of resultant cokes.
578. Marsh, H., and Neavel, R. C., *Fuel*, **59** 511 (1980), Carbonization and liquid-crystal (mesophase) development. 15. A common stage in mechanisms of coal liquefaction and of coal blends for coke making.
579. Marsh, H., Mochida, I., Macefiel, I., and Scott, E., *Fuel*, **59** 514 (1980), Carbonization and liquid-crystal (mesophase) development. 16. Carbonization of soluble and insoluble fractions of coal-extract solution.
580. Marsh, H., Mochida, I., Scott, E., Sherlock, J., *Fuel*, **59** 517 (1980), Carbonization and liquid-crystal (mesophase) development. 17. Co-carbonization of a solvent refined coal with petroleum pitches and hydrogenated coal-extract solution.
581. Marsh, H., Kimber, G. M., Rantell, T., and Scott, E., *Fuel*, **59** 520 (1980), Carbonization and liquid-crystal (mesophase) development. 18. Carbonization of coal-extract solutions (non-hydrogenated): influence of digestion conditions upon optical texture of cokes.
582. Martin, T. I., and Haas, W. E., *Abs. Pap. Acs.*, **179** 55 (1980), Analysis of multicomponent liquid-crystal mixtures using LC-MS-DS techniques.
583. Martinoty, P., and Bader, M., *Appl. Phys. L.* **37** 33 (1980), Pulse acousto-optic modulator using a nematic liquid-crystal in its isotropic phase.
584. Martinoty, P., and Thiriet, Y., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 114, Springer-Verlag, (1980), Dynamic shear properties near a smectic-A to smectic-B phase transition.
585. Martinoty, P., and Bader, M., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 157, Springer-Verlag, (1980), Pulse acoustic-optic modulator using a nematic liquid-crystal in its isotropic phase.
586. Matinot-L., P., and Durand, G., *J. Physique L.*, **41** 43 (1980), Flexoelectric effects in ferroelectric liquid-crystals?
587. Martins, A. F., *Phys. Rev. L.*, **44** 158 (1980), Theoretical foundations of some properties of chain ordering in liquid-crystals.
588. Martire, D. E., Oweimree., G. A., and Dowell, F., *Inor. Ch. A. A.*, **40** 54 (1980), The effect of solute structure on the nematic isotropic transition in binary mixtures.
589. Massalska., M., Moscicki, J. K., and Wrobel, S., *Act. Ph. Pol. A.*, **58** 443 (1980), Dielectric study of NPOB.
590. Mathey, Y., Mazieres, C., Gourdji, M., and Guibe, L., *Molec. Phys.*, **39** 693 (1980), (FR) NMR study of phase transitions in the paraffinic system of lamellar composition Ni(Cn)2-dodecylamine.
591. Matsuoka, Y., *J. Phys. Chem.*, **84** 1361 (1980), Film, dichroism. 4. Linear dichroism study of orientation behaviour of planar molecules in stretched polyvinyl-alcohol film.
592. Maze, C., *Hewlett-Pac*, **31** 22 (1980), First HP liquid-crystal display.

593. Meiboom, S. and Sammon, M., *Phys. Rev. L.*, **44** 882 (1980), Structure of the blue phase of a cholesteric liquid-crystal.
594. Meiboom, S. and Sammon, M., *Physics and Chemistry of Liquid-Crystal Devices*, p. 13, Plenum, N.Y., 1980, Molecular orientation of liquid-crystal layers on various substrates.
595. Meirovitch, E., and Freed, J. H., *J. Phys. Chem.*, **84** 2459 (1980), Electron-spin resonance studies of anisotropic ordering, spin relaxation and slow tumbling in liquid-crystalline solvents. IV. Cholestane motions and surface anchoring in smectics.
596. Meirovitch, E., and Freed, J. H., *J. Phys. Chem.*, **84** 3281 (1980), ESR studies of low water content 1, 2-dipalmitoyl, SN-glycero-3-phosphocholine in oriented multilayers. I. Evidence for long-range cooperative chain distortions.
597. Meirovitch, E., and Freed, J. H., *J. Phys. Chem.*, **84** 3295 (1980), ESR studies of low water content 1, 2-dipalmitoyl, SN-glycero-3-phosphocholine in oriented multilayers. II. Evidence for magnetic-field-induced reorientation of the polar headgroups.
598. Menczel, J., and Wunderlich, B., *B. Am. Phys. S.*, **25** 400 (1980), Glass transitions of mesophase macromolecules.
599. Menczel, J., and Wunderlich, B., *J. Pol. Sc. PP.*, **18** 1433 (1980), Phase transitions in mesophase macromolecules. 1. Novel behaviour in the vitrification of poly-(ethylene terephthalate-co-para-oxybenzoate).
600. Mesecke, J. K., and Urban, S., *Molec. Cryst.*, **59** 73 (1980), Dielectric relaxation in the metastable modification of the solid phase of p-methoxybenzylidene-p-n-butylaniline.
601. Meyer, R. B., *Ferroelectr.*, **28** 319 (1980), Ferroelectric liquid-crystals: fundamentals and possibilities for applications.
602. Michel, L., *Rev. M. Phys.*, **52** 617 (1980), Symmetry defects and broken symmetry: configurations hidden symmetry.
603. Miike, H., Yamada, T., and Ebina, Y., *Jap. J. A. Phy.*, **19** 653 (1980), A two-color display device utilizing field-induced pitch contraction in cholesteric liquid-crystal with negative dielectric anisotropy.
604. Miller, W. G., *B. Am. Phys. S.*, **25** 398 (1980), Structure and stability of lyotropic polypeptide liquid-crystals.
605. Mints, R. I., Kononenk., E. V., and Akselrod, E. G., *Sov. Ph. Cr. R.*, **25** 567 (1980), The disclinations and director field in a nematic-cholesteric mixture with a concentration gradient.
606. Miraldi, E., Trossi, L., Valabreg, P. T., and Oldano, C., *Nuov. Cim. B.*, **60** 165 (1980), Generalized method for nematic liquid-crystal viscoelastic constant determination by quasi-elastic light scattering.
607. Miyano, K., *B. Am. Phys. S.*, **25** 212 (1980), Surface induced ordering in the isotropic phase of liquid-crystals.
608. Miyano, K., *Sol. S. Ph. Jap.*, **15** 713 (1980), Interaction of liquid-crystals with solid surfaces.
609. Miyata, I., and Kishimoto, H., *Chem. Pharm.*, **28** 619 (1980), Viscosities of cholesteryl myristate, palmitate and oleate in the isotropic cholesteric and transition states with and without the addition of higher alkanols.
610. Mochida, I., Miyasaka, H., Fujitsu, H., Takeshi, K., Takahashi, R., and Marsh, H., *Fuel*, **59** 349 (1980), Microscopic and chemical study of anisotropic mesophase possessing novel features.
611. Moncton, D. E., Pindak, R., and Goodby, J. W., *B. Am. Phys. S.*, **25** 213 (1980), X-ray study of the smectic-F phase in thin films.
612. Montgome., G. P., *J. Opt. Soc.*, **70** 287 (1980), Optical properties of a liquid-crystal image transducer at normal incidence: mathematical analysis and application to the off-state.
613. Montgome., G. P., *J. Opt. Soc.*, **70** 843 (1980), Optical properties of a liquid-crystal image transducer at normal incidence: on-state.

614. Montgome., G. P., *Appl. Optics.*, **19** 3103 (1980), Use of equivalent films to reduce effects of nonuniform liquid-crystal thickness in a liquid-crystal image transducer.
615. Moore, T. C., Kuo, A. L., Matthews, R. C., Wade, C. G., Tarr, C. E., and Field, M. E., *J. Magn. Res.*, **38** 135 (1980), NMR relaxation and linewidths in a series of alkoxyazoxybenzenes.
616. Moritz, E., *Molec. Cryst.*, **56** 177 (1980), Effect of fluctuation on evanescence in nematics.
617. Morriset., J. D., Pownall, H. J., Plumlee, R. T., Smith, L. C., Yang, R. D., Patel, K. M., Knapp, R. D., and Sklar, L. A., *J. Am. Oil. Ch.*, **57** 122 (1980), Effect of a trans fatty-acid (elaicid acid) on the thermotropic properties of a bacterial membrane and its lipid components.
618. Moscicki, J. K., and Urban, S., *Molec. Cryst.*, **59** 73 (1980), Dielectric relaxation in the metastable modification of the solid phase of p-methoxybenzylidene-p-n-butylaniline.
619. Motika, G., Agocs, P. M., Szabo, A., and Zoltai, A. I., *Act. Phys. Ch.*, **26** 71 (1980), Liquid-crystals. 3. Synthesis of n-(alkoxycarbonyl-n-decyl)-3-beta-cholesteryl urethanes and their polymorphic and mesomorphic properties.
620. Motoc, C., Mitroi, R., and Rosu, C. B., *B. I. Po. Buc. E.*, **42** 15 (1980), (RU) On some hysteresis phenomena in mixtures of liquid-crystals.
621. Motoc, C., Honciuc, M., Cuculescu, I., *B. I. Po. Buc. E.*, **42** 17 (1980), (RU) On some techniques employed for liquid-crystal characterization.
622. Muellerw., U. T., Nazzal, A., Cox, R. J., and Giroud, A. M., *J. Chem. S. Ch.* **1980** 497 (1980), Smectic and nematic derivatives of tetrathia-fulvalene (TTF) and their charge-transfer complexes with mesomorphic dithienes.
623. Muellerw., U. T., Nazzal, A., Cox, R. J., and Giroud, A. M., *Molec. Cryst.*, **56** 249 (1980), Mesomorphic transition-metal complexes. 4. Dithiene complexes of Ni, Pd, and Pt.
624. Mugele, T., Graf, V., Woelfel, W., and Noack, F., *Z. Naturfo. A.*, **35** 924 (1980), Investigation of molecular motion in smectic phases of the liquid-crystal TBBA by NMR relaxation dispersion.
625. Mugele, T., Graf, V., Woelfel, W., and Noack, F., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 88, Springer-Verlag, (1980), Investigation of molecular motions in smectic A and C TBBA by NMR relaxation dispersion.
626. Mukamel, D., and Hornreich, R. M., *J. Phys. C.*, **13** 161 (1980), Nematic smectic-C phase transition: a renormalization group-analysis.
627. Mukamel, D., and Hornreich, R. M., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 80, Springer-Verlag, (1980), The nematic smectic-C phase transition: a renormalization group analysis.
628. Mulvaney, B., and Swift, J., *Phys. Rev. B.*, **21** 2676 (1980), NMR relaxation-time near phase transitions in liquid-crystals.
629. Muriel, M. A., and Martinpe., J. A., *Optics Lett.*, **5** 494 (1980), Liquid-crystal electro-optic modulator based on electrohydrodynamic effects.
630. Muriel, M. A., and Martinpe., J. A., *J. Opt. Soc.*, **70** 1610 (1980), Analog light-beam deflector with liquid-crystals.
631. Murthy, V. R., Naidu, S. V., and Reddy, R. N. V. R., *Molec. Cryst.*, **59** 27 (1980), Polarizabilities of a few nematic liquid-crystals.
632. Murthy, V. R., and Reddy, R. N. V. R., *Act. Ph. Ac. Hu.*, **48** 293 (1980), Polarizabilities of liquid-crystals of a series of 4-cyano-phenyl esters of 4-alkoxy-cinnamic acids.
633. Murthy, V. R., and Reddy, R. N. V. R., *Act. Cien. Ind.*, **6** 21 (1980), Quantum mechanical approach to the polarizabilities of few liquid-crystals.
634. Murthy, M. V. R. K., and Shukla, R. P., *Opt. Eng.*, **19** 113 (1980), Liquid-crystal wedge as a polarizing element in its use in shearing interferometry.
635. Muschik, G. M., and Miller, M., *Abs. Pap. Acs.*, **179** 73 (1980), Evaluation of high temperature nematic liquid-crystal GLC capillary columns.

636. Muschik, G. M., Kelly, T., and Manning, W. B., *J. Chromat.*, **202** 75 (1980), Gas-liquid-chromatographic separation of methoxy-substituted quinones on nematic liquid-crystals.
637. Nabarro, F. R. N., *Dislocations in Solids*, Vol. 5, p. 421, North-Holland, (1980), Other effects of dislocations: disclinations.
638. Nabarro, F. R. N., Quintan., A. T., and Hanson, K., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 327, Springer-Verlag, (1980), The crenation of lipid bilayers and of the membrane of the human red blood cell.
639. Naemura, S., *J. Appl. Phys.*, **51** 6149 (1980), Polar and non-polar contributions to liquid-crystal orientations on substrates.
640. Naikwadi, K. P., Panse, D. G., Bapat, B. V., and Ghatge, B. B., *J. Chromat.*, **195** 309 (1980), Liquid-crystals. 1. Synthesis and application as stationary phases in gas-liquid-chromatography.
641. Nakahara, M., Maeda, K., and Osugi, J., *B. Chem. S. Jap.*, **53** 2499 (1980), Effect of pressure of mesomorphic transitions in cholesterol esters of unsaturated C-18 aliphatic-acids.
642. Nakajima, Y., Yoshida, H., Kobinata, S., and Maeda, S., *J. Ph. Soc. Jap.*, **49** 1140 (1980), Determination of order parameter in liquid-crystal by resonance Raman method: MBBA as probed by beta-carotene.
643. Nakamura, S., Kabashima, S., and Kawakubo, T., *J. Ph. Soc. Jap.*, **48** 33 (1980), Wave number spectrum of dissipative structures in nematic liquid-crystals.
644. Nakano, F., Kawakami, H., Morishit., H., and Sato, M., *Jap. J. A. Phy.*, **19** 659 (1980), Dynamic properties of twisted nematic liquid-crystal cells.
645. Nakano, F., Isogai, M., and Sato, M., *Jap. J. A. Phy.*, **19** 2013 (1980), Simple method of determining liquid-crystal tilt-bias angle.
646. Naqvi, K. R., *J. Chem. Phys.*, **73** 3019 (1980), Photoselection in uniaxial liquid-crystals: the effect of rotational Brownian motion on measurements of orientational distribution function.
647. Nazem, F. F., *Carbon*, **18** 43 (1980), Flow of molten mesophase pitch.
648. Nazem, F. F., *Fuel*, **59** 851 (1980), Rheology of carbonaceous mesophase pitch.
649. Nelson, D. R., Halperin, B. I., *Phys. Rev. B.*, **21** 5312 (1980), Solid and fluid phases in smectic layers with tilted molecules.
650. Nesrulla., A. N., Sonin, A. S., and Shelemin, E. B., *Zh. Np. Fotog.*, **25** 57 (1980), (RS) Determination of the indicatrix of scattering of liquid-crystals for coherent and non-coherent radiation.
651. Nesrulla., A. N., Rabinovi., A. Z., and Sonin, A. S., *Sov. Ph. Cr. R.*, **25** 252 (1980), Nature of the smectic-A nematic phase transition in binary mixtures of 4-n-octyl-4-cyanodiphenyl with 4-n-decyl-4-cyanodiphenyl.
652. Nesrulla., A. N., Rabinovi., A. Z., Sonin, A. S., and Shelemin, E. B., *Kvan. Elektr.*, **7** 2578 (1980), (RS) Thermo-optical recording by a chiral ferroelectric smectic-C phase of liquid-crystals.
653. Neubert, M. E., Carlino, L. T., Fishel, D. L., and Dsidocky, R. M., *Molec. Cryst.*, **59** 253 (1980), The effect of terminal alkyl chain length on mesomorphic properties of 4-alkoxyphenyl-4-alkylbenzoates.
654. Nikitin, E. N., Arechev, I. P., and Zaitseva, N. V., *Sov. Ph. Cr. R.*, **25** 119 (1980), Directed crystallization of p-azoxyanisole in electric and magnetic fields.
655. NN, *Electr. Eng.*, **52** 27 (1980), Liquid-crystal displays.
656. Odawara, K., Ishibashi, T., Kinugawa, K., Sakurada, H., and Tanaka, H., *P. SID*, **21** 79 (1980), An 80-character alphanumeric liquid-crystal display system for computer terminals.
657. Odulov, S. G., Reznikov, Y. A., Sarbey, O. G., Soskin, M. S., Frolova, E. K., and Khizhnya., A. I., *Ukr. Fiz. Zh.*, **25** 1922 (1980), (RS) Dynamic holographic lattices in mesophase of a nematic liquid-crystal.
658. Oloane, J. K., *Chem. Rev.*, **80** 41 (1980), Optical activity in small molecules, non-enantiomorphous crystals and nematic liquid-crystals.

659. Onogi, Y., Withe, J. L., and Fellers, J. F., *J. Pol. Sc. P. P.*, **18** 663 (1980), Structural investigations of polymer liquid-crystalline solutions: aromatic polyamides, hydroxy propyl cellulose and poly(gamma-benzyl-L-glutamate).
660. Onogi, Y., White, J. L., and Fellers, J. F., *J. Non-Newt. F.*, **7** 121 (1980), Rheo-optics of shear and elongational flow of liquid-crystalline polymer-solutions: hydroxypropyl cellulose/water and poly-P-phenylene-terephthalamide sulfuric acid.
661. Onogi, Y., Fellers, J. F., and White, J. L., *J. Rheol.*, **24** 917 (1980), Rheooptical behavior of liquid-crystalline polymer solutions.
662. Osimov, M. A., *JETP Letter*, **32** 629 (1980), Steric interactions of molecules and the flexoelectric effect in smectic-C liquid-crystals.
663. Osman, M. A., and Revesz, L., *Molec. Cryst.*, **56** 133 (1980), Mesomorphic properties of some alkyl-amino substituted phenylcyclohexanes.
664. Osman, M. A., and Revesz, L., *Molec. Cryst.*, **56** 157 (1980), Trans, trans-cyclohexyl cyclohexanoates: a new class of aliphatic liquid-crystals.
665. Ostrovsk., B. I., Rabinovi., A. Z., Sonin, A. S., Sorkin, E. L., Strukov, B. A., and Taraskin, S. A., *Ferroelectr.*, **24** 309 (1980), Ferroelectric behavior of different classes of smectic liquid-crystals.
666. Ostrovsk., B. I., and Chigrinov, V. G., *Sov. Ph. Cr. R.*, **25** 322 (1980), Linear electrooptic effect in chiral smectic-C liquid-crystals.
667. Otnes, K., and Riste, T., *Phys. Rev. Let.*, **44** 1490 (1980), Observation by neutron correlation spectroscopy of a nonlinear soft mode at the Rayleigh-Benard instability in azoxyanisole.
668. Ovsyanni, V. D., Svechniko., S. V., and Sorokin, V. M., *Polu. Tekh. Mi.*, **31** 27 (1980), (RS) Obtaining transparent conducting films for electrooptical light modulators with homeotropic orientation of the liquid-crystal molecules.
669. Oweimree, G. A., and Martire, D. E., *J. Chem. Phys.*, **72** 2500 (1980), The effect of quasispherical and chain-like solutes on the nematic to isotropic phase transition in liquid-crystals.
670. Owersbra., J. R., Calder, I. D., Ketterso., J. B., and Halperin, W. P., *B. Am. Phys. S.*, **25** 213 (1980), NMR study of the smectic-A smectic-B phase transition in 4O.8.
671. Oyabu, T., *J. Vac. Soc. Jp.*, **23** 68 (1980), Structure of obliquely deposited SiO films for use in liquid-crystal devices.
672. Panikars., V. D., Tishchen., V. G., and Lisetski., L. N., *Zh. Fiz. Khim.*, **54** 1147 (1980), (RS) Influence of nonmesogenic additions on selective reflection of cholesteric system.
673. Papanek, J., and Strba, A., *Act. Phy. Slov.*, **30** 219 (1980), Temperature dependence of transient self-focusing in the isotropic phase of MBBA.
674. Pardowit., I., and Hess, S., *Physica A.*, **100** 540 (1980), On the theory of irreversible processes in molecular liquids and liquid-crystals: nonequilibrium phenomena associated with the second and fourth rank alignment tensors.
675. Parfyono., A.V., Kompanet., I. N., and Popov, Y. M., *Kvan Elektr.*, **7** 290 (1980), (RS) Spatial light modulation in photosensitive high-resolution MIS structures with a liquid-crystal.
676. Parkash, S. and Berkowit., N., *Carbon*, **18** 43 (1980), Mesophase behavior of bitumen pitch from oil sands in the early stages of carbonization.
677. Parkash, S. and Berkowit., N., *Fuel*, **59** 375 (1980), Mesophase behavior in oil sand bitumen pitch.
678. Patel, D. L., and Dupre, D. B., *J. Chem. Phys.*, **72** 2515 (1980), Optical rotatory behavior of polypeptide solutions in the liquid-crystal and pretransitional regions.
679. Patel, D. L., and Dupre, D. B., *J. Pol. Sc. P. P.*, **18** 1599 (1980), Spherulite morphology in liquid-crystals of polybenzylglutamates: optical rotatory power and effect of magnetic field.
680. Pavlyuch., A. I., Titov, V. V., Smirnova, N. I., and Grachev, V. T., *Khim. Getero.*, **1980** 888 (1980), (RS) Synthesis and structure of mesomorphous 2-cyano-5-alkyl(alkoxy)phenylpyridines.

