

# Poster Presenters List

**[On-site Poster]**

RIEC : Research Institute of Electrical Communication, Tohoku University

No.	Grant No.	Title	Presenter	Affiliated Institution	Keywords
P-1	R04/A20	Saliency at first sight: instant identity referential advantage toward a newly met partner	CHENG Miao	RIEC	partner-advantage / self-bias / identity referential advantage / social cognition
P-2	R04/A14	Modulation of neural dynamics by voluntary attention	IMANISHI Takumi, SAKAI Ko	Univ. of Tsukuba	vision / attention / neural systems / EEG
P-3	R04/A16	Study on application of facial expression analysis to remote medical care	SATO Yoshiyuki	Tohoku Univ.	Facial expression analysis / remote care / machine learning / Intelligent System
P-4	R02/A18	Modeling Racial Effects on Facial Emotion Expression	KAMINOSONO Shougo	RIEC	smart society
P-5	R03/A02	A high-quality gate stack fabrication on Ge for Si/Ge integrated hybrid devices	1)YAMAMOTO Keisuke, WANG Dong, NAKASHIMA Hiroshi, 2)SAKURABA Masao, 3)MUROTA Junichi	1)Kyushu Univ., 2)RIEC, 3)Tohoku Univ.	IoT / Integrated devices / Semiconductor / Surface, Interface
P-6	R02/A05	New Group-IV Semiconductor Materials and Highly-Integrated Device Process	SAKURABA Masao	RIEC	Semiconductor / Device / Materials / Process
P-7	R04/A04	Control of Silicidation of Metal Nanodots with Monosilane	MIYAZAKI Seiichi	Nagoya Univ.	Nanomaterials / Semiconductor Quantum Dots / Magnetic Nanodots / Functional Devices
P-8	R03/A32	CMOS analog neural circuit for edge computing	SATO Shigeo	RIEC	CMOS / Edge Computing / Neural Network / Analog Circuit
P-9	R02/A10	Investigation of high-k/Ge interface affected by fabrication processes	1)OTANI Yohei, 2)KOBAYASHI Yasuyuki, 3)SATO Tetsuya, 4)SAKURABA Masao, 5)MUROTA Junichi	1)Suwa Univ., 2)Hiroaki Univ., 3)Univ. of Yamanashi, 4)RIEC, 5)Tohoku Univ.	Ge-MIS / Interface Property / Fabrication Technology / Fabrication Process
P-10	R04/A19	Study on Superconducting Nanowires for Single Photon Detection	MIMA Satoru	NICT	Superconductor / Single Photon Detector/ Infrared / Nanowire
P-11	R02/A23	Low-cost and Power-free Interfaces Extending Input Vocabulary of Touch Devices	FUJITA Kazuyuki	RIEC	Smart society / User interface / Touch interaction / Input vocabulary
P-12	R03/B09	Organization of Fronto-limbic projections underlying emotional control in macaque monkeys	YOSHINO Rintaro	Tohoku Univ.	anterior cingulate cortex / neural circuits / emotion / amygdala / periaqueductal gray
P-13	R03/A23	Creative Harmonization for Social Agents	1)SASAI Kazuto, 2)UCHIYA Takahiro	1)Ibaraki Univ., 2)Nagoya Inst. of Technology	Intelligent System / Society 5.0 / Interaction / AI
P-14	R04/A12	The vocal affective communication in radio-listeners	KUWA Mai, TANAKA Akihiro	Tokyo Woman's Christian Univ.	Radio/Voice/Emotion perception/Communication
P-15	R03/A16	Effects of auditory selective attention in distance	TANAKA Yuki, TERAOKA Ryo	Kumamoto Univ.	auditory selective attention / auditory distance perception / auditory spatial attention / sound localization
P-16	R03/A28	Effect of Active or Passive Pedaling on Peripersonal Space Representation	KURODA Naoki, TERAMOTO Wataru	Kumamoto Univ.	Human / Perception / Spatial processing / Self-motion
