

The background is a solid red color with several abstract geometric elements. A large, semi-transparent circular graphic is centered on the right side, consisting of multiple concentric rings. The outermost ring is a solid line, followed by a dashed line, and then a ring of small white dots. Diagonal lines and bands of varying opacity cross the page, creating a sense of depth and movement. The overall aesthetic is modern and technical.

# IV

## List of Publications



## List of Publications

- K. Asami, J. Ueda, K. Yasuda, K. Hongo, R. Maezono, M. G. Brik and S. Tanabe  
**“Development of Persistent Phosphor of  $\text{Eu}^{2+}$  Doped  $\text{Ba}_2\text{SiO}_4$  by  $\text{Er}^{3+}$  Codoping Based on Vacuum Referred Binding Energy Diagram”**, *Opt. Mater.*, **84** (2018) 436.
- L. Guo and M. Katoh  
**“*pn*-type Substrate Dependence of  $\text{CsK}_2\text{Sb}$  Photocathode Performance”**, *Phys. Rev. Accel. Beams*, **22** (2019) 033401.
- A. Hara and T. Awano  
**“Ground State of Ultrashallow Thermal Donors in Silicon”**, *Jpn. J. Appl. Phys.*, **57** (2018) 101301.
- Y. Hikosaka and E. Shigemasa  
**“Metastability of Carbonyl Sulfide Dications Studied by Multi-Electron–Ion Coincidence Spectroscopy”**, *Int. J. Mass Spectrom.*, **439** (2019) 13.
- M. Huttula, M. Patanen, R. Piispanen, T. Ohigashi, N. Kosugi, S. Swaraj, R. Belkhou, A. Pranovich, T. Jyske, P. Kilpeläinen, A. Kärkönen, R. Korpinen, T. Laakso, S. Valkonen and P. Saranpää  
**“STXM Chemical Mapping of Norway Spruce Knotwood Lignans”**, *Microsc. Microanal.*, **24** (2018) 482.
- H. Iwayama and J. R. Harries  
**“Resonant-Auger-State-Selected Dissociation Dynamics and Dissociation Limits of  $\text{N } 1s \rightarrow \pi^*$  core Excited  $\text{N}_2$  Molecules Studied Using a Two-Dimensional Auger-Electron-Photoion Coincidence Method”**, *J. Electron Spectrosc., Relat. Phenom.* **232** (2019) 40.
- S. Kamei, J. Hibi, Y. Ohtsubo, H. Watanabe and S. Kimura  
**“Infrared Evaluation of Enantiometric Amount and Application to Racemization at the Interface Between L- and D-Alanine”**, *Applied Spectrosc.*, **72** (7) (2018) 1074.
- T. Kawai, T. Hirai and K. Bando  
**“Optical Studies on the Conversion from  $\text{Ag}^+$  to  $\text{Ag}^-$  Centers by the Electrolytic Coloration in  $\text{NaCl}$  and  $\text{KCl}$  Crystals”**, *Opt. Mater.*, **77** (2018) 30.
- T. Kawai and A. Iguchi  
**“Energy Transfer Processes from  $\text{I}^-$  Centers to  $\text{In}^+$  Centers at Room Temperature in Co-Doped  $\text{NaCl}:\text{I}^-, \text{In}^+$  Crystals”**, *J. Lumin.*, **207** (2019) 58.
- M. Kitaura, S. Watanabe, K. Kamada, K. J. Kim, M. Yoshino, S. Kurosawa, T. Yagihashi, A. Ohnishi and K. Hara  
**“Shallow Electron Traps Formed by  $\text{Gd}^{2+}$  Ions Adjacent to Oxygen Vacancies in Cerium-Doped  $\text{Gd}_3\text{Al}_2\text{Ga}_3\text{O}_{12}$  Crystal”**, *Appl. Phys. Lett.*, **113** (2018) 041906.
- S. Kurosawa, T. Horiai, R. Murakami, Y. Shoji, J. Pejchal, A. Yamaji, S. Kodama, Y. Ohashi, Y. Yokota, K. Kamada, A. Yoshikawa, A. Ohnishi and M. Kitaura  
**“Comprehensive Study on Ce-Doped  $(\text{Gd}, \text{La})_2\text{Si}_2\text{O}_7$  Scintillator”**, *IEEE Trans. Nucl. Sci.*, **65** (2018) 2136.
- M.-H. Li, H.-H. Yeh, Y.-H. Chiang, U.-S. Jeng, C.-J. Su, H.-W. Shiu, Y.-J. Hsu, N. Kosugi, T. Ohigashi, Y.-A. Chen, P.-S. Shen, P. Chen and T.-F. Guo  
**“Highly Efficient 2D/3D Hybrid Perovskite Solar Cells via Low-Pressure Vapor-Assisted Solution Process”**, *Adv. Mater.*, **30** (2018) 1801401.