681. Pedersen, A. M., and Riste, T., *Z. Phys. B*, **37** 171 (1980), Real time observations by neutron scattering of fluctuations near the Rayleigh-Benard instability.
682. Pedulli, G. F., Cabiddu, S., and Zannoni, C., *Inor. Ch. A. A.*, **40** 96 (1980), Selective interactions between spin probes and lyotropic phases with anionic or cationic head groups.
683. Pellatt, M. G., Roe, I. H. C., and Constant, J., *Molec. Cryst.*, **59** 299 (1980), Photostable anthraquinone pleochroic dyes.
684. Pelzl, G., *Krist. Tech.*, **15** 349 (1980), Dielectric reorientation of smectic-C, smectic-F, and smectic-I phases.
685. Pelzl, G., Hauser, A., Kresse, H., and Demus, D., *Krist. Tech.*, **15** 1345 (1980), Frequency dependence of the Fredericksz transition in the nematic and smectic-C phase of 3-n-heptyl-6-(4-n-pentyl-oxyphenyl)-1,2,4,5-tetrazine.
686. Penz, P. A., *Physics and Chemistry of Liquid-Crystal Devices*, p. 199, Plenum, N.Y., 1980, Analog displays: the other approach to LCDs.
687. Perrin, H., and Berges, J., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 89, Springer-Verlag, 1980, Study of conformational motions in the aromatic core of Schiffs bases by semi-empirical quantic or empirical methods. Influence of the packing of molecules on the conformation.
688. Pershan, P. S., and Asher, S. A., *Fed. Proc.*, **39** 2191 (1980), Polarized Raman and x-ray studies of lipid orientation in single crystals and monodomain liquid-crystals of lipids.
689. Pershin, V. K., Pershin, V. L. K., and Fishbein, L. A., *Act. Ph. Ac. Hu.*, **48** 281 (1980), Dynamical aspects of the formation of the mesomorphic state structure.
690. Pershin, V. K., Pershin, V. L. K., and Fishbein, L. A., *Sov. Ph. Cr. R.*, **25** 532 (1980), Dynamics of structural disordering of a molecular crystal in the mesogenic region.
691. Persson, N. O., and Lindblom, G., *J. Phys. Chem.*, **83** 3015 (1980), Cesium ion and water interaction in the lamellar phase of the 1-monooctanon-water-CsCl system. NMR quadrupole splittings and chemical shift anisotropies.
692. Pesquer, M., Cotrait, M., Marsau, P., and Volpilha, V., *J. Physique*, **41** 1039 (1980), Molecular conformation and arrangement of a disc-like compound by semi-empirical calculations.
693. Petrov, A. G., and Naidenov, S., *J. Disp. Sci.*, **1** 283 (1980), Stabilization of foam films of non-ionic detergents by liquid-crystals.
694. Phaovibul, O., and Tang, I. M., *J. Sci. S. Thai*, **6** 112 (1980), Nematic isotropic transition temperature of binary nematic liquid-crystal mixtures.
695. Phaovibul, O., Pongthana, K., and Tang, I. M., *Molec. Cryst.*, **62** 25 (1980), Dilatometric properties of p-azoxyanisole (PAA), p-p-di-n-pentyloxyazoxybenzene (PPAB) and their mixtures.
696. Pichikyan, N. A., Slepko, I. A., and Sonin, A. S., *Sov. Ph. Cr. R.*, **25** 108 (1980), Dynamic characteristics of electrooptical effect with memory in smectics A.
697. Pick, R. M., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 47, Springer-Verlag, (1980), Physical properties of plastic crystals.
698. Pikin, S. A., and Chigrinov, V. G., *Zh. Eksy. Teo.*, **78** 246 (1980), (RS) Novel type of high frequency instability in nematic liquid-crystals.
699. Pikin, S. A., *Sov. Te. Ph. L.*, **6** 205 (1980), Nonlinear flexoelectric effect.
700. Pindak, R., Bishop, D. J., and Sprenger, W. O., *B. Am. Phys. S.*, **25** 213 (1980), Mechanical measurements on freely suspended liquid-crystal films.
701. Pindak, R., Bishop, D. J., and Sprenger, W. O., *Phys. Rev. L.*, **44** 1461 (1980), Mechanical measurements of the smectic-B smectic-A transition in liquid crystal films.
702. Pindak, R., Young, C. Y., Meyer, R. B., and Clark, N. A., *Phys. Rev. L.*, **45** 1193 (1980), Macroscopic orientation patterns in smectic-C films.

703. Pirkle, W. H., and Rinaldi, P. L., *J. Org. Chem.*, **45** 1379 (1980), Use of liquid-crystal-induced circular dichroism for determination of absolute configuration of alcohols and oxapiridines.
704. Pisarski, R. D., and Stein, D. L., *J. Physique*, **41** 345 (1980), Surface singularities in nematics and some notes on cholesterics.
705. Plate, N. A., and Shibaev, V. P., *J. Pol. Sc. P. C.*, **1980** 1 (1980), Thermotropic liquid-crystalline polymers: a new type of mesomorphic macromolecular system.
706. Pleiner, H., and Brand, H., *J. Physique L.*, **41** 383 (1980), Oscillatory convective instabilities in cholesteric and smectic-A liquid-crystals.
707. Pleiner, H., and Brand, H., *J. Physique L.*, **41** 491 (1980), On the influence of higher-order radiant terms on the hydrodynamics of liquid-crystals.
708. Pleiner, H., and Brand, H., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 117, Springer-Verlag, (1980), Convective instabilities in cholesteric smectic A liquid-crystals.
709. Pocsik, I., *Hu. Ac. Bu. Kfki.*, **47** 7 (1980), New interpretation of light scattering measurements in nematic liquid-crystals.
710. Poeti, G., and Fanelli, E., *Chim. Ind. M.*, **62** 814 (1980), (IT) New homologous series of liquid-crystals.
711. Poeti, G., Fanelli, E., and Braghet, M., *Molec. Cryst.*, **61** 163 (1980), Liquid-crystalline phases in 4-propionyl-4-n-alkanoyloxyazobenzenes.
712. Pollmann, P., and Scherer, G., *Ber. Buns. Ges.*, **84** 571 (1980), (GE) The influence of temperature and composition on the kind of phase transitions of cholesteric liquid-crystals at pressures up to 2.5 kbar.
713. Pollmann, P., *Hi Temp. Hi P.*, **13** 103 (1980), Phase transition lines of the blue phase of cholesteryl nonanoate up to 1200 bars.
714. Pouligny, B., and Sein, E., *Phys. Rev. A.*, **21** 1528 (1980), Additional contribution, with no critical thermal behavior, to the optical Kerr constant of nematicogens in their isotropic phases.
715. Praefcke, K., Schmidt, D., and Heppke, G., *Chem. Zeitung*, **104** 269 (1980), (GE) 1, 2-di-(trans-4-alkylcyclohexyl)ethanes, 1, 2-di-(trans-4-alkylcyclohexyl)ethenes and 1, 2-di-(trans-4-alkylcyclohexyl)ethynes: new liquid-crystalline compounds.
716. Prasad, J. S., and Gowda, L. S., *Ind. J. P. A. Ph.*, **18** 127 (1980), Low angle x-ray diffraction study of liquid-crystal: cholesteryl methyl carbonate.
717. Prasad, J. S., Shivapra., N. C., and Rajalaks., P. K., *Act. Ph. Pol. A*, **57** 921 (1980), The origin of macroscopic helical structure in the cholesteric liquid-crystalline phase.
718. Prasad, J. S., and Shivapra., N. C., *Act. Ph. Pol. A*, **58** 101 (1980), On the existence of tails or smear effects in the diffraction photographs of mesogenic materials.
719. Prasad, J. S., and Shivapra., N. C., *Act. Ph. Pol. A*, **58** 95 (1980), Long periods in cholesteryl ethyl carbonate.
720. Price, A. H., and Evans, M. W., *J. Chem. S. F.* **2**, **76** 217 (1980), Diffusion equation for the nematic phase dielectric loss.
721. Priest, R. G., *Molec. Cryst.*, **60** 167 (1980), Landau phenomenological theory of one and two component phospholipid bilayers.
722. Prost, J., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 125, Springer-Verlag, 1980, Reflections on the reentrant nematic and the SA-SA phase transitions.
723. Przedmojsk., J., and Pura, B., *Krist. Tech.*, **15** 1037 (1980), X-ray investigation of NPOOB crystals.
724. Pysz, R. W., and Heintz, E. A., *Carbon*, **18** 43 (1980), Mesophase development on a carbon substrate.
725. Rabinovi., A. Z., Sonin, A. S., Anisimova, T. N. Loseva, M. V., and Chernova, N. I., *Sov. Te. Ph. L.*, **6** 177 (1980), Spontaneous polarization in a binary mixture of chiral smectics.

726. Raisanen, K., *J. Mol. Struct.*, **69** 89 (1980), Proton, carbon, silicon, and tin NMR-studies on methyltrichlorosilane and methyltrichlorostannane in isotropic and anisotropic phases.
727. Rajalaksh., P. K., Shivapra., N. C., and Prasad, J. S., *Molec. Cryst.*, **60** 311 (1980), Infrared spectroscopic studies of the nematogenic homologous series para-(para-ethoxyphenylazo)phenyl alkanoates.
728. Rajan, V. T., and Woo, C. W., *Phys. Rev. A*, **21** 990 (1980), Liquid-crystalline properties and reentrance phenomena in PBLG solutions.
729. Rajasekh., M. V., and Manohara., P. T., *Molec. Cryst.*, **59** 197 (1980), EPR studies on cooper and cobalt triazene-l-oxide complexes in a frozen nematic medium.
730. Rance, M., Jeffrey, K. R., Tulloch, A. P., Butler, K. W., and Smith, I. C. P., *Bioc. Biop. A*, **600** 245 (1980), Orientational order of unsaturated lipids in the membranes of acholeplasma-laidlawii as observed by H-2-NMR.
731. Rao, A. S. N., Murty, P. N., Murty, C. R. K., Reddy, T. R., and Bahadur, B., *Phys. St. A*, **58** 567 (1980), Electron-paramagnetic resonance study of molecular ordering in liquid-crystal: DBAP.
732. Rao, A. S. N., Murty, C. R. K., and Reddy, T. R., *Z. Naturfo. A*, **35** 841 (1980), EPR study of the nematic liquid-crystals: PEBAB and EBRA.
733. Rao, A. S. N., and Murty, C. R. K., *Ind. J. P. A. Ph.*, **18** 262 (1980), EPR study of p-n-octyloxybenzylidene-p-toluidine using VAAC probe.
734. Ratna, B. R., *Molec. Cryst.*, **58** 205 (1980), Magnetic and electric birefringence in the isotropic phase of a nematic of large positive dielectric anisotropy.
735. Raynes, E. P., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 176, Springer-Verlag, (1980), Applications of smectic and cholesteric liquid-crystals.
736. Rayss, J., Witkiewicz, Z., Waksmond., A., and Dabrowski, R., *J. Chromat.*, **188** 107 (1980), Effect of the support surface on the structure of the film of liquid-crystalline stationary phase.
737. Razinaqv., K., *J. Chem. Phys.*, **73** 3019 (1980), Photoselection in uniaxial liquid-crystals: the effect of rotational Brownian motion on measurements of orientational distribution function.
738. Razumov, A. A., and Kirsanov, E. A., *Sov. Ph. Tp. R.*, **25** 746 (1980), Electrothermal effect in nematic crystals in the conduction regime.
739. Reid, C. J., and Evans, M. W., *Molec. Phys.*, **40** 1523 (1980), Assignment of far infrared absorptions in liquid-crystalline 4-n-heptyl-4-cyanobiphenyl.
740. Resing, H. A., and Slotfeld., D., *J. Magn. Res.*, **38** 401 (1980), Order parameter from chemical-shift anisotropy patterns in two-dimensional systems.
741. Richards., R. M., Leadbetter, A., Bonsor, D. H., and Kruger, G. J., *Molec. Phys.*, **40** 741 (1980), A self-consistent interpretation of nuclear magnetic resonance and quasi-elastic neutron scattering data from the smectic-A and nematic phases of ethyl-4-(4-acetoxybenzylidene)aminocinnamate.
742. Richter, W. J., Heggemei., H., Krabbe, H. J., Korte, E. H., and Schrader, B., *Ber. Buns. Ges.*, **84** 200 (1980), (GE) Experimental test of approximative chirality functions at the examples of induced cholesteric solutions. Chiral methane derivatives. 2.
743. Riggs, D. M., and Diefendo., R. J., *Carbon*, **18** 42 (1980), Effect of heat treatment on the molecular characteristics of mesophase forming material.
744. Robert, J., and Clerc, F., *SID Dig.*, **11** 30 (1980), Liquid-crystal matrices for TV and colored graphic displays.
745. Rondelez, F., Gruler, H., and Vilanove, R., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 260, Springer-Verlag, (1980), Photochromic polymers in two dimensions.
746. Ronis, D., and Rosenbla., C., *B. Am. Phys. S.*, **25** 213 (1980), Unified model of the smectic-A, nematic and isotropic phases in bulk and thin films.
747. Ronis, D., and Rosenbla., C., *Phys. Rev. A*, **21** 1687 (1980), Unified model of the smectic-A, nematic and isotropic phase for bulk, interfaces, and thin films: bulk.

748. Rosciszewski, K., *Act. Ph. Pol. A*, **57** 927 (1980), Topological classification of symmetry defects and solitons in thin layers of liquid-crystals.
749. Rosenblatt, C., Meyer, R. B., Pindak, R., and Clark, N. A., *Phys. Rev. A*, **21** 140 (1980), Temperature behavior of ferroelectric liquid-crystal thin films: a classical XY system.
750. Rosenblatt, C., and Amer, N. M., *B. Am. Phys. S.*, **25** 213 (1980), Optical determination of smectic-A layer spacing in freely suspended thin films.
751. Rosenblatt, C., and Amer, N. M., *Appl. Phys. L.*, **36** 432 (1980), Optical determination of smectic-A layer spacing in freely suspended thin films.
752. Rothschild, K. J., Rosen, K. M., and Clark, N. A., *Biophys. J.*, **31** 45 (1980), Incorporation of photoreceptor membrane into a multilamellar film.
753. Ryumtsev, E. I., Kovshik, A. P., and Polushin, S. G., *Sov. Ph. Cr. R.*, **25** 197 (1980), Dipole polarization mechanisms for nematic liquid-crystals with dielectric anisotropy.
754. Sackmann, E., Rueppel, D., and Gebhardt, C., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 309, Springer-Verlag, (1980), Defect structure and texture of isolated bilayers of phospholipids and phospholipid mixtures.
755. Sackmann, H., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 19, Springer-Verlag, (1980), The system of nonamphiphilic smectic liquid-crystals with layer structures.
756. Sadlejso, N., *J. Chem. Educ.*, **57** 223 (1980), Imposed orientation of dye molecules by liquid-crystals and an electric field.
757. Safinya, C. R., Kaplan, M., Als-Nielsen, J., Birgeneau, R. J., Davidov, D., Litster, J. D., Johnson, D. L., and Neubert, M. E., *Phys. Rev. B*, **21** 4149 (1980), High-resolution x-ray study of a smectic-A smectic-C phase transition.
758. Saito, S., Shirakura, Y., and Kamihara, M., *T. I. E. Com. J.*, **63** 75 (1980), Conformation of molecular orientation in a cell of nematic liquid-crystal pretilted reversely on both electrode surfaces.
759. Sakagami, S., and Nakamizo, M., *B. Chem. S. Jap.*, **43** 229 (1980), Liquid-crystalline properties of n-(4-alkoxybenzylidene)-4-halogenoanilines.
760. Sakamoto, K., *Molec. Cryst.*, **59** 59 (1980), Liquid-crystals composed of n-acylamino acids. 2. Influence of crystalline structure of n-acyl-L-glutamic acid on the formation of liquid-crystals.
761. Samulski, E. T., and Luz, Z., *J. Chem. Phys.*, **73** 142 (1980), On the blue phase of cholesteric liquid-crystals: a deuterium NMR study.
762. Samulski, E. T., *Ferroelectr.*, **30** 83 (1980), Constrained chain statistics: D-NMR of octane in a nematic solvent.
763. Sandhu, J. S., Britton, W. G. B., Stephens, R. W., *IEEE Son. Ul.*, **27** 161 (1980), Acousto-hydrodynamic effects in liquid-crystals excited by surface waves.
764. Sengen, O., Okada, T., and Yamamoto, Y., *Kobun. Ron. Jp.*, **37** 367 (1980), Differential scanning calorimetry of polyether-polyester elastomers by use of poly(oxy-1, 4-butylene glycol) as a soft segment. XI. Studies on blockpolymers prepared by polycondensation.
765. Sarkisya, A. G., Minasyan, M. K., Shaginya, A. A., Zakaryan, V. A., and Chistyak, I. G., *Colloid J.*, **42** 663 (1980), X-ray-scattering determination of the site of n-dodecylmercaptan and aliphatic alcohols in the liquid-crystal phases of an ionogenic surfactant.
766. Sarkisya, A. G., Minasyan, M. K., and Shaginya, A. A., *Colloid J.*, **42** 997 (1980), X-ray analysis of polymer amphiphilic liquid-crystals.
767. Sasaki, A., Inoda, M., and Ishibashi, T., *P. SID*, **21** 341 (1980), Laser-addressed liquid-crystal multifunction light valve.
768. Sato, S., and Labes, M. M., *Appl. Phys. L.*, **37** 677 (1980), Multicolor fluorescent liquid-crystal display concepts.
769. Saupe, A., *J. Chem. Phys.*, **72** 5026 (1980), Absorption in cholesteric films and contrast of dichroic liquid-crystal displays.
770. Saupe, A., Haven, T., Yu, L. J., *Inor. Ch. A. A.*, **40** 54 (1980), Properties of amphiphilic nematic systems.

