

Chemistry Letters

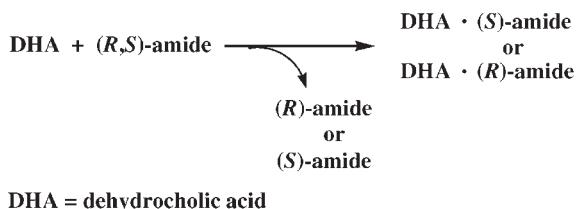
<http://www.csj.jp/journals/chem-lett/>

Vol.32 No.3
March, 2003

CMLTAG
ISSN 0366-7022

Copyright © 2003 The Chemical Society of Japan

206 Optical Resolution of Cyclic Amides by Inclusion in Dehydrocholic Acid



Olga Bortolini, Marco Fogagnolo, Giancarlo Fantin, and Alessandro Medici

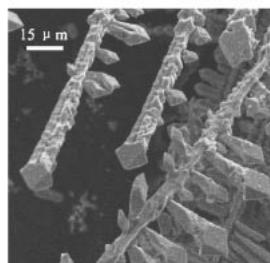
208 Simple Preparation Method of Isolated Iron (III) Species on Silica Surface



Yusuke Yamada, Yuichi Ichihashi, Hisanori Ando, Atsushi Ueda, Hiroshi Shioyama, and Tetsuhiko Kobayashi

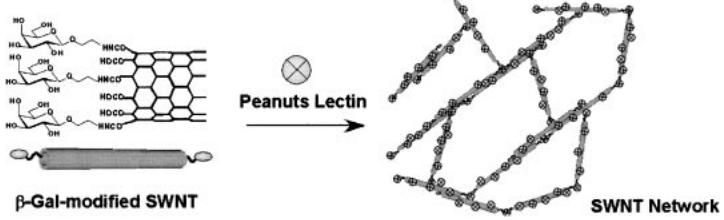
210 Synthesis of Silver Selenide Dendritic Crystals via Glycothermal Route

Millimeter scale dendritic crystals of silver selenide with pyramid-like leaf-tips have been fabricated by a glycothermal reaction.



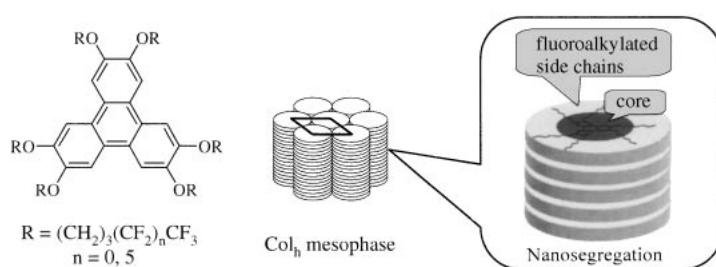
Guozhen Shen, Di Chen, Kaibin Tang, Xuan Jiang, and Yitai Qian

212 Lectin-mediated Supramolecular Junctions of Galactose-derivatized Single-walled Carbon Nanotubes



Kazunori Matsuura, Kentaro Hayashi, and Nobuo Kimizuka

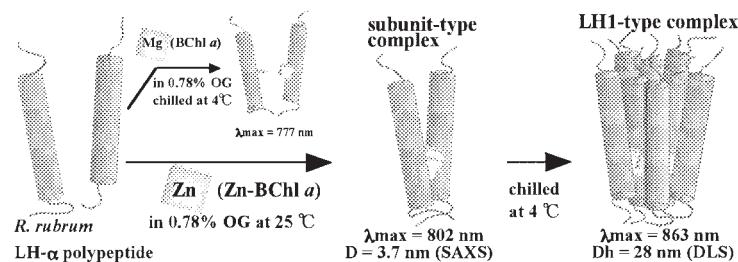
214 **Fluorination Effect of the Peripheral Chains on the Mesomorphic Properties in Discotic Liquid Crystals of Hexasubstituted Triphenylene**



Naohiro Terasawa, Hirosato Monobe, Kenji Kiyohara, and Yo Shimizu

216 **Construction of Photosynthetic Antenna Complex Using Light-harvesting Polypeptide- α from Photosynthetic Bacteria, *R. rubrum* with Zinc Substituted Bacteriochlorophyll α**

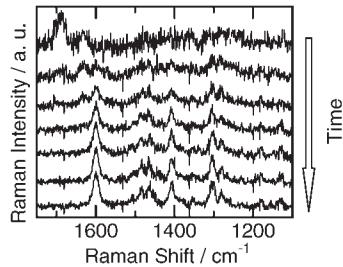
Morio Nagata, Mamoru Nango, Ayumi Kashiwada, Shuhei Yamada, Seiji Ito, Naoko Sawa, Makiko Ogawa, Kouji Iida, Yukihisa Kurono, and Toshiaki Ohtsuka



