

# FY2024 RIEC Nation-Wide Cooperative Research Projects List for Report Format

Grant No.	Report Format	Title of Research	PI	Research Collaborator of RIEC	Research Term	PI's Affiliation
R04/A01	Form2	Coplanar waveguide size and magnetization angle dependence of magnetization dynamics in CoFeB-MgO magnetic tunnel junction structure measured by spin rectification ferromagnetic resonance	Eli Christopher Inocencio Enobio	FUKAMI Shunsuke	2024 - 2024	Mindanao State University-Iligan Institute of Technology
R04/A04	様式2	Study on Silicidation Reaction of Metal Nanodots with SiH4	MAKIHARA Katsunori	SATO Shigeo	2024 - 2024	Nagoya University
R04/A05	Form2	Study of magnetic, dielectric and optical properties of nanomaterials for Terahertz applications	AMINE El Moutaouakil	OTSUJI Taiichi	2024 - 2024	United Arab Emirates University
R04/A08	様式2	High Frequency Response of Submicron-Sized Magnetic Materials with Asymmetric Magnetic Vortex Structure	KODA Tetsunori	ISHIYAMA Kazushi	2024 - 2024	National Institute of Technology, Oshima College
R04/A09	様式2	Development of efficient magnetization-switching devices using transition metal compounds	SHINJI Isogami	SHIRAI Masafumi	2024 - 2024	National Institute for Materials Science
R04/A11	様式2	Development of Diamond High-Frequency High-Power Devices and Circuits for Post-5G Base Stations	KANEKO Junichi	SUEMATSU Noriharu	2024 - 2024	Hokkaido University
R04/A12	様式2	Manipulation of sense of self using multisensory information	TANAKA Akihiro	SAKAMOTO Shuichi	2024 - 2024	Tokyo Woman's Christian University
R04/A13	Form2	Exploring and designing interactions for VR headsets using smartphone interfaces	BOUSTILA Sabah	KAZUYUKI Fujita	2024 - 2024	Manchester Metropolitan University
R04/A19	様式2	Study of Superconducting Nanowire for Single Photon Detection	MIMA Satoru	SATO Shigeo	2024 - 2024	National Institute of Information and Communications Technology
R04/A21	様式2	Wireless Propagation Channel for Body Area	AKIMOTO Kohei	SUEMATSU Noriharu	2024 - 2024	Akita Prefectural University
R04/A22	様式2	An Exploratory Study to Build an Environment for Collaborative HyFlex Classes" Utilizing XR Technology"	HAYASHI Masako	KITAMURA Yoshifumi	2024 - 2024	Tohoku University
R05/A02	様式1	Development of Fundamental Technology of Materials and Processes for New Group-IV Semiconductor Nanoelectronics	SAKURABA Masao	SAKURABA Masao	2024 - 2025	Tohoku University
R05/A04	様式1	Development of intraluminal NMR probe for high magnetic field MRI	MATSUNAGA Tadao	SUEMATSU Noriharu	2024 - 2025	Tottori University
R05/A05	様式1	Fundamental Survey on Measurement of Intraoral Bite Force Using Inverse Magnetostrictive and Magneto-Optical Effects	ISOGAI Ryosuke	GOTO Taichi	2024 - 2025	Seiko Future Creation Inc.
R05/A07	Form1	Japan-Russia International collaborative research of new designs of high-power large-area photoconductive antenna-emitters	DMITRY Ponomarev	OTSUJI Taiichi	2024 - 2025	Institute of ultra high frequency semiconductor electronics of Russian academy of sciences
R05/A08	様式1	Investigation of physical structure model of high-k/Ge interface affected by process temperatures	OTANI Yohei	SATO Shigeo	2024 - 2025	Suwa University of Science
R05/A09	様式2	Study on plasmonic nanodevices integrated with two-dimensional materials	UCHINO Takashi	OTSUJI Taiichi	2024 - 2024	Tohoku Institute of Technology
R05/A11	様式1	Survey of over100GHz direct digital transceiver technology	SUEMATSU Noriharu	SUEMATSU Noriharu	2024 - 2025	Tohoku University
R05/A12	様式1	Study on optimization design of milli-meter wave devices and transmission lines	ITOH Keiichi	SUEMATSU Noriharu	2024 - 2025	National Institute of Technology, Akita College
R05/A13	Form1	New generation of 2d material based devices for terahertz technology	MEZIANI Yahya Moubarak	OTSUJI Taiichi	2024 - 2025	Salamanca University

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R05/A14	Form2	Collaborative evaluation of non-verbal communication solutions	Benjamin WATSON	CHENG Miao	2024 - 2024	North Carolina State University
R05/A16	様式1	Research on dynamic VR/AR workspaces for inducing physical movements	TAKAHARA Ryo	KAZUYUKI Fujita	2024 - 2025	TATAMI inc.
