## **REVIEW ARTICLES AND TEXTBOOKS**

- **Y. OKAMOTO**, "Optimization Algorithms and Protein Structure Determination," *JCPE Newsletter (Japan Chemistry Program Exchange Newsletter)* (in Japanese) **9**, December, 3 (1997).
- **Y. OKAMOTO**, "Protein Folding Problem as Studied by New Simulation Algorithms," *Recent Res. Devel. in Pure & Applied Chem.* **2**, 1 (1998).
- **H. NAKAMURA**, "Nonadiabatic Transitions at Potential Curve Crossings and New Mechanism of Molecular Switching," *J. Korean Phys. Soc.* **32**, 332 (1998).
- **K. OKUMURA**, "Feynman Rules for a Quantum Brownian Oscillator Model on the Unified Time Path: Applications to Analysis of Molecular Spectroscopy in Liquid Phase," *Bussei Kenkyu* (in Japanese) **69**, pp. 134-148 (1997).
- **K.** OKUMURA, "Femtosecond pulse spectroscopy on moleqular liquids: Feynman rules for a nonequilibrium dissipative system and their application," *Soryusiron Kenkyu* (in Japanese) **94**, pp. D66-D70 (1997).
- **F. HIRATA**, "Chemical Processes in Solution Studied by an Integral Equation Theory of Molecular Liquids," *Bull. Chem. Soc. Jpn.* **71**, 1483 (1998).
- F. HIRATA, T. IMAI and M. IRISA, "Molecular Theories of Partial Molar Volume," Rev. High Press. Sci. & Tech. 8, 96 (1998).
- T. KITAGAWA, T. OGURA, S. HIROTA, D. A. PROSHLYAKOV, J. MATYSIK, E. H. APPELMAN, K. SHINZAWA-ITOH and S. YOSHIKAWA, "Time-resolved resonance Raman study of dioxygen reduction by cytochrome *c* oxidase" in *Oxygen Homeostasis and Its Dynamics*, Y. Ishimura, H. Shimada and M. Suematsu Eds., Springer-Verlag; Tokyo, 57 (1997).
- T. OGURA, D. A. PROSHLYAKOV, J. MATYSIK, E. H. APPELMAN, K. SHINZAWA-ITOH, S. YOSHIKAWA and T. KITAGAWA, "Mechanism of dioxygen reduction by cytochrome *c* oxidase as studied by time-resolved resonance Raman spectroscopy" in *Oxygen Homeostasis and Its Dynamics*, Y. Ishimura, H. Shimada and M. Suematsu Eds., Springer-Verlag; Tokyo, 102 (1997).
- S. NAGANO, M. TANAKA, K. ISHIMORI, I. MORISHIMA, Y. WATANABE, M. MUKAI, T. OGURA and T. KITAGAWA, "Catalytic roles of the distal site hydrogen bond network of peroxidases" in *Oxygen Homeostasis and Its Dynamics*, Y. Ishimura, H. Shimada and M. Suematsu Eds., Springer-Verlag; Tokyo, 354 (1997).
- N. NISHI, "Size and Structure Effect" in *Functionality of Molecular Systems*, Springer-Verlag; Tokyo, pp. 262-283 (1998).
- **Y. MATSUMOTO**, "Photochemistry and Electronic Excited States of Adsorbates," *J. Vac. Soc. Japan* (in Japanese) **41**, 555 (1998).
- **Y. MATSUMOTO**, "Reactions of Free Radicals at Surfaces" (in Japanese) in *Science on Free Radicals*, E. Hirota, Ed., Gakkai Shuppan Center; Tokyo, pp. 84-100 (1997).
- **K. YOSHIHARA**, "Ultrafast Intermolecular Electron Transfer in Solution" in *Adv. Chem. Phys. "Electron Transfer- From Isolated Molecules to Biomolecules,"* vol. **107**, J. Jortner and M. Bixon, Eds., John Wiley and Sons, Inc.; New York, pp. 371-402 (1998).
- **K. YOSHIHARA**, "Electron Transfer" in *Functionality of Molecular Systems*, S. Nagakura, Ed., vol. **A**, Springer; Tokyo, Chapter 3, (1998).
- I. TANAKA, H. HOSOYA, K. KAYA, Y. TANIMOTO and K. YOSHIHARA, "Professor Saburo Nagakura," *Photochemistry* (in Japanese) **25**, 2 (1997).
- **K. TOMINAGA**, "Higher-Order Nonlinear Spectoscopy in Liquids," *J. Spectrosc. Soc. Jpn.* (in Japanese) **47**, 93 (1998).
- **K. TOMINAGA**, "Off-Resonant Fifth and Seventh Order Time-Domain Nonlinear Spectrscopy on Vibrational Dephasing in Liquids" in *Advances in Multi-Photon Processes and Spectroscopy*, S. H. Lin and Y. Fujimura, Eds., vol. **11**, World Scientific; Singapore, pp. 127-207 (1998).
- **K. KANODA**, "Metal-Insulator Transition and Superconductivity in Quasi-Two-Dimensional Organic Conductors," *Bussei Kenkyu* **70**, 137 (1998).
- **H. INOKUCHI**, "Molecular Fastener" in *Polymers and Organic Solids*, L. Shi and D. Zhu Eds., Scientific Press, pp. 216-227 (1997).
- S. TAKEDA, "Proton Dynamics in Hydrogen Bonds," J. Cryst. Soc. Jpn. 40, 52 (1998).
