

Publication List 1996-2000 (5 years)

Laboratory of Jun Miyake, Dec. 23, 2000.

Original Reviewed Papers

1. A. Planner, M. Hara, J. Miyake, K. Klaczynska, D. Frackowiak, Polarized photoacoustic spectra of various photosynthetic cyanobacteria embedded in polymer film, *Photosynthetica* 38, in press(2000).
2. K. Klaczynska, A. Dudkowiak, D. Frackowiak, A. Planner, M. Hara, J. Miyake, Polarized photoacoustic spectra of green bacteria cells, *Current Topics in Biophysics* 24, in press (2000).
3. J. Lukaszewicz, M.Hara, J. Miyake, D. Wrobel, D. Frackowiak, Spectral properties of the stilbazolium merocyanines oriented in stretched polymer films and Langmuir-Blodgett monolayers, *J.Photochem.Photobiol, A: Chem* 5624, 1-10 (2000).
4. A. Dudkowiak, T. Kusumi, C. Nakamura, J. Miyake, Spectroscopic properties of bacterichlorophyll c in Langmuir monolayers in the absence, and presence, of amphiphilic peptides, *J. Photochem. Photobiol. A* 134, 177-183 (2000).
5. A. Planner, T. Runka, A. Skrzypczak, M. Hara and J. Miyake, Application of argon laser beam diffraction for determination of the properties of photoinduced processes in dyed PVA foils, *SPIE* 4238, 250-254 (2000).
6. C. Nakamura, K. Noda, N. A. Zorin, H. Akutsu, J. Miyake, Cytochrome c3 -Langmuir-Blodgett film for hydrogen evolving device, *Synthetic Metals* 7617, 1-4 (2000).
7. C. Nakamura, M. Hasegawa, Y. Yasuda, J. Miyake, Self-Assemble Photo Reaction Center on Electrode for Current Generation, *Appl. Biochem. Biotechnol.* 84/86 401-408 (2000).
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9. Chang, C. Nakamura, J. Miyake, The principle and applications of piezoelectric crystal sensors, *Material Sci. Eng. C* 12, 111-123 (2000).
10. D.-J. Qian, C. Nakamura, J. Miyake Mixed monolayers of phospholipids with a viologen and the electrochemical properties in Langmuir-Blodgett films, *Colloids and Surfaces A* 175, 93-98 (2000).
11. D.-J. Qian, C. Nakamura, J. Miyake, Monolayers of a series of viologen derivatives and the electrochemical properties in Langmuir-Blodgett films, *Thin Solid Films* 374, 125-133 (2000).

12. D.-J. Qian, C. Nakamura, K. Noda, N. A. Zorin, J. Miyake, Fabrication of an electrode biogen hydrogenase heterogeneous system and the electrochemical hydrogen evolution, *Appl. Biochem. Biotechnol* 84/86, 409-418 (2000).
13. D.-J. Qian, C. Nakamura, J. Miyake, Multiporphyrin array from interfacial material-mediated assembly and its Langmuir-Blodgett films *Langmuir* 16, 9615-9619 (2000).
14. H. Aizawa, S. Kurosawa, K. Kobayashi, K. Kashima, T. Hirokawa, Y. Yoshimi, M. Yoshimoto, T. Hirotsu, J. Miyake, H. Tanaka, Turning of Contact Angle on Glass Plates Coated with Plasma-Polymerized Styrene, Allylamine and Acrylic Acid, *Material Sci. Eng. C* 12, 49-54 (2000).
15. H. Enomoto, S. Takeda, C. Nakamura, J. Miyake, A. Ptak, A. Dudkowiak, D. Frackowiak, Interactions of chlorophyll and polypeptide mixture with bacterial reaction centers, *Photosynthetica* 38, 1-6 (2000).
16. M. Hara, H. Yuan, M. Miyake, S. Iijima, Q. Yang, J. Miyake, Amphiphilic polymer/liposome interaction: a novel immobilization membrane for liposome on glass surface, *Material Sci. Eng. C* 13, 117-12 (2000).
17. M. Miyake, J. Schnackenberg, C. Nakamura, Y. Asada, J. Miyake, Molecular Handling of Hydrogenase, *Biohydrogen II* (Eds. J. Miyake, T. Matsunaga, A. San Pietro) Elsevier, London, pp.195-210 (2000).
18. P. Planner, M. Hara, Z. Stachowiak and J. Miyake, Properties of photosynthetic bacteria in anisotropic rigid matrix and in suspension, *Photosynthetica* 38, 251-258 (2000).
19. Q. Yang, X.-Y. Liu, K. Umetani, T. Ikehara, S. Miyauchi, N. Kamo, T. Jin, J. Miyake, Membrane partitioning and Translocation of Hydrophobic Phosphonium Homologues: Thermodynamic Analysis by Immobilized Liposome Chromatography, *J. Phys. Chem. B* 104, 7528-7534 (2000).
20. Q. Yang, X.-Y. Liu, M. Hara, P. Lundahl, J. Miyake, Quantitative affinity chromatographic studies of mitochondrial cytochrome c binding to bacterial photosynthetic reaction center, reconstituted in liposome membranes and immobilized by detergent dialysis and avidin-biotin binding, *Anal. Biochem.* 280, 94-102 (2000).
21. S. Kurosawa, T. Hirokawa, K. Kashima, H. Aizawa, D.-S. Han, Y. Yoshimi, Y. Okada, K. Yase, J. Miyake, M. Yoshimoto, J. Hilborn, Detection of Deposition Rate of Plasma-Polymerized Films by Quartz Crystal Microbalance, *Thin Solid Films* 374, 262-267 (2000).
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23. Seong-Hun Song, Hong-sig Cho, Jong-Won Park, Kwang Kim, Chikashi Nakamura, Qing Yang, Jun Miyake, and Sang-Mok Chang, Analysis of Avidin-biotinylated Liposome Layers on Au Electrode by Quartz Crystal Analyzer, *Korean J. Biotechnol. Bioeng.* 15, 497-500 (2000).
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26. A. Dudkowiak, T. Kusumi, C. Nakamura, J. Miyake, Chlorophyll a aggregates stabilized by a synthesized peptide, *J. Photochem. Photobiol. A* 5376 1-5 (1999).
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28. C. Nakamura, M. Hasegawa, M. Hara, J. Miyake, Isolation and analysis of tetraheme-bound cytochrome from photosynthetic reaction centers of *Rhodospseudomonas viridis*, *Appl. Biochem. Biotechnol.* 77/79, 169-179 (1999).
29. E. Nakada, S. Nishikata, Y. Asada, J. Miyake, Photosynthetic bacterial hydrogen production combined with a fuel cell, *Int. J. Hydrogen Energy* 24, 1053-1057 (1999).
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35. J. Miyake, M. Miyake, Y. Asada, Biotechnological hydrogen production: Research for efficient light energy conversion, *J. Biotechnol.* 70, 89-101 (1999).
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37. J. Schnackenberg, M. Miyake, J. Miyake, N. A. Zorin, Y. Asada, In Vitro in Vivo Coupling of Thiocapsa Hydrogenase with Cyanobacteria and Algal Electron Mediators, *J. Biosci. Bioeng.* 88 30-34 (1999).
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