771. Savithra., K. L., and Madhusud., N. V., *Molec. Cryst.*, **62** 63 (1980), The nematic isotropic phase transition: application of the Andrews method.
772. Scheffer, T. J., and Nehring, J., *Physics and Chemistry of Liquid-Crystal Devices*, p. 173, Plenum, N.Y., (1980), Guest-host displays.
773. Schmiedel, H., Hillner, B., Grande, S., Losche, A., and Limmer, S., *J. Magn. Res.*, **40** 369 (1980), Interpretation of proton NMR lineshape of liquid-crystals.
774. Schmiedel H., Hillner, B., and Grande, S., *Phys. Lett. A*, **78** 458 (1980), NMR magic echo in liquid-crystals by sample reorientation.
775. Schneider, F., *Z. Naturfo. A*, **35** 1426 (1980), (GE) The flow of a nematic liquid-crystal in a capillary with a rectangular cross-section.
776. Schroeder, H., *J. Chem. Phys.*, **72** 3271 (1980), Theory of molecular dispersion forces and the molecular pair potential under the aspect of liquid-crystal ordering.
777. Schroeder, H., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 196, Springer-Verlag, (1980), Cholesteric structures and the role of phase biaxiality.
778. Schroeder, J. P., *Molec. Cryst.*, **61** 229 (1980), Liquid-crystals. 7. Smectic nematic transition temperature as a function of alkyl end group length in p-phenylene di-p-n-alkoxybenzoates.
779. Schwartz, R., Juhasz, A., and Selinger, S., *Rev. Ro. Chim.*, **31** 1196 (1980), (RU) Derivatives of cholesterol: liquid-crystals.
780. Scudieri, F., Bertolotti, M., and Ferrari, A., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 90, Springer-Verlag, (1980), Homeotropic alignment of liquid-crystals in cylindrical geometry.
781. Scudieri, F., Bertolotti, M., and Sbrilli, L., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 219, Springer-Verlag, (1980), Ultrasound effects on cholesterics.
782. Seifert, K., and Kraus, G., *J. Chromat.*, **192** 97 (1980), (GE) Solution behavior of liquid-crystal phase in capillary gas-chromatography. 2. Solution properties of smectic-A, smectic-B and smectic-C modifications.
783. Seleznev, S. A., and Mineev, L. I., *Biofizika*, **25** 810 (1980), (RS) Estimation of some structural models of pretransition phenomena in liquid-crystal lipid systems.
784. Senatra, D., Gambi, C. M., and Neri, A. P., *Lett. Nuov. C.*, **28** 433 (1980), Lyotropic mesomorphism of water-in-oil microemulsion by thermal-current analysis.
785. Senatra, D., Vannini, M., and Neri, A. P., *Lett. Nuov. C.*, **28** 608 (1980), Electro-optical phenomena in lyotropic liquid-crystals.
786. Senatra, D., Gambi, C. M., and Neri, A. P., *Nuov. Cim. B.*, **28** 603 (1980), Structural relaxation processes in water-in-oil microemulsions by thermal-current analysis.
787. Servuss, R. M., and Boroske, E., *Chem. Phys. L.*, **27** 57 (1980), Dependence of the optimal contrast of vesicle walls on lamellarity and curvature.
788. Sethna, V. M., Devries, A., and Spielberg, N., *Molec. Cryst.*, **62** 141 (1980), X-ray studies of liquid-crystals. 8. A study of the temperature dependence of the directly observed parameters of the skewed cybotactic nematic phase of some bis-(4-alkoxybenzal)-2-chloro-1, 4-phenylenediamines.
789. Seurin, P., Guillon, D., and Skoulios, A., *Molec. Cryst.*, **61** 185 (1980), (FR) Dilatometric and diffractometric study on liquid-crystal polymorphism of 3-beta, 5-alpha-octylcholestane.
790. Seurin, P., Guillon, D., and Skoulios, A., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 146, Springer-Verlag, (1980), Experimental evidence of monolayers and bilayers in smectics.
791. Seuron, P., and Solladie, G., *J. Org. Chem.*, **45** 715 (1980), Asymmetric induction in liquid-crystals: optically active trans-cyclooctene from Hofmann elimination in new cholesteric mesophases.
792. Shanks, I. A., Tough, R. J. A., and Fedak, I., *Molec. Cryst.*, **64** 63 (1980), Field induced twist profiles in voltage controlled circular dichroism liquid-crystal cells.

793. Shanks, I. A., *Physics and Chemistry of Liquid-Crystal Devices*, p. 253, Plenum, N.Y., 1980, Directly driven liquid-crystal analogue meter and horological displays.
794. Sharma, N. K., Pelzl, G., Demus, D., and Weissflo., W., *Z. Phys. Ch. L.*, **261** 579 (1980), (GE) EDA complexes from two liquid-crystal components.
795. Shashidhar, R., Kalkura, A. N., and Chandras., S., *Molec. Cryst.*, **64** 101 (1980), The search for a Lifshitz point in a single-component liquid-crystalline system: a high pressure study of 5O.6.
796. Sheley, C., Lu, S., and Carlino, L., *Physics and Chemistry of Liquid-Crystal Devices*, p. 289, Plenum, N.Y., 1980, Synthesis of trans-4-alkylcyclohexane carboxylic acids and their nematogenic esters.
797. Shibaev, V. P., Moiseenk., V. M., Freidzon, Y. S., and Plate, N. A., *Eur. Polym. J.*, **16** 277 (1980), Specific features of liquid-crystalline comb-like polymers with mesogenic groups.
798. Shibaev, V. P., Moiseenk., V. M., and Plate, N. A., *Makrom. Chem.*, **181** 1381 (1980), Thermotropic liquid-crystalline polymers. 3. Comblike polymers with side-chains simulating the smectic type of liquid-crystals.
799. Shibaev, V. P., Plate, N. A., Smolyans., A. L., and Voloskov, A. Y., *Makrom. Chem.*, **181** 1393 (1980), Thermotropic liquid-crystalline polymers. 4. Study of crystalline and liquid-crystalline comb-like polymers with mesogenic side groups by IR spectroscopy.
800. Shih, L. B., Brown, G. H., and Mann, J. A., *Abs. Pap. Acs.*, **180** 22 (1980), Surface fluctuations of nematic liquid-crystals.
801. Shimoda, S., Mada, H., and Kobayashi, S., *Physics and Chemistry of Liquid-Crystal Devices*, p. 47, Plenum, N.Y., (1980), Anchoring properties of liquid-crystals at substrates: temperature dependence of pretilt.
802. Shimomura, T., Mada, H., and Kobayashi, S., *Jap. J. A. Phy.*, **19** 891 (1980), Color gamut of a nematic liquid-crystal display.
803. Shimomura, T., and Kobayashi, S., *Appl. Optics*, **19** 4206 (1980), Color shift induced by background color in a nematic liquid-crystal display.
804. Shipov, N. V., and Belyakov, V. A., *Sov. Ph. Tp. R.*, **25** 125 (1980), Non-linear frequency conversion in cholesteric liquid-crystals.
805. Shivapra., N. C., Rajalaks., P. K., and Prasad, J. S., *Molec. Cryst.*, **60** 319 (1980), Infrared spectroscopic studies of homologous cholesteric liquid-crystals.
806. Shivapra., N. C., Rajalaks., P. K., and Prasad, J. S., *Act. Ph. Pol. A*, **58** 413 (1980), Molecular packing of some cholesterol derivatives.
807. Shivapra., N. C., Rajalaks., P. K., and Prasad, J. S., *Molec. Cryst.*, **60** 153 (1980), Molecular packing coefficient and thermal stabilities in some cholesterol derivatives.
808. Shivapra., N. C., Rajalaks., P. K., and Prasad, J. S., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 72, Springer-Verlag, 1980, Molecular packing coefficients of the homologous series 4,4-di-n-alkyloxyazoxybenzene.
809. Shoji, K., Ishiji, T., and Takeda, M., *Nip. Kag. Kai.*, **1980** 557 (1980), (JA) Gas-chromatographic study on the interaction between solutes and nematic liquid-crystals.
810. Sigaud, G., Tinh, N. H., Hardouin, F., and Gasparoux, H., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 155, Springer-Verlag, (1980), Occurrence of reentrant nematic and reentrant smectic-A phases in some liquid-crystal series.
811. Sigaud, G., Achard, M. F., Destrade, C., and Tinh, N. H., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 403, Springer-Verlag, 1980, Magnetic susceptibility of discotic mesophases of disk-like molecules.
812. Silvius, J. R., and McElhane., R. N., *Chem. Phys. L.*, **26** 67 (1980), Effects of phospholipid acyl chain structure on thermotropic phase properties. 3. phosphatidylcholines with (-)-anteiso and (+/-)-anteiso acyl chains.
813. Silvius, J. R., Mak, N., and McElhane., R. N., *Bioc. Biop. A.*, **597** 199 (1980), Lipid and protein composition and thermotropic lipid phase transition in fatty acid homogeneous membranes of acholeplasma-laidlawii-8.

814. Simoni, F., Bartolino, R., and Scaramuzza, N., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 205, Springer-Verlag, 1980, Optical properties of cholesteric liquid-crystals under a DC electric field.
815. Simova, P., and Petrov, M., *Bulg. J. Phys.*, **7** 626 (1980), Dynamic scattering with storage in nematics with smectic-C order.
816. Singer, L. S., Delhaes, P., Rouillon, J. C., and Fug, G., *Carbon*, **18** 43 (1980), Physical properties of magnetically oriented petroleum mesophase pitch.
817. Sinton, S., and Pines, A., *Chem. P. Lett.*, **76** 263 (1980), Study of liquid-crystal conformation by multiple quantum NMR: normal-pentyl cyanobiphenyl.
818. Sitte, P., *Eur. J. Cell.*, **22** 280 (1980), Nematic liquid-crystals of lipid pigments in chromoplasts.
819. Sivardie, J., *J. Physique*, **41** 1081 (1980), Lattice gas model for binary mixtures: miscibility of nematogens and solid liquid equilibria.
820. Skarp, K., Lagerwall, S. T., and Stebler, B., *Molec. Cryst.*, **60** 215 (1980), Measurements of hydrodynamic parameters for nematic 5CB.
821. Sintliski, T., and Kou, M., *Molec. Cryst.*, **61** 31 (1980), Influence of solid support sorptive properties on the color of cholesteric liquid-crystals. 1. Qualitative observations.
822. Smith, G. W., *Molec. Cryst.*, **64** 15 (1980), Phase behavior of some condensed polycyclic aromatics.
823. Soederman, O., Lindblom, G., Johansson, L. B., and Fontell, K., *Molec. Cryst.*, **59** 121 (1980), The structure of lyotropic liquid-crystalline phase that orients in a magnetic field.
824. Soederman, O., Engstrom, S., and Wennerst., H., *J. Coll. I. Sc.*, **78** 110 (1980), Alkali counterion binding specificity in lamellar liquid-crystals.
825. Soederman, O., Khan, A., Persson, N. O., and Lindblom, G., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 296, Springer-Verlag, 1980, Ion binding in liquid-crystals as studied by chemical shift anisotropies and quadrupole splittings.
826. Soederman, O., Johansson, L. B., Lindblom, G., and Fontell, K., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 297. Springer-Verlag, 1980, The structure of a lyotropic liquid-crystalline phase that spontaneously orients in a magnetic field.
827. Sohl, C. H., *Phys. Rev. A*, **22** 1256 (1980), Viscosity and surface-tension measurements on cyanobenzylidene octyloxyaniline using propagating capillary waves: critical behavior.
828. Sokolova, E. P., *V. Lenin, Fiz.*, **1980** 65 (1980), (RS) Lattice model for nematic solution. 4. Phase-equilibria, activities of components and the order parameter for athermal mixture of hard and flexible particles.
829. Solladie, G., Seuron, P., and Hibert, M., *Inor. Ch. A. A.*, **40** 89 (1980), Solute-solvent interactions in ordered phases: asymmetric induction in cholesteric liquid-crystals.
830. Sonin, A. S., and Shibaev, I. N., *Zh. Fiz. Khim.*, **54** 3109 (1980), (RS) Optical properties of finely dispersed cholesteric films: the studies of selective reflection in pseudo-capsular films of various thickness.
831. Sorai, M., Tsuji, K., Suga, H., and Seki, S., *Molec. Cryst.*, **59** 33 (1980), Studies on disc-like molecules. I. Heat capacity of benzene-hexa-n-hexanoate from 13 to 393 K.
832. Soref, R. A., and McMahon, D. H., *Optics Lett.*, **5** 147 (1980), Total switching of unpolarized fiber light with a 4-port electro-optic liquid-crystal device.
833. Soref, R. A., *Am. Ceram. S.*, **59** 340 (1980), Low-loss fiber optic switches based on liquid-crystals.
834. Sorkin, H., *Molec. Cryst.*, **56** 279 (1980), A new liquid-crystal family: 5-alkyl-2-(4-cyanophenyl)-1,3-dioxanes.
835. Spielberg, N., Ekachai, A., and Devries, A., *B. Am. Phys. S.*, **25** 37 (1980), Quantum model for orientation in smectic liquid-crystals.

836. Spiesecke, H., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 304, Springer-Verlag, 1980, NMR measurements of w/o type microemulsions formed by large bolaform ions.
837. Sprokel, G. J., *J. Elect. Mat.*, **9** 651 (1980), Liquid-crystal alignment films produced by the RF plasma beam technique.
838. Sprokel, G. J., *Physics and Chemistry of Liquid-Crystal Devices*, p. 23, Plenum, N.Y., 1980, An RF plasma technique for producing twisted nematic liquid-crystal cells.
839. Stadelho., J. W., *Fuel* **59** 360 (1980), Examination of the influence of natural quinoline insoluble material on the kinetics of mesophase formation.
840. Stamatoff, J., Cladis, P. E., Guillon, D., Cross, M. C., Bilash, T., and Finn, P., *Phys Rev. L*, **44** 1509 (1980), X-ray diffraction intensities of a smectic-A liquid-crystal.
841. Stecki, J., and Poniewie., A., *Molec. Phys.*, **41** 1451 (1980), Application of the statistical theory of elastic constant of nematics to spherocylindrical molecules with attractive forces.
842. Stegemeyer, H., *Phys. Lett. A*, **79** 425 (1980), Helical pitch change at the phase transition blue phase to cholesteric.
843. Stegemeyer, H., and Bergmann, K., *Liquid-Crystals of One-and Two-Dimensional Order*, p. 161, Springer-Verlag, 1980, Experimental results and problems concerning blue phases.
844. Stephens., D. S., and Binsch, GF., *Omr. org. Mag.*, **14** 226 91980), Automated analysis of high resolution NMR spectra. 3. The nematic phase spectra of 3-allyl halides.
845. Stevens, W. C., Scherr, G. S., and Diefendo., R. J., *Carbon*, **18** 40 (1980), Thermodynamic description of mesophase/nonmesophase systems.
846. Stieb, A. E., *J. Physique*, **41** 961 (1980), Structure of elongated and spherulitic domains in long pitch cholesterics with homeotropic boundary alignment.
847. Straugha., B. J. *Mecanique*, **19** 629 (1980), Stability of uniform equilibrium states of a nematic liquid-crystal.
848. Strzelec., L., and Van Luyen, D., *Eur. Polym. J.*, **16** 299 (1980), (FR) Effects of structure on mesomorphic properties of polyesters I.
849. Sugakov, V. I., and Shiyarov., S. V., *Opt. Spektro*, **48** 298 (1980), Effects of long-range activity in intermolecular interaction on optical spectra of liquid-crystals.
850. Sugakov, V. I., and Shiyarov., S. V., *Sov. Ph. S. S. R.*, **22** 527 (1980), Band splitting in optical spectra of nematic liquid-crystals.
851. Sugiura, M., Watanabe, T., and Ebisawa, M., *Nip. Kag. Kai.*, **1980** 250 (1980), (JA) Studies on liquid-crystals of phenanthrene derivatives: 2,7-dialkoxyphenanthrene.
852. Suryapra., N., Kunwar, A. C., and Khetrapa., C. L., *Current Sci.*, **49** 1 (1980), NMR spectra of 2-fluoropyridine in nematic liquid-crystals.
853. Svet, V. D., and Yakovenk., G. N., *Sov. Ph. Ac. R.*, **26** 84 (1980), Spectral studies of acoustooptical interaction in homeotropically oriented nematic liquid-crystals.
854. Swalen, J. D., and Sprokel, G. J., *B. Am. Phys. S.*, **25** 214 (1980), Liquid-crystal interactions by plasmon surface polaritons.
855. Swalen, J. D., and Sprokel, G. J., *Physics and Chemistry of Liquid-Crystal Devices*, p. 39, Plenum, N.Y., 1980, Liquid-crystal surface interactions by surface plasmons.
856. Swift, J., and Mulvaney, B., *Phys. Rev. B*, **22** 4523 (1980), Anisotropic dispersion and attenuation of sound near the nematic smectic-A phase transition.
857. Swift, J., *J. Chem. Phys.*, **72** 3420 (1980), Entropy of phase transitions in a binary mixture of liquid-crystals.
858. Szabo, A., *J. Chem. Phys.*, **72** 4620 (1980), Theory of polarized fluorescent emission in uniaxial liquid-crystals.

859. Tabriyan, N. V., and Zeldovich, B. Y., *Molec. Cryst.*, **62** 237 (1980), The orientational optical nonlinearity of liquid-crystals. 1. Nematics.
860. Tachiban., T., Mori, T., and Hori, K., *B. Chem. S. Jap.*, **53** 1714 (1980), Chiral mesophases of 12-hydroxyoctadecanoic acid in jelly and in the solid state. 1. A new type of lyotropic mesophase in jelly with organic solvents.
861. Takemori, T., Ueha, S., and Tsujiuch, J., *Opt. Commun.*, **32** 24 (1980), Real-time in-plane vibration measurements by speckle interferometry with the aid of liquid-crystal light valve.
862. Tanaka, T., Mori, T., Tsutsui, T., Ohno, S., and Tanaka, R., *J. Macr. S. Ph.*, **17** 723 (1980), Poly(L-glutamic acid) poly(oxyethylene glycol) systems: perpetuated cholesteric liquid-crystal structures in non-crosslinked and crosslinked solid films.
863. Tanaka, Y., and Maitani, Y., *J. Syn. Org. J.*, **38** 986 (1980), History of liquid-crystals.
864. Tanaka, Y., and Suzuki, M., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 350, Springer-Verlag, 1980, Photoreaction of cholesteryl cinnamate in multilayers.
865. Tani, C., *Jap. J. A. Phys.*, **19** 211 (1980), Transient helical pitch in field induced nematic cholesteric relaxation processes.
866. Tani, C., Ogawa, F., Naemura, S., Ueno, T., Saito, F., and Kogure, O., *P. SID*, **21** 71 (1980), Storage-type liquid-crystal matrix display.
867. Tarczon, J. C., and Miyano, K., *J. Chem. Phys.*, **73** 1994 (1980), Surface induced ordering of a liquid-crystal in the isotropic phase. 2. 4-methoxybenzylidene-4-n-butylaniline (MBBA).
868. Tarr, C. E., and Carr, E. F., *Sol. St. Comm.*, **33** 459 (1980), NMR evidence for an ionic conduction-induced flow alignment angle in nematic liquid-crystals.
869. Taylor, P. J., and Sherman, P. L., *J. Liq. Chrom.*, **3** 21 (1980), Liquid-crystals as stationary phases for high-performance liquid-chromatography.
870. Thierry, A., Millaud, B., and Skoulios, A., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 261, Springer-Verlag, 1980, Nematic phases of polymers.
871. Thundath, R., Stoffer, J. O., and Friberg, S. E., *J. Pol. Sc. P. C.*, **18** 2629 (1980), Polymerization in lyotropic liquid-crystals. 1. Change of structure during polymerization.
872. Thurston, R. N., Cheng, J., and Boyd, G. D., *IEEE Device*, **27** 2069 (1980), Mechanically bistable liquid-crystal display structures.
873. Tiddy, G. J. T., *Phys. Rep. Ne.*, **57** 1 (1980), Surfactant/water liquid-crystal phases.
874. Tikhomir, N. A., Shuvalov, L. A., Baranov, A. I., Karasev, A. R., Dontsova, L. I., Popov, E. S., Shilniko., A. V., and Bultova, L. G., *Ferroelectr.*, **29** 51 (1980), Study of domain dynamics in TGS using nematic liquid-crystals.
875. Tikhomir, N. A., Pikin, S. A., Shuvalov, L. A., Dontsova, L. I., Popov, E. S., Shilniko., A. V., and Bulatova, L. G., *Ferroelectr.*, **29** 145 (1980), Visualization of static and the dynamics of domain structure in triglycine sulfate by liquid crystals.
876. Tinh, N. H., Hardouin, F., and Sigaud, G., *Molec. Cryst.*, **56** 189 (1980), New rod-like compound with a polar cyano head group giving an orthogonal smectic-B phase.
877. Tinh, N. H., Zann, A., Dubois, J.C., and Billard J., *Molec. Cryst.*, **56** 323 (1980), Phase-diagrams of new compounds with nematic reentrant mesophases.
878. Tinh, N. H., Pourriere, A., Destradee, C., *Molec. Cryst.*, **62** 125 (1980), Synthesis and mesomorphic properties of the homologous series of 4-alkyl or alkoxy-4-bromo or cyano-tolanes.
879. Tinh, N. H., Jussot-D., M., and Destrade, C., *Molec. Cryst.*, **56** 257 (1980), Influence of the substituent on the reentrant phenomenon.
880. Titov, V. V., and Pavlyuch., A. I., *Khim. Getero.*, **1980** 3 (1980), (RS Thermotropic liquid-crystals in the heterocyclic series.

