

AUTHOR INDEX

- Aasa, R., Bergström, J. and Vänngård, T.
On the interaction and orientation of the iron-sulfur centers A and B in chloroplasts of higher plants (637) 118
- Amesz, J., see Kramer, H.J.M. (637) 272
- Andersson, B., see Haehnel, W. (637) 389
- Arents, J.C., see Westerhoff, H.V. (637) 69
- Arntzen, C., see Leto, K. (637) 107
- Bailey, I.A., Seymour, A.-M.L. and Radda, G.K.
A ^{31}P -NMR study of the effects of reflow on the ischaemic rat heart (637) 1
- Barber, J., see Yamamoto, Y. (637) 224
- Berden, J.A., see Van Ark, G. (637) 34
- Bergström, J., see Aasa, R. (637) 118
- Berzborn, R.J., see Haehnel, W. (637) 389
- Bisson, R., see Prochaska, L.J. (637) 360
- Blumenfeld, L.A., see Tikhonov, A.N. (637) 321
- Boelens, R., see Wilms, J. (637) 168
- Bogucka, K., see Duszyński, J. (637) 217
- Bolt, J.D. and Sauer, K.
Fluorescence properties of the light-harvesting bacteriochlorophyll protein from *Rhodospseudomonas sphaeroides* R-26 (637) 342
- Borisov, A.Yu., see Il'ina, M.D. (637) 540
- Bowes, J.M. and Crofts, A.R.
The role of pH and membrane potential in the reactions of Photosystem II as measured by effects on delayed fluorescence (637) 464
- Braumann, T. and Grimme, L.H.
Reversed-phase high-performance liquid chromatography of chlorophylls and carotenoids (637) 8
- Briantais, J.-M., see Maison-Peteri, B. (637) 202
- Briquet, M., see Villalobo, A. (637) 124
- Bruni, A., see Dabbeni-Sala, F. (637) 400
- Buse, G., see Prochaska, L.J. (637) 360
- Cammack, R., see Thomson, A.J. (637) 423
- Capaldi, R.A., see Prochaska, L.J. (637) 360
- Cartling, B. and Wilbrandt, R.
Time-resolved resonance Raman spectroscopy of cytochrome c reduced by pulse radiolysis (637) 61
- Case, E.E., see Hales, B.J. (637) 291
- Chain, R.K., see Malkin, R. (637) 88
- Chaudhry, G.R., Suzuki, I., Duckworth, H.W. and Lees, H.
Isolation and properties of cytochrome c-553, cytochrome c-550, and cytochrome c-549, 554 from *Nitrobacter agilis* (637) 18
- Chollet, R., see Holaday, A.S. (637) 334
- Crofts, A.R., see Bowes, J.M. (637) 464
- Dabbeni-Sala, F., Pitotti, A. and Bruni, A.
Regulation of phospholipid-ATPase complex interaction by the adenine nucleotide carrier (637) 400
- Davidson, V.L. and Knaff, D.B.
Calcium-proton antiports in photosynthetic purple bacteria (637) 53
- Dekker, H.L., see Wilms, J. (637) 168
- Duckworth, H.W., see Chaudhry, G.R. (637) 18
- Duszyński, J., Bogucka, K., Letko, G., Küster, U., Kunz, W. and Wojtczak, L.
Relationship between the energy cost of ATP transport and ATP synthesis in mitochondria (637) 217
- Dutton, P.L., see O'Keefe, D.P. (637) 512
- Dutton, P.L., see Tiede, D.M. (637) 278
- Elbanowski, M., see Slawinski, J. (637) 130
- Galezowski, W., see Slawinski, J. (637) 130
- Garnier, J., see Maroc, J. (637) 473
- Gingras, G., see Mar, T. (637) 546
- Goffeau, A., see Villalobo, A. (637) 124
- Graan, T. and Ort, D.R.
Factors affecting the development of the capacity for ATP formation in isolated chloroplasts (637) 447
- Grassi de Gende, A.O., see Wang, T. (637) 523
- Grimme, L.H., see Braumann, T. (637) 8
- Guikema, J.A. and Sherman, L.A.
Electrophoretic profiles of cyanobacterial membrane polypeptides showing heme-dependent peroxidase activity (637) 189
- Gupta, A.D., see Hales, B.J. (637) 303
- Haehnel, W., Berzborn, R.J. and Andersson, B.
Localization of the reaction side of plastocyanin from immunological and kinetic studies with inside-out thylakoid vesicles (637) 389
- Hales, B.J. and Case, E.E.
Immobilized radicals. IV. Biological semiquinone anions and neutral semiquinones (637) 291
- Hales, B.J. and Gupta, A.D.
