

## Main grant winners (Titles omitted)

### Multi-year research grants (3 years)

Name	Affiliation	Position	Research theme
Shin-ichiro Seki	University of Tokyo	Associate professor	Development and control of new materials generating magnetic skyrmions in the absence of a magnetic field
Takeshi Kondo	University of Tokyo	Associate professor	Development of physical properties and photoregulation of exotic magnetic materials through direct band observation
Takeshi Yanagida	University of Tokyo	Professor	Creation of metallic oxide interfaces enabling robust recognition of molecular shapes by utilizing interactions between hydrophobic molecules and hydrophilic ion solid surfaces
Kaori Sugihara	University of Tokyo	Lecturer	Understanding the principle of the antimicrobial peptide “double cooperative effect” using a self-developed electrophysiological method
Naoji Matsuhisa	University of Tokyo	Associate professor	Displays for optical and mechanical unification with skin for use in health care and electron cosmetics
Yuichiro Ando	Kyoto University	Associate professor	Understanding the characteristics of third-generation two-dimensional materials and their application in devices
Kiyohiko Kawai	Tokyo Institute of Technology	Professor	Using DNA1 molecular electronics to read DNA sequences
Sadashige Matsuo	RIKEN	Research scientist	Developing new functionality through spin control of coherently coupled Josephson junctions

### One-year research grants

Name	Affiliation	Position	Research theme
Tomoya Higo	University of Tokyo	Designated associate professor	Responsiveness control through distortion of topological antiferromagnetic materials and developing applications in data recording technology
Toru Kondo	Tokyo Institute of Technology	Tenure-track lecturer	Understanding the effects of delocalized exciton states on light energy transport
Makoto Arimoto	Kanazawa University	Associate professor	Innovations in the treatment of cancer through the realization of ultrasensitive spectral X-ray CT imaging
Kenji Ueda	Waseda University	Professor	Manufacturing high-speed, high-precision image recognition devices utilizing graphene-diamond junctions
Takahiro Nishimura	Osaka University	Assistant professor	Understanding and establishing control methods for photodynamic treatments utilizing the antitumor effects of selective illumination of tumor cells and tumor vessels
Jun Kondoh	Shizuoka University	Professor	Application of surface acoustic wave devices for nondestructive inspection of large structures
Takashi Kikkawa	University of Tokyo	Assistant professor	Exploring the effectiveness of ultralow-temperature spintronic cooling
Takuya Maeda	University of Tokyo, Graduate School of Engineering	Assistant professor	Research on new nitride semiconductor heterojunction transistors for next-generation high-frequency communication applications
Nana Sato	Japan Atomic Energy Agency	Scientist	Building a spin Hall nano-oscillator employing angular momentum compensation properties
Qian Chen	Tohoku University	Specially appointed assistant professor	Building a theoretical basis for development of high-density quantum wire devices using grain boundary core structure control
Hideki Narita	Kyoto University	Program-Specific Assistant Professor	Development of Josephson junction elements with a noncollinear magnetic configuration
Kou Li	Chuo University	Assistant professor	Controlling the electrical properties of carbon nanotubes with the aim of understanding design principles for nondestructive inspection and measuring technology utilizing the thermophotovoltaic effect
Yosuke Ugata	Yokohama National University	Assistant professor	Developing high-energy-density lithium secondary batteries utilizing electrostatic interaction between a dense electrolyte and polymer
Daisuke Shimoyama	Tokyo Metropolitan University	Assistant professor	Precision synthesis of monomolecular polymers with the aim of creating innovative organic electroluminescent materials
Kohei Yoshimatsu	Tohoku University	Associate professor	Phase-change memory utilizing titanium oxide crystal polymorphs
Shingo Yonezawa	Kyoto University	Professor	Gap structures and symmetry breakdown in kagome lattice materials in a novel superconductive state
Toshiki Sawada	Tokyo Institute of Technology	Associate professor	Manufacturing ultra-sensitive bioelectronic devices using the surface of filamentous viruses as the recognition location
Wanli Cai	Toyohashi University of Technology	Associate professor	The state of intellectual property protections for virtual objects in virtual spaces—a preliminary study aimed at the formation of international rules based on a comparison of Japan, the United States, and China
Masakazu Emoto	Hitotsubashi University	Specially appointed assistant professor	Examination of the effects on corporate heterogeneity and macroeconomic interaction of dynamic selection by informal sectors
Ryohei Suzuki	Hitotsubashi University, Graduate School of Law	Third-year doctoral student	Analysis of factors that spread disinformation and factors that suppress it—an international comparative study of Japan and Britain
Koki Takahashi	Hokkaido University, Laboratory of Regional Science	Associate professor	Spatial commodification of ethnicity in the multicultural city of Toronto: an examination of gentrification and private government BIAs
Sheldon Liu	University of Tokyo	Fourth-year doctoral student	Reception of Song history as an ideological resource of the Meiji Restoration—reassessing military strategist Hirayama Kozo