

# LIST OF REVIEW ARTICLES AND TEXTBOOKS

## Theoretical and Computational Molecular Science

- A. AKIYAMA, H. SAKIAT, Y. NIIHORI, T. KAWAWAKI, D. OGATA, P. ZHAO, J. YUASA, M. EHARA and Y. NEGISHI, "Commentary: Synthesis and Luminescence Characterization of Sulfonate-Protected Silver Nanoclusters," *The Bulletin of the Society of Nano Science and Technology*, **22**, 13–19 (2023). (in Japanese)
- Y. MAEDA, P. ZHAO and M. EHARA, "Recent Progress in Controlling the Photoluminescence Properties of Single-Walled Carbon Nanotubes by Oxidation and Alkylation," *Chem. Commun.* **59**(98), 14497–14508 (2023). DOI: 10.1039/D3CC05065C
- Y. MAEDA and M. EHARA, "Commentary: Controlling the Near-Infrared Emission Properties of Carbon Nanotubes by Chemical Modification—Aiming to Use as a Light Source for Bioimaging and Photonics Devices," *Kagaku*, **79**, 37–40 (2024). (in Japanese)
- B. SRIDHARAN, A. SINHA, J. BARDHAN, R. MODEE, M. EHARA and U. D. PRIYAKUMAR, "Deep Reinforcement Learning in Chemistry: A Review," *J. Comput. Chem.* **45**(22), 1881–1885 (2024). DOI: 10.1002/jcc.27354
- H. OKUMURA, "Perspective for Molecular Dynamics Simulation Studies of Amyloid- $\beta$  Aggregates," *J. Phys. Chem. B* **127**(51), 10931–10940 (2023). DOI: 10.1021/acs.jpcb.3c06051
- H. OKUMURA, "Amyloid-Fibril Disruption by Ultrasonic Wave and Infrared Laser Observed by Molecular Dynamics Simulation," *The Review of High Pressure Science and Technology*, **33**(2), 76–82 (2024). DOI: 10.4131/jshpreview.33.76 (in Japanese)
- A. YAMASHITA and K. OKAZAKI, "Mechanism of Oxalate Transporter in an Oxalate-Degrading Bacterium in the Gut Microbiota," *Seibutsubutsuri*, **64**(1), 25–27 (2024). DOI: 10.2142/biophys.64.25 (in Japanese)

## Photo-Molecular Science

- S. KERA, T. ARAKI, K. TANAKA, Y. TAIRA, M. KATOH and F. MATSUI, "UVSOR Synchrotron Facility 40<sup>th</sup> Anniversary," *Synchrotron Radiat. News* **37**(2), 41–42 (2024). DOI: 10.1080/08940886.2024.2330876
- T. YOKOYAMA, F. MATSUI, H. ABE and T. KINOSHITA, "60 Years of Synchrotron Radiation in Japan (JPSR60)," *Synchrotron Radiat. News* **37**(2), 43–44 (2024). DOI: 10.1080/08940886.2024.2330877

## Materials Molecular Science

- Y. TAKAGI and T. YOKOYAMA, "Present Status and Prospects of Operando Measurement by Atmospheric Pressure Hard X-Ray Photoelectron Spectroscopy," *Vac. Surf. Sci.*, **67**(3) (Special Feature: Recent Progress of Near Ambient Pressure and Atmospheric X-Ray Photoelectron Spectroscopy), 123–128 (2024). DOI: 10.1380/vss67.123 (in Japanese)
- T. KOITAYA, S. YAMAMOTO, I. MATSUDA, J. YOSHINOBU and T. YOKOYAMA, "Operando Observation of Hydrogenation of Carbon Dioxide by Near Ambient Pressure X-Ray Photoelectron Spectroscopy," *Vac. Surf. Sci.*, **67**(3) (Special Feature: Recent Progress of Near Ambient Pressure and Atmospheric X-Ray Photoelectron Spectroscopy), 117–122 (2024). DOI: 10.1380/vss.67.117 (in Japanese)
- Y. TAKAGI, T. KOITAYA and T. YOKOYAMA, "Catalyst Structure Analysis by Near Ambient Pressure Hard X-Ray Photoelectron Spectroscopy," *Shokubai (Catalysis)*, **66**(4) (Special issue: Advanced analysis techniques of catalysts using synchrotron radiation and neutrons), 204–209 (2024). (in Japanese)
- T. KOITAYA and T. YOKOYAMA, "Operando Characterization of Copper-Zinc-Alumina Catalyst for Methanol Synthesis by Ambient-Pressure Hard X-Ray Photoelectron Spectroscopy," *Spring-8 Research Frontiers 2023*, 78–79 (2024).
- T. SUGIMOTO, "Pioneering Interfacial Molecular Science for Realistic Catalyst under Reaction Condition :Molecular-Level Insights into the Critical Impacts of Interfacial Water on C–H Activation in Photocatalytic Methane Conversion," *Vac. Surf. Sci.* **66**(10), 580 (2023). DOI: 10.1380/vss.66.580 (in Japanese)

