

AUTHOR INDEX

- Akowitz, A.A., see Shigekawa, M. (548) 433
 Ames, J., see Swarthoff, T. (548) 427
 Arakaki, N., see Higuti, T. (548) 166
- Barsky, E.L. and Samuilov, V.D.
 Blue and red shifts of bacteriochlorophyll absorption band around 880 nm in *Rhodospirillum rubrum* (548) 448
- Bazlen, O., see Metzner, H. (548) 287
- Beinert, H., see Shaw, R.W. (548) 386
- Berg, S.P. and Nesbitt, D.M.
 Chromium oxalate: A new spin label broadening agent for use with thylakoids (548) 608
- Bernard, P.A. and Cockrell, R.S.
 The respiration of brain mitochondria and its regulation by monovalent cation transport (548) 173
- Blasie, J.K., see Pachence, J.M. (548) 348
- Blum, H., Salerno, J.C., Rich, P.R. and Ohnishi, T.
 Exchange integral for a variety of tetra-nuclear ferredoxins (548) 139
- Boonman, J.C.P., see Verheul, F.E.A.M. (548) 397
- Borden, D., see Verheul, F.E.A.M. (548) 397
- Borisov, A.Y., see Godik, V.I. (548) 296
- Boyer, J.S., see Younis, H.M. (548) 328
- Brandolin, G., Lauquin, G.J.M., Silva Lima, M. and Vignais, P.V.
 Characterization by photoaffinity labeling of the adenine nucleotide carrier in plant mitochondria (548) 30
- Breton, J., Geacintov, N.E. and Swenberg, C.E.
 Quenching of fluorescence by triplet excited states in chloroplasts (548) 616
- Briantais, J.-M., Vernotte, C., Picaud, M. and Krause, G.H.
 A quantitative study of the slow decline of chlorophyll a fluorescence in isolated chloroplasts (548) 128
- Bruschi, M., see Hatchikian, C.E. (548) 471
- Cammack, R., Luijk, L.J., Maguire, J.J., Fry, I.V. and Packer, L.
 EPR spectra of Photosystem I and other iron protein components in intact cells of cyanobacteria (548) 267
- Carey, P.R., see Koyama, Y. (548) 153
- Chollet, R., see Rathnam, C.K.M. (548) 500
- Cockrell, R.S., see Bernard, P.A. (548) 173
- De Jong, L., Holtrop, M. and Kroon, A.M.
 The biogenesis of rat-liver mitochondrial ATPase. Subunit composition of the normal ATPase complex and of the deficient complex when mitochondrial protein synthesis is blocked (548) 48
- De la Torre, A., see Rupp, H. (548) 552
- Doussière, J., Sainsard-Chanet, A. and Vignais, P.V.
 The respiratory chain of *Paramecium tetraurelia* in wild type and the mutant Cl₁. I. Spectral properties and redox potentials (548) 224
- Doussière, J., Sainsard-Chanet, A. and Vignais, P.V.
 The respiratory chain of *Paramecium tetraurelia* in wild type and the mutant Cl₁. II. Cyanide-insensitive respiration, function and regulation (548) 236
- Draijer, J.W., see Verheul, F.E.A.M. (548) 397
- Dutton, P.L., see Pachence, J.M. (548) 348
- Duysens, L.N.M., see Sonneveld, A. (548) 536
- Feinberg, B.A., see Ilan, Y. (548) 565
- Fischer, K., see Metzner, H. (548) 287
- Fry, I.V., see Cammack, R. (548) 267
- Garnier, J., see Maroc, J. (548) 374
- Gast, P. and Hoff, A.J.
 Transfer of light-induced electron-spin polarization from the intermediary acceptor to the prerduced primary acceptor in the reaction center of photosynthetic bacteria (548) 520
- Gautheron, D.C., see Penin, F. (548) 63
- Geacintov, N.E., see Breton, J. (548) 616
- Geelen, M.J.H., see Vaartjes, W.J. (548) 38

- Godik, V.I. and Borisov, A.Y.
