



Associate Professor

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Background

2022-present Associate Professor, Department of Chemistry, Shimane University

2014-2022 Assistant Professor, Department of Chemistry, Shimane University

2012-2014 Postdoctoral Researcher, Department of Chemistry, Kanagawa University (JSPS-PD)

2012 Ph.D, Department of Chemistry, Osaka University

Research

Development of artificial photosynthetic system for hydrogen evolution and chromic materials based on polynuclear metal complexes.

Key papers

1. Redox-triggered reversible modulation of intense near-infrared and visible absorption using paddlewheel-type diruthenium(III) complex, Yusuke Kataoka,* Nanako Imasaki, Natsumi Yano, Minoru Mitsumi, Makoto Handa, *Dalton Transactions*, 2021, **50**, 9547-9553.
2. Unique Vapochromism of a Paddlewheel-type Dirhodium Complex Accompanied by Dynamic Structural and Phase Transitions, Yusuke Kataoka,* Yoshihiro Kohara, Natsumi Yano, Tatsuya Kawamoto, *Dalton Transactions*, 2020, **49**, 14373-14377.
3. Experimental and Theoretical Study of Photochemical Hydrogen Evolution Catalyzed by Paddlewheel-type Dirhodium Complexes with Electron Withdrawing Carboxylate Ligands Yusuke Kataoka,* Natsumi Yano, Yoshihiro Kohara, Takeshi Tsuji, Satoshi Inoue, Tatsuya Kawamoto*, *ChemCatChem*, 2019, **11**, 24, 6218-6226.
4. Intrinsic Hydrogen Evolution Capability and Theoretically Supported Reaction Mechanism of Paddlewheel-type Dirhodium Complex, Yusuke Kataoka,* Natsumi Yano, Makoto Handa, Tatsuya Kawamoto*, *Dalton Transactions*, 2019, **48**, 7302-7312.