P-17	R03/A31	Research on construction of gravity observation network using optical communication technology and volcanic activity monitoring	1)KASAI Keisuke, 2)ARAYA Akito, 1)YOSHIDA Masato, 3)TSUBOKAWA Tsuneya, 4)NAKAZAWA Masataka	1)RIEC, 2)Univ. of Tokyo, 3)Shin-ei keisoku, 4)Tohoku Univ.	Crustal deformation measurement / Gravitational acceleration measurement / Frequency stabilized laser / Optical fiber network
P-18	R02/A04	Spin transport and magnetism in 2D van der Waals ferro and antiferromagnets	FUKAMI Shunsuke	RIEC	Physics/Material/Device/Thin Film
P-19	R04/A17	Creation, manipulation, and electrical control of chiral spin textures in non-collinear antiferromagnetic heterostructures	FUKAMI Shunsuke	RIEC	Physics / Material / Theory / Calculation
P-20	R04/A01	Coplanar waveguide size and magnetization angle dependence of magnetization dynamics in CoFeB-MgO magnetic tunnel junction structure measured by spin rectification measured by spin rectification ferromagnetic resonance	FUKAMI Shunsuke	RIEC	Physics / Material / Device / Measurement technique
P-21	R03/A25	Creation of Device Informatics and its application to Beyond 5G devices	FUKIDOME Hirokazu	RIEC	Beyond 5G / Machine learning / Smart Society
P-22	R03/A03	Generalized scaling of spin qubit coherence for exploration of quantum materials	1)KANAI Shun, 2)F. Joseph Heremans, 3)Hosung Seo, 2)Gary Wolfowicz, 4)Christopher P. Anderson, 2)Sean E. Sullivan, 4)Mykyta Onizhuk, Giulia Galli, David D. Awschalom, 1)OHNO Hideo	1)RIEC, 2)Argonne National Lab., 3)Ajou Univ., 4)Univ. of Chicago	Energy-saving Technology / smart society / qubit / spintronics
P-23	R04/B02	Local bifurcation of spin-transfer torque in superparamagnetic tunnel junctions	1)KANAI Shun, FUNATSU Takuya, 2)IEDA Jun'ichi, 1)FUKAMI Shunsuke, OHNO Hideo	1)RIEC, 2)JAEA	Energy-saving Technology / smart society / IoT / spintronics
P-24	R03/A06	Study on Radiation Response of Quantum Point Contact	1)YOSHIDA Sei, NISHIKAWA Takahiro, SHIBATA Shinsho, 2)KISHIMOTO Yasuhiro, 3)OTSUKA Tomohiro	1)Osaka Univ., 2)Tohoku Univ., 3)RIEC	Quantum point contact / Quantum dot / particle radiation / sensor
P-25	R04/A06	Electron transport through single colloidal quantum dot coupled to nanogap metal electrodes	1)SHIBATA Kenji, 2)OTSUKA Tomohiro	1)Tohoku Inst. of Technology, 2)RIEC	Colloidal quantum dots / Transistor / Tunneling effect / Single electron
P-26	R03/A26	Towards automatic parameter tuning of larger-scale quantum systems	1)FUKUHARA Takeshi, 2)OTSUKA Tomohiro	1)RIKEN, 2)RIEC	Quantum technology / machine learning / data science / automation
P-27	R03/B12	Towards Establishing Hearable Device Security	WATANABE Hiroki	Hokkaido Univ.	wearable / IoT / interaction / security
P-28	R04/B12	Renewable Energy Scheduling for Multiple Smart Homes with Multi-Agent Reinforcement Learning	SHAO Xun	Toyohashi Univ. of Technology	Intelligent System / Energy-saving Technology / smart society /IoT
P-29	R03/B01	Experimental and theoretical studies of new physical phenomena at interfaces brought on by electron spins, orbitals and multipoles	1)MIURA Yoshio, 2)SHIRAI Masafumi	1)National Instit. for Materials Science, 2)RIEC	Spintronics / magnetic thin films / X-ray Magnetic Circular Dichroism / First-principles calculation
P-30	R04/A09	Antiperovskite materials with light elements for practical spintronic applications	ISOGAMI Shinji	NIMS	Spintronics / Energy-saving / light elements
P-31	R02/A01	Asymmetric dual grating graphene Field effect transistor for terahertz detection	Yahya Moubarak Meziani	Salamanca Univ.	terahertz / graphene / transistor / detection
