

SELECTED GRANTS

DIVISION OF SYNTHETIC CHEMISTRY

— Organoelement Chemistry —

TOKITOH, Norihiro
New Main Group Element Chemistry and Materials Science
Based on Heavy Aryl Anions
Grant-in-Aid for Scientific Research (S)
26 June 2019–31 March 2024

YAMADA, Hiroko
Development Organic Donor-Acceptor Materials for the Control
of Dynamic Exciton
Grant-in-Aid for Transformative Research Areas (A)
19 November 2020–31 March 2025

YAMADA, Hiroko
Development of Pi-Expanded Aromatic Compounds Based on
Precursor Approach
Grant-in-Aid for Scientific Research (A)
1 April 2020–31 March 2023

MATSUO, Kyohei
Development of n-Type Organic Semiconductors Using Main
Group Element Complexes of Tetrabenzoporphyrins
Grant-in-Aid for Scientific Research (C)
1 April 2022–31 March 2025

YAMAUCHI, Mitsuaki
Control of Helical Arrangement of Quantum Dots Using Supra-
molecular Templates and the Realization of Circular Polarized
Emission
Grant-in-Aid for Early-Career Scientists
1 April 2022–31 March 2025

YUKIMOTO, Mariko
Creation of Tautomerizable Heavy Amides Compounds
Grant-in-Aid for Early-Career Scientists
1 April 2022–31 March 2024

— Structural Organic Chemistry —

MURATA, Yasujiro
Developments of Nanoscale Laboratory by Sophisticated
Chemical Transformation of Fullerenes
Grant-in-Aid for Scientific Research (B)
1 April 2023–31 March 2026

MURATA, Yasujiro
Synthesis and Photophysical Properties of Novel Chiral Nanocar-
bons
Grant-in-Aid for Challenging Research (Exploratory)
30 June 2023–31 March 2025

HIROSE, Takashi
Investigation on Chiral Molecular Wire Properties Based on
pi-Extended Helical Molecules
Grant-in-Aid for Scientific Research (B)
1 April 2023–31 March 2026

HIROSE, Takashi
Creation of Chiral Molecular Functions Based on Precise
Arrangement of Helical pi-Conjugated Molecules
PRESTO, (Precursory Research for Embryonic Science and
Technology), JST
1 December 2020–31 March 2024

HASHIKAWA, Yoshifumi
Creation of Experimental Hydration Models Based on Spherical
pi-Systems
Grant-in-Aid for Scientific Research on Innovative Areas
(Research in a Proposed Research Area)
1 April 2022–31 March 2024

— Synthetic Organic Chemistry —

OHMIYA, Hirohisa
Flexible Conversion of Complex and Bulky Molecules Using
Light Energy
Grant-in-Aid for Transformative Research Areas (A)
1 April 2023–31 March 2028

OHMIYA, Hirohisa
Radical-Enabled Organocatalytic Chemistry
Grant-in-Aid for Scientific Research (A)
5 April 2021- 31 March 2025

NAGAO, Kazunori
Catalytic Generation of Sulfur Cation Radical Species by Dynamic
Exciton and its Application to Bond Formation Reactions
Grant-in-Aid for Transformative Research Areas (A)
10 September 2021–31 March 2023

NAGAO, Kazunori
Catalytic Generation of Carbocation without Acids and the Appli-
cation to Bond Formation Reactions
Grant-in-Aid for Early-Career Scientists
1 April 2021–31 March 2024

Abbreviations and Acronyms

AMED : Japan Agency for Medical Research and Development
JSPS : Japan Society for the Promotion of Science
JST : Japan Science and Technology Agency
MEXT : Ministry of Education, Culture, Sports, Science and Technology
NEDO : New Energy and Industrial Technology Development Organization
METI : Ministry of Economy, Trade and Industry

— **Advanced Inorganic Synthesis** —

TERANISHI, Toshiharu
Nanoscale Element Replacement Science: Structural Transformation of Nanocrystalline Phases and Development of Novel Functions

Grant-in-Aid for Scientific Research (S)
26 June 2019–31 March 2024

TERANISHI, Toshiharu
Synthesis of Unprecedented Ordered Alloy Nanoparticles and Development of Their Structure-Specific Properties

Grant-in-Aid for Challenging Research (Exploratory)
28 June 2019–31 March 2023

TERANISHI, Toshiharu
Creation of Unprecedented Nanomaterials by Precious Arrangement of Atomic Layers and Crystal Phase

CREST (Core Research for Evolutional Science and Technology), JST
1 November 2021–31 March 2027

TERANISHI, Toshiharu
Fabrication of Unprecedented Alloy Cathode Catalysts
Development of Technologies for Realizing a Hydrogen Society,

NEDO
31 July 2020–31 March 2025

TAKAHATA, Ryo
Modeling of Defects and Exploration of Novel Materials by Using Cadmium Chalcogenide Clusters with Definite Structures

Grant-in-Aid for Early-Career Scientists
1 April 2021–31 March 2024

TAKAHATA, Ryo
Development of Precise Control Methods for Nanomaterials with Multi-Functions

Uncharted Territory Challenge 2050, NEDO
1 November 2021–30 September 2026

TAKEKUMA, Haruka
Controlling Plasmonic Properties of Novel Ordered Alloy Nanoparticles

Grant-in-Aid for Early-Career Scientists
1 April 2023–31 March 2026

TAKEKUMA, Haruka
Creation of Platinum-Based Bimetallic Nanoparticles
IRCCS Young Scientists Co-Creation Proposal Research Fund
1 April 2022–31 March 2023