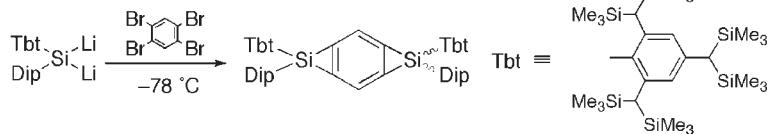
218 **Measurement of Complexation Rate of Palladium(II) with Pyridylazo Ligand at the Heptane-Water Interface by Centrifugal Liquid Membrane-resonance Raman Microprobe Spectroscopy**

Akira Ohashi and Hitoshi Watarai

The complexation kinetics of Pd(II) with 5-Br-PADAP at the heptane-water was investigated by resonance Raman spectroscopy combined with a centrifugal liquid membrane method. This method allowed us to measure the resonance Raman spectral change in the course of the formation of Pd(II)-5-Br-PADAP complex at the heptane-water interface.

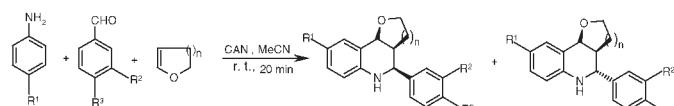


220 **The First Examples of Stable Benzenes Fused with Two Three-membered Rings: Synthesis and Structures of the Two Stereoisomers of Bis(silacyclopropano)benzenes**



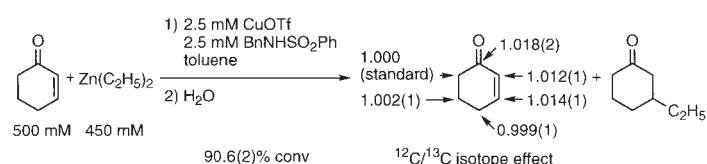
Tomoyuki Tajima, Ken Hatano, Takayo Sasaki, Takahiro Sasamori, Nobuhiro Takeda, and Norihiro Tokitoh

222 **A Facile and Convenient Three-component Coupling Protocol for the Synthesis of Pyrano and Furoquinolines**



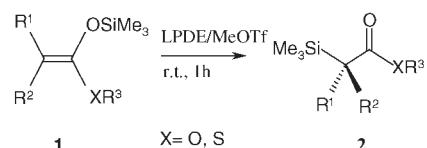
N. Ravindranath, C. Ramesh, M. Ravinder Reddy, and Biswanath Das

224 **1,4-Addition of Diethylzinc to Cyclohexenone Catalyzed by CuOTf-Sulfonamide Combined System. Evidence Supporting a Concerted Mechanism**



Keiji Nakano, Yuhki Bessho, and Masato Kitamura

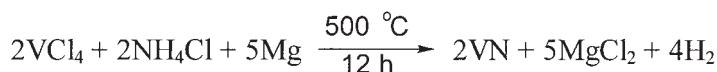
226 **Lithium Perchlorate Diethyl Ether/Methyl Triflate Catalyzed Transfer of Silicon from Oxygen to Carbon in Silyl Ketene (Thio) Acetals**



Akbar Heydari and Reza Alijanianzadeh

228 **A Thermal Reduction-Nitridation Synthesis and Ultraviolet-light Emission of Nanocrystalline VN**

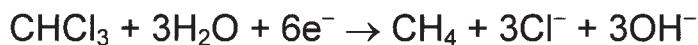
Vanadium nitride nanocrystallites have been synthesized through a low-temperature reduction-nitridation method.



Xiaogang Yang, Cun Li, Yan Yan, Yitai Qian, Yunbo Jia, and Houbo Zhang

230 **Electrochemical Dechlorination of Chlorinated Hydrocarbons – Electrochemical Reduction of Chloroform in Acetonitrile/Water Mixtures at High Current Density**

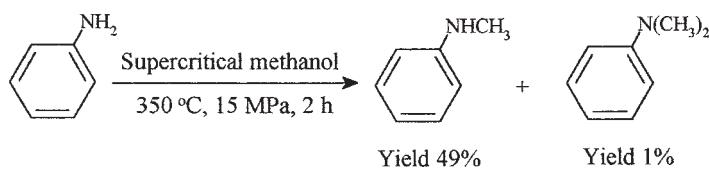
Chloroform is electrochemically dechlorinated at an Ag electrode in acetonitrile containing 1 M H₂O at the current density higher than 0.3 A cm⁻².



Yoshio Hori, Kazumi Murata, and Takayoshi Oku

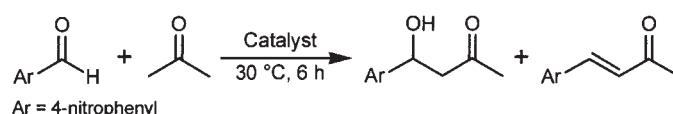
232 **Alkylation and Acetal Formation Using Supercritical Alcohol without Catalyst**

Selective *N*-methylation to monomethylated compound proceeding rapidly without any catalyst.