881. Tokuoeka, T., and Kusunoki, H., *J. Soc. Ma. S. J.*, **29** 1122 (1980), Waves in elastic liquid-crystals.
882. Toriumi, H., Minakuch., S., Uematsu, Y., and Uematsu, I., *Polym. J.*, **12** 431 (1980), Helical twisting power of poly(gamma-benzyl L-glutamate) liquid-crystals in mixed solvents.
883. Toriyama, K., Suzuki, K., Nakagomi, T., Ishibashi, T., and Odawara, K., *Physics and Chemistry of Liquid-Crystal Devices*, p. 153, Plenum, N.Y., 1980, Liquid-crystal for multiplexed twisted nematic displays: its philosophy and practice.
884. Toulouse, G., *Modern Trends in the Theory of Condensed Matter. A Lecture on the Topological Theory of Defects in Ordered Media: How the Old Theory Was Leading to Paradoxes and How Their Resolution Comes within the Larger Frameworks of Homotopy Theory*, Springer-Verlag, 1980.
885. Tretyako., A. G., *Opt. Spektro*, **48** 613 (1980), Raman-line broadening in a nematic liquid-crystal.
886. Trufanov, A. N., Blinov, L. M., and Barnik, M. I., *Zh. Eksp. Teo.*, **78** 622 (1980), Novel type of high frequency electrohydrodynamic instability in nematic liquid-crystals.
887. Tsutsui, J., and Fukai, S., *J. Pediat. Op.* **17** (1980), Studies on visual evoked cortical response by liquid-crystal phase difference haploscope: amblyopia and-or strabismus.
888. Tsutsui, T., and tanaka, R., *J. Pol. Sc. Pl.*, **18** 16 (1980), Immobilization of cholesteric structure in poly(gamma-butyl L-glutamate)-butyl acrylate liquid crystalline system.
889. Tsutsui, T., and Tanaka, R., *Polym. J.*, **12** 473 (1980), Formation of cholesteric mesophase in some hydroxypropyl cellulose organic solvent systems.
890. Tsutsui, T., and Tanaka, R., *Polymer*, **21** 1351 (1980), Solid cholesteric films for optical applications.
891. Tsvetkov, V. N., Ryumtsev, E. I., Polushin, S. G., and Kovshik, A. P., *D. A. N. SSR*, **254** 619 91980), (RS) High frequency dielectric polarization of liquid-crystals in the direction of their optical axis.
892. Tsvetkov, V. V., Fyodorov, V. B., Tsevetkov, V. A., and Fyodorov., M. N., *Kvan. Elektr.*, **7** 2306 (1980), (RS) A study of liquid-crystal light polarization plane switches on the basis of the twist effect with two-frequency control.
893. Tsykalo, A. L., *Sov. Ph. Tp. R.*, **25** 28 (1980), Computer simulation of smectic mesophases.
894. Tsykalo, A. L., and Bagmet, A. D., *Sov. Ph. Tp. R.*, **25** 857 (1980), Thin-films of nematic liquid-crystals.
895. Tsykalo, A. L., Nyankima, E. E., and Bagmet, A. D., *Sov. Ph. Tp. R.*, **25** 1384 (1980), Molecular dynamics study of cholesteric liquid-crystals.
896. Tsykalo, A. L., *Zh. Fiz. Khim.*, **54** 3014 (1980), (RS) Molecular-dynamic models and prediction of new liquid-crystalline mesophases in the systems of disc-shaped molecules.
897. Tsykalo, A. L., and Bagmet, A. D., *J. Eng. Phys.*, **38** 412 (1980), Self-diffusion and molecular motion in nematic and smectic liquid-crystals.
898. Tsykalo, A. L., and Bagmet, A. D., *Sov. Ph. Cr. R.*, **25** 326 (1980), Investigation of smectic liquid-crystals by the method of molecular dynamics.
899. Tsykalo, A. L., *Sov. Ph. Tp. L.*, **6** 213 (1980), Prediction of liquid-crystal mesophases in systems of disk-shaped molecules.
900. Uchida, T., Ishii, Y., and Wada, M., *P. SID*, **21** 55 (1980), Properties of a display device using depolarization in a twisted nematic liquid-crystal layer. "DTN-cell."
901. Uchida, T., Ishikawa, K., and Wada, M., *Molec. Cryst.*, **60** 37 (1980), Liquid-crystal alignments and surface energy.
902. Uchida, T., Ohgawara, M., and Wada, M., *Jap. J. A. Phy.*, **19** 2127 (1980), Liquid-crystal orientation on the surface of obliquely evaporated silicon monoxide with homeotropic surface treatment.
903. Uchida, T., Seki, H., Shishido, C., and Wada, M., *SID Dig.*, **11** 192 (1980), Bright dichroic guest-host LCDs without a polarizer.

904. Uemoto, T., Yoshino, K., and Inuishi, Y., *Jap. J. A. Phys.*, **19** 1467 (1980), Influence of pressure and solutes on ferroelectricity of chiral smectic liquid-crystal.
905. Umanskii, B. A., Blinov, L. M., and Barnik, M. I., *Sov. Ph. T. P. L.*, **6** 87 (1980), Flexoelectric domains in twisted liquid-crystal structures.
906. Vainshtein, B., Chistyak, I. G., Zharenov, R. I., Mineev, L. I., Radzhabo., Z. B., and Bradukov, L. N., *Sov. Ph. Cr. R.*, **25** 544 (1980), The structure of 4-nitrophenyl-4-octylhydroxybenzoate.
907. Vainshtein, B., Kamenchuk, L. M., Tishchenko, G., and Kosterin, E. A., *Sov. Ph. Cr. R.* **25** 1176 (1980), Crystal structure of the mesogenic compound bis-(4-p-hexylhydroxybenzylidene)-1, 4-phenylenediamine.
908. Van Doorn, C. Gerritsma, C. J., and De Klerk, J. J., *Physics and Chemistry of Liquid-Crystal Devices*, p. 95, Plenum, N.Y., 1980. Influence of the device parameters on the performance of twisted nematic liquid-crystal matrix displays.
909. Van Eck, D. C., and Zijlstra, R. J. J., *J. Physique*, **41** 351 (1980), Spectral analysis of light intensity fluctuation caused by orientational fluctuations in nematics.
910. Van Hecke, G. R., Cantu, T. S., Domon, M., and Billard, J., *J. Phys. Chem.*, **84** 263 (1980), Use of regular solution theory for calculating binary mesogenic phase diagrams exhibiting azeotrope-like behavior. 2. Maxima form systems.
911. Van Hecke, G. R., *Physics and Chemistry of Liquid-Crystal Devices*, p. 319, Plenum, N.Y., 1980, Thermodynamics of the liquid two-phase regions in binary mixtures of mesogenic materials.
912. Van Luyen, D., and Strzelec, L., *Eur. Polym. J.*, **16** 303 (1980), (FR) Effect of structure on mesomorphic properties of polyesters. 2.
913. Vanderha, R., Debroyne, J., Luyckx, R., and Lekkerke., H. N. W., *J. Chem. Phys.*, **73** 2469 (1980), Four particle cluster approximation for the Maier-Saupe model of the isotropic nematic phase transition.
914. Vanlerbe., G., Handiani, R. M., and Rondot, B., *Rev. Fr. Corp.*, **27** 237 (1980), (FR) Hydrophilic group structure of surfactants: relation with the superficial and mesomorphic phases.
915. Vanuiter, L. G., Zydzik, G. J., Singh, S., and Camlibel, I., *Appl. Phys. L.*, **36** 109 (1980), Anthraquinoid red display cells.
916. Vaz, N. A. P., and Doane, J. W., *Phys. Lett. A*, **77** 235 (1980), Motionally induced asymmetry parameter in NMR spectral patterns from a lyotropic lamellar phase.
917. Vaz, N. A. P., and Doane, J. W., *Phys. Rev. A*, **22** 2238 (1980), NMR measurements of chain ordering in some liquid-crystalline lamellar phases.
918. Venugopala., S., and Prasad, S. N., *J. Chem. Phys.*, **72** 4153 (1980), Polymorphism of the smectogen ethyl-p-azoxybenzoate: far-infrared and Raman study.
919. Verbit, L., Pinhas, A. R., and Hudec, J., *Molec. Cryst.*, **59** 159 (1980), Synthesis and liquid-crystal properties of some 3-arylcholest-3, 5-dienes.
920. Verma, S. P., Wallach, D. F. H., and Sakura, J. D., *Biochem.*, **19** 574 (1980), Raman analysis of the thermotropic behavior of lecithin fatty acid systems and of their interaction with proteolipid apoprotein.
921. Vetrova, Z. P., Karabano., N. T., and Iashin, J. I., *D. A. N. SSSR*, **250** 1165 (1980), (RS) Selective sorbent on the base of liquid-crystals and macroporous silochromes.
922. Vilasagar, S., and Blumstei., A., *Molec. Cryst.*, **56** 263 (1980), Cholesteric, thermotropic polymers with mesogenic moieties and flexible spacers in the main chain.
923. Vilfan, M., and Zumer, S., *Phys. Rev. A*, **21** 672 (1980), Theory of nuclear spin relaxation by translational self diffusion in liquid-crystals: smectic-A phase.
924. Vilfan, M., Blinc, R., Seliger, J., and Zagar, V., *Ferroelectr.*, **24** 211 (1980), Molecular orientational ordering in the smectic C-star and H-star phases of chiral TBACA.

925. Vilfan, M., Seliger, J., Zagar, V., and Blinc, R., *Phys. Lett. A*, **79** 186 (1980), N-14 NQR and H-1-NMR study of the smectic-B phase of IBPBAC.
926. Visloukh, V. A., and Makarov, V. A., *V. Mosk. Fiz.*, **21** 87 (1980), (RS) influence of space dispersion nonlinearity on nonstationary self focusing of laser irradiation in liquid-crystals.
927. Vistin, L. K., Zeinally, A. K., and Khatayev., V. I., *Sov. Ph. Cr. R.*, **25** 194 (1980), Instability of nematic liquid-crystals in an electric field at reduced temperatures.
928. Volchek, B. Z., Purkina, A. V., Lebedev, G. A., Vlasov, G. P., and Ovsyanni., L. A., *Vyso. Soed. A*, **22** 841 (1980), (RS) Experimental study of phase equilibrium of liquid-crystal isotropic solution for poly-gamma-benzyl-L-glutamate in various solvents.
929. Volkova, L. A., Grigorye., A. I., Andreyev., M. A., Podolski., A. F., Orlova, N. G., and Edkin, V. Y., *Vyso Soed. A*, **22** 1393 (1980), (RS) The study of mesomorphic properties for solutions of block co-polymers of butadiene with styrene and of isoprene with alpha-methylstyrene.
930. Volovik, G. E., *JETP Letter*, **31** 273 (1980), Relationship between molecular shape and hydrodynamics in a nematic substance.
931. Vucelic, V., and Vucelic, D., *Chem. P. Lett.*, **69** 534 (1980), Combined lyotropic and thermotropic phase transitions of deoxycholic-acid.
932. Wacrenie., J. M., Druon, C., and Tabourie., P., *J. Phys. C*, **13** 4399 (1980), A method of analysis of dielectric relaxation: application to a few X-zeolites and liquid-crystals.
933. Waldron, W., Aftergut, S., and Cole, H. S., *SID Dig.*, **11** 194 (1980), A multimode touch-entry dichroic liquid-crystal display.
934. Wallis, G. P., and Roy, S. K., *J. Physique*, **41** 1165 (1980), Nuclear magnetic-resonance studies of liquid-crystals under pressure.
935. Warner, M., and Flory, P. J., *J. Chem. Phys.*, **73** 6327 (1980), The phase equilibria in thermotropic liquid-crystalline systems.
936. Warner, M., *J. Chem. Phys.*, **73** 5874 (1980), Interaction energies in nematogens.
937. Warner, M., *Chem. P. Lett.*, **70** 155 (1980), A Van-der-Waals theory with quartic density gradients.
938. Warner, S. B., and Jaffe, M., *J. Cryst. Gr.*, **48** 184 (1980), Quiescent crystallization in thermotropic polyesters.
939. Warner, S. B., *Abs. Pap. Acs.*, **179** 44 (1980), Morphology of thermotropic polymers.
940. Warner, S. B., *Macromolec.*, **13** 450 (1980), Thermotropic anthraquinone polymers: structure and enthalpic relaxation.
941. Watabe, K., Suzuki, S., and Araki, S., *Nip. Kag. Kai.*, **1980** 582 (1980), (JA) Liquid-crystals as the stationary phase in gas-chromatography. 2. Adsorption phenomenon under DC electric field applied across the liquid-crystal column in gas-chromatography.
942. Watabe, K., Suzuki, S., and Araki, S., *J. Chromat.*, **192** 89 (1980), Lipid-crystals as the stationary phase in gas-chromatography: adsorption phenomenon caused by an electric field applied across the column.
943. Watabe, K., Suzuki, S., and Araki, S., *Bunseki. Kag.*, **29** 575 (1980), (JA) Liquid-crystals as the stationary phase in gas-chromatography. 3. Elimination of highly polar compounds as interferences through application of DC electric field on liquid-crystal stationary phase in gas-chromatography.
944. Weissflo., W., Pelzl, G., Wiegeleb., A., and Demus, D., *Molec. Cryst.*, **56** 295 (1980), A new polymorphism variant: nematic—smectic-C—smectic-A—nematic.
945. Weissflo., W., Sharma, N. K., Pelzl, G., and Demus, D., *Krist. Tech.*, **15** 35 (1980), The re-entrant nematic phase of 4-n-octyloxy-benzoyloxy-benzylidene-4-cyanoaniline.
946. Weissflo., W., Kresse, H., and Kolbe, A., *Z. Chem.*, **20** 259 (1980), (GE) Liquid-crystalline 4-n-alkylaminobenzoic acids.

947. Wiebe, H. H., and Drake, B. G., *Bioscience*, **30** 32 (1980), Leaf temperature mapping with thermosensitive liquid-crystals.
948. Wiegele, A., Richter, L., Deresch, J., and Demus, D., *Molec. Phys.*, **59** 329 (1980), Calorimetric investigation of some homologous series with a high degree of smectic polymorphism.
949. Witkiewicz, Z., Szulc, J., Dabrowski, R., and Sadowski, J., *J. Chromat.*, **200** 65 (1980), Properties of liquid-crystalline cyanoazoxybenzene alkyl carbonates as stationary phases in gas-chromatography.
950. Woelfel, W., Graf, V., and Noack, F., *Liquid-Crystals of One- and Two-Dimensional Order*, p. 156, Springer-Verlag, 1980, NMR proton relaxation investigation of the nematic-isotropic phase transition in homologues of the PAA series.
951. Wong, T. C., and Altman, L. J., *J. Magn. Res.*, **37** 285 (1980), Tritium and proton nuclear magnetic resonance study of the isotope effects on the molecular structure and the degree of order of partially oriented benzene-1-H-3.
952. Wong, T. C., and Koval, K. J., *Omr. Org. Mag.*, **13** 384 (1980), Proton nuclear magnetic resonance study of phthalide and 2-coumaranone partially oriented in nematic phases.
953. Wong, T. C., and Engler, E. M., *J. Mol. Struct.*, **67** 279 (1980), A nuclear magnetic resonance investigation of tetraselenafulvalene partially oriented in a nematic liquid-crystal.
954. Wong, T. C., and Jeffrey, K. R., *Abs. Pap. ACS.*, **180** 209 (1980), A deuteron NMR-study of the molecular motions and ordering in a rubidium stearate water lyotropic liquid-crystal.
955. Xie, Y. Z., *Wuli*, **9** 51 (1980), (CH) On the elastic continuum theory of uniaxial liquid-crystals.
956. Yagupols., L. M., Shelyazh., S. V., Yurchenk., V. M., and Fialkov, Y., *Molec. Cryst.*, **56** 209 (1980), Fluorinated analogues of liquid-crystals. 1. Analogues of 4-methoxybenzylidene-4-butylaniline with perfluorinated alkyl- and alkoxy-groups.
957. Yamada, H., Fukumura, K., and Tamamush., B., *B. Chem. S. Jap.*, **53** 3054 (1980), The Raman spectra of aligned thin films of nematic liquid-crystals.
958. Yamashit., M., Kimura, H., and Nakano, H., *Prog. T. Ph. Jp.*, **64** 1079 (1980), Stability of the cholesteric phase exposed to a magnetic field.
959. Yao, N. Y., Wu, C. L., Wang, L. Y., Zhang, B. Z., Bai, G. M., Lu, Y. Z., and Liao, S. S., *J. Qing. Hua. U.*, **20** (1980), (CH) A new synthetic method of phenylcyclohexane-type liquid-crystalline compounds and study of electro-optic characteristics in its mixture.
960. Yasuniwa, M., Taki, S., and Takemura, T., *Molec. Cryst.*, **60** 111 (1980), NMR and Raman scattering studies of MBBA and EBBA.
961. Ye, F., Chu, G., Zhang, Z., Fu, F., Ji, G., and Lin, X., *J. Opt. Soc.*, **70** 638 (1980), Four-wave mixing and its relaxation effect in liquid-crystals.
962. Yin, K. M., *B. Am. Phys. S.*, **25** 460 (1980), Multiple modes of dielectric polarization in nematic and glassy nematic phases of cyanobiphenyl mixture.
963. Yoshino, K., Iwasaki, Y., Uemoto, T., Inuishi, Y., Yanagida, S., and Okahara, M., *Jap. J. A. Phys.*, **19** 1439 (1980), Dielectric properties of p-alkoxybenzylidene-p-amino-2-chloropropyl-cinnamate in chiral smectic phase.
964. Yoshino, K., Iwasaki, Y., Uemoto, T., Yanagida, S., and Okahara, M., *Oyo Buturi*, **49** 876 (1980), (JA) Synthesis of ferroelectric liquid-crystal and its electrical properties.
965. Yoshino, K., Iwasaki, Y., Uemoto, T., Inuishi, Y., Yanagida, S., and Okahara, M., *Tech. R. Osaka*, **30** 1551 (1980), (JA) Electrical properties of ferroelectric liquid-crystal. III. P-alkoxybenzylidene-p-amino-2-chlor-propylcinnamate.
966. Yu, L. J., and Saupe, A., *J. Am. Chem. S.*, **102** 4879 (1980), Liquid-crystalline phases of the sodium decyl sulfate-decanol-water system: nematic to nematic and cholesteric to cholesteric phase transitions.
967. Yu, L. J., and Saupe, A., *Phys. Rev. L.*, **45** 1000 (1980), Observation of a biaxial nematic phase in potassium laurate-1-decanol water mixtures.