- S. Matsuba, K. Kawase, A. Miyamoto, S. Sasaki, M. Fujimoto, T. Konomi, N. Yamamoto, M. Hosaka and M. Katoh  
**“Generation of Vector Beam with Tandem Helical Undulators”**, Appl. Phys. Lett., **113** (2018) 021106.
- Z. Mita, H. Watanabe and S. Kimura  
**“Giant Thermal Effect of Vibration Modes of Single-Crystalline Alanine”**, Infrared Phys. Tech., **96** (2019) 7.
- M. Nagasaka, H. Yuzawa and N. Kosugi  
**“Intermolecular Interactions of Pyridine in Liquid Phase and Aqueous Solution Studied by Soft X-ray Absorption Spectroscopy”**, Z. Phys. Chem., **232** (2018) 705.
- M. Nagasaka, H. Yuzawa, K. Mochizuki, E. Rühl and N. Kosugi  
**“Temperature-Dependent Structural Changes in Liquid Benzene”**, J. Phys. Chem. Lett., **9** (2018) 5827.
- T. Ohigashi, A. Ito, K. Shinohara, S. Tone, Y. Inagaki, H. Yuzawa and N. Kosugi  
**“3-Dimensional Chemical Structures of an Isolated Cell Nucleus by a Scanning Transmission X-ray Microscope”**, Microsc. Microanal., **24** (2018) 400.
- J. Okabayashi, Y. Miura and H. Munekata  
**“Anatomy of Interfacial Spin-Orbit Coupling in Co/Pd Multilayers Using X-ray Magnetic Circular Dichroism and First-Principles Calculations”**, Scientific Reports, **8** (2018) 8303.
- J. Okabayashi, S. Miyasaka, M. Takahashi and S. Tajima  
**“Local Electronic and Magnetic Properties of Ferro-Orbital-Ordered FeV<sub>2</sub>O<sub>4</sub>”**, Jpn. J. Appl. Phys., **57** (2018) 0902BD.
- J. Okabayashi  
**“Tailoring Spins and Orbitals in Spin-Orbitronic Interfaces Probed by X-Ray Magnetic Circular Dichroism”**, Progress in Photon Science, (2019) 471. Springer (review book).
- T. Sakai, M. Koshimizu, Y. Fujimoto, D. Nakauchi, T. Yanagida and K. Asai  
**“Evaluation of the Scintillation and Thermally Stimulated Luminescence Properties of Cs<sub>2</sub>CdCl<sub>4</sub> Single Crystals”**, Sensors and Materials, **30** (2018) 1564.
- K. Shinohara, T. Ohigashi, S. Toné, M. Kado and A. Ito  
**“Quantitative Analysis of Mammalian Chromosome by Scanning Transmission Soft X-ray Microscopy”**, Ultramicroscopy, **194** (2018) 1.
- K. Shinohara, S. Toné, T. Ejima, T. Ohigashi and A. Ito  
**“Quantitative Distribution of DNA, RNA, Histone and Proteins Other than Histone in Mammalian Cells, Nuclei and a Chromosome at High Resolution Observed by Scanning Transmission Soft X-Ray Microscopy (STXM)”**, Cells, **8** (2019) 164.
- M. M. Shirolkar, Y.-F. Wang, Y. C. Shao, K.-H. Chen, H.-T. Wang, X.-S. Qiu, J.-S. Yang, J.-J. Wu, J.-W. Chiou, T. Ohigashi, N. Kosugi and W.-F. Pong  
**“Probing the Electronic Structure of BiVO<sub>4</sub> Coated ZnO Nanodendrite Core-Shell Nanocomposite Using X-ray Spectroscopic and Spatially Resolved Scanning Transmission X-ray Microscopy Studies”**, Microsc. Microanal., **24** (2018) 468.
- Y. Sugizaki, H. Motoyama, K. Edamoto and K. Ozawa  
**“Electronic Structure of the VO Film Grown on Ag(100): Resonant Photoelectron Spectroscopy Study”**, e-J. Surf. Sci. Nanotech., **16** (2018) 236.
- Y. Sugizaki, H. Motoyama, Y. Shimato, T. Yoshida, T. Takano and K. Edamoto  
**“Valence and Core-Level Photoelectron Spectroscopy Studies of Fe<sub>2</sub>P(10 $\bar{1}$ 0):Effect of P Segregation on the Surface Electronic Structure”**, Jpn. J. Appl. Phys., **57** (2018) 115701.