Yoshiteru Horikawa, Yuki Uchino, and Takeshi Sako

234 Enhanced Effect of Mesoporous Silica on Base-Catalyzed Aldol Reaction

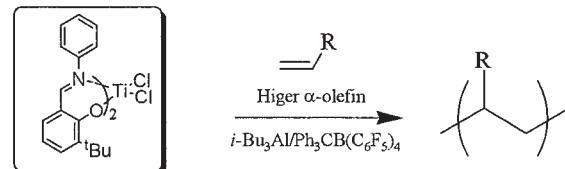


Catalyst	Isolated yield / %
Piperazine + FSM-16	91 4
Piperazine	5 1
FSM-16	0 0

Yoshihiro Kubota, Kunio Goto, Shintaro Miyata, Yasutomo Goto, Yoshiaki Fukushima, and Yoshihiro Sugi

236 Higher α -Olefin Polymerization Behavior of a Bis(Phenoxy-Imine)Titanium Complex/ $i\text{-Bu}_3\text{Al/Ph}_3\text{CB}(\text{C}_6\text{F}_5)_4$ Catalyst System

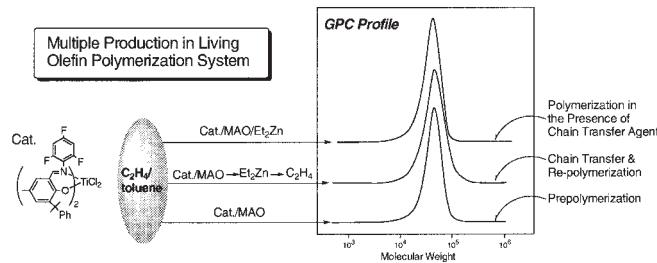
Higher α -olefin polymerization by using titanium complex having phenoxy-imine chelate ligands



Activity order: 4-methyl-1-pentene > 1-decene > 1-octene > 1-hexene

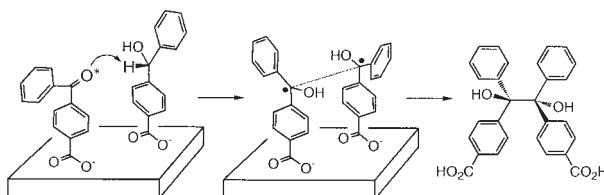
Junji Saito, Yasuhiko Suzuki, and Terunori Fujita

238 Combination System of Fluorine-containing Phenoxy-imine Ti Complex and Chain Transfer Agent: A New Methodology for Multiple Production of Monodisperse Polymers



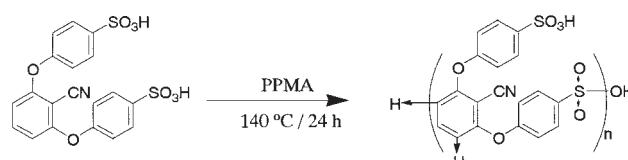
Makoto Mitani, Jun-ichi Mohri, Rieko Furuyama, Seiichi Ishii, and Terunori Fujita

240 Enantioselective Photopinacolization of Benzophenone and Benzhydrol Intercalated in Mg-Al LDH Interlayers



Tetsuya Shichi, Yukiko Minamikawa, Naoto Yasuda, Naoya Yamada, Yoshio Okamoto, and Katsuhiko Takagi

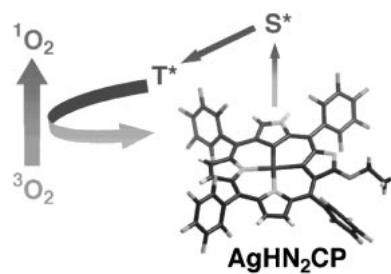
242 Preparation of Hyperbranched Aromatic Poly(ether sulfone)s Possessing Sulfonic Acid Terminal Groups for Polymer Electrolyte



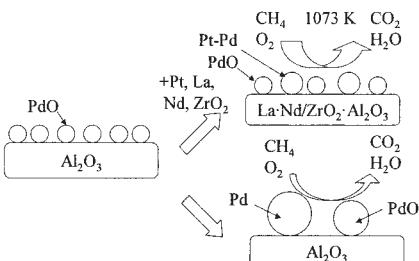
Masaki Takeuchi, Mitsutoshi Jikei, and Masa-aki Kakimoto

244 **Doubly N-Confused Porphyrins as Efficient Sensitizers for Singlet Oxygen Generation**

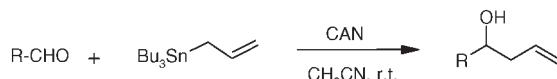
Koiti Araki, Fábio M. Engelmann, Idemar Mayer, Henrique E. Toma, Maurício S. Baptista, Hiromitsu Maeda, Atsuhiko Osuka, and Hiroyuki Furuta

246 **Effect of Addition of Pt, La₂O₃, Nd₂O₃ and ZrO₂ to PdO/Al₂O₃ on Catalytic Combustion of Methane**

The addition of Pt, La, Nd and ZrO₂ prevents the deactivation of the PdO/Al₂O₃ during CH₄ combustion at 1073 K because of prevention of the particle growth of PdO.