Supposition of the origin of Signal II from random and oriented chloroplasts (637) 303
- Hall, D.O., see Thomson, A.J. (637) 423
- Hamanaka, T., see Naito, T. (637) 457
- Harvey, G.W., see Melis, A. (637) 138
- Harvey, J.D., see Knight, V.A. (637) 146
- Hassinen, I., see Nuutinen, M. (637) 481
- Heber, U., see Takahama, U. (637) 530
- Heldt, H.W., see Laing, W.A. (637) 348
- Hellingwerf, K.J., see Westerhoff, H.V. (637) 69
- Hiraki, K., see Naito, T. (637) 457
- Holaday, A.S., Shieh, Y.-J., Lee, K.W. and Chollet, R.
Anatomical, ultrastructural and enzymic studies of leaves of *Moricandia arvensis*, a $\text{C}_3\text{-C}_4$ intermediate species (637) 334

- Holt, T.K. and Krogmann, D.W.
A carotenoid-protein from cyanobacteria (637) 408
- Horton, P.
The effect of redox potential on the kinetics of fluorescence induction in pea chloroplasts. II. Sigmoidicity (637) 152
- Houghton, R.L., see Joshi, S. (637) 504
- Hughes, J.B., see Joshi, S. (637) 504
- Il'ina, M.D. and Borisov, A.Yu.
The fluorescence lifetime and quantum yield of chlorophyll a in Triton X-100 solutions (637) 540
- Jagendorf, A.T., see Viale, A. (637) 496
- Jin, Y.-Z., Tang, H.-L., Li, S.-L. and Tsou, C.-L.
The triphasic reduction of cytochrome b in the succinate-cytochrome c reductase (637) 551
- Johnson, M.K., see Thomson, A.J. (637) 423
- Joshi, S., Hughes, J.B., Houghton, R.L. and Sanadi, D.R.
Occurrence of proteins immunoreactive with anti-coupling factor B in phosphorylating membrane preparations (637) 504
- Jurtshuk, P., Jr, Mueller, T.J. and Wong, T.Y.
Isolation and purification of the cytochrome oxidase of *Azotobacter vinelandii* (637) 374
- Kaniuga, Z., see Michalski, W.P. (637) 159
- Karube, I., Matsunaga, T., Otsuka, T., Kayano, H. and Suzuki, S.
Hydrogen evolution by co-immobilized chloroplasts and *Clostridium butyricum* (637) 490
- Kato, S., see Yamagishi, A. (637) 252
- Kato, S., see Yamagishi, A. (637) 264
- Kayano, H., see Karube, I. (637) 490
- Khomutov, G.B., see Tikhonov, A.N. (637) 321
- Kim, J.-K., see Nicholls, P. (637) 312
- Kito, Y., see Naito, T. (637) 457
- Knafl, D.B., see Davidson, V.L. (637) 53
- Knafl, D.B., see Malkin, R. (637) 88
- Knight, V.A., Wiggins, P.M., Harvey, J.D. and O'Brien, J.A.
The relationship between the size of mitochondria and the intensity of light that they scatter in different energetic states (637) 146
- Kobayashi, K., see Naito, T. (637) 457
- Kováč, L. and Varečka, L.
Membrane potentials in respiring and respiration-deficient yeasts monitored by a fluorescent dye (637) 209
- Krogmann, D.W., see Holt, T.K. (637) 408
- Kraichoke, S., see Malkin, R. (637) 88
- Kramer, H.J.M., Amesz, J. and Rijgersberg, C.P.
Excitation spectra of chlorophyll fluorescence in spinach and barley chloroplasts at 4 K (637) 272
- Kunz, W., see Duszyński, J. (637) 217
- Küster, U., see Duszyński, J. (637) 217
- Lee, K.W., see Holaday, A.S. (637) 334
- Lees, H., see Chaudhry, G.R. (637) 18
- Letko, G., see Duszyński, J. (637) 217
- Leto, K. and Arntzen, C.
Cation-mediated regulation of excitation energy distribution in chloroplasts lacking organized Photosystem II complexes (637) 107
- Li, S.-L., see Jin, Y.-Z. (637) 551
- Li, Y.-S., Ueng, S.-H. and Lin, B.-Y.
Mg²⁺ accelerates plastoquinone reduction in chloroplasts (637) 433
- Lin, B.-Y., see Li, Y.-S. (637) 433
- Loach, P.A., see Runquist, J.A. (637) 231
- Maison-Peteri, B., Vernotte, C. and Briantais, J.-M.
Modifications of the functioning of Photosystem II induced in the dark by alkaline pH in the presence of cations (637) 202
- Malkin, R., Chain, R.K., Kraichoke, S. and Knaff, D.B.
Studies of the function of the membrane-bound iron-sulfur centers of the photosynthetic bacterium *Chromatium vinosum* (637) 88
- Mar, T., Picorel, R. and Gingras, G.