R05/A17	Form2	Auditory influences on saccadic suppression	Hiu Mei CHOW	TSENG Chia-huei	2024 - 2024	St. Thomas University
R05/A18	様式1	Constructive analysis of brain computing based on multicellular networks	TANII Takashi	YAMAMOTO Hideaki	2024 - 2025	Waseda university
R05/A19	様式1	Expansion of nonlinear complex systems theory to spatiotemporal systems and its applications	HORIO Yoshihiko	HORIO Yoshihiko	2024 - 2025	Tohoku University
R05/A20	Form2	Characterization of Microstructure and Properties of High Performance Soft Magnetic Iron Alloys	SUZUKI Shigeru	ISHIYAMA Kazushi	2024 - 2024	Tohoku University
R05/A21	様式1	New development of multicellular neurobiocomputing	KAMIYA Haruyuki	YAMAMOTO Hideaki	2024 - 2025	Hokkaido University
R05/A22	Form2	Motion Unit: A data-driven study on bodily emotion expressions	FUJIWARA Ken	CHENG Miao	2024 - 2024	National Chung-Cheng University
R05/A24	様式1	Research on Autopoietic Service Platform Supporting Smart Society	KITAGATA Gen	HASEGAWA Go	2024 - 2025	Morioka University
R05/A27	様式2	Research on online text analysis using machine learning	ZABIR Salahuddin Muhammad Salim	HASEGAWA Go	2024 - 2024	National Institute of Technology, Tsuruka College
R05/A28	様式2	Deep learning based object detection for ultra high resolution image sensing	Matsumura Tetsuya	OTSUJI Taiichi	2024 - 2024	Nihon University
R05/A29	様式1	Fabrication of magnetic garnet ultrafine particles for flexible magneto-optical films	HASHIMOTO Ryosuke	GOTO Taichi	2024 - 2025	National Institute of Technology, Suzuka College
R05/A30	様式1	Research of photonics/electronics-heterogeneous integration technology	KITA Tomohiro	SATOU Akira	2024 - 2025	Waseda university
R05/A31	様式1	Discovering a relationship between auditory attention and auditory immersion	KIM Sungyoung	SAKAMOTO Shuichi	2024 - 2025	Rochester Institute of Technology
R05/A32	Form2	Enhancing Non-Verbal Communication through Facial Expression and Gestures using Generative AI	PUNPONGSANON Parinya	KITAMURA Yoshifumi	2024 - 2024	Saitama University
R05/A33	Form1	Emotion processing in real and cyber world	Monica Perusquia Hernandez	CHENG Miao	2024 - 2025	Nara Institute of Science and Technology
R05/A35	様式1	Development of automated sound environment recognition system with decentralized autonomous organization type structure	TAKANE Shouichi	SAKAMOTO Shuichi	2024 - 2025	Tohoku Bunka Gakuen University
R06/A01	様式1	Development of novel semiconductor quantum devices with atomically thin layered materials	KATO Toshiaki	OTSUKA Tomohiro	2024 - 2026	Tohoku University
R06/A02	様式1	Study on resistance of quantum devices to radioactive radiations	KISHIMOTO Yasuhiro	OTSUKA Tomohiro	2024 - 2025	Tohoku University
R06/A03	様式1	Integrated Devices using Memristor and Capacitor and Spike Neurosystem using Transient-type Signal Transfer	KIMURA Mutsumi	SATO Shigeo	2024 - 2026	Ryukoku University
R06/A04	様式1	Physics and applications of single nanocrystal transistors	SHIBATA Kenji	OTSUKA Tomohiro	2024 - 2026	Tohoku Institute of Technology

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R06/A05	様式1	Electronic transport properties of quantum nano-devices based on two-dimensional materials	HARA Masahiro	OTSUKA Tomohiro	2024 - 2026	Kumamoto University
R06/A06	様式1	Realization of monolithic three-dimensional stacked devices composed of single-crystalline silicon/polycrystalline germanium tin	YAMAMOTO Keisuke	SAKURABA Masao	2024 - 2026	Kyushu University
R06/A07	様式1	Realzaition of the transistor miniaturized down to monomolecule scale	FUKIDOME Hirokazu	FUKIDOME Hirokazu	2024 - 2026	Tohoku University
R06/A08	様式1	System Applications of Neuromorphic Edge Computing Hardware	SATO Shigeo	SATO Shigeo	2024 - 2026	Tohoku University