## Life and Coordination-Complex Molecular Science

- H. YAGI and K. KATO, "Methods for Glycostructuromics Analysis," *The Cell*, **56**, 260–262 (2024). (in Japanese)
- H. YAGI, K. TAKAGI and K. KATO, "Exploring Domain Architectures of Human Glycosyltransferases: Highlighting the Functional Diversity of Non-Catalytic Add-On Domains," *Biochim. Biophys. Acta, Gen. Subj.* **1868**, 130687 (2024). DOI: 10.1016/j.bbagen.2024.130687
- D. KOGA, S. KUSUMI, H. YAGI and K. KATO, "Three-Dimensional Analysis of the Intracellular Architecture by Scanning Electron Microscopy," *Microscopy*, **73**, 215–225 (2024). DOI: 10.1093/jmicro/dfad050
- N. YAZDANPANAH, C. SEDIKIDES, H. D. OCHS, C. A. CAMARGO JR., G. L. DARMSTADT, A. CERDA, V. CAUDA, G. J. PETERS, F. SELLKE, N. D. WONG, E. COMINI, A. R. JIMENO, V. GLOVER, N. HATZIARGYRIOU, C. E. VINCENOT, S. P. A. BORDAS, I. M. RAO, H. ABOLHASSANI, G. B. GHAREHPETIAN, R. WEISKIRCHEN, M. GUPTA, S. S. CHANDEL, B. O. OLUSANYA, B. CHESON, A. POMPONIO, M. TANZER, P. S. MYLES, W.-X. MA, F. BELLA, S. GHAVAMI, S. M. MOGHIMI, D. PRATICO, A. M. HERNANDEZ, M. MARTINEZ-URBISTONDO, D. M. URBISTONDO, S.-M. FERESHTEHNEJAD, I. ALI, S. KIMURA, A. W. HAYES, W. CAI, C. K. J. ERNEST, S. THOMAS, K. RAHIMI, A. SOROOSHIAN, M. SCHREIBER, K. KATO, J. H. T. LUONG, S. PLUCHINO, A. M. LOZANO, J. F. SEYMOUR, K. S. KOSIK, S. G. HOFMANN, R. S. MCINTYRE, M. PERC, A. LEEMANS, R. S. KLEIN, S. OGINO, C. WLEZIEN, G. PERRY, J. J. NIETO, L. LEVIN, D. J. KLIONSKY, B. MOBASHER, T. DORIGO, N. REZAEI and USERN ADVISORY BOARD, "Global Challenges After a Global Challenge: Lessons Learned from the COVID-19 Pandemic," *Adv. Exp. Med. Biol. (The COVID-19 Aftermath. Advances in Experimental Medicine and Biology)*, N. Rezaei, Ed., **1457**, 1–31 (2024). DOI: 10.1007/978-3-031-61939-7\_1
- Y. SEGAWA, "The Transannular Scholl Reaction for the Introduction of Heptagons into Aromatic Hydrocarbons," *Chem* **9**, 2725–2727 (2023). DOI: 10.1016/j.chempr.2023.09.014

## Research Center of Integrative Molecular Systems

- T. KOSUGI, "Method to Design Allosteric Sites by Restoring Lost Functions: A Demonstration for Rotary Molecular Motor V<sub>1</sub>-ATPase," *Protein Science Society of Japan (PSSJ) Archives*, **16**, eEssay13 (2023). (in Japanese)
- T. KOSUGI, "Structural Analysis for Engineering Protein and Interpreting its Mechanism," *Photon Factory News*, **42(1)**, 26 (2024). (in Japanese)

## Center for Mesoscopic Sciences

- H. OKAMOTO, "Chiro-Optical Effects of Plasmon Resonances," *Japanese Journal of Optics*, **53(7)**, 285–291 (2024). (in Japanese)

## Division of Advanced Molecular Science

- T. NAKAMURA and S. KIMURA, "Realization of Monoatomic Layer Heavy-Fermion Systems—Kondo Effect on a Monoatomic Layered Material—," *Solid State Physics*, **59(6)**, 331–339 (2024). (in Japanese)