968. Yusuniwa, M., Taki, S., and Takemura, T., *Molec. Cryst.*, **60** 111 (1980), NMR and Raman scattering studies of MBBA and EBBA.
969. Zakzouk, A. K. M., *J. Elchem. Soc.*, **127** 932 (1980), Time dependent MOS gate oxide defects using liquid-crystals.
970. Zeldovich, B. Y., and Tabiryan, N. V., *Sov. J. Q. El.*, **10** 440 (1980), Stimulated scattering of light in the mesophase of a smectic liquid-crystal.
971. Zeldovich, B. Y., Pilipets., N. F., Sukhov, A. V., and Tabiryan, N. V., *JETP Letter*, **31** 263 (1980), Giant optical nonlinearity in the mesophase of a nematic liquid crystal.
972. Zeldovich, B. Y., and Tabiryan, N. V., *Zh. Eksp. Teo.*, **79** 2388 (1980), (RS) Self-focusing of light in nematic liquid-crystals as a method for investigation of the orienting effect of a free surface.
973. Zeldovich, B. Y., and Tabiryan, N. V., *Sov. Ph. Tp. L.*, **6** 107 (1980), Mechanism for ordering a polydomain liquid-crystal.
974. Zeminder, A. K., Paul, S., and Paul, R., *Molec. Cryst.*, **61** 191 (1980), Refractive indices and orientational order parameter of five liquid-crystals in nematic phase.
975. Zhang, Z. Q., Feng, K. E., and Lin, L., *Act. Phys. Sin.*, **29** 807 (1980), Generalized Suzuki formula and its application in liquid-crystals.
976. Zhao, J. A., Tong, S.S., and Ruan, L., *Wuli*, **9** 10 (1980), (CH) Use of the cholesteric to nematic phase transition of liquid-crystals in television screens.
977. Zharkova, G. M., *Fl. Mec. Sov. R.*, **9** 51 (1980), The application of liquid-crystals in experimental aerodynamics.
978. Zhelezny, V. V., Kocharov, V. V., and Kocharo, V. L. V., *Zh. Eksp. Teo.*, **79** 1735 (1980), (RS) Linear wave coupling in the optics of liquid-crystals.
979. Zielinski, J., Nowinowski, E., Dabrowski, R., Stolarzo, Z., and Zimija, A. J., *Electr. Tec. P.*, **12** 111 (1980), Electric-field-induced cholesteric-to-nematic phase transition in biphenyl mixtures.
980. Zippelius, A., *B. Am. Phys. S.*, **25** 187 (1980), Large distance and long time properties of two-dimensional solids and hexatic liquid-crystals.
981. Zippelius, A., *Phys. Rev. A*, **22** 732 (1980), Large-distance and long-time properties of two-dimensional solids and hexatic liquid-crystals.
982. Zolin, V. F., Koreneva, L. G., and Samokhina, M. A., *J. Appl. Spectr.*, **33** 887 (1980), Study of phase transition in europium-activated liquid-crystals.
983. Zolotko, A. S., Kitaeva, V. F., Kroo, N., Sobolev, N. N., and Chillag, L., *JETP Letter*, **32** 158 (1980), The effect of an optical field on the nematic phase of the liquid-crystal octylcyano-biphenyl.
984. Zverkova, T. I., Lyukmano, N. F., and Kovshev, E. I., *Zh. Org. Kh.*, **16** 645 (1980), (RS) Liquid-crystal compounds from class of 3,6-disubstituted 2-pyrones.

AUTHOR INDEX 1980

- Aadsen, D., 352
 Abraham, D. B., 1
 Achard, M. F., 2, 362, 811
 Acimis, M., 3
 Adamska, G., 212
 Adamski, P., 4, 5
 Adeleke, S. A., 6
 Adomenas, P. V., 47
 Aftergut, S., 7, 933
 Agarwal, V. K., 39
 Agocs, P. M., 619
 Aharoni, S. M., 8, 9, 10, 11
 Akahane, T., 12
 Akchurin, S. M., 440
 Akhundov, G., 19
 Akiyama, R., 13
 Akselrod, E. G., 605
 Albertini, G., 14, 15, 16
 Albrand, J. P., 17
 Alfassi, Z. B., 287
 Aliev, D. F., 18, 19
 Aliev, F. M., 20
 Allender, D. W., 377
 Alpay, M. H., 21
 Als-Nielsen, J., 22, 23, 546, 757
 Altman, L. J., 951
 Altmann, H., 238
 Altschuh, J., 502
 Amaral, L. Q., 24
 Amer, N. M., 750, 751
 Amrein, J., 255
 Andersson, L., 25
 Andre, Y. B., 26
 Andreyev, M. A., 929
 Aneva, N., 27
 Anisimov, M. A., 28
 Anisimova, T. N., 725
 Antonyan, T. P., 545
 Aoki, H., 288
 Apenko, S. M., 556
 Arakelya, S. M., 29, 30, 31, 32
 Araki, S., 941, 942, 943
 Araya, K., 33, 34
 Arechev, I. P., 654
 Arend, H., 104
 Armitage, D., 35, 36, 37
 Aronishi, S. N., 38
 Arora, V. P., 39
 Arslan, P., 40
 Asada, T., 41, 401
 Asher, S. A., 688
 Auderer, G., 42
 Auguie, D., 43
 Auyeung, J., 286
 Averyano, E. M., 44, 45, 46, 47
 Azaroff, L. V., 48, 49
 Babcock, E. E., 554
 Bacalogli, R., 50
 Bach, D., 51
 Baci, I., 74, 204
 Bacon, R., 52
 Bader, M., 583, 585
 Baeyensv., D., 216
 Bagmet, A. D., 894, 895, 897, 898
 Bahadur, B., 731
 Bai, G. M., 959
 Baird, D. G., 53, 424
 Baisa, D. F., 54
 Balavoin, G., 197
 Bales, B. L., 530
 Balibi, C., 55
 Ball, J. E., 56
 Bapat, B. V., 640
 Baraff, D. R., 57
 Baranov, A. I., 874
 Baranova, N. B., 58
 Barbarin, F., 59
 Barbero, G., 60, 61
 Barboy, B., 62, 319
 Bardeen, J., 63
 Bardukov, L. N., 906
 Barili, P. L., 64, 276
 Barnik, M. I., 65, 886, 905
 Barr, J. B., 431
 Barra, O., 68
 Barratt, P. J., 66
 Bartolino, R., 67, 68, 270, 814
 Bata, L., 142
 Bauman, D., 69
 Baur, G., 70
 Baushev, V. N., 20
 Bechtold, W., 71
 Beckmann, P. A., 72
 Belotski, E. D., 73
 Beltrame, M., 40
 Belyakov, V. A., 250, 804
 Bena, R., 74, 205
 Benassi, A., 233
 Benattar, J. J., 75, 76, 77, 360, 363
 Benguigui, L., 78, 79, 289
 Benicewi, B. C., 80
 Benjamin, R., 81, 82
 Beresnev, L. A., 83
 Berges, J., 84, 687
 Bergmann, K., 505, 843

- Berkowit., N., 676, 677
 Berman, A. L., 85, 86
 Bermejo, F. J., 87
 Bernasco., J., 88
 Berreman, D. W., 89, 90, 374
 Berthaul., J. P., 414
 Berthold, T., 492
 Bertolin., G., 345
 Bertolotti, M., 780, 781
 Bhaṭṭach., S., 91, 92
 Bheda, J., 93, 94
 Bianchi, E., 55
 Biering, A., 95
 Bilash, T., 840
 Bilibin, A. Y., 96
 Billard, J., 97, 98, 414, 450, 877, 910
 Binsch, G., 844
 Birecki, H., 99, 100, 101, 435
 Birgeneau, R. J., 22, 23, 546, 757
 Bishop, D. J., 700, 701
 Biswas, A. B., 102
 Bito, Y., 444
 Blackburn., W. J., 103
 Blinc, R., 104, 105, 535, 562, 924, 925
 Blinov, L., M., 83, 886, 905
 Bloom, A., 407
 Blume, A., 106, 107
 Blumenth., R., 471
 Blumstei., A., 108, 922
 Blumstei., R. B., 108
 Bobylev, B., 109
 Bobylev, Y. U. P., 109
 Bock, E., 257
 Bock, M., 110
 Boden, N., 111
 Bodmann, H. W., 112
 Boero, J. F. R., 113
 Bogdanov, D. L., 114
 Bonekamp, J., 115
 Bonsor, D. H., 741
 Borkowsk., L., 116
 Boroske, E., 275, 787
 Bos, P. J., 117, 251
 Bouamra, M., 223
 Bouchet, F. R., 118
 Boulet, E., 59
 Bouligand, Y., 119, 120, 121, 122
 Bowen, J. M., 123
 Boyd, G. D., 124, 169, 170, 872
 Boynton, R., 57
 Bradshaw, W. G., 125
 Braghetti., M., 771
 Bramley, J. S., 66
 Brand, H., 126, 127, 706, 707, 708
 Breese, K., 143
 Brenman, M., 551
 Brisbin, D., 224
 Britton, W. G. B., 763
 Brochard, F., 128
 Brog, T. K., 129
 Broude, V. L., 130
 Brown, G. H. 131, 800
 Brownsey, G. J., 132
 Bryan, R. F., 133, 134, 135, 136, 137, 138
 Buckley, N. W., 343, 345
 Budianu, G., 139
 Buechler, M., 140, 141
 Buka, A., 142
 Bulatova, L. G., 874, 875
 Bulkin, B. J., 335
 Bull, H. B., 143
 Bunning, J. D., 144
 Burgar, M., 562
 Burnell, E. E., 145, 146
 Butler, K. W., 730
 Byron, D. J., 147, 148
 Cabiddu, S., 682
 Cagnon, M., 149, 270
 Caille, A., 150
 Calder, I. D., 151, 152, 670
 Camlibel, I., 915
 Candau, F., 153
 Candau, S., 154
 Cantu, T. S., 910
 Carlino, L., 796
 Carlino, L. T., 653
 Carr, E. F., 868
 Carroll, M. M., 207
 Casagran., C., 264
 Castellano, J., 155
 Castleber., D. E., 156
 Catalano, D., 157
 Cavatorta, F., 462
 Chaban, I. A., 158
 Chadwick, A. V., 159
 Chambare., J. P., 26
 Chandras., S., 160, 302, 795
 Chang, I. F., 161
 Channin, D. J., 162
 Chanzy, H., 163
 Chapoy, L. L., 164, 267
 Chapuis, G., 104
 Charvolin, J., 165, 166, 225, 378
 Chaunis, S., 163
 Chaure, A., 167
 Chausse, J. P., 59
 Chavel, P., 168
 Chen, C. K., 175, 176
 Cheng, B. Y., 151, 152
 Cheng, J., 124, 169, 170, 872
 Cherkash., R. M., 171

- Chernova, N. I., 555, 725
 Chesnoko., E. D., 54
 Chidichi., G., 157, 172, 527
 Chigrinov, V. G., 666, 698
 Chilaya, G. S., 38
 Chilinga., Y. S., 29, 30, 31, 32
 Chillag, L., 983
 Chingduang, P., 490, 491
 Chistyak., I. G., 173, 765, 906
 Chou, L. S., 174
 Christen., H., 519
 Chu, G., 961
 Chu, K. C., 175, 176
 Chumakov., S. P., 173
 Chung, S. C., 177
 Chuvyrov, A. N., 178, 179, 453, 511
 Ciferri, A., 55, 498, 499, 500
 Cioranes., D., 180
 Ciosek, M., 181
 Cladis, P. E., 118, 182, 213, 332, 352, 840
 Clark, M. G., 183, 184
 Clark, N. A., 185, 186, 187, 188, 702, 749, 752
 Clerc, F., 744
 Clinard, C., 189, 351
 Clough, S. B., 108
 Coche, A., 451
 Cogne, A., 190, 191
 Cole, H. S., 7, 933
 Coles, H. J., 192
 Collings, P. J., 129
 Constant, J., 193, 683
 Coolbear, K. P., 218
 Cornell, B. A., 194
 Corrigan, O. I., 195
 Cotrait, M., 692
 Courtieu, J., 196, 197
 Cox, R. J., 37, 198, 199, 343, 622, 623
 Craven, B. M., 200
 Crone, T. A., 123
 Crooker, P. P., 201, 426
 Cross, M. C., 840
 Croxton, C. A., 202
 Cser, F., 203, 365, 366
 Cuculescu, I., 74, 204, 205, 206, 621
 Cuendet, P. A., 489
 Curran, J. H., 207
 Curtis, G. H., 284
 Cushley, R. J., 208
 Cvikl, B., 209
 Dabrowski, R., 181, 210, 211, 212, 736, 949, 979
 Dai, Q. H., 536
 Daniels, W. B., 182, 213, 352, 543
 Dario, P., 233
 Dave, J. S., 214
 Davey, A. B., 215
 David, C., 216
 Davidov, D., 757
 Davies, D., 217
 Davis, H. T., 303
 Davis, P. J., 218
 De Gennes, P. G., 219
 De Jeu, W. H., 220
 De Klerk, J. J., 908
 Deblieck, R., 221, 526
 Debroyne, J., 913
 Decoster, D., 222, 223
 Dehoff, R. J., 224
 Delange, C. A., 146
 Delhaes, P., 816
 Deloche, B., 225, 264
 Demiray, H., 226
 Demus, D., 95, 227, 228, 229, 230, 243, 244, 496, 497, 509, 685, 794, 944, 945, 948
 Denham, J. Y., 231
 Denisov, Y. V., 232
 Denite, Y., 44
 Depret, J., 222
 Deresch, J., 948
 Derossi, D., 233
 Deshpand., D. D., 102, 234
 Destrade, C., 235, 236, 237, 317, 534, 811, 878, 879
 Deutscher, H. J., 238
 Devertu., F., 150
 Devries, A., 320, 788, 835
 Dewey, A. G., 239
 Dianoux, A. J., 240, 241
 Dias, J. P., 180, 242
 Diefendo., R. J., 743, 845
 Diehl, P., 255, 428
 Diele, S., 243, 244
 Diepquan., H., 245
 Dimic, V., 209
 Dimitrow., K., 246
 Diogo, A. C., 247, 248
 Dion, J. L., 249
 Dmitrienko, V., 38, 250
 Doane, J. W., 117, 251, 916, 917
 Doi, M., 252
 Dolganov, V. K., 130, 253, 254
 Dombi, G., 255
 Domon, M., 910
 Dong, R. Y., 256, 257, 258
 Doniach, S., 259
 Dontsova, L. I., 874, 875
 Dorfler, H. D., 260
 Dörner, B., 533
 Douy, A., 261

- Dowell, F., 262, 588
 Dozov, I. N., 263
 Drake, B. G., 947
 Dreher, R., 285
 Druon, C., 932
 Dsidocky, R. M., 653
 Dubault, A., 264
 Dube, M., 575
 Dubini, B., 14, 15, 16
 Dubois, J. C., 450, 877
 Dulnev, G. N., 20
 Dunmur, D. A., 265
 Dunn, S., G., 266
 Dupre, D. B., 267, 268, 678, 679
 Durand, G., 149, 269, 270, 586
 Dusic, M., 209
 Dutchak, Y. I., 271
 Dylik-Gro., L. A., 4, 5, 272
 Dzyalosh., I. E., 273

 Ebina, Y., 274, 603
 Ebisawa, M., 851
 Ebisu, S., 367
 Edkin, V. Y., 929
 Eguchi, T., 115
 Ekachai, A., 835
 Elwensp., M., 275
 Emsley, M., 276, 277, 278
 Enache, A., 74, 204
 Engler, E. M., 953
 Engstrom, S., 824
 Epand, R. F., 279
 Epand, R. M., 279
 Erezesin., G., 260
 Eriksson, P., 280
 Eritsyan, O. S., 29, 281
 Eshelby, J. D., 282
 Evans, M. W., 720, 739

 Faber, T. E., 283
 Fabre, C., 59
 Fan, M., 197
 Fanelli, E., 710, 711
 Fedak, I., 284, 792
 Fedyshin, M. I., 271
 Fehrenbach, W., 285
 Fekete, D., 286
 Feldman, L., 287
 Fellers, J. F., 93, 94, 288, 659, 660, 661
 Felstein., J., 289
 Feng, K. E., 290, 291, 975
 Ferrari, A., 780
 Ferre, A., 154
 Fialkov, Y., 956
 Field, M. E., 615
 Filipic, C., 535

 Filyov, V. M., 253
 Finkelmann, H., 292, 293, 294
 Finn, P., 182, 840
 Fisch, M. R., 295, 296
 Fischer, W., 217
 Fishbein, L. A., 689, 690
 Fishel, D. L., 653
 Flack, J. H., 426
 Flavin, M., 471
 Flood, J., 288
 Florea, C., 204, 206, 297
 Flory, P. J., 298, 299, 935
 Fontana, M. P., 461, 462
 Fontell, K., 823, 826
 Force, G., 217
 Forcier, P. G., 133, 134
 Forrest, B. J., 300, 301
 Frank, F. C., 302
 Franes, E. I., 303
 Freed, J. H., 595, 596, 597
 Freidzon, Y. S., 304, 797
 Frenkel, S. Y., 96
 Frenzel, J., 305
 Friberg, S. E., 306, 519, 871
 Friel, J. J., 307
 Frolova, E. K., 657
 Fronza, G., 308
 Frosini, V., 559
 Frost, J. C., 309
 Fu, F., 961
 Fug, G., 317, 816
 Fujitsu, H., 610
 Fujiwara, F. Y., 310, 311
 Fujiwara, H., 312
 Fukai, S., 887
 Fukuda, A., 13, 487
 Fukumura, K., 957
 Furlow, T. W., 313
 Fyodorov., V. B., 892
 Fyodorov., M. N., 892

 Gallot, B., 261, 314
 Galstyan, S. R., 32
 Gambi, C. M., 784, 786
 Garibyn, O. V., 32
 Garland, C. W., 315, 442, 443, 560
 Gaspard, S., 316
 Gasparoux, H., 235, 237, 317, 318, 362,
 534, 810
 Gebhardt, C., 754
 Gelbart, W. M., 62, 319
 Gelerinter, E., 320
 George, A. K., 321
 Gerber, P. R., 322, 323, 324
 Germain, C., 75
 Germain, J. P., 59

- Gerritsma, C. J., 908
 Gertner, I., 289
 Geruspia, I., 577
 Gervais, M., 261
 Gevorkya, E. V., 114, 325
 Gharadje, F., 326
 Ghatge, B. B., 640
 Ghosh, S. K., 327, 328, 329
 Gilmanov, N. K., 511
 Gilson, D. F. R., 375
 Giroud, A. M., 330, 622, 623
 Glushkov, N. A., 567
 Goldsmit, A. D., 552
 Goldstein, J. H., 71, 554
 Gonord, P., 196
 Goodby, J. W., 144, 147, 229, 230, 331, 332, 333, 611
 Gorrisen, H., 208
 Goto, N., 13
 Gottarel, G., 334
 Gounelle, Y., 197
 Gourdji, M., 590
 Gowda, L. S., 716
 Grachev, V. T., 680
 Graf, V., 624, 625, 950
 Grand, A., 190
 Grande, S., 540, 773, 774
 Grasselli, J. G., 335
 Grauel, A., 336
 Gray, G. W., 144, 147, 229, 230, 331, 333, 337, 338, 339, 340
 Grebel, V., 341
 Gribbon, B., 57
 Griffin, A. C., 182, 342, 343, 344, 345
 Grigorye, A. I., 929
 Grint, A., 577
 Gritsenk, N. I., 346
 Grosberg, A. Y., 347, 348
 Gruler, H., 745
 Guazzelli, E., 349
 Gudgin, E. F., 350
 Guerina, N. G., 200
 Guet, J. M., 189, 351
 Guibe, L., 590
 Guillois, A., 196
 Guillon, D., 182, 352, 789, 790, 840
 Guk, A. V., 485
 Gunther, L., 353
 Gutwilli, H., 394
 Guyon, E., 573
 Haas, W. E., 354, 582
 Haase, W., 355
 Hacker, H., 356, 357
 Hagston, W. E., 358
 Hall, D. R., 532
 Halle, B., 433, 434
 Halperin, B. I., 649
 Halperin, W. P., 670
 Hancock, T. A., 288
 Handjani, R. M., 914
 Hanmura, H., 446
 Hansen, J., 359
 Hanson, K., 638
 Hardouin, F., 2, 360, 361, 362, 363, 364, 534, 810, 876
 Hardy, G., 203, 365, 366
 Harrison, K. F., 184, 217
 Harrison, K. J., 155
 Hartley, P., 135, 136, 137, 138
 Hashimot, T., 12, 367
 Hata, Y., 368
 Hatta, A., 369
 Hatz, R., 449
 Hauck, G., 370
 Hauschil, J., 246
 Hauser, A., 685
 Haven, T., 770
 Havens, S. J., 342, 344, 345
 Hayamizu, K., 371
 Hayes, C. F., 372
 Hecker, L., 300
 Hedge, R. M., 373
 Heffner, W. R., 89, 374
 Heggemei, H., 742
 Heilmann, O. J., 1
 Heintz, E. A., 724
 Heldman, M. A., 375
 Helfrich, W., 275, 380
 Helmkamp, G. M., 376
 Henderso, G. L., 377
 Hendrixx, Y., 165, 166, 378
 Hentschel, M., 379, 380
 Heppke, G., 110, 381, 715
 Hermann, A. C., 123
 Herrmann, J., 382, 383, 384, 385
 Hess, S., 386, 674
 Hibert, M., 387, 829
 Hida, K., 388
 Higuchi, W. I., 195
 Hillner, B., 540, 773, 774
 Hilsum, C., 389
 Hiltrop, K., 390, 391
 Hinov, H. P., 392
 Hinshaw, J. V., 550
 Hiroshim, K., 393
 Hlozek, V., 394
 Ho, J. T., 539
 Hochapfel, A., 316, 520
 Hochbaum, A., 395
 Hoffmann, S., 260
 Hofmann, A. F., 195