R06/A09	様式2	Research on seamless optical and wireless access networks between underwater and land using broadband optical integrated circuits	YOSHIMOTO Naoto	OTSUJI Taiichi	2024 - 2024	Chitose Institute of Science and Technology
R06/A10	Form1	Cross-Reality Collaboration with Digital Twins	Bernd Froehlich	KITAMURA Yoshifumi	2024 - 2026	Bauhaus-Universitaet Weimar
R06/A11	様式1	Element number reduction of embedded millimeter-wave large-scale array antennas by utilizing a combination of mixed element number subarrays	Satoshi Yoshida	SUEMATSU Noriharu	2024 - 2026	Ryukoku University
R06/A12	様式1	Delay-Bounding Congestion Control Algorithm under Internet Traffic	UTSUMI Satoshi	HASEGAWA Go	2024 - 2026	Fukushima University
R06/A13	様式1	Research on hardware security using machine learning	OGUMA Hiroshi	HOMMA Naofumi	2024 - 2026	National Institute of Technology, Toyama College
R06/A14	様式1	A Study on Congestion Control Based on Artificial Intelligence Technology for Wireless Network	OBATA Hiroyasu	HASEGAWA Go	2024 - 2026	Hiroshima City University
R06/A15	様式1	Development of measurement system for spin-wave detection using magnetic garnet waveguide	SHIRAKI Eiji	GOTO Taichi	2024 - 2026	National Institute of Technology, Gifu College
R06/A16	様式1	Simultaneous Wireless Power Transfer to Multiple IoT Devices Using Director Elements and Metamaterials, with Applications in Underwater and Maritime Environments	MARUYAMA Tamami	SUEMATSU Noriharu	2024 - 2026	National Institute of Technology, Hakodate College
R06/A17	様式1	Augmented Reality for Human-Robot Interaction	SUZUKI Ryo	KITAMURA Yoshifumi	2024 - 2026	University of Calgary
R06/A18	様式1	Research on remote sensing technology for crustal deformation using optical fiber networks	KASAI Keisuke	KASAI Keisuke	2024 - 2026	Tohoku University
R06/A19	Form1	Cross-Cultural Dialogue on the Potential of the Sense of Smell	OBRIST Marianna	TSENG Chia-huei	2024 - 2026	University College London
R06/A20	Form1	Establishing Databases of Verbal and Nonverbal Features of Human Emotions	Yang Lee-Xieng	TSENG Chia-huei	2024 - 2026	National Chengchi University
R06/A21	Form1	Motion tracking study on nonverbal communication: a case of emotion and body synchrony	KITA sotaro	CHENG Miao	2024 - 2024	University of Warwick
R06/A22	Form1	Adaptive Avatar and Smart Telepresence Robot to enhance Remote Collaboration	TEO Theophilus	CHENG Miao	2024 - 2025	University of South Australia
R06/A23	様式1	Age-related changes in peripersonal space during self-motion	TERAMOTO Wataru	SAKAMOTO Shuichi	2024 - 2026	Kumamoto University
R06/A24	Form1	Psychophysical properties of body expression perception: Signal efficiency and noise tolerance	CHEN Chien-Chung	TSENG Chia-huei	2024 - 2026	National Taiwan University
R06/A25	様式1	Toward comprehensive understanding of Alice in Wonderland syndrome	TAKAGI Gen	SAITO Godai	2024 - 2025	Tohoku Fukushi University

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R06/A26	様式1	Creation of Bio-Devices Utilizing Short-Lived Reactive Species Synthesized by Non-Equilibrium Plasmas	KANEKO Toshiro	HIRANO Ayumi	2024 - 2026	Tohoku University
R06/A27	様式1	Development of Printed Conductive Materials for Next-Gen Interactive Devices and Applications	TAKADA Ryosuke	KAZUYUKI Fujita	2024 - 2026	Kobe City College of Technology
R06/A28	様式1	How do we recognize our body as overweight? Combining VR technique and psychophysiological fMRI experiments	Hamamoto Yumi	KITAMURA Yoshifumi	2024 - 2026	Northumbria University
R06/A29	様式1	Research on synthesis method of emergency evacuation speech for overcome normality bias""	CUI Zhenglie	SAKAMOTO Shuichi	2024 - 2026	Aichi University of Technology
R06/A30	様式1	Psychophysical study on visual consciousness using sensory entrainment technique	TAKESHIMA Yasuhiro	SAITO Godai	2024 - 2025	Hosei University