Yasushi Ozawa, Yoshihisa Tochihara, Ayako Watanabe, Masatoshi Nagai, and Shinzo Omi

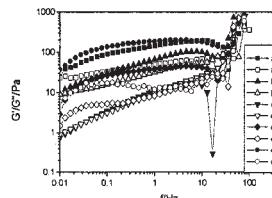
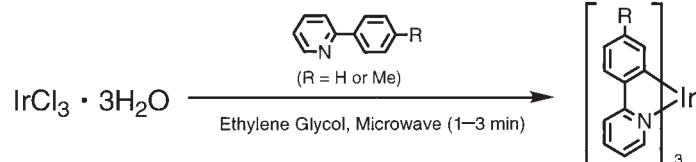
248 **Ceric(IV) Ammonium Nitrate: A Novel Reagent for the Synthesis of Homoallyl Alcohols**

J. S. Yadav, B. V. S. Reddy, A. D. Krishna, K. Sadasiv, and Ch. Janardhana Chary

250 **Studies on Synthesis of MMH and Rheological Properties of Concentrated MMH Dispersions**

Peizhi Guo, Dejun Sun, Jie Zhang, and Chunguang Zhang

Frequency sweep curves of dispersions of 26% MMH and different salt concentrations. Salt concentrations are 0 (a), 10⁻⁴ M (b), 10⁻³ M (c), 5×10⁻³ M (d), 10⁻² M (e). Full symbols: G', and open symbols: G''

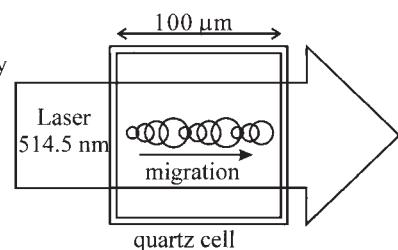
252 **Selective One-pot Synthesis of Facial Tris-ortho-metatalated Iridium(III) Complexes Using Microwave Irradiation**

Hideo Konno and Yoshiyuki Sasaki

254 **Periodic Expansion-contraction Motion of Photoabsorbing Organic Droplets during Laser Photophoretic Migration in Water**

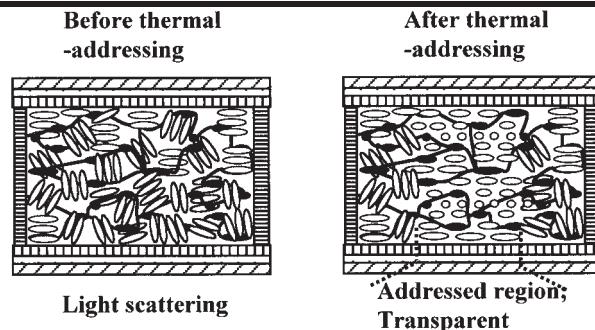
Hideaki Monjushiro, Makiko Tanaka, and Hitoshi Watarai

Micrometer-sized organic droplets with high absorptivity repeated expansion and contraction during laser photophoretic migration. The frequency of the motion was proportional to the absorptivity of the droplet.



256 **Study on Thermal-addressing Characteristics of (Polymer Network/Liquid Crystals/Chiral Dopant) Composite**

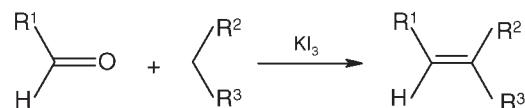
Huai Yang, Hirotugu Kikuchi, and Tisato Kajiyama



258 **Potassium Triiodide. A New and Efficient Catalyst for Carbon–Carbon Bond Formation in Aqueous Media**

Potassium triiodide catalyses the condensation of carbonyl compounds with active methylene compounds in aqueous media to afford *E* olefinic products in high yields.

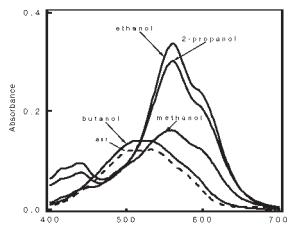
Ashim J. Thakur, Dipak Prajapati, Baikuntha J. Gogoi, and Jagir S. Sandhu



260 **Vapochromic Properties of Nafion Film Doped with Cationic Dyes**

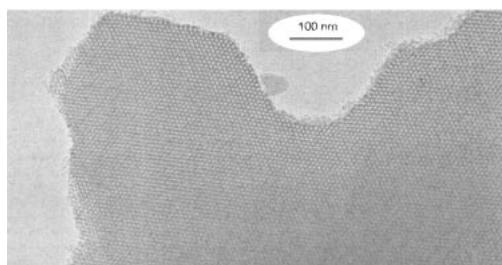
Protonated Nafion thin film doped with cationic dyes such as flavylium and thionine revealed rapid and vapor-specific color changes with good reversibility, upon exposure to volatile organic compounds.