Rotational mobility of the photoreaction center in chromatophore membranes of *Rhodospirillum rubrum* (637) 546
- Maroc, J. and Garnier, J.
Gel electrophoresis of chloroplast membranes of mutants of *Chlamydomonas reinhardtii* which have impaired Photosystem II function and lack photosynthetic cytochromes (637) 473
- Marrs, B.L., see Zannoni, D. (637) 96
- Matsunaga, T., see Karube, I. (637) 490
- Melis, A. and Harvey, G.W.
Regulation of photosystem stoichiometry, chlorophyll a and chlorophyll b content and relation to chloroplast ultrastructure (637) 138
- Michalski, W.P. and Kaniuga, Z.
Photosynthetic apparatus of chilling-sensitive plants. X. Relationship between superoxide dismutase activity and photoperoxidation of chloroplast lipids (637) 159
- Mueller, T.J., see Jurtshuk, P., Jr (637) 374
- Naito, T., Kito, Y., Kobayashi, K., Hiraki, K. and Hamanaka, T.
Retinal-protein interactions in bacteriorhodopsin monomers, dispersed in the detergent L-1690 (637) 457
- Nicholls, P. and Kim, J.-K.
Oxidation of sulphide by cytochrome aa₃ (637) 312
- Nuutinen, M. and Hassinen, I.
Plasma membrane phosphate transport and extracellular phosphate concentration in the regulation of cellular respiration in isolated perfused rat heart (637) 481
- O'Brien, J.A., see Knight, V.A. (637) 146
- O'Keefe, D.P., Prince, R.C. and Dutton, P.L.
The interaction of the reaction center secondary quinone

- with the ubiquinone-cytochrome c_2 oxidoreductase in *Rhodospseudomonas sphaeroides* chromatophores (637) 512
- Ollinger, O., see Radmer, R. (637) 80
- Olson, J.M.
Bacteriopheophytin c in reaction center complexes of green photosynthetic bacteria (637) 185
- Ort, D.R., see Graan, T. (637) 447
- Otsuka, T., see Karube, I. (637) 490
- Peters, G. and Rodgers, M.A.J.
Single-electron transfer from NADH analogues to singlet oxygen (637) 43
- Picorel, R., see Mar, T. (637) 546
- Pitotti, A., see Dabbeni-Sala, F. (637) 400
- Prince, R.C., see O'Keefe, D.P. (637) 512
- Prochaska, L.J., Bisson, R., Capaldi, R.A., Steffens, G.C.M. and Buse, G.
Inhibition of cytochrome c oxidase function by dicyclohexylcarbodiimide (637) 360
- Raap, A.K., see Van Ark, G. (637) 34
- Radda, G.K., see Bailey, I.A. (637) 1
- Radmer, R. and Ollinger, O.
Mass spectrometric studies of hydrazine photooxidation by illuminated chloroplasts (637) 80
- Rao, K.K., see Thomson, A.J. (637) 423
- Rasmussen, H., see Ruben, L. (637) 415
- Rich, P.R.
Electron transfer reactions between quinols and quinones in aqueous and aprotic media (637) 28
- Rijgersberg, C.P., see Kramer, H.L.M. (637) 272
- Robinson, A.E., see Thomson, A.J. (637) 423
- Rodgers, M.A.J., see Peters, G. (637) 43
- Ruben, L. and Rasmussen, H.
Phenothiazines and related compounds disrupt mitochondrial energy production by a calmodulin-independent reaction (637) 415
- Runquist, J.A. and Loach, P.A.
Catalysis of electron transfer across phospholipid bilayers by iron-porphyrin complexes (637) 231
- Ruuge, E.K., see Tikhonov, A.N. (637) 321
- Sanadi, D.R., see Joshi, S. (637) 504
- Satoh, K., see Yamagishi, A. (637) 252
- Satoh, K., see Yamagishi, A. (637) 264
- Sauer, K., see Bolt, J.D. (637) 342
- Schilder, L.T.M., see Tervoort, M.J. (637) 245
- Schwartz, A., see Wang, T. (637) 523
- Seymour, A.-M.L., see Bailey, I.A. (637) 1
- Sherman, L.A., see Guikema, J.A. (637) 189
- Shieh, Y.-J., see Holaday, A.S. (637) 334
- Shimizu-Takahama, M., see Takahama, U. (637) 530
- Slater, E.C., see Van Ark, G. (637) 34
- Slawinski, J., Galezowski, W. and Elbanowski, M.
Chemiluminescence in the reaction of cytochrome c with hydrogen peroxide (637) 130
- Slovin, J.P. and Tobin, E.M.