SARUYAMA, Masaki
Chemical Synthesis and Exploration of Concerted Optical Properties of Anisotropic Three-Dimensional Quantum Dot Superlattices

Grant-in-Aid for Scientific Research (B)
1 April 2023–31 March 2027

SARUYAMA, Masaki
Synthesis and Function of Diverse Three-Dimensional Inorganic Nanoparticle Superstructures

Grant-in-Aid for Challenging Research (Exploratory)
30 July 2020–31 March 2023

SARUYAMA, Masaki
Creation of Structure Specific Reaction Fields through Self-Assembly of Nanocrystals

FOREST (Fusion Oriented Research for Disruptive Science and Technology), JST
1 April 2022–31 March 2025

SATO, Ryota
Principle Study of Plasmonic Ordered Nanoalloys
Grant-in-Aid for Scientific Research (B)
1 April 2023–31 March 2027

MATSUMOTO, Kenshi
Inter-Element Miscibility Driven Rearrangement from Disordered to Long-Range Ordered Alloy Structures

Grant-in-Aid for Early-Career Scientists
1 April 2022–31 March 2025

DIVISION OF MATERIALS CHEMISTRY
— **Chemistry of Polymer Materials** —

TSUJII, Yoshinobu
Development of Next-Generation Monolithic Membrane Columns to Reduce Biopharmaceutical Purification Costs

Go-Tech Project, The Small and Medium Enterprise Agency, METI
1 August 2023–1 May 2025

TSUJII, Yoshinobu
Development of High-Performance Sliding Parts by Imparting Concentrated Polymer Brushes (CPB) and Their Application to Equipment

A-STEP (Adaptable and Seamless Technology Transfer Program through Target-driven R&D), JST
1 December 2020–31 March 2023

TSUJII, Yoshinobu
Hierarchical Understanding and Control of Wear Phenomena on Ultra-Low Friction Polymer Brushes

CREST (Core Research for Evolutional Science and Technology), JST
1 October 2021–31 March 2027

TSUJII, Yoshinobu
Development of Next-Generation Ship-Bottom Coating Films and Coating Processes for Energy Saving and Reduced Environmental Impact

Environment Research and Technology Development Fund, ERCA (Environmental Restoration and Conservation Agency)
1 April 2022–31 March 2024

KINOSE, Yuji
Synthesis of Asymmetric Polymer-Brush-Modified Nanorods and Formation of Their Ordered Structures

Grant-in-Aid for Early-Career Scientists
1 April 2023–31 March 2026

ISHIDA, Koichiro
Construction of Polysaccharide-Nanofiber Monolayers by Interfacial Architectonics and Creation of Novel Scaffold Functions

Grant-in-Aid for JSPS Research Fellow
8 April 2022–31 March 2024

— **Polymer Controlled Synthesis** —

YAMAGO, Shigeru
Development of New Fabrication Methods of Polymer Materials Based on the Structurally Controlled Hyperbranched Polymers

Grant-in-Aid for Scientific Research (S)
5 July 2021–31 March 2026

YAMAGO, Shigeru
International Research Center for Basic Organic Device Chemistry
by True Integration of Synthesis and Device
Core-to-Core Program, JSPS
1 April 2022–31 March 2026

TOSAKA, Masatoshi
Aggregation Structure of Hyper-branched Block Copolymers in
Solution
Grant-in-Aid for Scientific Research (C)
1 April 2021–31 March 2024

KAYAHARA, Eiichi
Creation of New Cyclic π -Conjugated Molecules for Realization
of High Density Conjugation
Grant-in-Aid for Transformative Research Areas (A)
10 September 2021–31 March 2023

KAYAHARA, Eiichi
Pioneering Chemistry of Totally Conjugated Cyclic Polymers
FOREST (Fusion Oriented Research for Disruptive Science and
Technology), JST
1 April 2022–31 March 2025

— Inorganic Photonics Materials —

MIZUOCHI, Norikazu
Research of Quantum Sensing by Advanced Control of the
Quantum State of NV Center in Diamond
Grant-in-Aid for Scientific Research (A)
5 April 2021–31 March 2024

MIZUOCHI, Norikazu
Development of Innovative Sensor Systems by Highly Sophisti-
cated Control of Solid Quantum Sensors
Q-LEAP (Quantum Leap Flagship Program), MEXT
1 November 2018–31 March 2028

MIZUOCHI, Norikazu
Innovations Medicine and Life Sciences through the Application
of Quantum Technology
Q-LEAP (Quantum Leap Flagship Program), MEXT
1 April 2020–31 March 2030

MIZUOCHI, Norikazu
Highly Sensitive Quantum Sensing Microscope Development
Research for Elucidating Biological Phenomena
CREST (Core Research for Evolutional Science and Technology),
JST
1 October 2023–31 March 2029

MIZUOCHI, Norikazu
Development of an Ultra-Sensitive Quantum Magnetic Sensing
System That Enables High Sensitivity NMR without the Need for
Cooling
A-STEP (Adaptable and Seamless Technology Transfer Program
through Target-driven R&D), JST
1 October 2023–31 March 2027

MORIOKA, Naoya
Study of Spin-Optical-Charge Dynamics of Defects in Silicon
Carbide for Highly Efficient Electrical Spin Readout
Grant-in-Aid for Scientific Research (B)
1 April 2022–31 March 2025

MORIOKA, Naoya
Exploring Control of Localized Spins Based on Electrical Spin
Injection in Silicon Carbide
Grant-in-Aid for Research Activity Start-up
30 August 2021–31 March 2023