- Hola, O., 396, 397
 Holmes, B. J., 358, 398
 Holmes, M. C., 111
 Holwek, A., 4
 Honciuc, M., 399, 621
 Hoover, D. S., 400
 Hopf, R., 381
 Hori, K., 860
 Horio, M., 401
 Hornreich, R. M., 402, 403, 626, 627
 Hosemann, R., 379, 380
 Howard, J. A. K., 404
 Huang, S. J., 80
 Hub, H. H., 405
 Hubbard, R. L., 406
 Hudec, J., 919
 Hung, P. L. K., 407
 Hupfer, B., 405
 Hyvernat, P., 43

 Iashin, J. I., 921
 Ikeda, M., 408
 Ilchishi, I. P., 409, 410
 Iluc, S., 50
 Imada, K., 411
 Imamura, T., 412
 Imry, Y., 353
 Inoda, M., 767
 Insul, W., 368
 Inuishi, Y., 904, 963, 965
 Ioffe, I. V., 413
 Iorgules, R., 206
 Isaert, N., 414
 Ishibashi, T., 656, 767, 883
 Ishii, Y., 900
 Ishiji, T., 809
 Ishikawa, K., 901
 Isogai, M., 645
 Ito, K. I., 415
 Ivashche, A. V., 65
 Iwasaki, Y., 963, 964, 965

 Jackson, W. J., 416
 Jacob, A. D., 249
 Jacobs, R. E., 417
 Jacobsen, J. P., 359, 418
 Jacques, J., 236
 Jadzyn, J., 419
 Jaehnig, F., 420
 Jaffe, M., 938
 Janini, G. M., 421, 422
 Janossy, I., 423
 Jeffrey, K. R., 730, 954
 Jennings, B. R., 486
 Jerman, R. S., 424
 Ji, G., 961

 Johansson, L. B., 425, 823, 826
 Johnson, D. L., 224, 377, 426, 757
 Johnson, F. G., 345
 Johnson, J. F., 80, 343
 Jokisaar, J., 427, 428, 429
 Jonas, J., 115
 Jones, F., 430
 Jones, J. B., 431
 Jonsson, B., 432, 433, 434
 Jousot-D., M., 879
 Juhasz, A., 779
 Jullien, J., 196, 197

 Kabashima, S., 643
 Kahn, F. J., 99, 100, 101, 435
 Kajiyama, T., 415
 Kalkura, A. N., 795
 Kallo, A., 365, 366
 Kaluzny, J., 436
 Kamenchuk, L. M., 907
 Kamensky, V. G., 437
 Kamihara, M., 758
 Kamikawa, T., 438
 Kan, S. K., 196
 Kaneko, E., 446
 Kaneko, T., 439
 Kaplan, M., 22, 23, 546, 757
 Kapustin, A. P., 440
 Kapustin, O. A., 441
 Karabano, N. T., 921
 Karasev, A. R., 874
 Karayan, A. S., 29, 32
 Karpinski, J. K., 307
 Kasper, A. M., 376
 Kasting, G. B., 315, 442, 443, 560, 561
 Kato, K., 444
 Kats, E., I., 437
 Katz, S., 445
 Kawai, H., 367
 Kawakami, H., 446, 644
 Kawakubo, T., 643
 Kaye, W., 447
 Kazan, B., 448
 Keating, D. A., 147
 Kedzierski, J., 211
 Kelker, H., 449
 Keller, P., 450
 Kelly, S. M., 338
 Kelly, T., 636
 Kenig, K., 210, 211
 Keough, K. M. W., 218
 Kerllene, B., 451
 Kerszber, M., 452
 Katterso, J. B., 151, 152, 670
 Keyes, P. H., 213, 543
 Khairtd., I. A., 453

- Khan, A., 825
 Khatayev, V. I., 927
 Khertrapa, C. L., 852
 Khizhnyia, A. I., 657
 Khoo, I. C., 454, 455, 456
 Khoshtar, D. G., 38
 Kilmonto, B., 457
 Kilmonto, Y., 457
 Kimber, G. M., 581
 Kimura, H., 958
 Kind, R., 104
 Kini, U. D., 458, 459
 Kinugawa, K., 656
 Kirdte, B., 460
 Kirichen, G. B., 571, 572
 Kirov, N., 461, 462, 463, 464
 Kirsanov, E. A., 738
 Kirste, B., 465, 466, 467, 468
 Kishimot., H., 609
 Kiss, G., 469, 470
 Kitaeva, V. F., 983
 Kizel, V. A., 232
 Klausner, R. D., 471
 Kleinhans, H. D., 383
 Kleman, M., 472, 473, 474, 475
 Klimontovi., Y., 476
 Klug, D. D., 477
 Klyuchnik, A. V., 556
 Kmetz, A. R., 478, 479
 Knapp, R. D., 617
 Knoll, P. M., 112
 Kobayashi, F., 487
 Kobayashi, S., 801, 802, 803
 Kobinata, S., 642
 Kocharov., V. V., 978
 Kocharo., V. L. V., 978
 Kodon, M., 480
 Kogure, O., 866
 Kohler, A., 481, 482
 Kohne, B., 110, 381
 Kojima, T., 483
 Kolbe, A., 484, 946
 Kolennik., P. I., 485
 Kolinsky, P. V., 486
 Komarov, V. S., 518
 Kompanet., I. N., 675
 Konarzew., A., 212
 Kondo, K., 487
 Konecny, M., 436
 Kononenk., E. V., 605
 Koopman, D. E., 488
 Kopp, F., 489
 Koreneva, L. G., 982
 Korets, A. Y., 44, 45, 47
 Korte, E. H., 490, 491, 742
 Kosterin, E. A., 907
 Kostylev, K. A., 65
 Kothe, G., 492, 493
 Kou, M., 821
 Koval, K. J., 952
 Kovshev, E. I., 984
 Kovshik, A. P., 753, 891
 Kozelj, M., 104
 Kozhevni, E. N., 494
 Krabbe, H. J., 742
 Kramer, G., 85
 Kraus, G., 484, 782
 Kresse, H., 142, 243, 495, 496, 497, 685, 946
 Kricheve., Y. M., 271
 Krigbaum, W. R., 55, 498, 499, 500, 501
 Kristol, E., 209
 Kroo, N., 254, 983
 Kruger, G. J., 741
 Kruus, P., 350
 Krylova, S. P., 253
 Kuball, H. G., 502
 Kuczynski, W., 503, 504, 505
 Kuhfuss, H. F., 416
 Kulagina, T. P., 506
 Kumar, N., 471
 Kunwar, A. C., 852
 Kuo, A. L., 615
 Kuonanoj., J., 427, 429
 Kurian, G., 214
 Kurik, M. V., 507
 Kurreck, H., 460, 465, 466, 467, 468
 Kurup, M. B., 508
 Kusabaya., S., 480
 Kuschel, F., 509
 Kustova, N. N., 304
 Kusunoki, H., 881
 Kuze, E., 13, 487
 Kuzmin, R. N., 568
 Kuznetso., A. N., 506
 Kwolek, S. L., 510
 Kwon, Y., 356
 Labbate, A., 233
 Labes, M. M., 395, 768
 Labno, W., 419, 531
 Lacey, D., 148
 Lachinov, A. N., 179, 511
 Lacour, N. F., 164
 Lader, H. J., 498, 500, 501
 Lagerwall, S. T., 185, 186, 188, 512, 513, 820
 Lagunov, A. S., 114
 Lai, N. T., 196
 Laidlaw, W. G., 201, 514
 Lajunen, L., 427
 Lajzerow., J., 353

- Lakkad, S. C., 515
 Lalanne, J. R., 516
 Lambert, M., 75, 76, 77, 533
 Lamourou, E. L., 26
 Laprice, W. J., 517
 Larin, V. B., 518
 Larsen, D. W., 519
 Laugier, J., 190
 Laurent, M., 520
 Leadbetter, A., 132, 309, 331, 333, 521, 741
 Lebedev, G. A., 928
 Lebedev, V. I., 522
 Leblanc, A., 249
 Lee, Y., 523
 Lefkowitz, I., 356, 357
 Legrange, J. D., 524, 525
 Lejeck, L., 473
 Lekkerke, H. N. W., 221, 526, 913
 Lelj, F., 172, 308, 527
 Lemaire, B., 516
 Lemanska, G., 528
 Lembriko, B. I., 413
 Lemke, G., 529
 Lemoigne, J., 576
 Leon, V., 530
 Lesniak, M., 531
 Lester, R., 532
 Letcher, S. V., 91, 92
 Lev, B. I., 73
 Levanon, H., 341
 Levelut, A. M., 77, 360, 361, 363, 364, 533, 534, 538
 Levinson, L. M., 156
 Levstik, A., 535
 Levstik, I., 535
 Lewis, J. S., 257
 Lewis, J. W., 231
 Li, T. S., 536
 Liao, S. S., 959
 Liebert, L., 537, 538
 Lim, K. C., 539
 Limmer, S., 540, 773
 Lin, L., 541, 542, 548, 975
 Lin, W. J., 543
 Lin, X., 961
 Lindblom, G., 280, 425, 691, 823, 825, 826
 Lindegaa, A., 22
 Lipari, G., 544
 Lisetski, L. N., 545, 672
 Litster, J. D., 22, 23, 546, 547, 757
 Liu, J. G., 548
 Livingst., G. K., 549
 Lochmuel, C. H., 550
 Loewenst., A., 551, 552
 Lohar, J. M., 553
 Long, J. R., 57
 Long, R. C., 71, 554
 Longeri, M., 64, 157, 172
 Lontz, R., 356, 357
 Losche, A., 540, 773
 Loseva, M. V., 555, 725
 Lozovik, Y. E., 556
 Lu, S., 217, 796
 Lu, Y. Z., 959
 Lubensky, T. C., 266
 Lubitz, W., 465
 Luckhurst, G. R., 231, 277, 278, 557, 558
 Luippold, D. A., 187
 Lungu, E., 50
 Lupanov, V. N., 441
 Lupinacc., D., 559
 Lushingt., K. J., 315, 442, 443, 560, 561
 Luyckx, R., 913
 Luz, Z., 761
 Luzar, M., 105, 562
 Lyakhov, G. A., 30, 563
 Lydon, J. E., 144, 564
 Lyukmano., N. F., 984
 MacDonal., A. G., 565
 MacEfiel., I., 579
 MacLaurin, B. K., 57
 MacNaugh., W., 565
 Mada, H., 801, 802
 Madhusud., N. V., 160, 566, 771
 Maeda, K., 641
 Maeda, S., 642
 Magagnin., P. L., 559
 Magalins., V. B., 567
 Maier, A. A., 568
 Maitani, Y., 863
 Mak, N., 813
 Makarov, V. A., 563, 926
 Makhotil., A. P., 569
 Makow, D. M., 570
 Maksimov, V. I., 571, 572
 Malik, K. M. A., 521
 Malofeev, V. S., 65
 Malraison, B., 573
 Malthete, J., 68, 235, 236
 Malvano, R., 60
 Mamnitsk., V. M., 28
 Mamone, V. P., 125
 Mann, J. A., 800
 Manning, W. B., 421, 636
 Manohara., P. T., 729
 Mansingh, A., 39
 Marcerou, J. P., 574
 Marchess., R. H., 575
 Marcolin., L., 157

- Markovit., D., 576
 Marsau, P., 692
 Marsh, H., 577, 578, 579, 580, 581, 610
 Martin, T. I., 582
 Martinet, A., 537
 Martinoty, P., 269, 583, 584, 585
 Martinot-L., P., 586
 Martinpe., J. A., 629, 630
 Martins, A. F., 247, 248, 587
 Martire, D. E., 588, 669
 Marzotko, D., 227
 Mashru, U., 553
 Massalska., M., 589
 Masterfa., T., 445
 Mathey, Y., 590
 Mathiese., S., 22
 Mathis, A., 576
 Matsunag., Y., 33, 34
 Matsuoka, Y., 591
 Matthews, R. C., 615
 Mayne, C. L., 196
 Maze, C., 592
 Mazid, M. A., 331, 333, 521
 Mazieres, C., 590
 McElhane, R. N., 812, 813
 McMahon, D. H., 832
 McMullen, K. J., 111
 Mehta, S., 307
 Meiboom, S., 374, 593, 594
 Meier, G., 285
 Meirovitch, E., 595, 596, 597
 Melone, S., 14, 15, 16
 Menczel, J., 598, 599
 Meseieke, J. K., 600
 Meshkovs., I. K., 20
 Meyer, R. B., 601, 702, 749
 Michel, L., 602
 Miike, H., 274, 603
 Mikityuk, Z. M., 271
 Millaud, B., 870
 Miller, I. R., 51
 Miller, M., 635
 Miller, R. W., 136, 137
 Miller, W. G., 303, 604
 Miller, W. H., 265
 Minakuch., S., 882
 Minasyan., M. K., 765, 766
 Mineev, L. I., 783, 906
 Miner, C. J., 57
 Mints, R. I., 605
 Miraldi, E., 606
 Mitchell, G. D., 307
 Mitroi, R., 620
 Miyano, K., 607, 608, 867
 Miyasaka, H., 610
 Miyata, I., 609
 Mochel, J. M., 524, 525
 Mochida, I., 579, 580, 610
 Mochizuk., M., 393
 Moiseenk., V. M., 797, 798
 Moncton, D. E., 611
 Mondelli, R., 308
 Montgome., G. P., 612, 613, 614
 Monzie, P., 163
 Moore, T. C., 615
 Moraru, A., 50
 Mori, T., 860, 862
 Morishit., H., 644
 Moritz, E., 616
 Morriset., J. D., 617
 Mortimer, M., 373
 Moscicki, J. K., 497, 589, 618
 Moshel, N. V., 346
 Motika, G., 619
 Motoc, C., 399, 620, 621
 Moussa, F., 75, 76, 77, 533
 Muellerw., U. T., 198, 330, 622, 623
 Mugele, T., 624, 625
 Mukamel, D., 626, 627
 Mulvaney, B., 628, 856
 Munro, P. N., 350
 Muramats., H., 41
 Muriel, M. A., 629, 630
 Murthy, V. R., 631, 632, 633
 Murty, C. R. K., 731, 732, 733
 Murty, M. V. R. K., 634
 Murty, P. N., 731, 732
 Muscatel., U., 40
 Muschik, G. M., 421, 422, 635, 636
 Nabarro, F. R. N., 637, 638
 Naemura, S., 639, 866
 Nagle, J. F., 116
 Naidenov., S., 693
 Naidu, S. V., 631
 Naikwadi, K. P., 640
 Nakagomi, T., 883
 Nakahara, M., 641
 Nakajima, Y., 642
 Nakamizo, M., 412, 759
 Nakamura, S., 643
 Nakano, F., 644, 645
 Nakano, H., 958
 Naqvi, K. R., 646
 Narebska, A., 528
 Nazem, F. F., 647, 648
 Nazzal, A., 198, 330, 622, 623
 Neavel, R. C., 578
 Nehring, J., 479, 772
 Nelson, D. R., 649
 Neri, A. P., 784, 785, 786
 Nesrulla., A. N., 650, 651, 652

- Neubert, M. E., 117, 539, 653, 757
 Ng, C. B., 140, 141
 Ngo, P. D. T., 124
 Nguyen, T. L., 196
 Nikitin, E. N., 654
 NN, 655
 Noack, F., 624, 625, 950
 Norden, B., 25
 Nowinowski, E., 979
 Nutiu, M., 50
 Nyankina, E. E., 895
 Nyitrai, K., 203, 365, 366

 Oberlin, A., 43
 Oberlin, M., 43
 Odawara, K., 656, 883
 Odulov, S. G., 657
 Ogawa, F., 866
 Oh, C. S., 86
 Ohgawara, M., 902
 Ohmes, E., 492, 493
 Ohno, S., 862
 Okada, T., 764
 Okahara, M., 963, 964, 965
 Oldano, C., 606
 Oldfield, E., 417
 Oloane, J. K., 658
 O'Neill, M. T., 147
 Onogi, S., 41, 401
 Onogi, Y., 288, 659, 660, 661
 Opher, R., 289
 Orlov, V. A., 232
 Orlova, N. G., 929
 Osimov, M. A., 662
 Osman, M. A., 663, 664
 Ostrovsk., B. I., 555, 665, 666
 Osugi, J., 641
 Ottes, K., 667
 Ovcharen, 54
 Ovsyanni, V. D., 668
 Ovsyanni, L. A., 928
 Oweimree, G. A., 588, 669
 Owersbra, J. R., 670
 Oyabu, T., 671

 Padmini, A. R. K., 321
 Panatta, A., 327, 329
 Panikars., V. D., 672
 Panse, D. G., 640
 Papanek, J., 673
 Pardowit., I., 674
 Parfyonov, A. V., 675
 Parkash, S., 676, 677
 Patel, D. L., 268, 678, 679
 Patel, K. M., 617

 Patel, N. R., 214
 Paul, R., 974
 Paul, S., 974
 Paulus, H., 355
 Pavlyuch., A. I., 680, 880
 Paykary, M., 159
 Peate, N. A., 304
 Pedersen, A. M., 681
 Pedulli, G. F., 682
 Peguy, A., 163
 Pellatt, M. G., 683
 Pelzl, G., 228, 495, 684, 685, 794, 944, 945
 Penchev, I. I., 263
 Penz, P. A., 686
 Perevoz., N. F., 232
 Perrin, H., 84, 687
 Pershan, P. S., 177, 295, 296, 688
 Pershin, V. K., 689, 690
 Pershin, V. L. K., 689, 690
 Persson, N. O., 691, 825
 Pesquer, M., 692
 Peters, A., 154
 Peterson, M. A., 177
 Petrov, A. G., 27, 693
 Petrov, M., 815
 Phaovibul, O., 694, 695
 Pichikyan, N. A., 696
 Pick, R. M., 697
 Pieranski, P., 154
 Pikin, S. A., 698, 699, 875
 Pilipets., N. F., 971
 Pindak, R., 611, 700, 701, 702, 749
 Pines, A., 817
 Pinhas, A. R., 919
 Pink, D., 150
 Pirkle, W. H., 703
 Pisarski, R. D., 704
 Plate, N. A., 705, 797, 798, 799
 Pleiner, H., 126, 706, 707, 708
 Plumlee, R. T., 617
 Pocsik, I., 709
 Podolski., A. F., 929
 Poeti, G., 710, 711
 Poggi, Y., 573
 Pollmann, P., 712, 713
 Polushin, S. G., 753, 891
 Pongthana., K., 695
 Poniewie., A., 841
 Ponziboss., M. G., 14, 15
 Popa, E., 205
 Popov, E. S., 874, 875
 Popov, Y. M., 675
 Porter, R. S., 469, 470
 Portugall, M., 493
 Pouligny, B., 714
 Pourriere, A., 878
 Pownall, H. J., 617