- Y. WATANABE, S. OZAKI and T. MATSUI, "Mechanism-Based Molecular Design of Peroxygenases" in *Oxygen Homeostasis and Its Dynamics*, Y. Ishimura, H. Shimada, and M. Suematsu, Eds., Springer; Tokyo. 340 (1997).
- S. NAGANO, M. TANAKA, K. ISHIMORI, I. MORISHIMA, Y. WATANABE, M. MUKAI, T. OGURA and T. KITAGAWA, "Catalytic Roles of the Distal Site Hydrogen Bond Network of Peroxidases" in *Oxygen Homeostasis and Its Dynamics*, Y. Ishimura, H. Shimada, and M. Suematsu, Eds., Springer; Tokyo. 354 (1997).
- **S. OZAKI, Y. INADA and Y. WATANABE**, "Catalytic Intermediates of Polyethylene-Glycolated Horseradish Peroxidase in Benzene" in *Oxygen Homeostasis and Its Dynamics*, Y. Ishimura, H. Shimada, and M. Suematsu, Eds., Springer; Tokyo. 359 (1997).
- Y. WATANABE, "Molecular Design of Peroxygenase," Porphyrins (in Japanese) 7, 33 (1998).
- **T. SUGIMOTO**, "Design and Synthesis of Molecular/Organic Magnets (in Japanese)" in *Organic Solids Based on -Electron Systems -Molecular Designing, Electronic Properties (Charge & Spin), and Applications*, Y. Shirota, M. Itoh, C. Inoue, M. Kinoshita and T. Yamamoto Eds., Gakkai Shuppan Center; Tokyo pp. 44-56 (1997).

- T. TAHARA, "Ultrafast Vibrational Coherence Spectroscopy," Bunko-Kenkyu (in Japanese) 47, 37 (1998).
- **T. TAHARA**, "New Methods in Pico- and Femtosecond Coherence Raman Spectroscopy" in *Raman Spectroscopy*, Y.Ozaki, Ed., IPC; Tokyo (1998).
- **S. NAGAOKA, K. MASE and I. KOYANO**, "Site-Specific Fragmentation Following Core-Level Photoexcitation of Organosilicon Molecules in the Vapor Phase and on the Solid Surface," *Trends Chem. Phys.* **6**, 1 (1997).
- **K. MASE, M. NAGASONO, S. TANAKA and S. NAGAOKA**, "Study of Ion Desorption Induced by Core-Electron Excitations of Molecules on Surface by Using Electron Ion Coincidence Spectroscopy," *J. Jpn. Soc. Synchrotron Rad. Res.* (in Japanese) **10**, 375 (1997).
- **K. MITSUKE and M. MIZUTANI**, "Synchrotron Radiation-Laser Combination Studies of Molecular Ionization and Dissociation," *Hoshako* (in Japanese) **10**, 463 (1997).
- **N. UENO**, "Charactarization of Molecular Orientation in Organic Ultrathin Films and Their Growth Processes," *Oyobuturi* (in Japanese) **66**, pp. 1054-1060 (1997).
- **N. UENO**, "Let's Look at the Molecular Orientation in Organic Ultrathin Films and Their Growth Studies Using Various Surface-Sensitive Electron Spectroscopies; from Organic Semiconductors to Polymers," *Hyoumen* (in Japanese) **36**, pp. 321-334 (1998).
- **K. TANAKA**, "Reduction of CO<sub>2</sub> Directed toward Carbon-Carbon Bond Formation," *Bull. Chem. Soc. Jpn.* (Accounts) **71**, 17-29 (1998).
- **K. TANAKA**, "Reduction of Carbon Dioxide Catalyzed by Metal Complexes," *Chemistry and Chemical Industry* (Japanese) **51**, 1424 (1998).
- **E. KIMURA, T. KOIKE and M. SHIONOYA**, "Advances in Zinc Enzyme Models by Small, Mononuclear Zinc(II) Complexes" in *Metal Sites in Proteins and Models*, H. A. O. Hill, P. Sadler and A. J. Thompson, Eds., Structure and Bonding Vol. 89, Springer-Verlag; Berlin, Heidelberg, New York, pp. 1-28 (1997).
- N. SARUKURA, T. TAIRA, T. SASAKI, K. WASHIO, K. NAKAGAWA, M. NAKAZAWA, M. OKA and K. KOBAYASHI, "Solid State Lasers" (in Japanese), T. Kobayashi, Ed., Gakkai shuppan center, pp. 141-153 (1997).
- H. OHTAKE and N. SARUKURA, "Generation and application of THz radiation," *Oyobuturi* (in Japanese) 66, 984 (1997).
- N. SARUKURA, "New application of ultraviolet lasers," OPTRONICS (in Japanese) 10, 164 (1997).
- **H. OHTAKE and N. SARUKURA**, "CLEO/QELS'97 report," *The Review of Laser Engennering* (in Japanese) **25**, 588 (1997).
- N. SARUKURA, "Ultraviolet Laser Clystals," Hikarigijutu Contact (in japanese) 35, 663 (1997).
- **T. WADA, H. MASUDA and T. TAIRA**, "Report on topical meeting of 12th Advanced Solid State Lasers (ASSL)," *The Review of Laser Engineering* (in Japanese) **25**, 247 (1997).
- T. TAÍRA, "Diode-pumped Yb: YAG lasers," Optical and Electro-Optical Engineering Contact (in Japanese) 35, 682 (1997).
- T. TAIRA and T. KOBAYASHI, "Microchip lasers," Optronics (in Japanese) 193, 63 (1998).