HERBSCHLEB, Ernst David
Enhanced Quantum Sensing with a Nitrogen-Vacancy Centre as
Gateway to the Electron Spin of Phosphorus
Grant-in-Aid for Early-Career Scientists
1 April 2022–31 March 2024

NISHIKAWA, Tetsuri
Investigation of Carrier Transport Mechanism for Photocurrent-
Detected Magnetic Resonance on Color-Center Spins in Silicon
Carbide
Grant-in-Aid for Research Activity Start-up
31 August 2023–31 March 2025

— Nanospintronics —

ONO, Teruo
Ferrimagnetic Spintronics and Device Application
Grant-in-Aid for Scientific Research (S)
31 August 2020–31 March 2025

ONO, Teruo
Unraveling the Mechanism of Superconductive Diode Effect and
Creating Non-Volatile Superconductive Diode
Grant-in-Aid for Challenging Research (Pioneering)
9 July 2021–31 March 2024

ONO, Teruo
Development of 3D Magnetic Memory
CREST (Core Research for Evolutionary Science and Technology),
JST
1 October 2021–31 March 2025

SHIOTA, Yoichi
Polarization Control of Spin Wave Spin Current and Its Device
Application
Grant-in-Aid for Scientific Research (B)
1 April 2022–31 March 2025

HISATOMI, Ryusuke
Creation of Highly Efficient Optical Photon-Microwave Con-
version Using Disk-Shaped Ferromagnetic Thin Films
Grant-in-Aid for Early-Career Scientists
1 April 2022–31 March 2024

HISATOMI, Ryusuke
Opto-Spin-Mechanics Using Surface Acoustic Waves
PRESTO (Precursory Research for Embryonic Science and
Technology), JST
1 November 2020–31 March 2024

KARUBE, Shutaro
Development of Novel Spin Current Control Technology Based
on Exchange Interaction
Grant-in-Aid for Early-Career Scientists
1 April 2022–31 March 2025

KARUBE, Shutaro
Creation of Innovative Information Carrier Devices by Multi-
functional Spin Oxides
PRESTO (Precursory Research for Embryonic Science and
Technology), JST
1 October 2022–31 March 2025

NARITA, Hideki
Control of Superconductivity by Noncollinear Magnetism
Grant-in-Aid for Early-Career Scientists
1 April 2021–31 March 2024

NARITA, Hideki
Creation of Innovative Quantum Control Technology Using Hybrid Superconductors
PRESTO (Precursory Research for Embryonic Science and Technology), JST
1 October 2023–31 March 2025

DIVISION OF BIOCHEMISTRY — **Biofunctional Design-Chemistry** —

FUTAKI, Shiroh
Intracellular Fate of Extracellular Fine Particles and the Control System
CREST (Core Research for Evolutionary Science and Technology), JST
1 October 2018–1 March 2024

IMANISHI, Miki
Biological Function of Non-Canonical Nucleic Acids
Grant-in-Aid for Transformative Research Areas (B)
23 August 2021–31 March 2024

KAWAGUCHI, Yoshimasa
Intracellular Delivery and Phase Separation Control of Antibodies Based on Coa
Strategic Basic Research Programs ACT-X, JST
1 April 2022–31 March 2025

HIROSE, Hisaaki
Search for Peptides that Promote Internalization and Endoplasmic Release of Extracellular Vesicles
Grant-in-Aid for Scientific Research (C)
1 April 2022–31 March 2025

— **Chemistry of Molecular Biocatalysts** —

MASHIGUCHI, Kiyoshi
Investigation of the Cytochrome P450 Enzyme Family Involved in the Biosynthesis of Non-Canonical Strigolactones
Grant-in-Aid for Scientific Research (B)
1 April 2019–31 March 2023

MASHIGUCHI, Kiyoshi
Investigation of the Physiological Significance of the Structural Diversity of Strigolactones
Grant-in-Aid for Scientific Research (B)
1 April 2023–31 March 2028

— **Molecular Biology** —

AOYAMA, Takashi
Roles of Phosphoinositid Signaling in Plant Cell Morphogenesis
Grant-in-Aid for Scientific Research (B)
1 April 2021–31 March 2024

TSUGE, Tomohiko
Molecular Mechanism Governing Plant Plasticity through Pre-mRNA 3'UTR Regulation
Grant-in-Aid for Scientific Research (C)
1 April 2022–31 March 2025

KATO, Mariko
Study on the Involvement of Phosphoinositides in Pollen Germination
Grant-in-Aid for Scientific Research (C)
1 April 2021–31 March 2025

— **Chemical Biology** —

UESUGI, Motonari
Development of Artificial Chaperones
Grant-in-Aid for Transformative Research Areas (A)
16 June 2022–31 March 2024

UESUGI, Motonari
Chemical Biology of Cellular Self-Assemblies
Grant-in-Aid for Scientific Research (A)
1 April 2022–31 March 2025

UESUGI, Motonari
Designer Melanin for Analyzing and Controlling Cells
Grant-in-Aid for Challenging Research (Exploratory)
9 July 2021–31 March 2023

UESUGI, Motonari
Intracellular Analysis of LLPS Status
Grant-in-Aid for Challenging Research (Exploratory)
30 June 2023–31 March 2025

UESUGI, Motonari
Asian Chemical Biology Initiative
Core-to-Core Program, JSPS
1 April 2022–31 March 2025