P-32	R04/A05	Terahertz wave absorption in MoS2/Graphene heterostructures	Amine El Moutaouakil	UAE Univ.	Graphene; MoS2 / Terahertz / Absorption / Heterostructure

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P-33	R04/A10	Japan-USA International Collaborative Research on the Theoretical and Experimental Investigation of Coulomb Drag Instability of Graphene Dirac Plasmons and its Application for THz Laser Transistors its Application for THz Laser Transistors	Vladimir Mitin	Univ. at Buffalo, SUNY	terahertz / detector / emitter / graphene
P-34	R02/A03	Surface-enhanced Raman scattering on Ag/mica/graphene substrates	UCHINO Takashi	Tohoku Inst. of Technology	Optoelectronic Devices/Nanotechnology/Biochemical Sensors/2D Materials
P-35	R02/A13	Ultra low-latency video coding for 8K high-resolution image sensing	1)MATSUMURA Tetsuya, 2)OTSUJI Taiichi	1)Nihon Univ., 2)RIEC	video coding / low-latency transmission / image sensing / edge computing
P-36	R02/B07	Human / Social Sensing Infrastructure by Heterogeneous Data Fusion	OKABE Yasuo	Kyoto Univ.	Sensing / Smart Environment / IoT / Ubiquitous Networking
P-37	R03/A13	Stability of remote operation using all-photon access network	1)YOSHIMOTO Naoto, SUDO Aoi, YU Hongli, 2)IWATSUKI Katsumi, 3)OTSUJI Taiichi	1)Chitose Inst. of Science and Technology, 2)Tohoku Univ., 3)RIEC	Optical Fiber/Photonic network/Photonic router/Remote operation
P-38	R02/A11	Single-crystal graphene functional device	NAGASE Masao	Tokushima Univ.	Nano-device/Graphene/Far-infrared emitter/Negative differential conductance
P-39	R02/A02	Microfluidic cell engineering on high-density microelectrode arrays for assessing structure-function relationships in living neuronal networks	SATO Yuya	RIEC	Bioelectronics / Neuroscience / Devices / Microfabrication
P-40	R02/A20	In vitro modeling of activity modulation induced by inflammatory cytokines	SAKAIBARA Mamoru	RIEC	Bioscience / Neuroscience / Health / Medicine
P-41	R04/B06	Designing the Next Normal of Academic Conferences	MURAYAMA Hiromi	Pacific Convention Plaza Yokohama (PACIFICO Yokohama)	International Conference / Domestic Conference / Online/In Person / Hybrid / Accessibility / Inclusive / MICE
P-42	R04/B08	Study into water mobility for sustainable societies	SUEDA Ko	SenseFoil PTE. LTD.	Smart society / zero emissions / water mobility / sailing drone
P-43	R04/A22	An Exploratory Study to Build an Environment for "Collaborative HyFlex Classes" Utilizing XR Technology	HAYASHI Masako	Tohoku Univ.	XR Technology / Metaverse / intercultural collaborative learning / HyFlex Classes
P-44	R02/B11	Development for automation of crows' behavior control method using vocal communication	1)TSUKAHARA Naoki, NAGATA Ken, 2)SUEDA Koh, 3)KITAMURA Yoshifumi	1)CrowLab, 2)SenseFoil PTE. LTD., 3)RIEC	Crow / Vocalization / Behavior control
P-45	R02/A31	Evaluation of SNR for noise in a reflectionless transmission-line model based on the cochlea	ORIMA Takemori	RIEC	Auditory System / Audio Processing / Intelligent System / Edge AI
P-46	R03/A20	Neuromorphic Systems using Thin-Film Memcapacitors	KIMURA Mutsumi	Ryukoku Univ.	Neuromorphic System / Thin-Film / Memcapacitor / AI
P-47	R03/B06	Design theory of load-independent high-frequency WPT systems	SEKIYA Hiroo, Wenchi Zhu c	Chiba Univ.	Wireless Power Transfer / Energy Saving / Charging from Drone / Power Electronics