R06/A31	様式1	Development of network and agent technologies to realize a super smart society	UCHIYA Takahiro	SAKAMOTO Shuichi	2024 - 2026	Nagoya Institute of Technology
R06/A32	様式1	Study on Automatic Multipoint Measurement of Head-related Transfer Function	MORIKAWA Daisuke	SAKAMOTO Shuichi	2024 - 2026	Toyama Prefectural University
R06/A33	様式1	An investigation on spatio-temporal characteristics of auditory selective attention in depth	TERAOKA Ryo	SAKAMOTO Shuichi	2024 - 2026	Muroran Institute of Technology
R06/A34	様式2	Study of disaster prevention and reduction system for harmony between people and the environment	TAKAHASHI Hideyuki	YOKOTA Nobuhide	2024 - 2024	Tohoku Gakuin University
R06/A35	様式2	Study on the use of ICT technology to improve the efficiency of work to search for missing persons and evacuation guidance during disasters	SUGIYASU Kazuya	YOKOTA Nobuhide	2024 - 2024	Iwate Prefectural University
R06/A36	様式1	Next Generation Architecture for 6G Mobile Networks	ABE Shuya	HASEGAWA Go	2024 - 2026	Osaka University
R06/A37	様式1	High Efficiency and Low Loss Contactless Power Transmission System in Seawater	INAMORI Mamiko	SUEMATSU Noriharu	2024 - 2026	Tokai University
R06/A38	様式1	Investigation of the characteristics of audiovisual attention	YAMAMOTO Kosuke	SAITO Godai	2024 - 2025	Waseda University
R04/B03	様式2	Nanomaterial production by using novel gas-phase process and its application to high-performance devices	UCIDA Giichiro	SATO Shigeo	2024 - 2024	Meijo University
R04/B04	様式2	Control and exploartion of functions of quantum materials towards device applications	MATSUNO Jobu	FUKAMI Shunsuke	2024 - 2024	Osaka University
R04/B06	様式2	Designing the Next Normal of Academic Conferences	MURAYAMA Hiromi	KITAMURA Yoshifumi	2024 - 2024	Pacific Convention Plaza Yokohama
R04/B07	様式2	Theory of object recognition in vision and audition	KURIKI Ichiro	SAKAMOTO Shuichi	2024 - 2024	Saitama University
R04/B08	様式2	Workgroup on fundamental technologies and issues of surface unmanned vehicles for sustainable society	SUEDA Koh	KITAMURA Yoshifumi	2024 - 2024	SENSEFOIL PTE.LTD.
R04/B09	様式2	Studies on Generative Technology for Enriched Multimedia	SONODA Kotaro	SAKAMOTO Shuichi	2024 - 2024	Nagasaki University
R04/B10	様式2	Application study on microwave and laser SAR	KOGI Yuichiro	YASAKA Hiroshi	2024 - 2024	Fukuoka Institute of Technology
R04/B11	Form2	An Inter-personal Dimension of MA: Behavior, Physiology, and Engineering	TSENG Chia-huei	TSENG Chia-huei	2024 - 2024	Tohoku University



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R05/B01	様式1	Design of Borderless Wireless Networks for Digital Twin Society	SATO Koya	SUEMATSU Noriharu	2024 - 2025	The University of Electro-Communications
R05/B02	様式1	Integrated Design of Wireless Communication System and Hardware in the Massive Connect IoT Era	KAMEDA Suguru	SUEMATSU Noriharu	2024 - 2025	Hiroshima University
R05/B03	様式1	Highly Functional Coherent Communication and Measurement Systems Integrating Lightwave and Microwave	INOUE Takashi	HIROOKA Toshihiko	2024 - 2025	National Institute of Advanced Industrial Science and Technology
R05/B04	様式1	Millimeter-wave and Terahertz Wave Technologies and Applications for 6G System	SANADA Atsushi	SUEMATSU Noriharu	2024 - 2025	Osaka University
R05/B08	様式1	Study of methods for guiding a flock of crows	TSUKAHARA Naoki	KITAMURA Yoshifumi	2024 - 2025	CrowLab Inc
R05/B11	様式2	Development and control of artificial cell membrane systems for measuring membrane protein functions based on semiconductor microfabrication technology and nanomaterial functions	TERO Ryugo	HIRANO Ayumi	2024 - 2024	Toyohashi University of Technology
