

9th International School and Conference on Spintronics and Quantum Information Technology - Fukuoka, June 4th to 8th, 2017 -



Time schedule for Spintech 2017 School and Conference

June 4 (Sunday) - 8 (Thursday), 2017 Fukuoka International Congress Center

Jun. 4 (Sun)			Jun. 5 (Mon)			Jun. 6 (Tue)			l	Jun. 7 (Wed)				Jun. 8 (Thu)			
- 30	u + (Ouii)		8:00-9:00		Registration	1	<u>_</u>	J 0	(.40)	+		J /	(\vdash		Jan. 0	
			9:00-10:10	L-1	D. Awschalom		9:00-10:10	L-6	N. Samarth		9:00-9:40	INV-5	L. Vandersypen		9:00-9:40	INV-10	G. Salis
			10:10-10:40	Break		-	10:10-10:40	Break		-	9:40-10:20	INV-6	H. Takesue		9:40-10:20		K. Kobayashi
						0				-	10:20-10:40	Break	4.0:		10:20-10:40	Break	
						School					10:40-11:00	O-5	A. Crippa		10:40-11:00	O-9 O-10	F. Pezzoli
			10:40-11:50	L-2	H. Ohno	2017	10:40-11:50	L-7	M. Kläui		11:00-11:40	INV-7	S. Takei	a)	11:20-11:40	O-10	C. Egues N. Asam
											11:40-12:00	O-6	T. Fujita	Conference	11:40-12:00	O-11	T. Kuczmik
			11:50-14:00	Lunch		Spintech	11:50-13:30	Lunch			12:00-13:30	Lunch		Spintech2017 Confe	12:00-13:30	Lunch	
							13:30-14:10	INV-1	G. Beach	Conference					13:30-13:50 13:50-14:10	O-13 O-14	L. Thiel R. Moriya
		7 School	14:00-15:10	L-3	D. Loss		14:10-14:50	INV-2	T. Jungwirth	Spintech2017 Conf			ster Session A 502-503, Lobby)		14:10-14:50		S. Omar
		201					14:50-15:10	0-1	M. Grzybowski	tech					14:50-15:30	INIV/ 42	E. Saitoh
l ce		Spintech	15:10-15:40	Break			15:10-15:30	0-2	N. Rossi	Spir					14.50-15.50	1144-13	L. Salton
15:00-17:00	Registration	Spin				-	15:30-16:00	Break			15:30-16:10	INV-8	B. Hillebrands		15:30-15:50		Closing
Spintech 2017 School and Conference 12:00-11:00 spintech 2017 School and Conference 15:00-17:00 spintech 2017 School and Conference 15:00-17:00-17:00 spintech 2017 School and Conference 15:00-17:00 spintech 2017 School and			15:40-16:50	L-4	4 K-J Lee	nce	16:00-16:40	INV-3	/-3 M. Bibes		16:10-16:50	INV-9	R. Deacon				
Sch			16:50-17:20	Break		Conference	16:40-17:20	INV-4	A. Bonanni		16:50-17:10	Break					
2017		-						O-3	M Foltus		17:10-17:30	O-7	M. Kawamura				
17:00-18:30	Welcome Drink (Room 502-503)					2017	17:20-17:40	0-3	M. Foltyn M. Jamet		17:30-17:50	O-8	C. Trang				
Spini	(1700111 302-303)		17:20-18:30 18:30-19:00	L-5	J. Klinovaja Transfer	Spintech2017	18:00-19:00		Transfer		17:50-19:50		ster Session B 502-503, Lobby)				
			19:00-21:00		ome Reception (Palace m@Sunpalce)		19:00-21:00	(Hak	Banquet ata Bay cruise)			(ROOT)					

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Program of the Conference

Titles of Poster Presentation

Abstracts of Oral Presentations

Abstracts of Poster Presentations

Oral presentation schemes

The time allotted to each oral presentation is:

Lecture talks (L) 70 min including 10 min discussion Invited talks (INV) 40 min including 10 min discussion Contributed talks (O) 20 min including 5 min discussion

LCD projector will be available. Those who wish to use an LCD projector should bring their own computers. To save your presentation time, please start up your computer before talk if you will use it.

June 4th, Sunday

15:00 Registration starts in "Fukuoka International Congress center (5th floor)"

17:00 Welcome Drink (Room 502-503)

June 5th, Monday

8:50-9:00 Welcome address

SpinTech School: Day1

L1 Lecture-1: <u>David Awschalom</u>: University of Chicago

9:00-10:10 "Quantum Spintronics with Semiconductors"

10:10-10:40 Coffee Break

L 2 Lecture-2: <u>Hideo Ohno</u>: Tohoku University

10:40-11:50 "Introduction to Spintronics Devices for VLSI"

11:50-14:00 Lunch

L3 Lecture-3: <u>Daniel Loss</u>: *University of Basel*

14:00-15:10 "Spin Qubits in Semiconducting Nanostructures"

15:10-15:40 Coffee Break

L4 Lecture-4: Kyung-Jin Lee: Korea University
15:40-16:50 "Spintronics based on Antiferromagnets and

Ferrimagnets"