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**“Generation of Optical Vortices by Nonlinear Inverse Thomson Scattering at Arbitrary Angle Interactions”**, *Astrophys. J.*, **860:45** (2018).

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**“Auger-Free Luminescence Characteristics of  $\text{Rb}_{1-x}\text{Cs}_x\text{CaCl}_3$ ”**, *J. Ceram. Soc. Jpn.*, **126** (2018) 755.

Y. Takamori, T. Morimoto, N. Fukuda and Y. Ohki

**“Effects of Ultraviolet Photon Irradiation and Subsequent Thermal Treatments on Solution-Processed Amorphous Indium Gallium Zinc Oxide Thin Films”**, *AIP Advances*, **8** (2018) 115304.

A. Takemori, T. Hajiri, S. Miyasaka, Z. H. Tin, T. Adachi, S. Ideta, K. Tanaka, M. Matsunami and S. Tajima

**“Change of Fermi Surface States Related with Two Different  $T_c$ -raising Mechanisms in Iron Pnictide Superconductors”**, *Phys. Rev. B*, **98** (2018) 100501.

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**“Origin of Magnetic Properties in Carbon Implanted ZnO Nanowires”**, *Scientific Reports*, **8** (2018) 7758.

F. B. Wiggers, A. Fleurence, K. Aoyagi, T. Yonezawa, Y. Yamada-Takamura, H. Feng, J. Zhuang, Y. Du, A.Y. Kovalgin and M. P. de Jong

**“Van der Waals Integration of Silicene and Hexagonal Boron Nitride”**, *2D Mater.*, **6** (2019) 035001.

H. Yamane, A. Carlier and N. Kosugi

**“Orbital-Specific Electronic Interaction in Crystalline Films of Iron Phthalocyanine Grown on Au(111) Probed by Angle-Resolved Photoemission Spectroscopy”**, *Mater. Chem. Front.*, **2** (2018) 609.

H. Yamane, M. Oura, K. Sawada, T. Ebisu, T. Ishikawa N.Yamazaki, K. Hasegawa, K. Takagi and T. Hatsui

**“Critical Absorbed Dose of Resinous Adhesive Material towards Non-Destructive Chemical-State Analysis Using Soft X-Rays”**, *J. Electron Spectrosc. Relat. Phenom.*, **232** (2019) 11.

H. Yamane and N. Kosugi

**“Photoelectron Angular Distribution Induced by Weak Intermolecular Interaction in Highly Ordered Aromatic Molecules”**, *J. Phys. Chem. C*, **122** (2018) 26472.

J.-P. Yang, M. Meissner, T. Yamaguchi, X.-Y. Zhang, T. Ueba, L.-W. Cheng, S. Ideta, K. Tanaka, X.-H. Zeng, N. Ueno and S. Kera

**“Band Dispersion and Hole Effective Mass of Methylammonium Lead Iodide Perovskite”**, *Sol. RRL*, **2** (2018) 1800132.