UESUGI, Motonari
PD-1 Blockade Cancer Immunotherapy Combined with Small Molecule Activators of T Cell Fatty Acid Oxidation
P-PROMOTE (Project for Promotion of Cancer Research and Therapeutic Evolution), AMED
20 May 2022–31 March 2024

UESUGI, Motonari
Grand Design Platform and Database for the Development of Innovative Adjuvant and Vaccine Carrier
Program on R&D of New Generation Vaccine Including New Modality Application, AMED
1 July 2022–31 March 2027

SATO, Shinichi
Understanding Cellular Function with Short RNAs and Small Molecules
Grant-in-Aid for Scientific Research (B)
1 April 2020–31 March 2023

SATO, Shinichi
New Technologies for RNA Structural Regulation that Enables the Control and Analysis of Cellular Function
Grant-in-Aid for Scientific Research (B)
1 April 2023–31 March 2026

SATO, Shinich
A New Oligonucleotide Therapeutics that Induces a Cooperative RNA G-Quadruplex Formation for Gene Silencing
Grant-in-Aid for Challenging Research (Pioneering)
9 July 2021–31 March 2025

PERRON, Amelie
Live and Let Die: Orchestrating Aggregation of Eye Pigments
with Organic Molecules
Grant-in-Aid for Scientific Research (C)
1 April 2023–31 March 2026

ABO, Masahiro
Development of Self-Assembling Chemicals which Have
Chaperone Activity in Live Cells
Grant-in-Aid for Scientific Research (C)
1 April 2021–31 March 2024

TAKEMOTO, Yasushi
Exploration of Radical-Sensitive Signal Peptide
Grant-in-Aid for Scientific Research (C)
1 April 2022–31 March 2025

TAKEMOTO, Yasushi
Understanding and Application of Radical-Sensitive Peptide
Takeda Science Foundation
1 September 2021–31 May 2024

TAKEMOTO, Misao
Mechanistic Analysis for the Immune Activation of T Cells by
Covalent Natural Compounds
Grant-in-Aid for Scientific Research (C)
1 April 2022–31 March 2025

DIVISION OF ENVIRONMENTAL CHEMISTRY — Molecular Materials Chemistry —

KAJI, Hironori
Material Design Based on Dynamic Excitation and their Applica-
tions
Grant-in-Aid for Transformative Research Areas (A)
19 November 2020–31 March 2025

SHIZU, Katsuyuki
A Unified Theory of Electronic Transition Rate Constants for
High Throughput Materials Screening
Grant-in-Aid for Scientific Research (C)
1 April 2022–31 March 2025

SUZUKI, Katsuaki
Spatiotemporal Analysis of Dynamic Excitation by Solid-State NMR
Grant-in-Aid for Transformative Research Areas (A)
19 November 2020–31 March 2025

TANAKA, Hiroyuki
Development of Multiple-Resonance Thermally Activated
Delayed Fluorescent Molecules with Excellent Circularly Polar-
ized Luminescence Property
Grant-in-Aid for Challenging Research (Exploratory)
1 July 2023–31 March 2025

— Hydrospheric Environment Analytical Chemistry —

SOHRIN, Yoshiki
Ocean Section Diagnosis on the Basis of Stoichiometry and
Stable Isotope Ratios of Trace Metals
Grant-in-Aid for Scientific Research (A)
1 April 2019–31 March 2023

TAKANO, Shotaro
Isotopic Analysis for Estimating the Sources of Particulate Trace
Metals in the Ocean
Grant-in-Aid for Early-Career Scientists
1 April 2020–31 March 2023

ZHENG, Linjie
Speciation and Sectional Distribution of Al, Mn, Fe, Co, Ni, Cu,
Zn, Cd, and Pb in the South Pacific and Indian Oceans
Grant-in-Aid for Early-Career Scientists
1 April 2021–31 March 2024

— Chemistry for Functionalized Surfaces —

HASEGAWA, Takeshi
Evolution of Near-Infrared Spectroscopy for Materials Structure
Analysis: Development of NIR-MAIRS
Grant-in-Aid for Scientific Research (B)
1 April 2022–31 March 2026

HASEGAWA, Takeshi
Innovation in Control of Physical Properties of Polymer Thin-
Film Materials by Micro-Morphology Analysis of Amorphous
Grant-in-Aid for Challenging Research (Exploratory)
9 July 2021–31 March 2024

MORI, Taizo
Dynamic Response of Molecular Machines at the Air-Water
Interface Using Second Harmonic Generation
Grant-in-Aid for Scientific Research (C)
1 April 2023–31 March 2028

SHIOYA, Nobutaka
Visualization of Monolayer Structures Specifically Formed by
Functional Organic Materials at the Substrate Interface
Grant-in-Aid for Early-Career Scientists
1 April 2022–31 March 2025

— Molecular Microbial Science —

KURIHARA, Tatsuo
Molecular Basis for Generation of the Diversity of Bacterial
Membrane Phospholipid Acyl Chains and Mechanisms Underlying
Their Physiological Functions
Grant-in-Aid for Scientific Research (B)
1 April 2021–31 March 2024

KURIHARA, Tatsuo
Dissection of the Molecular Basis of Membrane Vesicle Biogenesis
and Construction of an Extracellular Platform for Substance
Production by Using a Hyper-Vesiculating Bacterium
Grant-in-Aid for Challenging Research (Pioneering)
30 July 2020–31 March 2023

KURIHARA, Tatsuo
Enzymatic Manipulation of Biomembrane Lipids to Enhance
Cellular Function
Grant-in-Aid for Challenging Research (Exploratory)
30 June 2023–31 March 2025