Ryoka Matsushima, Naoko Nishimura, and Yoshiumi Kohno



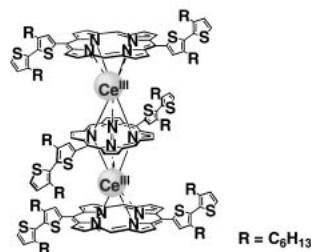
262 **Organised Mesoporous Silica Synthesised by Nanoscale Duplication of an Ordered Mesoporous Carbon Material Using a Gas Phase Process**

J. Parmentier, C. Vix-Guterl, S. Saadallah, M. Reda, M. Illescu, J. Werckmann, and J. Patarin



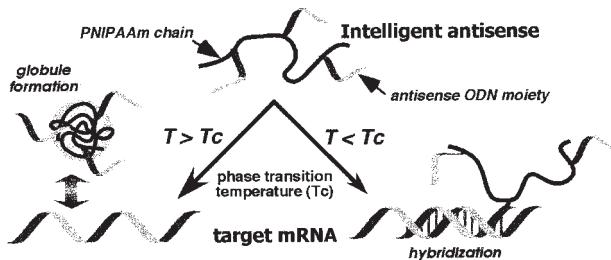
264 Electropolymerization of Bithienyl-appended Cerium(III) Triple Decker Porphyrin Complex

Kousei Yamashita, Masato Ikeda, Masayuki Takeuchi, and Seiji Shinkai



266 Thermo responsive DNA/Polymer Conjugate for Intelligent Antisense Strategy

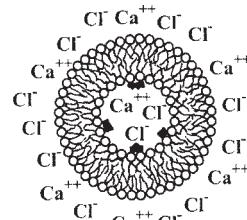
Masaharu Murata, Wataru Kaku, Takahisa Anada, Nobuaki Soh, Yoshiki Katayama, and Mizuo Maeda



268 Crystallization of Calcium Oxalate in Liposome Solutions of Different Carboxylates

Jian-Ming Ouyang, Li Duan, Jian-Hua He, Bernd Tieke

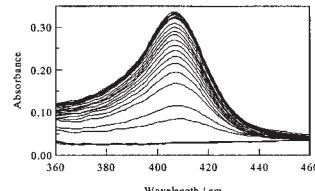
The effects of tri-, di-, and monocarboxylates on the growth of nanoparticles of calcium oxalate (CaOxa) were first investigated in liposome systems. The morphology and phase compositions of CaOxa crystals were mediated by the molecular arrays on the surfaces of liposome. The promotion effectiveness to COD decreased in this order: $\text{Na}_3\text{cit} > \text{Na}_2\text{tart} > \text{NaAc}$.



270 Study of Initial Adsorption Process of Hemoglobin to Glass Surface by Using Time-Resolved Slab Optical Waveguide(SOWG) Spectroscopy

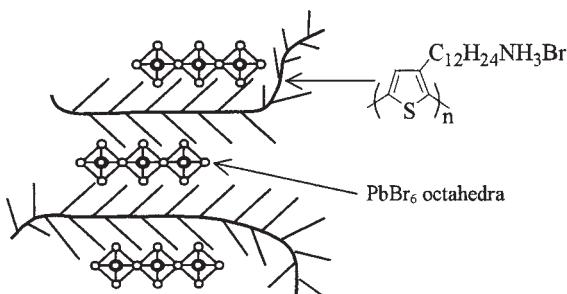
Takamitsu Yoshida, Hajime Asano, Jose H. Santos, Zhi-Mei Qi, Li-Xian Sun, Akiko Takatsu, Kenji Kato, and Naoki Matsuda

A slab optical waveguide (SOWG) has been used to study the initial adsorption process of hemoglobin onto glass based on time-resolved absorption measurement.



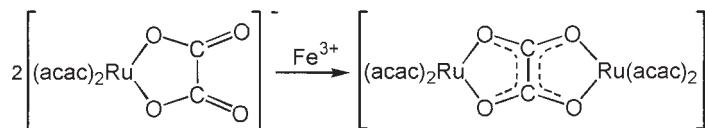
272 Formation of PbBr-Based Layered Perovskite Structure Having Poly(thiophene) as an Organic Layer by Soaking Thin Film of Hydrogen Bromide Salt of Poly(3-amino-dodecylthiophene) in Aqueous Lead Bromide Solution

Masanao Era



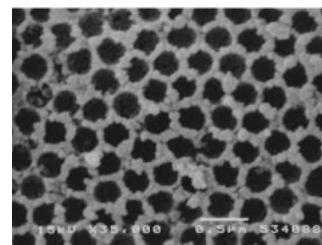
274 **Synthesis and Spectroelectrochemical Characterization of a Novel Oxalate-Bridged Binuclear Ruthenium(III) Complex**

An oxalate-bridged diruthenium(III) complex has been synthesized via self-dimerization reaction. The $\text{Ru}_{2}^{\text{III},\text{II}}$ mixed-valence species with $K_c = 10^{5.0}$ exhibits a weak IVCT band at 1430 nm. The IR spectra from spectroelectrochemistry indicate a partially localized mixed-valence state.