Short-lived delayed luminescence of photosynthetic organisms. I. Nanosecond afterglows in purple bacteria at low redox potentials (548) 296
- Godinot, C., see Penin, F. (548) 63
- Govindjee, see Younis, H.M. (548) 328
- Gromet-Elhanan, Z., see Oren, R. (548) 106
- Gupta, A.D., see Hales, B.J. (548) 276
- Hales, B.J. and Gupta, A.D.
Orientation of the bacteriochlorophyll triplet and the primary ubiquinone acceptor of *Rhodospirillum rubrum* in membrane multilayers determined by ESR spectroscopy (I) (548) 276
- Hall, D.O., see Rupp, H. (548) 552
- Hansen, R.E., see Shaw, R.W. (548) 386
- Harris, D.A., Von Tscharn, V. and Radda, G.K.
The ATPase inhibitor protein in oxidative phosphorylation. The rate-limiting factor to phosphorylation in submitochondrial particles (548) 72
- Hatchikian, C.E., Jones, H.E. and Bruschi, M.
Isolation and characterization of a rubredoxin and two ferredoxins from *Desulfovibrio africanus* (548) 471
- Hattori, A., see Higuti, T. (548) 166
- Higuti, T., Arakaki, N. and Hattori, A.
Localized energization of the mitochondrial inner membrane by ATP (548) 166
- Hoff, A.J., see Gast, P. (548) 520
- Holmes, N.G., see Hunter, C.N. (548) 253
- Holmes, N.G., see Hunter, C.N. (548) 458
- Holtrop, M., see De Jong, L. (548) 48
- Horiuchi, K., see Kawamura, S. (548) 147
- Hunter, C.N., Holmes, N.G., Jones, O.T.G. and Niederman, R.A.
Membranes of *Rhodopseudomonas sphaeroides*. VII. Photochemical properties of a fraction enriched in newly synthesized bacteriochlorophyll *a*-protein complexes (548) 253
- Hunter, C.N., Van Grondelle, R., Holmes, N.G. and Jones, O.T.G.
The reconstitution of energy transfer in membranes from a bacteriochlorophyll-less mutant of *Rhodopseudomonas sphaeroides* by addition of light-harvesting and reaction centre pigment-protein complexes (548) 458
- Ilan, Y. and Shafferman, A.
Intramolecular electron transfer and binding constants in iron hexacyanide/cytochrome *c* complexes as studied by pulse radiolysis (548) 161
- Ilan, Y., Shafferman, A., Feinberg, B.A. and Lau, Y.-K.
Partitioning of electrostatic and conformational contributions in the redox reactions of modified cytochromes *c* (548) 565
- Ito, M., see Kawamura, S. (548) 147
- Itoh, S.
Surface potential and reaction of the membrane bound electron transfer components. I. Reaction of P-700 in sonicated chloroplasts with redox reagents (548) 579
- Itoh, S.
Surface potential and reaction of the membrane bound electron transfer components. II. Integrity of the chloroplast membrane and reaction of P-700 (548) 596
- Jones, H.E., see Hatchikian, C.E. (548) 471
- Jones, O.T.G., see Hunter, C.N. (548) 253
- Jones, O.T.G., see Hunter, C.N. (548) 458
- Katz, A.M., see Shigekawa, M. (548) 433
- Kawamura, S., Yoshizawa, T., Horiuchi, K., Ito, M., Kodama, A. and Tsukida, K.
Photochemical reaction of 9-*cis*-retro- γ -rhodopsin at low temperatures (548) 147
- Kemp, A., see Wagenvoort, R.J. (548) 85
- Kihara, T., see McCray, J.A. (548) 417
- Kodama, A., see Kawamura, S. (548) 147
- Konishi, M., see Ogawa, M. (548) 119
- Koyama, Y., Long, R.A. Martin, W.G. and Carey, P.R.
The resonance Raman spectrum of carotenoids as an intrinsic probe for membrane potential. Oscillatory changes in the spectrum of neurosporene in the chromatophores of *Rhodopseudomonas sphaeroides* (548) 153
- Krab, K. and Wikström, M.