KAWAMOTO, Jun
Elucidation of Molecular Mechanism of Extracellular Membrane
Vesicle Production by Bacteria and Its Application
Grant-in-Aid for Scientific Research (B)
1 April 2023–31 March 2026

KAWAMOTO, Jun
A Novel Platform for Functional Nanoparticle -the Synthesis
Mechanism of Unique Outer-Membrane Vesicles of Bacteria and
Its Application-
Grant-in-Aid for Scientific Research (C)
1 April 2020–31 March 2023

KAWAMOTO, Jun
Exploration and Application of Outer Membrane Vesicle-Producing Bacteria as a Foundation for New Nano-Material Development Fund for the Promotion of Joint International Research (International Collaborative Research)
8 September 2023–31 March 2027

OGAWA, Takuya
Study on the Metabolic Conversion of Omega-3 Polyunsaturated Fatty Acids through a Reconsideration of Beta-Oxidation Pathway
Grant-in-Aid for Scientific Research (C)
1 April 2021–31 March 2024

DIVISION OF MULTIDISCIPLINARY CHEMISTRY
— **Polymer Materials Science** —

TAKENAKA, Mikihito
4D Analysis of Grazing Incidence Scattering to Reveal Adhesion Processes at the Adhesive Interface
Mirai Program, JST
1 November 2018–31 March 2028

OGAWA, Hiroki
Non-Equilibrium MI Scheme Shortens Future Material Development Feasibility Study Program, NEDO
10 May 2023–31 March 2025

OGAWA, Hiroki
Development of a Recycled Plastics Databank to Improve the Circularity
SIP, ERCA (Environmental Restoration and Conservation Agency)
1 October 2023–31 March 2028

— **Molecular Rheology** —

MATSUMIYA, Yumi
Molecular Dynamics of Associative Polymers and Its Experimental Validation: Effect of Dissociation Equilibrium on Entanglement Relaxation Modes
Grant-in-Aid for Scientific Research (B)
1 April 2021–31 March 2024

SATO, Takeshi
Development of Coarse-Grained Molecular Model for Predicting Dynamics of Entangled Associating Polymers
Grant-in-Aid for Early-Career Scientists
1 April 2021–31 March 2024

SATO, Takeshi
A New Fluid Science for Non-Newtonian/Non-Uniform/Non-Equilibrium Flows
PRESTO (Preliminary Research for Embryonic Science and Technology), JST
1 October 2022–31 March 2026

— **Molecular Aggregates** —

WAKAMIYA, Atsushi
Fundamental Chemical Research for Efficient Lead Free Perovskite Solar Cells
Grant-in-Aid for Scientific Research (A)
5 April 2021–31 March 2024

WAKAMIYA, Atsushi
Pb-Free Perovskite Solar Cells Consisting of Sn
Mirai Full-scale R&D Project, JST
1 April 2022–31 March 2027

WAKAMIYA, Atsushi
Development of Practical Technology for Perovskite Solar Module with High Installation Flexibility
Green Innovation Fund Projects, NEDO
27 December 2021–31 March 2026

WAKAMIYA, Atsushi
Development of Film-Type Perovskite Solar Module with High Degree of Freedom Design
Development of Technologies to Promote Photovoltaic Power Generation as a Primary Power Source, NEDO
13 July 2020–31 March 2025

MURDEY, Richard
Ageing and Passivation Effects in Perovskite Solar Cells
Grant-in-Aid for Scientific Research (C)
1 April 2019–31 March 2023

NAKAMURA, Tomoya
Two-Dimensionally Expanded pi-Systems for High-Performance Tin Perovskite Solar Cells
Grant-in-Aid for Early-Career Scientists
1 April 2021–31 March 2023

TRUONG, Minh Anh
Development of Multipodal Hole-Transporting Monolayer Materials for High Performance Perovskite Solar Cells
Grant-in-Aid for Early-Career Scientists
1 April 2022–31 March 2024

ADVANCED RESEARCH CENTER FOR BEAM SCIENCE
— **Particle Beam Science** —

WAKASUGI, Masanori
Precise Measurement of Charge Density Distribution of Sn Unstable Isotopes by Advanced Innovative SCIT Electron Scattering
Grant-in-Aid for Scientific Research (S)
12 April 2023–31 March 2028

WAKASUGI, Masanori
Development of Stationary Target for Unstable Nuclei for Application to Research of Nuclear Reaction
Grant-in-Aid for Challenging Research (Pioneering)
30 July 2020–31 March 2023

WAKASUGI, Masanori
Development of RFQ-Type Isobar Filters Leading Innovative Research on Unstable Nuclear Reactions
Grant-in-Aid for Challenging Research (Pioneering)
30 June 2023–31 March 2026

TSUKADA, Kyo
Isotope Dependences of Nuclear Charge Distributions and Neutron Radius by Electron Scattering
Grant-in-Aid for Scientific Research (A)
1 April 2020–31 March 2025

OGAWARA, Ryo
Development of Internal Active Target for Beam Recycle Techniques
Grant-in-Aid for Early-Career Scientists
1 April 2022–31 March 2024

OGAWARA, Ryo
Development of Beam Recycle Techniques for Advanced Research on Nuclear Reactions with Rare RI
FOREST (Fusion Oriented Research for Disruptive Science and Technology), JST
1 April 2023–31 March 2030

TONGU, Hiromu
Mapping System Using High-Speed Scanning in Cryogenic Environment for Superconductor State Inspection
Grant-in-Aid for Scientific Research (C)
1 April 2022–31 March 2025