Taku Fujino, Yoshimasa Hoshino, Motoki Eto, Yasuhiko Yukawa, Jan Fiedler, and Wolfgang Kaim

276 **Fabrication of Ordered Macroporous Structures Based on Hetero-Coagulation Process Using Nanoparticle as Building Blocks**

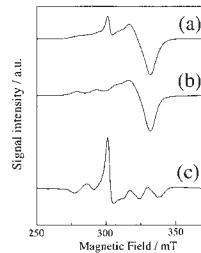


Fengqiu Tang, Hiroshi Fudouzi, Tetsuo Uchikoshi, Toru Awane, and Yoshio Sakka

278 **Unprecedented Soliton Formation Mechanism in Quasi-One-Dimensional Chloro-Bridged $\text{Pt}^{\text{II}}\text{-}\text{Pt}^{\text{IV}}$ Mixed-Valence Compound, $\{[\text{Pt}(\text{en})_2][\text{PtCl}_2(\text{en})_2]\}_3(\text{CuCl}_4)_4\cdot 12\text{H}_2\text{O}$**

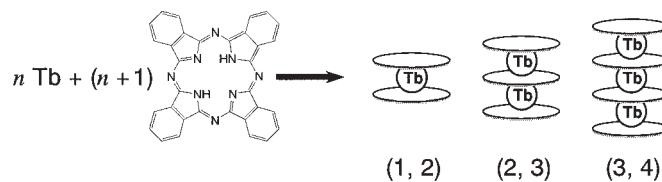
A new type of complex consisting of double linear-chain structure $\{[\text{Pt}(\text{en})_2][\text{PtCl}_2(\text{en})_2]\}_3(\text{CuCl}_4)_4\cdot 12\text{H}_2\text{O}$ was synthesized. High concentration (ca. 200 times larger than the literature) of neutral soliton (Pt^{III} component) formation was found.

Masahiro Yamashita, Hidemitsu Aso, Satoshi Matsunaga, Koichi Takizawa, Kazuya Nakata, Chihiro Kachi-Terajima, Fumiyasu Iwahori, Tomohiko Ishii, Hitoshi Miyasaka, Ken-ichi Sugiura, Takuya Kawashima, Kenzi Takai, Noritaka Kuroda, Motoo Shiro, Hideo Kishida, Hiroshi Okamoto, Hiroyuki Takahashi, Hisaaki Tanaka, Kazuhiro Marumoto, and Shin-ichi Kuroda



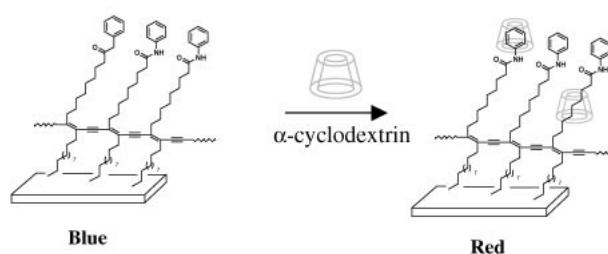
280 **The Electronic Structures of Terbium-Phthalocyanine Sandwich Clusters**

Multiple-decker $\text{Tb}_n(\text{pc})_{n+1}$ Sandwich Clusters



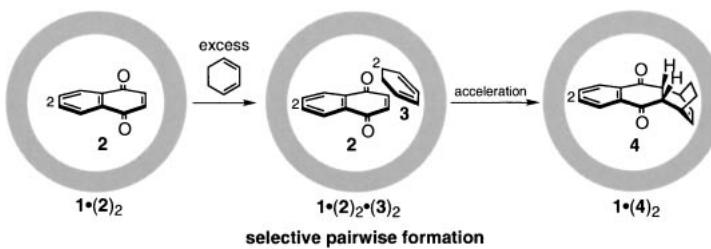
Ken Miyajima, Eiji Okada, Atsushi Nakajima, and Koji Kaya

282 **Cyclodextrin-induced Color Changes in Polymerized Diacetylene Langmuir-Schaefer Films**



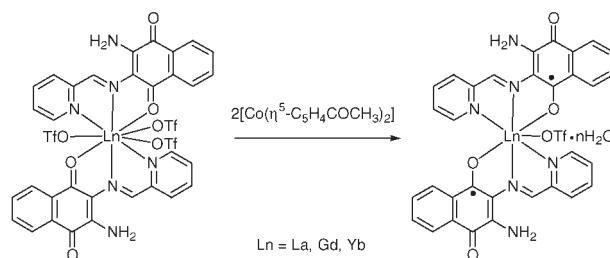
Jae-Taek Cho, Sung-Min Woo, Dong June Ahn, Kwang-Duk Ahn, Haiwon Lee, and Jong-Man Kim