On the stoichiometry and thermodynamics of proton-pumping cytochrome *c* oxidase in mitochondria (548) 1
- Krause, G.H., see Briantais, J.-M. (548) 128
- Kroon, A.M., see De Jong, L. (548) 48
- Lau, Y.-K., see Ilan, Y. (548) 565
- Lauquin, G.J.M., see Brandolin, G. (548) 30
- Lokaj, P., see Vacek, K. (548) 341
- Long, R.A., see Koyama, Y. (548) 153
- Luijk, L.J., see Cammack, R. (548) 267
- Maguire, J.J., see Cammack, R. (548) 267

- Margoliash, E., see Verheul, F.E.A.M. (548) 397
- Maroc, J. and Garnier, J.
Photooxidation of the cytochrome b-559 in the presence of various substituted 2-anilinothiophenes and of some other compounds, in *Chlamydomonas reinhardtii* (548) 374
- Martin, W.G., see Koyama, Y. (548) 153
- McGray, J.A. and Kihara, T.
Rates of reduced cytochrome c -ferri-cyanide binding and electron transfer (548) 417
- Metzner, H., Fischer, K. and Bazlen, O.
Isotope ratios in photosynthetic oxygen (548) 287
- Moore, A.L., see Rupp, H. (548) 16
- Muijsers, A.O., see Verheul, F.E.A.M. (548) 397
- Nesbitt, D.M., see Berg, S.P. (548) 608
- Niederman, R.A., see Hunter, C.N. (548) 253
- Ogawa, M. and Konishi, M.
Kinetics of photoconversion of protochlorophyllide 649 to chlorophyllide 676 at low temperature of etiolated cotyledons of *Pharbitis nil* (548) 119
- Ohnishi, T., see Blum, H. (548) 139
- Oren, R. and Gromet-Elhanan, Z.
Coupling factor ATPase complex of *Rhodospirillum rubrum*. Purification and characterization of an oligomycin and N,N'-dicyclohexylcarbodiimide-sensitive (Ca^{2+} , Mg^{2+})-ATPase (548) 106
- Pachence, J.M., Dutton, P.L. and Blasie, J.K.
Structural studies on reconstituted reaction center-phosphatidylcholine membranes (548) 348
- Packer, L., see Cammack, R. (548) 267
- Penin, F., Godinot, C. and Gautheron, D.C.
Optimization of the purification of mitochondrial F_1 -adenosine triphosphate (548) 63
- Peschek, G.A.
Anaerobic hydrogenase activity in *Anacystis nidulans*. H_2 -dependent photoreduction and related reactions (548) 187
- Peschek, G.A.
Aerobic hydrogenase activity in *Anacystis nidulans*. The oxyhydrogen reaction (548) 203
- Petersen, L.C.
The effect of pH on the oxygen kinetics of cytochrome c oxidase proteoliposomes (548) 636
- Picaud, M., see Briantais, J.-M. (548) 128
- Radda, G.K., see Harris, D.A. (548) 72
- Rademaker, H., see Sonneveld, A. (548) 536
- Rathnam, C.K.M. and Chollet, R.
Photosynthetic carbon metabolism in *Panicum milioides*, a C_3 - C_4 intermediate species. Evidence for a limited C_4 dicarboxylic acid pathway of photosynthesis (548) 500
- Remennikov, V.G. and Samuilov, V.D.
Two regimes of electrogenic cyclic redox chain operation in chromatophores of non-sulfur purple bacteria. A study using antimycin A (548) 216
- Rich, P.R., see Blum, H. (548) 139
- Rupp, H., De la Torre, A. and Hall, D.O.
The electron spin relaxation of the electron acceptors of Photosystem I reaction centre studied by microwave power saturation (548) 552
- Rupp, H. and Moore, A.L.