P-48	R03/A22	Implementation and Evaluation of Authenticated Cryptography for IoT	1)HIROKAWA Hikaru, MATSUSHITA Rei, OGUMA Hirosh, 2)HOMMA Naofumii	1)NIT-Toyama, 2)RIEC	Security / Authenticated Encryption
P-49	R02/A14	QZSS Short Message SS-CDMA Communication System – Evaluation of Satellite Signal Reception Error due to SVF –	1)KITA Hiroto, OGUMA Hiroshi, 2)KAMEDA Suguru, 3)SUEMATSU Noriharu	1)NIT-Toyama, 2)Hiroshima Univ., 3)RIEC	Wireless Communication
P-50	R03/A11	60-GHz-Band Phased Array Antenna for Mobile Terminal Application	YOSHIDA Satoshi	Kagoshima Univ.	Millimeterwave / antenna
P-51	R04/A02	Development of intraluminal NMR receiving coil for ultra high-field MRI	MATSUNAGA Tadao, Lee Sang-Seok	Tottori Univ.	Ultra high-field MRI / Intraluminal MRI / NMR receiving coil / Minimally invasive Medicine
P-52	R02/A15	Direct Digital RF Transmitter for Millimeter-Wave Digital Beam Forming	SUEMATSU Noriharu	RIEC	Communication / Space / IoT / B5G,6G
P-53	R04/A21	Evaluation of Directional Antenna for WBAN	1)AKIMOTO Kohei, FUKUI Renta, TOBANA Teruo, 2)SUEMATSU Noriharu	1)Akita Pref. Univ., 2)RIEC	IoT
P-54	R03/A12	Novel Looped Yagi-Uda Rectenna Array for Energy Harvesting	MARUYAMA Tamami	NIT-Hakodate	Wireless Power Transmission / Energy Harvesting / IoT / Wireless Communications / Antennas
P-55	R03/A29	Microscopic Characterization and Residual Stress Measurement in Iron Alloys with Complex Microstructure	1)TANNO Takenori, 2)CHIBA Masaki, 1)ABE Maho, 3)HASHI Shuichiro, 1)ISHIYAMA Kazushi, 2)SUZUKI Shigeru	1)RIEC, 2)Tohoku Univ., 3)Tohoku Gakuin Univ.	smart society
P-56	R04/A08	High-frequency response of submicron-sized magnetic dot with asymmetric magnetic vortex structure	1)KODA Tetsunori, 2)MUROGA Sho, 3)ENDO Yasushi, 4)ISHIYAMA Kazushi	1)NIT-Oshima, 2)Akita Univ., 3)Tohoku Univ., 4)RIEC	Nano Magnetism / High-frequency magnetic response / Magnetic vortex / radio wave absorption
P-57	R04/T06	Development of an adaptive automatic analysis system for biological time-series binary signal	1)SATO Madoka, 2)HARIYAMA Masanori, 1)KOMIYA Maki, TOZAWA Yuzuru, YAMAMOTO Hideaki, HIRANO-IWATA Ayumi	1)RIEC, 2)Tohoku Univ.	Channel current analysis / Ion channel / Electrophysiological recordings / Automatic analysis
P-58	R04/T07	Report of Spinics Research Society	OGAWA Tomoyuki, HANE Yoshiki, YABUKAMI Shin	Tohoku Univ.	Magnetic Material / Magnetic application / Spintronics
P-59	R04/T11	Analysis of the direction of head and eye movements while watching natural movies	1)HATORI Yasuhiro, FANG Yu, 2)EMOTO Masaki, 1)SHIOIRI Satoshi	1)RIEC, 2)Okayama Univ. of Science	Vision / Human behavior / Eye-head coordination / Intelligent System
P-60	Tohoku Univ.	Judging the value of information for prioritization of Yotta scale data - Advanced Institute for Yotta Informatics -	SATO Yoshiyuki	Advanced Institute for Yotta Informatics	Yotta Informatics/ Value of information/Facial expression analysis/ Big data analysis
P-61	Tohoku Univ.	Industry-University Collaboration of Tohoku University	MORI Ayaka	Tohoku University	Industry-University Collaboration / IP / matching / technology transfer
P-62	Tohoku Univ.	Industry-academia collaborative activities of the IIS Research Center	ABE Yusuke	IIS Research Center	Industry-academia collaboration / Regional collaboration / Social Implementation / AI