284 Remarkable Acceleration of Diels–Alder Reactions in a Self-Assembled Coordination Cage



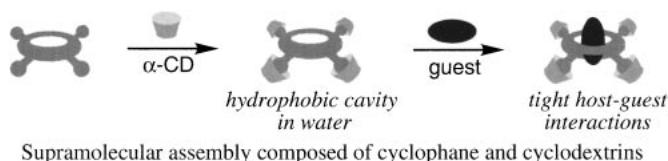
Takahiro Kusukawa, Tatsuya Nakai, Takashi Okano, and Makoto Fujita

286 Synthesis of Novel Lanthanide Complexes with Quinone-containing Ligands and Their Redox Controlled Magnetic Interaction



Takuya Nankawa, Masayuki Watanabe, Masaki Murata, and Hiroshi Nishihara

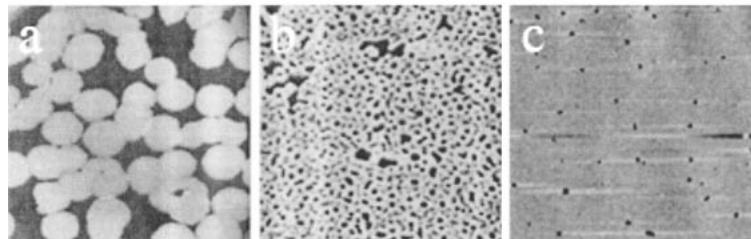
288 Molecular Recognition by Supramolecular Hosts Composed of an Adamantyl-appended Macrocyclic with Cyclodextrins in Water



Supramolecular assembly composed of cyclophane and cyclodextrins

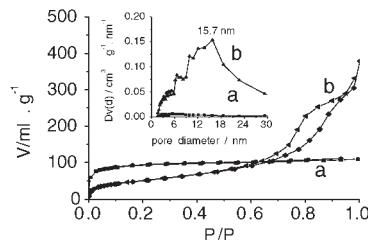
Osamu Hayashida and Itaru Hamachi

290 Nanofrictional Properties of Dendron Langmuir–Blodgett Films



Sai-Long Xu, Shi-Zhao Kang, Guo-Jun Deng, Peng Wu, Qing-Hua Fan, Chen Wang, Li-Jun Wan, and Chun-Li Bai

292 Synthesis of Surfactant-assisted Microporous Layered Tin Phenylphosphonate



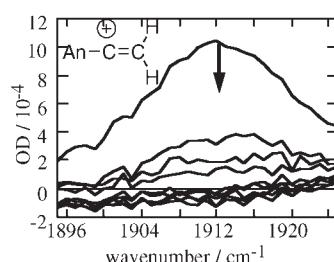
Nawal K. Mal, Masahiro Fujiwara, Yusuke Yamada, and Masahiko Matsukata

N_2 adsorption-desorption isotherms of (a) microporous sample 1 prepared using surfactant and (b) mesoporous sample 3 prepared in the presence of concentrated HF (Inset: pore size distribution curve).

294 **Study of the Time-resolved IR Spectrum of α -Arylvinyl Cations Generated by Laser Flash Photolysis**

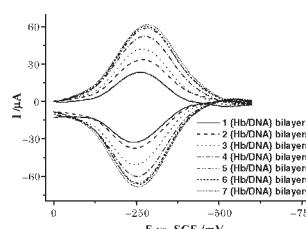
Masashi Kotani, Shinjiro Kobayashi, Masaaki Mishima, and Yuji Hori

The characteristic stretching band of $\text{C}(\text{sp}^2)=\text{C}(\text{sp})^+$ in vinyl cation was observed by a time-resolved IR spectrometer with laser flash irradiation of (4-methoxyphenyl)alkynes in TFE and α -arylvinyl bromide in acetonitrile. The absorption maxima are affected by the β -substituents.



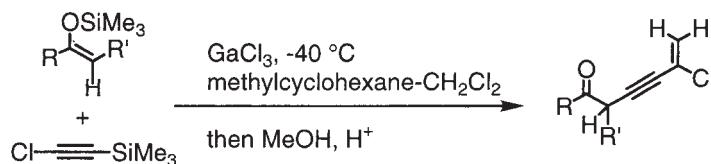
296 **Fabrication of Ultrathin, Protein-containing Films by Layer-by-Layer Assembly and Electrochemical Characterization of Hemoglobin Entrapped in the Film**

Libin Shang, Xinjian Liu, Jun Zhong, Chunhai Fan, Iwao Suzuki, and Genxi Li



Multilayer films were assembled on pyrolytic graphite electrode surface by alternating deposition of hemoglobin and DNA. These films are stable during electrochemical experiments and sensitive for electrocatalytic reduction of nitric oxide.