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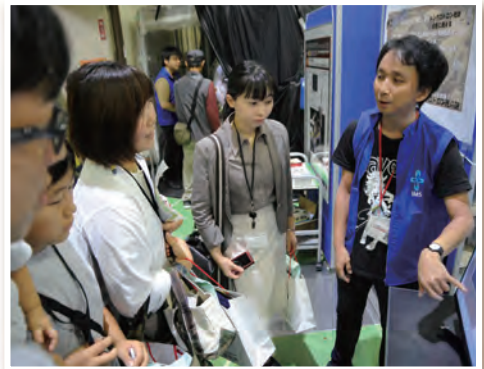
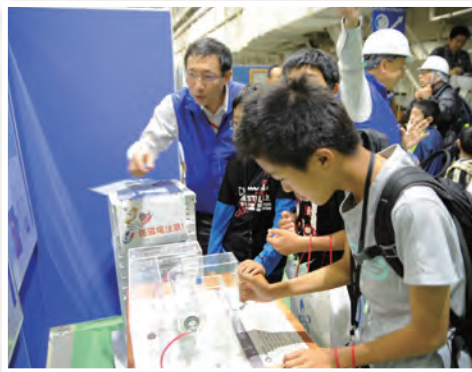
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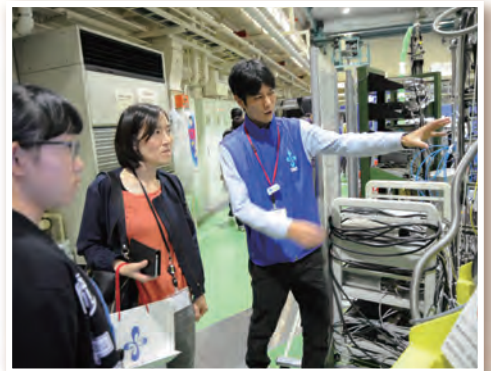
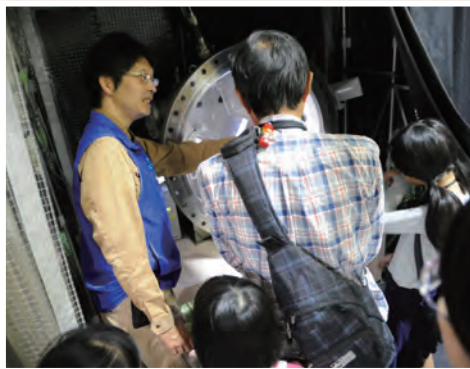
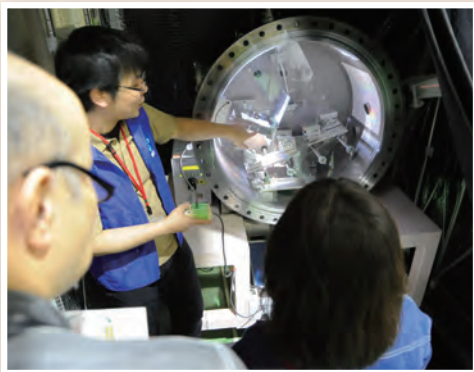
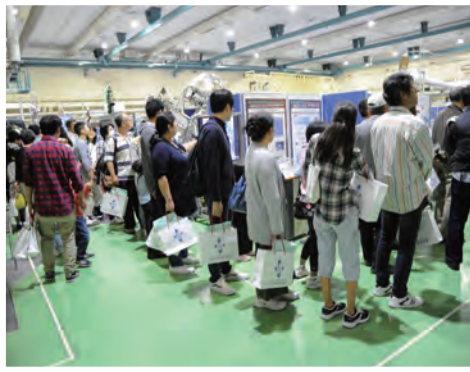
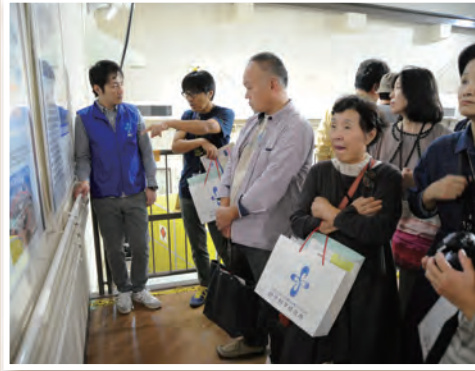


# IMS Open to the public 1





# IMS Open to the public 2





# UVSOR Staff Works & Year End Party