Glyphosine, a plant growth regulator, affects chloroplast membrane proteins (637) 177
- Steffens, G.C.M., see Prochaska, L.J. (637) 360
- Stitt, M., see Laing, W.A. (637) 348
- Suzuki, I., see Chaudhry, G.R. (637) 18
- Suzuki, S., see Karube, T. (637) 490
- Takahama, U., Shimizu-Takahama, M. and Heber, U.
The redox state of the NADP system in illuminated chloroplasts (637) 530
- Tang, H.-L., see Jin, Y.-Z. (637) 551
- Tervoort, M.J., Schilder, L.T.M. and Van Gelder, B.F.
The absorbance coefficient of beef heart cytochrome c_1 (637) 245
- Thielen, A.P.G.M. and Van Gorkom, H.J.
Energy transfer and quantum yield in Photosystem II (637) 439
- Thomson, A.J., Robinson, A.E., Johnson, M.K., Cammack, R., Rao, K.K. and Hall, D.O.
Low-temperature magnetic circular dichroism evidence for the conversion of four-iron-sulphur clusters in a ferredoxin from *Clostridium pasteurianum* into three-iron-sulphur clusters (637) 423
- Tiede, D.M. and Dutton, P.L.
Orientation of the primary quinone of bacterial photosynthetic reaction centers contained in chromatophore and reconstituted membranes (637) 278
- Tikhonov, A.N., Khomutov, G.B., Ruuge, E.K. and Blumenfeld, L.A.
Electron transport control in chloroplasts. Effects of photosynthetic control monitored by the intrathylakoid pH (637) 321
- Tobin, E.M., see Slovin, J.P. (637) 177
- Tsai, L.-I., see Wang, T. (637) 523
- Tsou, C.-L., see Jin, Y.-Z. (637) 551
- Ueng, S.-H., see Li, Y.-S. (637) 433
- Vallejos, R., see Viale, A. (637) 496
- Van Ark, G., Raap, A.K., Berden, J.A. and Slater, E.C.
Kinetics of cytochrome b reduction in submitochondrial particles (637) 34
- Van Gelder, B.F., see Tervoort, M.J. (637) 245
- Van Gelder, B.F., see Wilms, J. (637) 168
- Van Gorkom, H.J., see Thielen, A.P.G.M. (637) 439
- Vänngård, T., see Aasa, R. (637) 118
- Varečka, L., see Kováč, L. (637) 209
- Vernotte, C., see Maison-Peteri, B. (637) 202
- Viale, A., Vallejos, R. and Jagendorf, A.T.
Hydrogen exchange into soluble spinach chloroplast coupling factor during heat activation of its ATPase (637) 496
- Villalobo, A., Briquet, M. and Goffeau, A.
Electrogenic proton ejection coupled to electron transport through the energy-conserving site 2 and K^+/H^+ exchange in yeast mitochondria (637) 124

- Wang, T., Grassi de Gende, A.O., Tsai, L.-I. and Schwartz, A.
Influence of monovalent cations on the Ca^{2+} -ATPase of sarcoplasmic reticulum isolated from rabbit skeletal and dog cardiac muscles. An interpretation of transient-state kinetic data (637) 523
- Westerhoff, H.V., Arents, J.C. and Hellingwerf, K.J.
The effect of ionophores and light intensity on the initial rate of proton uptake into bacteriorhodopsin liposomes can be quantitatively described by mosaic non-equilibrium thermodynamics (637) 69
- Wiggins, P.M., see Knight, V.A. (637) 146
- Wilbrandt, R., see Cartling, B. (637) 61
- Wilms, J., Dekker, H.L., Boelens, R. and Van Gelder, B.F.
The effect of pH and ionic strength on the pre-steady-state reaction of cytochrome c and cytochrome aa_3 (637) 168
- Wojtczak, L., see Duszyński, J. (637) 217
- Wong, T.Y., see Jurtshuk, P., Jr (637) 374
- Yamagishi, A., Satoh, K. and Katoh, S.
The concentrations and thermodynamic activities of cations in intact *Bryopsis* chloroplasts (637) 252
- Yamagishi, A., Satoh, K. and Katoh, S.
Fluorescence induction in chloroplasts isolated from the green alga, *Bryopsis maxima*. V. pH dependence of the P-S_1 transient (637) 264
- Yamamoto, Y. and Barber, J.
Measurement of degree of chlorophyll fluorescence polarization in relation to the regulation of excitation energy transfer between Photosystems I and II in pea chloroplasts (637) 224
- Yu, C.A., see Yu, L. (637) 383
- Yu, L. and Yu, C.A.
The participation of primary amino groups of succinate dehydrogenase in the formation of succinate-Q reductase (637) 383
- Zannoni, D. and Marrs, B.L.
Redox chain and energy transduction in chromatophores from *Rhodospseudomonas capsulata* cells grown anaerobically in the dark on glucose and dimethyl sulfoxide (637) 96