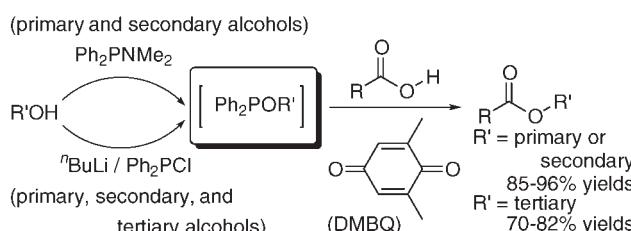
298 **Sequential Carbometalation/Elimination Reaction Takes Place between Gallium Enolate and Chloroethyne**



Ryo Amemiya, Akiko Fujii, Mieko Arisawa, and Masahiko Yamaguchi

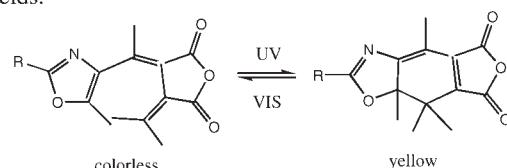
300 **Preparation of Various Carboxylic Acid Esters from Bulky Alcohols and Carboxylic Acids by a New Type Oxidation-reduction Condensation Using 2,6-Dimethyl-1,4-benzoquinone**

Teruaki Mukaiyama, Wataru Kikuchi, and Taichi Shintou



302 **Oxazolylfulgides as Yellow Photochromic Dyes**

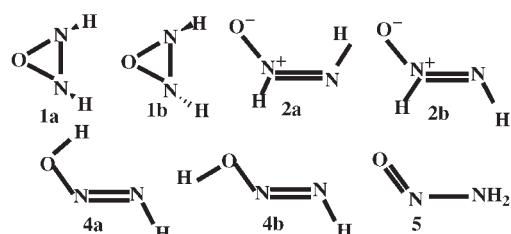
Substituted oxazolylfulgides exhibit favorable features as photochromic yellow dyes with fairly good thermal stability and photo-reversibility and moderate quantum yields.



Ryoka Matsushima, Hiroyuki Morikane, and Yoshiumi Kohno

304 Green High Energy Density Material, N_2H_2O

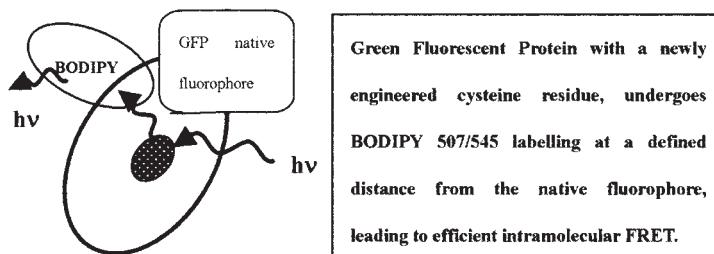
We proposed a new concept "green high energy density material" (HEDM) and designed seven N_2H_2O isomers.



Yi-hong Ding and Satoshi Inagaki

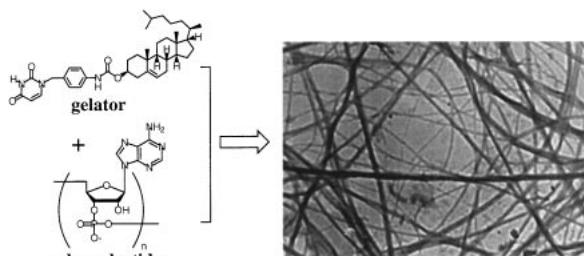
306 Intramolecular Fluorescent Resonance Energy Transfer (FRET) by BODIPY Chemical Modification of Cysteine-engineered Mutants of Green Fluorescent Protein

Miho Suzuki, Yoichiro Ito, Hannah Elizabeth Savage, Yuzuru Husimi, and Kenneth T. Douglas



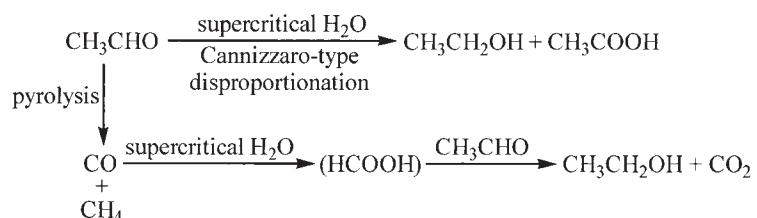
308 Polynucleotide Can Stabilize Nucleobase-appended Cholesterol Gels

Munenori Numata and Seiji Shinkai



310 Noncatalytic Cannizzaro-type Reaction of Acetaldehyde in Supercritical Water

Yasuhiro Nagai, Chihiro Wakai, Nobuyuki Matubayasi, and Masaru Nakahara



Noncatalytic reaction pathway of acetaldehyde in supercritical water.

Additions and Corrections

312 Direct Determination of Chlortetracycline by a Fluorescent Microscopic Ring-like Deposit Technique

Yuan Fang Li and Cheng Zhi Huang