R05/B13	様式1	Theoretical study of memory and learning in neural networks	IKEGUCHI Tohru	HORIO Yoshihiko	2024 - 2025	Tokyo University of Science
R05/B15	様式1	Research on fundamental technologies related to human and social sensing and intervention	ARAKAWA Yutaka	OTSUJI Taiichi	2024 - 2025	Kyushu University
R05/B16	様式1	Study on applications using head-gaze tracking technique with a smartphone	KAZUYUKI Fujita	KAZUYUKI Fujita	2024 - 2025	Tohoku University
R05/B17	様式1	International Research Collaboration of Brainware-LSI-Oriented Emerging Circuits/Systems	HANYU Takahiro	HANYU Takahiro	2024 - 2025	Tohoku University
R06/B01	様式1	Development of experimental and computational systems via novel orbital magnetism	OKABAYASHI Jun	SHIRAI Masafumi	2024 - 2026	The University of Tokyo
R06/B02	様式1	Empirical Study on the Applicability of Nonlinear Dynamical Theory to Various Optimization Problems	KIMURA Takayuki	HORIO Yoshihiko	2024 - 2026	Nippon Institute of Technology
R06/B03	Form1	Quantum Circuits Accelerator based on Stochastic Computing	Lukac Martin	ONIZAWA Naoya	2024 - 2026	Hiroshima City University
R06/B04	様式1	Research on mode on light	HAMAMOTO Kiichi	YOSHIDA Masato	2024 - 2026	Kyushu University
R06/B05	Form2	User Experience in Spatial Computing: Developing New Models of Fatigue for Interaction Design	Tag Benjamin	KITAMURA Yoshifumi	2024 - 2024	Monash University
R06/B06	様式1	Conduct meetings on quality estimation and stabilization methods for satellite constellations	KASHIWAZAKI Hiroki	HASEGAWA Go	2024 - 2026	Kindai University
R06/B07	様式1	Exploration of New Research Area on Electromagnetic Wave Engineering	KONNO Keisuke	SUEMATSU Noriharu	2024 - 2026	Tohoku University
R06/B08	様式1	Networking Technology for 6G Communication	OBATA Hiroyasu	HASEGAWA Go	2024 - 2026	Hiroshima City University
R06/B09	様式1	Sinultaneous transmission of power and data by load-independent magnetic resonance power transfer systems	SEKIYA Hiroo	HORIO Yoshihiko	2024 - 2026	Chiba University
R06/B10	様式1	Evaluation and improvement of intellectual productivity by computer	ITOH Yuichi	KAZUYUKI Fujita	2024 - 2026	Aoyama Gakuin University
R06/B11	様式1	Understanding perceptual, motor, cognitive and emotional properties of humans as the basis of communication	TSUTSUI Ken-Ichiro	SAKAMOTO Shuichi	2024 - 2026	Tohoku University

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R06/B12	様式1	An analysis framework based on the complex network theory for cross-language text analysis	SHIMADA Yutaka	HORIO Yoshihiko	2024 - 2026	Saitama University
R06/B13	様式1	Development and Societal Implementation of Life Science Infrastructure Based on Ubiquitous Computing Technology	OHNISHI Ayumi	HASEGAWA Go	2024 - 2026	Kobe University
R06/B14	様式1	Research on representation learning in deep learning	JINNO Kenya	HORIO Yoshihiko	2024 - 2026	Tokyo City University
R06/B15	様式1	New Developments in Human-Workspace Interaction	KAZUYUKI Fujita	KAZUYUKI Fujita	2024 - 2026	Tohoku University
R06/B16	様式1	Self-motion perception as a multi-sensory integration process	SAKURAI Kenzo	SAKAMOTO Shuichi	2024 - 2026	Tohoku Gakuin University
R06/B17	様式2	High-dimensional neural-network information processing based on geometric algebra	HIROSE Akira	SATO Shigeo	2024 - 2024	Tokyo University
R06/B18	様式2	An emulation environment for a nonvolatile FPGA	DAISUKE Suzuki	HANYU Takahiro	2024 - 2024	The University of Aizu
R06/B19	様式1	Approximate Search Method by Random Forest for Binarized Convolutional Neural Network Models and Its FPGA Implementation	SAITO Hiroshi	HANYU Takahiro	2024 - 2026	The University of Aizu
R06/B20	様式1	Research on Stochastic Computing Algorithms	KOSHITA Shunsuke	ONIZAWA Naoya	2024 - 2026	Hachinohe Institute of Technology