— **Laser Matter Interaction Science** —

TOKITA, Shigeki
Development of Mid-Infrared High-Power Ultrashort Pulse Lasers and Its Application to Soft-Matter Micro-Processing
Grant-in-Aid for Scientific Research (B)
1 April 2021–31 March 2024

TOKITA, Shigeki
The Power Laser DX Platform
Project for Promoting Public Utilization of Advanced Research, MEXT
1 April 2021–31 March 2026

TOKITA, Shigeki
Formation of Ultrashort Femtosecond Pulses in the Mid-Infrared Range Based on Iron-Doped Chalcogenides for Problems of Nonlinear Optics of Media with a Reduced Dimension
Bilateral Joint Research Projects, JSPS
1 April 2021–31 March 2023

TOKITA, Shigeki
Development of an Industrial Femtosecond Laser
Intensive Support Program for Young Promising Researchers, NEDO
15 January 2021–31 March 2023

TOKITA, Shigeki
Pioneering of a High-Intensity Coherent X-Ray Generation Method Using an Ultrahigh-Intensity Mid-Infrared Laser
Matsuo Academic Research Grant, MATSUO Foundation
1 December 2023–31 March 2025

TOKITA, Shigeki
Development of Compact and Highly Efficient Mid-Infrared Femtosecond Lasers
Research Grant, The Asahi Glass Foundation
1 April 2023–31 March 2025

TOKITA, Shigeki
Development of High-Intensity Mid-Infrared Lasers for Realizing Compact Coherent X-Ray Sources
Research Grant, Research Foundation for Opto-Science and Technology
1 January 2023–31 December 2024

TOKITA, Shigeki
Micromachining of Transparent Resin Using Mid-Infrared Pulsed Lasers
AMADA Research and Development Grant, The AMADA Foundation
26 September 2020–31 March 2024

TOKITA, Shigeki
Development of High-Intensity Coherent X-Ray Generation Method Supporting Program for Unique Exploratory Investigation Team Studies (SPIRIT2), Kyoto University
1 April 2023–31 March 2025

OKAZAKI, Daiki
Exploring Multispectral Peak Light Source Technology Using High-Intensity Lasers
Grant-in-Aid for Research Activity Start-up
31 August 2023–31 March 2025

OKAZAKI, Daiki
Development of High Power 3 Micron Fiber Lasers Pumped by Laser Diodes
Resarch Support 2023, Yamada Science Foundation
4 August 2023–31 March 2026

OKAZAKI, Daiki
Research on a Novel Burst Pulse Generation Technique for Efficient Femtosecond Laser Processing
Encouragement Research Grant, The Amada Foundation
1 October 2023–31 March 2026

OKAZAKI, Daiki
Development of Wavelength-Tunable Mid-IR Burst Pulse Lasers
Basic Science Research Projects, The Sumitomo Foundation
7 December 2023–30 November 2026

KANAI, Tsuneto
Development of a Mid-IR Laser Driven X-Ray Spectroscopic System for Zeptosecond Atomic, Molecular, Particle Physics
Grant-in-Aid for Scientific Research (B)
1 April 2023–31 March 2026

KANAI, Tsuneto
Optical Poling-Based Microfabrication of Plastic Materials Using Carrier Wave Envelope Phase Stabilized, Wavelength Tunable Mid-Infrared Femtosecond Lasers
AMADA Research and Development Grant, The AMADA Foundation
1 October 2022–31 March 2026

KANAI, Tsuneto
Development of a Mid-IR Laser-Driven X-Ray Source for Zeptosecond Particle Physics
Matsuo Academic Research Grant, MATSUO Foundation
1 December 2022–31 March 2024

KANAI, Tsuneto
Development of High Power Mid-IR Lasers for Zeptosecond Particle Physics
SPIRITS 2022
1 April 2022–31 March 2023

HASHIDA, Masaki
Operando Measurements Using Advanced Beams to Study the Mechanism of Fine Structure Formation
Basic Foundational Research: “Next-Generation Laser” Projects, Q-LEAP (Quantum Leap Flagship Program), MEXT
1 April 2020–31 March 2029

— **Electron Microscopy and Crystal Chemistry** —

HARUTA, Mitsutaka
Visualization of Electron Orbital Using TEM
Grant-in-Aid for Scientific Research (B)
1 April 2022–31 March 2025

INTERNATIONAL RESEARCH CENTER FOR ELEMENTS SCIENCE

— **Synthetic Organotransformation** —

NAKAMURA, Masaharu
Iron-Catalyzed Cross Coupling: Quantum Control on Multi-Spin Pathways
Grant-in-Aid for Scientific Research (B)
1 April 2023–31 March 2026

ISOZAKI, Katsuhiro
Triple-Layer Core-Shell Metal Nanocluster Synthesis Driven by Interligand Hydrogen Bonds
Grant-in-Aid for Challenging Research (Exploratory)
30 June 2023–31 March 2025

DOBA, Takahiro
Iron-Catalyzed Carbon–Heteroatom Bond Formation Reactions through pi-Plane Activation
Research Activity Start-up
31 August 2023–31 March 2025

DOBA, Takahiro
Development of Iron-Catalyzed Carbon–Heteroatom Bond Formation Reactions
Research grant from the Institute of Synthetic Organic Chemistry
1 October 2023–30 September 2024

NAKAGAWA, Yuka
Pioneering Catalytic Reactions for Direct Synthesis of Functional Polymers from Wood
Grant-in-Aid for Early-Career Scientists
1 April 2023–31 March 2026