- Prade, B. S., 26
 Praefcke, K., 110, 381, 715
 Prasad, J. S., 716, 717, 718, 719, 727, 805, 806, 807, 808
 Prasad, S. N., 918
 Price, A. H., 720
 Priest, R. G., 721
 Pringle, R. D., 284
 Prokhorov, A. M., 20
 Prost, J., 574, 722
 Proutier, A., 516
 Przedmojski, J., 723
 Puig, J. E., 303
 Puiti, P., 14
 Pura, B., 723
 Purdie, N., 123
 Purkina, A. V., 928
 Purvanet, G. V., 83
 Pysz, R. W., 724
 Pyykko, P., 427

 Quednau, J., 383, 385
 Quintan, A. T., 638

 Rabinovi, A. Z., 555, 651, 652, 665, 725
 Radzhabov, Z. B., 173, 906
 Raisanen, K., 427, 726
 Rajalaks, P. K., 717, 727, 805, 806, 807, 808
 Rajan, V. T., 728
 Rajasekh, M. V., 729
 Rance, M., 730
 Randall, E. W., 308
 Rantell, T., 581
 Rao, A. S. N., 731, 732, 733
 Rao, A. V., 102, 234
 Raszewski, Z., 211
 Ratajczak, H., 463, 464
 Ratna, B. R., 734
 Raynes, E. P., 183, 184, 193, 735
 Rayss, J., 736
 Razinaqv, K., 737
 Razumov, A. A., 738
 Reddy, R. N. V. R., 631, 632, 633
 Reddy, T. R., 731, 732
 Reeve, T. J., 430
 Reeves, L. W., 3, 300, 301, 310, 311, 523
 Rehage, G., 292, 293, 305
 Reid, C. J., 739
 Resing, H. A., 740
 Revesz, L., 663, 664
 Reznikow, Y. A., 657
 Richards, R. M., 309, 741
 Richter, L., 95, 948
 Richter, W. J., 490, 742

 Ricklefs, U., 112
 Riggs, D. M., 743
 Rinaldi, P. L., 703
 Ringsdorf, H., 405, 493
 Riste, T., 667, 681
 Robert, J., 744
 Robert, J. B., 17, 190, 191
 Robinson, P. S., 332
 Roe, I. H. C., 683
 Romano, S., 558
 Rondelez, F., 745
 Rondot, B., 914
 Ronis, D., 746, 747
 Rosciszewski, K., 748
 Rosen, K. M., 752
 Rosenblatt, C., 746, 747, 749, 750, 751
 Rosta, L., 254
 Rosu, C., 620
 Rothschild, K. J., 187, 752
 Rouch, J., 516
 Rouillon, J. C., 816
 Roy, S. K., 934
 Ruan, L., 976
 Rudenko, A. A., 507
 Rueppel, D., 754
 Russo, N., 172, 527
 Rustichelli, F., 14, 15, 16
 Rutar, V., 104, 105, 562
 Ryumtsev, E. I., 753, 891

 Sackmann, E., 754
 Sackmann, H., 95, 229, 230, 244, 755
 Sadleir, N., 756
 Sadowska, K., 211
 Sadowski, J., 949
 Safinya, C. R., 22, 23, 546, 757
 Sainov, S., 392
 Saito, F., 866
 Saito, S., 758
 Saito, Y., 13
 Sakagami, S., 759
 Sakamoto, K., 760
 Sakura, J. D., 920
 Sakurada, H., 656
 Samay, G., 365, 366
 Sammon, M., 374, 593, 594
 Samokhina, M. A., 982
 Samori, E., 334
 Samulski, E. T., 761, 762
 Sandhu, J. S., 763
 Sandrock, R., 382
 Sengen, O., 764
 Sarbey, O. G., 657
 Sarkisyan, A. G., 765, 766
 Sarma, B. K., 151, 152
 Sasaki, A., 767
 Sasaki, Y., 312

- Sato, M., 644, 645
 Sato, R. I., 422
 Sato, S., 768
 Sauders, F. C., 389
 Saupe, A., 769, 770, 966, 967
 Saurer, E., 326
 Savin, O., 205
 Savithra., K. L., 771
 Sawchuk, A. A., 168
 Sawzik, P., 200
 Sbrolli, L., 781
 Scaramuzza, N., 814
 Schadt, M., 324
 Scheffer, T. J., 772
 Schenzle, A., 127
 Scherer, G., 712
 Scherr, G. S., 845
 Schmidt, D., 715
 Schmiedel, H., 540, 773, 774
 Schneider, F., 775
 Schneider, G. M., 382, 383, 384, 385
 Schonhof., A., 502
 Schrader, B., 742
 Schroeder, D. C., 21
 Schroeder, H., 776, 777
 Schroeder, J. P., 21, 778
 Schubert, H., 238, 246
 Schubert, K., 466
 Schulze, H., 529
 Schwartz, R., 779
 Scott, E., 579, 580, 581
 Scriven, L. E., 303
 Scudieri, F., 780, 781
 Scunderl., C., 50
 Seifert, K., 782
 Sein, E., 714
 Seki, H., 903
 Seki, S., 831
 Sela, B., 51
 Seleznev, S. A., 783
 Seliger, J., 105, 562, 924, 925
 Selinger, S., 779
 Senatra, D., 784, 785, 786
 Serinken, N. M., 57
 Servuss, R. M., 787
 Sethna, V. M., 788
 Seurin, P., 789, 790
 Seuron, P., 791, 829
 Shabanov, V. F., 44, 45, 47
 Shaginya., A. A., 765, 766
 Shanks, I. A., 792, 793
 Sharma, N. K., 227, 794, 945
 Sharma, R. P., 508
 Shashidhar, R., 795
 Sheka, E. F., 254
 Shelemin, E. B., 650, 652
 Sheley, C., 796
 Shelyazh., S. V., 956
 Shen, M. S., 136
 Shen, Y. R., 175, 176
 Shepelev., A. A., 96
 Sherlock, J., 580
 Sherman, P. L., 869
 Sherwood, M., 404
 Shetty, A. N., 117, 251
 Shibaev, I. N., 830
 Shibaev, V. P., 304, 705, 797, 798, 799
 Shigematz., H., 368
 Shih, L. B., 800
 Shilniko., A., V., 874, 875
 Shimoda, S., 801
 Shimomura, T., 802, 803
 Shipov, N. V., 804
 Shirakura, Y., 758
 Shishido, C., 903
 Shivapra., N. C., 717, 718, 719, 727,
 805, 806, 807, 808
 Shiyanov., S. V., 849, 850
 Shoji, K., 809
 Shoshin, V. M., 441
 Shpak, M. T., 410
 Shtrikman, S., 402, 403
 Shtýkov, N. M., 65
 Shukla, R. P., 634
 Shuvalov, L. A., 874, 875
 Sigaud, G., 2, 360, 362, 363, 810, 811, 876
 Silvius, J. R., 813, 813
 Simard, R., 249
 Simon, B. A., 187
 Simon, J., 576
 Simoni, F., 67, 814
 Simova, P., 463, 464, 815
 Singer, L. S., 816
 Singh, S., 915
 Sinton, S., 817
 Sitte, P., 818
 Sivarama., K. N., 108
 Sivardie., J., 819
 Skarp, K., 820
 Sklar, L. A., 617
 Skorokho., S. S., 96
 Skouliki, T., 821
 Skoulios, A., 789, 790, 870
 Slepков, I. A., 109, 696
 Slotfeld., D., 740
 Smirnova, N. I., 680
 Smith, G. W., 822
 Smith, I. C. P., 730
 Smith, K. J., 557
 Smith, L. C., 617
 Smith, R. A., 183
 Smith, R. E., 431

- Smolyans., A. L., 799
 Snaveley, M. K., 335
 Sobolev, N. N., 983
 Soederman, O., 823, 824, 825, 826
 Soffer, B. H., 168
 Sohl, C. H., 827
 Sokerov, S., 27
 Sokolova, E. P., 828
 Solladie, G., 387, 791, 829
 Sonin, A. S., 109, 555, 650, 651, 652, 665, 696, 725, 830
 Sorai, M., 831
 Soref, R. A., 832, 833
 Sorensen, L. B., 177, 296
 Sorkin, E. L., 28, 665
 Sorkin, H., 834
 Sorokin, A. V., 44
 Sorokin, V. M., 668
 Soskin, M. S., 657
 Spackman, W., 400
 Spielberg, N., 788, 835
 Spiesecke, H., 836
 Spratte, W., 382, 384
 Sprenger, W. O., 700, 701
 Sprokel, G. J., 837, 838, 854, 855
 Spruiell, J. E., 288
 Srebotnjak, E., 209
 Stadelho., J. W., 839
 Stamatoff, J., 840
 Stebler, B., 512, 513, 820
 Stecki, J., 116, 841
 Stefanov, M. E., 320
 Stegemeyer, H., 390, 391, 503, 504, 505, 842, 843
 Stein, D. L., 704
 Stephens, R. W., 763
 Stephens., D. S., 844
 Stevens, W. C., 845
 Stieb, A. E., 846
 Stoffer, J. O., 871
 Stolarzo., Z., 212, 979
 Storz, F. G., 169
 Stoylov, S. P., 27
 Strand, T. C., 168
 Strassle., S., 88
 Straugha., B., 847
 Straziel., C., 192
 Strba, A., 673
 Streater, R. W., 57
 Strigazz., A., 60
 Stroschio, J. A., 92
 Strukov, B. A., 665
 Strzelec., L., 538, 848, 912
 Suga, H., 831
 Sugakov, V. I., 849, 850
 Sugiura, M., 851
 Sukhorukov, A., 568
 Sukhov, A. V., 971
 Surka, S., 396, 397
 Suryapra., N., 852
 Sussman, A., 162
 Suzuki, K., 883
 Suzuki, M., 864
 Suzuki, S., 941, 942, 943
 Svechniko., S. V., 668
 Svet, V. D., 853
 Swalen, J. D., 854, 855
 Swift, J., 628, 856, 857
 Szabo, A., 544, 619, 858
 Szulc, J., 949
 Szwajcza., E., 531
 Szymanski., A., 531
 Tabiryan, N. V., 31, 859, 970, 971, 972, 973
 Tabourie., P., 932
 Tachiban., T., 860
 Takahash., K., 312
 Takahash., R., 610
 Takayana., M., 415
 Takeda, M., 809
 Takemori, T., 861
 Takemura, T., 960, 968
 Takenaka, S., 480
 Takeshi., K., 610
 Takezoe, H., 487
 Taki, S., 960, 968
 Tako, T., 12
 Talmon, Y., 303
 Tamamush., B., 957
 Tanaka, H., 656
 Tanaka, R., 862, 888, 889, 890
 Tanaka, T., 862
 Tanaka, Y., 863, 864
 Tang, I. M., 694, 695
 Tanguay, A. R., 168
 Tani, C., 865, 866
 Taraskin, S. A., 665
 Tarczon, J. C., 867
 Tarr, C. E., 615, 868
 Tavares, M. R., 24
 Taylor, P. J., 869
 Tchoubar, D., 189, 351
 Tealdi, A., 55
 Teo, B. K., 332
 Tettaman., E., 327, 328, 329
 Thierry, A., 870
 Thiriet, Y., 584
 Thomas, L., 345
 Thomas, R. K., 373
 Thosar, B. V., 508
 Thundath., R., 871

- Thurston, R. N., 872
 Tiddy, G. J. T., 111, 873
 Tikhomir., N. A., 874, 875
 Tikhonov, E. A., 409, 410
 Timimi, B. A., 277, 557
 Tinh, N. H., 235, 236, 237, 534, 810, 811,
 876, 877, 878, 879
 Tishchenko, G., 907
 Tishchen., V. G., 171, 410, 569, 672
 Titov, V. V., 680, 880
 Tokuoka, T., 881
 Tolmache., A. V., 171
 Tomchuk, E., 257
 Tomchuk, P. M., 73
 Tomilin, M. G., 522
 Tong, S. S., 976
 Torii, Y., 439
 Toriumi, H., 882
 Toriyama, K., 883
 Torquati, G., 16
 Tough, R. J. A., 183, 792
 Toulouse, G., 884
 Tracey, A. S., 523
 Tretyako., A. G., 885
 Trofimov, A. S., 54
 Trossi, L., 606
 Trufanov, A. N., 886
 Tsuji, K., 831
 Tsujiuch., J., 861
 Tsutsui, J., 887
 Tsutsui, T., 862, 888, 889, 890
 Tsvetkov, V. A., 892
 Tsvetkov, V. N., 891
 Tsvetkov, V. V., 892
 Tsykalo, A. L., 893, 894, 895, 896, 897,
 898, 899
 Tulloch, A. P., 730
 Tyka, R., 191

 Uchilda, T., 900, 901, 902, 903
 Ueberrei., K., 245
 Ueha, S., 861
 Uematsu, I., 882
 Uematsu, Y., 882
 Uemoto, T., 904, 963, 964, 965
 Ueno, T., 866
 Uhrich, D. L., 517
 Umanskii, B. A., 905
 Urban, S., 497, 600, 618

 Vainshtein, B., 906, 907
 Valabreg, P. T., 606
 Van Doorn, C., 908
 Van Eck, D. C., 909
 Van Hecke, G. R., 910, 911
 Van Luyen, D., 538, 848, 912

 Vanderha., R., 913
 Vanlerbe., G., 914
 Vannini, M., 785
 Vanuitert, L. G., 915
 Vasilev., A. S., 109
 Vaucamps, C., 516
 Vaz, N. A. P., 251, 916, 917
 Venugopala., S., 918
 Veracini, C. A., 64, 157, 172, 276, 308
 Verbit, L., 919
 Verma, S. P., 920
 Vetrova, Z. P., 921
 Veyssie, M., 264
 Vilanove, R., 745
 Vilasagar, S., 108, 922
 Villfan, M., 105, 923, 924, 925
 Villoria, F., 530
 Vilorio, F. R., 277
 Viovy, R., 316, 520
 Visloulkh, V. A., 926
 Vistin, L. K., 173, 927
 Vlasov, G. P., 928
 Volchek, B. Z., 928
 Volino, F., 240, 241
 Volkova, L. A., 929
 Voloskov, A. Y., 799
 Volovik, G. E., 273, 930
 Volpilha, V., 692
 Vora, R. A., 321
 Vucelic, D., 931
 Vucelic, V., 931

 Waclawek, W., 212
 Wacrenie., J. M., 932
 Wada, M., 900, 901, 902, 903
 Wade, C. G., 615
 Waksmond., A., 736
 Waldron, W., 933
 Wallach, D. F. H., 920
 Wallis, G. P., 934
 Wang, L. Y., 959
 Wang, X. Y., 541
 Wargon, J. A., 113
 Warner, M., 935, 936, 937
 Warner, S. B., 938, 939, 940
 Wassall, S. R., 208
 Wassmer, K. H., 493
 Watabe, K., 941, 942, 943
 Watanabe, R., 41
 Watanabe, T., 851
 Waton, G., 154
 Weinstein, J. N., 471
 Weissflo., W., 228, 794, 944, 945, 946
 Wennerst., H., 432, 433, 434, 824
 Westwood, W. D., 57
 Whalley, E., 477

- White, J. L., 93, 94, 140, 141, 288, 660, 661
 White, J. W., 373
 Wiebe, H. H., 947
 Wiegeleb., A., 95, 227, 228, 496, 944, 948
 Wiesenfe., L., 190, 191
 Wilson, R. C., 147, 148
 Withe, J. L., 659
 Witkiewicz, Z., 181, 210, 736, 949
 Wittmann, J. C., 153, 576
 Woelfel, W., 624, 625, 950
 Wojciecho., M., 4, 5, 272
 Wong, T. C., 951, 952, 953, 954
 Woo, C. W., 728
 Wrobel, D., 69
 Wrobel, S., 497, 589
 Wu, C. L., 959
 Wunderlich, B., 598, 599
- Xie, Y. Z., 955
- Yagupols., L. M., 956
 Yakovenk., G. N., 853
 Yamada, H., 957
 Yamada, T., 603
 Yamamoto, O., 371
 Yamamoto, Y., 764
 Yamashit., M., 958
 Yanagida, S., 963, 964, 965
 Yang, R. D., 617
 Yao, N. Y., 959
 Yariv, A., 286
 Yasuniwa, M., 960
 Ye, F., 961
 Yin, K. M., 962
 Yoshida, H., 642
 Yoshino, K., 904, 963, 964, 965
 Young, C. Y., 702
 Yu. L. J., 395, 770, 966, 967
- Yurchenk., V. M., 956
 Yusuniwa, M., 968
- Zagar, V., 924, 925
 Zaitseva, N. V., 654
 Zakaryan, V. A., 765
 Zakzouk, A. K. M., 969
 Zann, A., 450, 877
 Zannoni, C., 231, 682
 Zaszke, H., 95, 246
 Zecs, B., 104
 Zeinally, A. K., 18, 19, 927
 Zeks, B., 535
 Zeldovich, B. Y., 58, 859, 970, 971, 972, 973
 Zeller, H. R., 88
 Zeminder, A. K., 974
 Zhang, B. Z., 959
 Zhang, Z., 961
 Zhang, Z. Q., 975
 Zhao, J. A., 976
 Zharenov, R. I., 906
 Zharkova, G. M., 977
 Zhelezny., V. V., 978
 Zhuang, S. L., 455, 456
 Zhuikov, V. A., 47
 Zielinski, J., 979
 Zielinsk., W. L., 421
 Zijlstra, R. J. J., 909
 Zimija, A. J., 979
 Zimmerma., H., 465
 Zippelius, A., 980, 981
 Zolin, V. F., 982
 Zolotko, A. S., 983
 Zoltai, A. I., 619
 Zuckerma., M. J., 150
 Zumer, S., 923
 Zupanici., I., 104
 Zverkova, T. I., 984
 Zydzik, G. J. 915

LIST OF ABBREVIATIONS

Journals:

<i>Abs. Pap. A. C. S.</i>	Abstracts of Papers of the American Chem. Soc.
<i>Acc. Chem. Re.</i>	Accounts of Chemical Research
<i>Act. Cien. Ind.</i>	Acta Cienc. India
<i>Act. Chim. He.</i>	Acta Chimica Helvetica
<i>Act. Cryst. B</i>	Acta Crystallographica B
<i>Act. F. R. N. Cz.</i>	Acta Fac. Rerum Nat. Univ. Com. Ph. (Czech.)
<i>Act. Ph. Ac. Hu.</i>	Acta Physica Academiae Scientiarum Hungaricae
<i>Act. Ph. Pol. A</i>	Acta Physica Polonica A
<i>Act. Phys. Au.</i>	Acta Physica Austria
<i>Act. Phys. Ch.</i>	Acta Physica et Chimica
<i>Act. Phys. He.</i>	Acta Physica Helvetica
<i>Act. Phys. Hu.</i>	Acta Physica Hungarica
<i>Act. Phys. Sin.</i>	Acta Physica Sinica
<i>Act. Phy. Slov.</i>	Acta Physica Slovacia
<i>Adv. Chromat.</i>	Advances in Chromatography
<i>Adv. Mol. Int.</i>	Advanced Molecular Relaxation + Interaction Processes
<i>Adv. Physics</i>	Advances in Physics
<i>Am. Ceram. S.</i>	American Ceramic Society Bulletin
<i>Am. J. Phys.</i>	American Journal of Physics
<i>An. Fisica</i>	Anales de Fisica
<i>An. Quimica</i>	Anales de Quimica
<i>Analyt. Chem.</i>	Analytical Chemistry
<i>Angew. Chem.</i>	Angewandte Chemie
<i>Ann. Physics</i>	Annals of Physics
<i>Ann. Physik</i>	Annalen der Physik
<i>Ann. Physiq.</i>	Annales de Physique
<i>Ann. N.Y. Acad.</i>	Annals of the New York Academy of Sciences
<i>Ann. R. Mater.</i>	Annual Review of Materials Science
<i>Appl. Optics</i>	Applied Optics
<i>Appl. Phys. A</i>	Applied Physics A. Solids and Surfaces
<i>Appl. Phys. B</i>	Applied Physics B. Photophysics and Laser Chemistry
<i>Appl. Phys. L.</i>	Applied Physics Letters
<i>Appl. Spectr.</i>	Applied Spectroscopy
<i>Arch. Bioch.</i>	Archives of Biochemistry and Biophysics
<i>Arch. Mech.</i>	Archives of Mechanics
<i>Aust. J. Phys.</i>	Australian Journal of Physics
<i>B. Am. Phys. S.</i>	Bull. of the American Physical Society
<i>B. Chem. S. Jap.</i>	Bull. of the Chemical Society of Japan
<i>B. I. Po. Buc. C.</i>	Bull. Inst. Politeh. Bucuresti. Chim. (Rum.)
<i>B. I. Po. Buc. E.</i>	Bull. Inst. Politeh. Bucuresti. Electr. (Rum.)
<i>B. Mineral.</i>	Bulletin de Mineralogie
<i>B. S. Fr. Min.</i>	Bulletin de la Soc. Franc. de Min. et Crist.
<i>Ber. Buns. Ges.</i>	Berichte der Bunsen-Ges. für Physikalische Chemie
<i>Bioc. Biop. A.</i>	Biochimica et Biophysica Acta
<i>Biochem.</i>	Biochemistry
<i>Bioch. Pharm.</i>	Biochemical Pharmacology
<i>Biofizika</i>	Biofizika
<i>Biophys. Ch.</i>	Biophysical Chemistry
<i>Biophys. J.</i>	Biophysical Journal
<i>Bioscience</i>	Bioscience
<i>Br. Polym. J.</i>	British Polymer Journal
<i>Brown Bov. R.</i>	Brown Boveri Research Report

<i>Bulg. J. Phys.</i>	Bulgarian Journal of Physics
<i>Bunseki Kag.</i>	Bunseki Kagaku
<i>Can. J. Bioch.</i>	Canadian Journal of Biochemistry
<i>Can. J. Chem.</i>	Canadian Journal Chemistry
<i>Can. J. Phys.</i>	Canadian Journal of Physics
<i>Carbon</i>	Carbon
<i>Cesk. C. Fys. A</i>	Ceskolovensky Casopis pro Fysiko A
<i>Chem. Anal.</i>	Chemia Analytyczna
<i>Chem. Ber.</i>	Chemische Berichte
<i>Chem. Lett.</i>	Chemistry Letters
<i>Chem. P. Lett.</i>	Chemical Physics Letters
<i>Chem. Pharm.</i>	Chemical and Pharmaceutical Bulletin
<i>Chem. Phys.</i>	Chemical Physics
<i>Chem. Phys. Li.</i>	Chemistry and Physics of Lipids
<i>Chem. Rev.</i>	Chemical Reviews
<i>Chem. Scr.</i>	Chemica Scripta
<i>Chem. Zeitun.</i>	Chemiker-Zeitung
<i>Chim. Ind. M.</i>	Chimica e l'Industria
<i>Chimia</i>	Chimia
<i>Chin. J. Phys.</i>	Chinese Journal of Physics (Taiwan)
<i>Chin. Phys.</i>	Chinese Physics
<i>Chromatogr.</i>	Chromatographia
<i>Colloid J.</i>	Colloid Journal of the USSR
<i>Colloid P. S.</i>	Colloid and Polymer Science
<i>C. R. Ac. Sci. B</i>	Comptes Rendues Hebd. Acad. Sciences B (Paris)
<i>Current Sci.</i>	Current Science
<i>D.A.N. BSSR</i>	Doklady Akademii NAUK BSSR
<i>D.A.N. SSSR</i>	Doklady Akademii NAUK SSSR
<i>Displays</i>	Displays—Technology and Applications
<i>Electr. Des.</i>	Electronic Design
<i>Electr. Eng.</i>	Electronic Engineering
<i>Electr. Lett.</i>	Electronics Letters
<i>Electr. Pow.</i>	Electronics and Power
<i>Electr. Tec. P.</i>	Electron Technol. (Poland)
<i>Electronics</i>	Electronics
<i>Elettrotecn.</i>	Elettrotecnica
<i>Eur. J. Cell</i>	European Journal of Cell Biology
<i>Eur. Polym. J.</i>	European Polymer Journal
<i>Exp. Tech. Phy.</i>	Experimentelle Technik der Physik
<i>Faraday Dis.</i>	Faraday Discussions of the Chemical Society
<i>Fed. Proc.</i>	Federation Proceedings
<i>Feinw. Messt.</i>	Feinwerktechnik & Messtechnik (Germany)
<i>Ferroelectr.</i>	Ferroelectrics
<i>Fiz. Tverd. T.</i>	Fizika Tverdogo Tela
<i>Fl. Mec. Sov. R.</i>	Fluid Mechanics. Soviet Research (USA)
<i>Fortschr. Ph.</i>	Fortschritte der Physik
<i>Fuel</i>	Fuel
<i>Helv. Chim. A.</i>	Helvetica Chimica Acta
<i>Helv. Phys. A.</i>	Helvetica Physica Acta
<i>Hewlett-Pac.</i>	Hewlett-Packard Journal
<i>Hi. Temp. Hi. P.</i>	High Temperatures High Pressures (GB)
<i>Hu. Ac. Sc. Bu.</i>	Hungarian Acad. Sci. (Budapest)

- I. J. Techn.*
I.A.N. SSS Fiz.
IBM J. Res.
IBM T. Disc. B.
IEEE Cons. E.
IEEE Device
IEEE J. Q. El.
IEEE Magnet.
IEEE Son. Ul.
Ind. J. Chem. A
Ind. J. P. A. Ph.
Inf. Display
Infrar. Phys.
Inor. Ch. A. A.
Instr. Exp. T.
Int. J. Eng. S.
Int. J. Sol. St.
Isr. J. Chem.

J. Am. Chem. So.
J. Am. Oil Ch.
J. Appl. Chem.
J. Appl. Elec.
J. Appl. Phys.
J. Appl. Poly.
J. Appl. Spect.
J. Biomed. En.
J. Chem. Educ.
J. Chem. Phys.
J. Chem. S. Ch.
J. Chem. S. F. 1
J. Chem. S. F. 2
J. Chem. S. P. 2
J. Chromat.
J. Coll. I. Sc.
J. Cryst. Gr.
J. Disp. Sci.
J. Elchem. Soc.
J. Elec. Mat.
J. Eng. Phys.
J. Fluid Mec.
J. Indian Ch.
J. Liq. Chrom.
J. Lumin. Ne.
J. Macr. S. Ph.
J. Magn. Res.
J. Mater. Sci.
J. Math. Anal.
J. Mecanique
J. Mol. Struc.
J. Non-Equ. T.
J. Non-Newt. F.
J. Opt. Soc.
J. Optics
J. Org. Chem.
J. Pediat. Op.
J. Pharm. Sci.
- Indian Journal of Technology
 Investiya Akademii NAUK SSSR. Seriya Fiz.
 IBM Journal of Research and Development
 IBM Technical Disclosure Bulletin
 IEEE Transactions on Consumer Electronics
 IEEE Transactions on Electron Devices
 IEEE Journal of Quantum Electronics
 IEEE Transactions on Magnetics
 IEEE Transactions on Sonics and Ultrasonics
 Indian Journal of Chemistry A
 Indian Journal of Pure and Applied Physics
 Information Display Journal (SID)
 Infrared Physics
 Inorganica Chimica Acta. Articles
 Instruments and Experimental Techniques
 International Journal of Engineering Science
 International Journal of Solids and Structures
 Israel Journal of Chemistry

 Journal of the American Chemical Society
 Journal of the American Oil Chemists Society
 Journal of Applied Chemistry of the USSR
 Journal of Applied Electrochemistry
 Journal of Applied Physics
 Journal of Applied Polymer Science
 Journal of Applied Spectroscopy
 Journal of Biomedical Engineering
 Journal of Chemical Education
 Journal of Chemical Physics
 Journal of Chemical Society. Chemical Comm.
 Journal of the Chemical Soc.: Faraday Tr. I
 Journal of the Chemical Soc.: Faraday Tr. II
 Journal of the Chemical Soc.: Perkin Trans. II
 Journal of Chromatography
 Journal of Colloid and Interface Science
 Journal of Crystal Growth
 Journal of Dispersion Science and Technology
 Journal of the Electrochemical Society
 Journal of Electronic Materials
 Journal of Engeneering Physics (USA)
 Journal of Fluid Mechanics
 Journal of the Indian Chemical Society
 Journal of Liquid Chromatography
 Journal of Luminance (Netherlands)
 Journal of Macromolecular Science. Physics
 Journal of Magnetic Resonance
 Journal of Material Science
 Journal of Mathematical Analysis and Appl.
 Journal de Mecanique
 Journal of Molecular Structure
 Journal of Non-Equilibrium Thermodynamics
 Journal of Non-Newtonian Fluid Mechanics
 Journal of the Optical Society of America
 Journal of Optics
 Journal of Organic Chemistry
 Journal of Pediatric Ophthalmology and Strabismus
 Journal of Pharmaceutical Sciences

<i>J. Phys. L.</i>	Journal of Physics. Letters
<i>J. Phys. C</i>	Journal of Physics C. Solid State Physics
<i>J. Phys. D</i>	Journal of Physics D. Applied Physics
<i>J. Phys. E</i>	Journal of Physics E. Scientific Instruments
<i>J. Phys. Chem.</i>	Journal of Physical Chemistry
<i>J. Ph. Soc. Jap.</i>	Journal of the Physical Society of Japan
<i>J. Physique</i>	Journal de Physique
<i>J. Physique L.</i>	Journal de Physique Lettres
<i>J. Pol. Sc. P. C.</i>	Journal of Polymer Science. Polymer Chemistry
<i>J. Pol. Sc. P. L.</i>	Journal of Polymer Science. Polymer Letters
<i>J. Pol. Sc. P. P.</i>	Journal of Polymer Science. Polymer Physics
<i>J. Prak. Chem.</i>	Journal für Praktische Chemie
<i>J. Qing. Hua U.</i>	Journal of the Qing Hua Univ. (China)
<i>J. Quan. Spec.</i>	Journal of Quantitative Spectrosc. + Rad. Transfer
<i>J. Rheol.</i>	Journal of Rheology
<i>J. Sci. S. Thai.</i>	Journal of the Scientific Soc. of Thailand
<i>J. Soc. Ma. S. J.</i>	Journal of the Society of Materials Science (Japan)
<i>J. Stat. Phys.</i>	Journal of Statistical Physics
<i>J. Syn. Org. J.</i>	Journal of Synthetic Organic Chemistry (Japan)
<i>J. Vac. Soc. Jp.</i>	Journal of the Vacuum Society of Japan
<i>Jap. J. A. Phy.</i>	Japanese Journal of Applied Physics (Part 1)
<i>Jap. J. A. Phy. L.</i>	Japanese Journal of Applied Physics (Part 2: Letters)
<i>Jap. Circ. J.</i>	Japanese Circulation Journal. English Edition
<i>JETP Letter.</i>	JETP Letters
<i>Kexue Tongba.</i>	Kexue Tongboa (For. Lang. Ed.)
<i>Khim. Getero.</i>	Khimiya Geterotsiklicheskikh Soedinenii
<i>Kobun Ron. Jp.</i>	Kobunshi Ronbunshu (Japan)
<i>Kristallogr.</i>	Kristallografiya (USSR)
<i>Krist. Tech.</i>	Kristall und Technik
<i>Kvan. Elektr.</i>	Kvantovaya Elektronika
<i>Lett. Nuov. C.</i>	Lettere Al Nuovo Cimento
<i>Macromolec.</i>	Macromolecules
<i>Magy. Kem. Fo.</i>	Magyar Kemiai Folyoirat
<i>Makro. Ch. R. C.</i>	Makromolekulare Chemie. Rapid Communications
<i>Makrom. Chem.</i>	Makromolekulare Chemie. Macromolecular Chem. and Phys.
<i>Mater. Sci. E.</i>	Material Science and Engineering
<i>Microb. Immu.</i>	Microbiology and Immunology
<i>Microelectr.</i>	Microelectronics
<i>Micron</i>	Micron
<i>Molec. Cryst.</i>	Molecular Crystals and Liquid Crystals
<i>Molec. Phys.</i>	Molecular Physics
<i>Mosc. Uni. P. B.</i>	Moscow University Physics Bulletin
<i>Naturwissen.</i>	Naturwissenschaften
<i>Nip. Kag. Kai.</i>	Nippon Kagaku Kaishi
<i>Nouv. J. Chim.</i>	Nouveau Journal de Chimie
<i>Nuov. Cim. B.</i>	Nuovo Cimento della Societa Ital. di Fisica B
<i>Omr. Org. Mag.</i>	Organic Magnetic Resonance
<i>Opt. Commun.</i>	Optics Communications
<i>Opt. Eng.</i>	Optical Engineering
<i>Opt. Spectro.</i>	Optica and Spektroskopiya (USSR)

- Optica Acta*
Optics Lett.
Oyo Buturi
P. Nat. A. S. U.S.
P. Roy. Soc. A
P. SID
Phil. Mag. A
Phil. Res. R.
Phi. T. Roy. A
Phi. T. Roy. B
Phot. Sci. En.
Phys. Bull. GB
Phys. Educ.
Phys. Lett. A
Phys. Lett. B
Phys. Rep. Ne.
Phys. Rev. A
Phys. Rev. B
Phys. Rev. L.
Phys. St. S. A
Phys. St. S. B
Phys. Tech.
Physica A
Pol. J. Chem.
Polym. Bull.
Polym. J.
Polym. S.
Polymer
Polu. Tekh. M. 1
Port. Phys.
Pramana
Proc. Int. Con.
Prog. Nuc. Res.
Prog. T. Ph. Jp.
Pur. A. Chem.

Q. Rev. Bioph.

Radiat. Env.
Radiat. Ph. C.
Radio El. En.
Rep. KFKI
Rev. Chim. Mi.
Rev. Fr. Corp.
Rev. M. Phys.
Rev. Ph. Ch. J.
Rev. Phys. Ap.
Rev. Ro. Chim.
Rev. Ro. Phys.
Rev. Tech. Th.
Rheol. Act.

S. Afr. J. Sci.
Science
SID Dig.
Sol. St. Comm.
Sol. St. Elec.
- Optica Acta (GB)*
Optics Letters
Oyo Buturi (Japan)

 Proceedings of the Nat. Academy of Sciences (USA)
 Proceedings of the Royal Society A (London)
 Proceedings of the Society for Information Display
 Philosophical Magazine A. Defects and Mech. Properties
 Philips Research Reports and Supplements
 Philos. Transact. of the Royal Soc. of London. A
 Philos. Transact. of the Royal Soc. of London. B
 Photographic Science and Engineering
 Physics Bulletin (London)
 Physics Education
 Physics Letters A
 Physics Letters B
 Physics Reports (Netherlands)
 Physical Review A
 Physical Review B
 Physical Review Letters
 Physica Status Solidi A. Applied Research
 Physica Status Solidi B. Basic Research
 Physics in Technology
 Physica A
 Polish Journal of Chemistry
 Polymer Bulletin
 Polymer Journal
 Polymer Engineering and Science
 Polymer
 Poluprovodn. Tekh. i Mikroelektron. (USSR)
 Portuguese Physics
 Pramana
 Proc. Int. Conf. on Ordering in 2 Dim. (North-Holland)
 Progress in Nuclear Magnetic Resonance Spectroscopy
 Progress of Theoretical Physics (Japan)
 Pure and Applied Chemistry

 Quarterly Reviews of Biophysics

 Radiation and Environmental Biophysics
 Radiation Physics and Chemistry
 Radio and Electronic Engineer
 Report KFKI-1981-71 Hung. Ac. Sci. (Budapest)
 Revue de Chimie Minerale
 Revue Francaise des Corps Gras
 Review of Modern Physics
 Review of Physical Chemistry of Japan
 Revue de Physique Appliquee
 Revue Roumaine de Chimie
 Revue Roumaine de Physique
 Revue Technique Thomson-CSF
 Rheologica Acta

 South African Journal of Science
 Science
 SID Digest
 Solid State Communications
 Solid State Electronics

- Sol. S. Ph. Jap.* Solid State Physics (Japan)
Sov. J. Opt. T. Soviet Journal of Optical Technology
Sov. J. Q. El. Soviet Journal of Quantum Electronics
Sov. Ph. Ac. R. Soviet Physics Acoustics
Sov. Ph. Cr. R. Soviet Physics Crystallography
Sov. Ph. Dokl. Soviet Physics Doklady. Physics Section
Sov. Ph. J.E. R. Soviet Physics JETP
Sov. Ph. S. S. R. Soviet Physics Solid State
Sov. Ph. T. P. L. Soviet Technical Physics Letters
Sov. Ph. T. P. R. Soviet Physics Technical Physics
Sov. Phys. Usp. Soviet Physics Uspekhi
Sov. Phys. J. Soviet Physics Journal (USA)
Stud. Biophy. Studia Biophysica
Stroke Stroke
- T. Appl. Phys.* Topics in Applied Physics
T. I. E. Com. J. Trans. Inst. of Electronics & Commun. Eng. (Japan)
Tech. R. Osaka Technical Report of the Osaka University (Japan)
Tetrahedron Tetrahedron
Thermoc. Act. Thermochemica Acta
- Ukr. Fiz. Zh.* Ukrainskii Fizicheskii Zhurnal
Usp. Fiz. Nau. Uspekhi Fizicheskikh Nauk
Usp. Kh. Uspekhi Khimii
- V. Lenin. Fiz.* Vestnik Leningradskogo Uni. Seriya Fiziki i Khimii
Vyso. Soed. A Vysokomolekulyarnye Soedineniya Seriya A
Vyso. Soed. B Vysokomolekulyarnye Soedineniya Seriya B
- Wuli* Wuli (China)
- Z. Anal. Chem.* Fresenius-Zeitschrift für Analytische Chemie
Z. Chem. Zeitschrift für Chemie
Z. Kristall. Zeitschrift für Kristallographie
Z. Naturfo. A Zeitschrift für Naturforschung A
Z. Naturfo. B Zeitschrift für Naturforschung B
Z. Phys. B Zeitschrift für Physik B
Z. Phys. Ch. F. Zeitschrift für Physikalische Chemie (Frankfurt)
Z. Phys. Ch. L. Zeitschrift für Physikalische Chemie (Leipzig)
Zh. Eksp. Teo. Zhurnal Eksperimentalnoi i Teoreticheskoi Fiziki
Zh. Fiz. Khim. Zhurnal Fizicheskoi Khimii
Zh. N. P. Fotog. Zhurnal Nauchnoi i Prikladnoi Fotografii i Kinematogr.
Zh. Org. Kh. Zhurnal Organicheskoi Khimii
Zh. Tekh. Fiz. Zhurnal Tekhnicheskoi Fizika
- Publishers:**
- Ann. Review* Annual Rev. Inc., Palo Alto, USA
Verlag Chemie Verlag Chemie GmbH, Weinheim, Germany
Gordon Breach Gordon and Breach, New York, London, Paris, Montreux, Tokyo
IEEE N.Y. IEEE, New York, USA
North-Holland North Holland, Amsterdam, Netherlands
Pergamon Pergamon, Oxford, England
Plenum N.Y. Plenum, New York, USA
Reidel, Dord. Reidel, Dordrecht, Netherlands
Springer-Verlag Springer-Verlag, Berlin, Germany