Characterization of iron-sulphur centres of plant mitochondria by microwave power saturation (548) 16
- Sainsard-Chanet, A., see Doussi re, J. (548) 224
- Sainsard-Chanet, A., see Doussi re, J. (548) 236
- Salerno, J.C., see Blum, H. (548) 139
- Samuilov, V.D., see Barsky, E.L. (548) 448
- Samuilov, V.D., see Remennikov, V.G. (548) 216
- Shafferman, A., see Ilan, Y. (548) 161
- Shafferman, A., see Ilan, Y. (548) 565
- Shaw, R.W., Hansen, R.E. and Beinert, H.
The oxygen reactions of reduced cytochrome c oxidase. Position of a form with an unusual EPR signal in the sequence of early intermediates (548) 386
- Shigekawa, M., Akowitz, A.A. and Katz, A.M.
Stimulatory and inhibitory effects of dimethylsulfoxide, propanolol and chlorpromazine on the partial reactions of ATPase of sarcoplasmic reticulum (548) 433
- Silva Lima, M., see Brandolin, G. (548) 30
- Sladk y, P., see Vacek, K. (548) 341
- Sonneveld, A., Rademaker, H. and Duysens, L.N.M.
Chlorophyll a fluorescence as a monitor of nanosecond reduction of the photooxidized primary donor P-680^+ of Photosystem II (548) 536
- Swarthoff, T. and Amez, J.
Photochemically active pigment-protein complexes from the green photosynthetic bacterium *Prosthecochloris aestuarii* (548) 427

- Swenberg, C.E., see Breton, J. (548) 616
- Tarr, G.E., see Verheul, F.E.A.M. (548) 397
- Tsukida, K., see Kawamura, S. (548) 147
- Urbanová, M., see Vacek, K. (548) 341
- Vaartjes, W.J., Geelen, M.J.H. and Van den Bergh, S.G.
Accumulation of pyruvate by isolated rat liver mitochondria (548) 38
- Vacek, K., Lokaj, P., Urbanová, M. and Sladký, P.
Radiative and nonradiative transitions in subchloroplast particles highly enriched in P-700 (548) 341
- Van den Bergh, S.G., see Vaartjes, W.J. (548) 38
- Van der Kraan, I., see Wagenvoort, R.J. (548) 85
- Van Grondelle, R., see Hunter, C.N. (548) 458
- Vega, J.M., see Zumft, W.G. (548) 484
- Verheul, F.E.A.M., Boonman, J.C.P., Draijer, J.W., Muijsers, A.O., Borden, D., Tarr, G.E. and Margoliash, E.
The isolation of bovine-heart cytochrome c oxidase subunits. Dependence on phospholipid and cholate content (548) 397
- Vernotte, C., see Briantais, J.-M. (548) 128
- Vignais, P.V., see Brandolin, G. (548) 30
- Vignais, P.V., see Doussière, J. (548) 224
- Vignais, P.V., see Doussière, J. (548) 236
- Von Tscharn, V., see Harris, D.A. (548) 72
- Wagenvoort, R.J., Van der Kraan, I. and Kemp, A.
Localization of adenine nucleotide-binding sites on bovine-heart mitochondrial ATPase by photolabelling with 8-azido-ADP and 8-azido-ATP (548) 85
- Wikström, M., see Krab, K. (548) 1
- Wraight, C.A.
Electron acceptors of bacterial photosynthetic reaction centers. II. H^+ binding coupled to secondary electron transfer in the quinone acceptor complex (548) 309
- Yagi, T.
Purification and properties of cytochrome c-553, an electron acceptor for formate dehydrogenase of *Desulfovibrio vulgaris*, Miyazaki (548) 96
- Yoshizawa, T., see Kawamura, S. (548) 147
- Younis, H.M., Boyer, J.S. and Govindjee
Conformation and activity of chloroplast coupling factor exposed to low chemical potential of water in cells (548) 328
- Zumft, W.G. and Vega, J.M.
Reduction of nitrite to nitrous oxide by a cytoplasmic membrane fraction from the marine denitrifier, *Pseudomonas perfectomarinus* (548) 484