NAKAGAWA, Yuka
Development of Molecular Complex Catalysts for Converting Wood into Functional Materials
PRESTO, (Precursory Research for Embryonic Science and Technology), JST
30 September 2023–30 March 2027

MINEO, Keito
Integrated Scenario Analysis of Environmental Impacts and Economic Potential of Forest Management and Wood Uses
Daigas Research Grants for Young Researchers, Kyoto University Open Innovation Institute
8 February 2023–7 February 2024

IMAI, Makiko
Analysis of Lignin Decomposition Mechanism That Produce Nanosheet Cellulose
Grant-in-Aid for Early-Career Scientists
1 April 2023–31 March 2026

— **Advanced Solid State Chemistry** —

SHIMAKAWA, Yuichi
Construction of Physical Property Correlation Based on Entropy and Creation of New Thermal Control Materials
Grant-in-Aid for Scientific Research (S)
12 April 2023–31 March 2028

SHIMAKAWA, Yuichi
Exploration of Functional Transition-Metal Oxides and Their Structure-Property Relationships
AdCORP (Advanced International Collaborative Research Program), JST
1 April 2023–31 March 2027

— **Organometallic Chemistry** —

OHKI, Yasuhiro
Synthesis and Reactions of Bio-Inspired Molecular Metal-Hydride Compounds
Grant-in-Aid for Scientific Research on Innovative Areas (Research in a Proposed Research Area)
1 April 2021–31 March 2023

OHKI, Yasuhiro
Synthesis of Iron-Containing Cluster Complexes and Reducing Reactions with Multiple Metals
Grant-in-Aid for Scientific Research (B)
1 April 2023–31 March 2026

OHKI, Yasuhiro
Synthesis of Metal-Nanoclusters of Iron Group Metals
Grant-in-Aid for Challenging Research (Exploratory)
30 July 2020–31 March 2023

OHKI, Yasuhiro
Fuel Regeneration from CO₂ by Grid-Aligned Biomimetic Catalysts on Functionalized Silica
Grant-in-Aid for JSPS Fellows
8 March 2023–31 March 2025

OHKI, Yasuhiro
Electron Transfer Networks of Transition Metal Cluster Complexes for Catalytic Applications
CREST (Core Research for Evolutional Science and Technology), JST
1 October 2021–31 March 2027

TANIFUJI, Kazuki
CO₂/CO Reduction into Short-Chain Hydrocarbons Promoted by Cuboidal Metal-Sulfur Clusters
Grant-in-Aid for Scientific Research (C)
1 April 2022–31 March 2025

TANIFUJI, Kazuki
Structure-Function Relationships of a Fe/Mo-S-C Cluster Unique to N₂-Reducing Enzymes
Grant-in-Aid for Research Activity Start-up
30 August 2021–31 March 2023

HIGAKI, Tatsuya
Creation of Novel Cluster Nanomagnets with Strong Exchange Interactions
Grant-in-Aid for Early-Career Scientists
1 April 2023–31 March 2025

HIGAKI, Tatsuya
Atomically Precise Synthesis of Iron-Group Metal Nanoclusters to Probe the Origin of Superparamagnetism
Grant-in-Aid for Research Activity Start-up
31 August 2022–31 March 2024

IZU, Hitoshi
Catalytic System for Carbon Dioxide Reduction Utilizing Sequence Control of Cubane-Type Complexes
Grant-in-Aid for Early-Career Scientists
1 April 2023–31 March 2025

— Nanophotonics —

KANEMITSU, Yoshihiko
Fusing Nanomaterials and Strong Electric Field Nonlinear Optics for New Advances in Photonics
Grant-in-Aid for Specially Promoted Research
23 April 2019–31 March 2024

KANEMITSU, Yoshihiko
Optical Responses of Ordered Alloy Nanomaterials and Nanomaterial-Based Superstructures
CREST (Core Research for Evolutional Science and Technology), JST
1 October 2021–31 March 2027

HIRORI, Hideki
Phononic Strong Coupling by THz Metamaterial and Its Applications to Material Control
Grant-in-Aid for Scientific Research (B)
1 April 2021–31 March 2025

YUMOTO, Go
Development of Polarization-Resolved Pump-Probe Microscopy and Study of Rashba Spin-Optoelectronics in Atomically Thin Materials
Grant-in-Aid for Early-Career Scientists
1 April 2023–31 March 2025

TAHARA, Hirokazu
Spatial and Temporal Super-Resolution Method for Revealing Quantum Cooperative Processes in Semiconductor Nanostructures
Grant-in-Aid for Scientific Research (B)
1 April 2022–31 March 2026

TAHARA, Hirokazu
Development of Nanostructured Semiconductor-Photon Coupled Systems for Giant Optoelectronic Amplification
Grant-in-Aid for Challenging Research (Exploratory)
30 June 2023–31 March 2025

TAHARA, Hirokazu
Development of Efficient Optoelectronic Devices with Quantum Cooperativity in Nanomaterial Superstructures
PRESTO (Precursory Research for Embryonic Science and Technology), JST
1 October 2023–31 March 2027

BIOINFORMATICS CENTER
— Chemical Life Science —

OGATA, Hiroyuki
Virus-Driven Clockwork in Lower Tropic Level Marine Ecosystem and Its Impact on the Ocean
Grant-in-Aid for Scientific Research (S)
5 July 2021–31 March 2026

OGATA, Hiroyuki
Aggregate-Biosphere: Unveiling Hidden Regulatory Processes in the Oceanic Carbon Cycle
Grant-in-Aid for Scientific Research (S)
26 June 2019–31 March 2024

