

## 3. Theses

Lists of doctoral theses, which were written based on the PF experiments.

Doctor of Science

AHMED, Naveed (Chiba Univ. )

“Photocatalytic Conversion of Carbon Dioxide into Methanol over Layered Double Hydroxide Catalysts” (7C, 9A and 9C)

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Doctor of Science

TORIGOE, Hiroe (Okayama Univ. )

“Preparation of New Type of Xe-Compounds and Activation of Small Molecules by Utilizing Zeolite as A Specific Reaction Field” (NW10A and 9C)

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Doctor of Science

TANG, Qun (CAS)

“RecOR Complex Including RecR N-N Dimer and RecO Monomer Displays a High Affinity for ssDNA. Nucleic Acid Research” (NW10A and 9C)

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Doctor of Engineering

YAMAMOTO, Takafumi (Kyoto Univ.)

“Synthesis, Structure, and Physical Properties of Novel Iron Oxides Prepared by Topotactic Reactions” (NE1A)

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Doctor of Science

OHTSUBO, Yoshiyuki (Kyoto Univ.)

“Spin-Polarized Electronic States on Ge(111)” (18A and 19A)

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Doctor of Science

KOITAYA, Takanori (The Univ. of Tokyo)

“Adsorbed Cyclohexane on Rh(111): Two-Dimensional Superstructure, Energy Level Alignment, and Kinetic and Geometric Isotope Effects” (13A)

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Doctor of Engineering

NIWA, Hideharu (The Univ. of Tokyo)

“Electronic Structure of Carbon-Based Oxygen Reduction Catalysts Studied by Soft X-Ray Spectroscopy” (2C)

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Doctor of Engineering

SEKI, Kazuaki (Nagoya Univ.)

“Polytype Control and Twin Suppression in Solution Growth of 3C-SiC” (15C)

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Doctor of Engineering

ITO, Eri (Nagoya Inst. of Tech.)

“Structure Analysis of Poly(dimethyl siloxane)-Based Amphiphilic Hydrogel for Medical Device Applications” (6A, 9C, and 15A)

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Doctor of Engineering

JEONG, Ji-Hoon (Kyoto Univ.)

“Recovery of Heavy Metals from Wastes using Environmentally Friendly Hydrometallurgical Process” (3A)

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Doctor of Engineering

HINOKUMA, Satoshi (Kumamoto Univ.)

“Development of Support Material Stabilizing Precious Metal Nanoparticles and Their Preparation Method” (NW10A)

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Doctor of Philosophy

VELAGA, Srihari (Univ. of Madras, INDIA)

“Investigation on CdO CaO Solid Solution with Wide band Gap Tunability: Macroscopic Structure, Vibrational and Local Structural Studies at Atomic Scale” (NW10A)

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Doctor of Science

ISOHAMA, Yoichi (Hiroshima Univ.)

“Study of Local Ti Off-Centering of BaTiO<sub>3</sub> Probed by Resonant X-Ray Emission Spectroscopy” (15B1)

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Doctor of Science

MICHISHIO, KOJI (Tokyo Univ. of Sci.)

“Production of an Energy-Tunable Positronium Beam using the Photodetachment of Positronium Negative Ions” (SPF)

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Doctor of Science

HIRAO, Norie (Ibaraki Univ.)

“Development of Micro-XAFS using Synchrotron Soft X-Rays and its Application to Surface State Analyses” (27A)

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Doctor of Engineering

HARAGUCHI, Daisuke (Waseda Univ.)

“Investigation of Removal Mechanisms and Modeling for Hydroxide Co-Precipitation Treatment in Wastewater Containing Fluorine and Arsenic” (9A and 12C)

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Doctor of Agriculture

NISHIOKA, Taiki (Hokkaido Univ.)

“Structure-Guided Design for Improvement of Enzymes and Their Application” (17A, NE3A, NW12A and 5A)

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Doctor of Engineering

MATSUI, Kazuki (MURORAN Inst. of Tech.)

“Pressure-Induced Structural Change of Unfilled Skutterudite Compounds” (NE5C and 18C)

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Doctor of Science

EINAGA, Mari (Niigata Univ.)

“Study of Pressure-Induced Superconductivity and Structural Phase Transition in Bismuth Compounds” (NE1A and 18C)

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Doctor of Science

OKADA, Akitoshi (The Univ. of Tokyo)

“Crystal Structure Analysis of DnaB-DnaC Complex Involved in DNA Replication in E. Coli” (NW12A)

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Doctor of Agriculture

HORITA, Shoichiro (The Univ. of Tokyo)

“Structural Basis of the Different Substrate Preferences of Two Old Yellow Enzymes from Yeasts in Asymmetric Reduction of Enone Compounds” (NW12A)

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Doctor of Science

KIYOTANI, Tamiko (Kitasato Univ.)

“Crystal Structure and Powder X-Ray Analysis of Structural Transition Depended on Temperature and Humidity of Peptide Hydrate” (4B2)

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Doctor of Science

ISHIGURO, Nozomu (The Univ. of Tokyo)

“Advanced Characterization of Practical Heterogeneous Catalysts using Time-Resolved/Space-Resolved XAFS” (9A, 9C and 12C)

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Doctor of Science

NISHIDA, Keisuke (Tohoku Univ.)

“Density and Sound Velocity Measurements of Liquid Fe-S at High Pressure: Implications for the Earth’s and the lunar Cores” (14C2 and NE7A)

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