OGATA, Hiroyuki
Ecology of Giant viruses Inhabiting the Aphotic Zone of the Sea
Grant-in-Aid for Scientific Research (A)
1 April 2022–31 March 2026

OGATA, Hiroyuki
Molecular Ecological Mechanism of Bloom Disintegration by Viral Infection
Grant-in-Aid for Scientific Research (A)
1 April 2022–31 March 2027

OGATA, Hiroyuki
Study of Giant Virus Ecology and Virus-Host Interaction in Aquatic Environments
Grant-in-Aid for Scientific Research (B)
1 April 2020–31 March 2023

OGATA, Hiroyuki
Virus-Host Database
Grant-in-Aid for Publication of Scientific Research Results (Database)
1 April 2020–31 March 2025

ENDO, Hisashi
Viral Infection and Its Control Mechanisms of Marine Plankton Communities as Revealed by Dissolved Ribosomal RNA
Grant-in-Aid for Scientific Research (B)
1 April 2022–31 March 2026

ENDO, Hisashi
Plankton Communities Contributing to Marine Biological Pump on the Global Scale
Grant-in-Aid for Scientific Research (B)
1 April 2022–31 March 2025

ENDO, Hisashi
Experimental Investigation of the Effects of Phytoplankton Diversity on Ecosystem Functioning in the Ocean
Grant-in-Aid for Early-Career Scientists
1 April 2019–31 March 2023

ENDO, Hisashi
A Novel Dynamics Analysis of Marine Plankton Based on Genetic Information in the Dissolved Fraction of Seawater
CREST (Core Research for Evolutional Science and Technology), JST
1 October 2023–31 March 2029

ENDO, Hisashi
A Novel Dynamics Analysis of Marine Plankton Based on Genetic Information in the Dissolved Fraction of Seawater
PRESTO (Precursory Research for Embryonic Science and Technology), JST
1 October 2023–31 March 2027

OKAZAKI, Yusuke
Unveiling the Organic Matter Dynamics Functioning in Lake Hypolimnion
Grant-in-Aid for Scientific Research (A)
1 April 2022–31 March 2026

OKAZAKI, Yusuke
Elucidating the Molecular Heterogeneity of Dissolved Organic Matter That Governs Its Long-Term Persistence
Grant-in-Aid for Scientific Research (B)
1 April 2022–31 March 2025

OKAZAKI, Yusuke
Microbial Nitrogen Pump: Bacterial Semi-Labile Dissolved Organic Nitrogen as a Nutrient Transport Pathway in Aquatic Systems
Grant-in-Aid for Scientific Research (B)
1 April 2021–31 March 2024

OKAZAKI, Yusuke
Who is the Host of Uncultivated Viruses? Linking Viral and Bacterial Genomes in the Environment
Grant-in-Aid for Early-Career Scientists
1 April 2022–31 March 2025

OKAZAKI, Yusuke
Developing a High-Resolution Eco-Genomics Platform through Inter-Lake Comparisons
FOREST (Fusion Oriented Research for Disruptive Science and Technology), JST
1 April 2023–31 March 2030

OKAZAKI, Yusuke
Challenging Dry Questions in Environmental Microbiology and Virology from Wet
Kyoto University 125th Anniversary Fund Kusunoki 125
13 September 2021–31 March 2025

HIKIDA, Hiroyuki
Diversity of Giant Virus Infection Strategy
Grant-in-Aid for Early-Career Scientists
1 April 2022–31 March 2025

HIKIDA, Hiroyuki
Development of Novel Gene Engineering Technology Utilizing Giant Viruses
Strategic Basic Research Programs ACT-X, JST
1 October 2022–31 March 2025

— Mathematical Bioinformatics —

AKUTSU, Tatsuya
Advanced Studies and Developments on Discrete Preimage Problems
Grant-in-Aid for Scientific Research (A)
1 April 2022–31 March 2027

AKUTSU, Tatsuya
Analysis and Control of Steady States of Multiple Biological Networks
Grant-in-Aid for Challenging Research (Exploratory)
30 June 2022–31 March 2025

TAMURA, Takeyuki
Algorithms for Metabolic Network Design for Producing Useful Substances
Grant-in-Aid for Scientific Research (B)
1 April 2020–31 March 2025

MORI, Tomoya
Establishment of the Method for Biological Tissue Domain Estimation and Analysis Based on Spatial Omics Data
Grant-in-Aid for Scientific Research (C)
1 April 2023–31 March 2026

— Bio-knowledge Engineering —

MAMITSUKA, Hiroshi
Development of Next Generation Plastic Materials Based on Structurally Controlled Hyperbranched Polymers
Grant-in-Aid for Scientific Research (S)
5 July 2021–31 March 2026

MAMITSUKA, Hiroshi
Latent Data Structure Estimation through Integrating Diverse Data
Grant-in-Aid for Scientific Research (B)
1 April 2022–31 March 2025

MAMITSUKA, Hiroshi
Developing Machine Learning Based Bioinformatics to Decipher Hidden Biology of Depression Symptoms
Grant-in-Aid for JSPS Fellows
13 November 2020–31 March 2023

NGUYEN, Hao Canh
Machine Learning on Large Graphs
Grant-in-Aid for Scientific Research (C)
1 April 2018–31 March 2023

NGUYEN, Hao Canh
Machine Learning for Structure-Rich Data-Scarce Domains
Grant-in-Aid for Scientific Research (C)
1 April 2022–31 March 2025