16:50-17:20 Coffee Break

L 5 17:20-18:30	Lecture-5: <u>Jelena Klinovaja</u> : <i>University of Basel</i> "Topological Quantum States"
18:30-19:00	Transfer
19:00-21:00	Welcome Reception (Palace room @ Sunpalace Hotel)
June 6th, Th	uesday
SpinTech Scl	hool: Day2
L 6	Lecture-6: Nitin Samarth: Penn State University "Topological Spintronics" (planning to present by Skype)
10:10-10:40	Coffee Break
L 7 10:40-11:50	Lecture-7: Mathias Kläui: University of Mainz "Tutorial on Domain Wall and Skyrmion Dynamics -from fundamental Science to Applications-"
11:50-13:30	Lunch
SninTech Co	nference: Day1
INV 1	Geoffrey S. D. Beach: Massachusetts Institute of Technology
13:30-14:10	"Current-Induced Switching in a Magnetic Insulator"
INV 2	<u>Tomas Jungwirth</u> : Institute of Physics, Academy of Sciences of the Czech Republic
14:10-14:50	"Electric field switching of antiferromagnetic multi-level bit-cells by pulse-length scaled down to a picosecond"
O 1	Michal Grzybowski: Institute of Physics, Polish Academy
14:50-15:10	of Sciences "Imaging Current-Induced Switching of Antiferromagnetic Domains in CuMnAs"
O 2 15:10-15:30	Nicola Rossi: University of Basel "Torque Magnetometry of Individual GaAs Nanowires with Ferromagnetic MnAs Tips"

15:30-16:00	Coffee Break
INV 3 16:00-16:40	Manuel Bibes: Universite Paris-Sud "Highly efficient spin-charge conversion in engineered SrTiO ₃ -based 2-dimensional electron systems"
INV 4 16:40-17:20	Alberta Bonanni: Johannes Kepler University "Perspectives for III-nitrides: spin-orbitronics and piezoelectro magnetization effects"
O 3	Marek Foltyn: Institute of Physics, Polish Academy of Sciences
17:20-17:40	"Stretching magnetism with an electric field in a nitride semiconductor"
O 4	Matthieu Jamet: CEA Grenoble and Université Grenoble
17:40-18:00	Alpes "Evidence for spin-to-charge conversion by Rashba coupling in metallic states at the Fe/Ge(111) interface"
18:00-19:00	Transfer
19:00-21:00	Banquet: Hakata Bay cruise
June 7 th , We	ednesday
-	nference: Day2
INV 5 9:00-9:40	Lieven Vandersypen: Technical University of Delft "A "Spins-inside" Quantum Processor"
INV 6 9:40-10:20	Hiroki Takesue: NTT Basic Research Laboratory "Artificial spin network based on coupled optical parametric oscillators for solving Ising model"
10:20-10:40	Coffee Break
O 5 10:40-11:00	Alessandro Crippa: Université Grenoble Alpes "Spin qubit manipulation by g-factor electric modulation in Silicon transistors"

INV 7	So Takei: Queens College of the City University of New York
11:00-11:40	"Prediction for spin current and its noise generated across biased quantum spin chains"
O 6 11:40-12:00	Takafumi Fujita: Delft University of Technology "Coherent spin shuttling through quantum dots"
12:00-13:30	Lunch
13:30-15:30	Poster Session A (Room 502-503, Lobby)
INV 8	Burkhard Hillebrands: Technische Universität Kaiserslautern
15:30-16:10	"Physics and applications of focused spin-wave beams and caustics"
INV 9	Russell Deacon: RIKEN Center for Emergent Matter Science
16:10-16:50	"Signatures of Topological Superconductivity in the dynamics of HgTe Josephson Junctions"
16:50-17:10	Coffee Break
O 7	Minoru Kawamura: RIKEN Center for Emergent Matter Science
17:10-17:30	"Magnetic Heterostructure of Topological Insulators: A Platform for Topological Magnetoelectric Effect"
O 8 17:30-17:50	Chi Xuan Trang: Tohoku University "Observation of tunable Dirac-cone surface state in bulk-insulating topological insulator TlBi _{1-x} Sb _x Te ₂ "
17:50-20:00	Poster Session B (Room 502-503, Lobby)

June 8th, The SpinTech Co	ursday nference: Day3
INV 10 9:00-9:40	Gian Salis: IBM Research-Zurich "Control of spin precession by drift and diffusion in a 2D electron gas"
INV 11 9:40-10:20	Kensuke Kobayashi : Osaka University "Spin-dependent Current Fluctuations in Mesoscopic Conductors"
10:20-10:40	Coffee Break
O 9 10:40-11:00	Fabio Pezzoli: University of Milano-Bicocca "Strong confinement-induced engineering of the g-factor and lifetime of conduction electron spins in Ge quantum wells"
O 10 11:00-11:20	Nagarjuna Asam: Kyushu University "Spin-current Absorption and Enhancement by Additional Ferromagnetic Layer"
O 11 11:20-11:40	<u>Carlos Egues</u> : <i>Universidade de São Paulo</i> "Stretchable spin helices and persistent skyrmion lattices in non-interacting spin-orbit coupled GaAs quantum wells"
O 12 11:40-12:00	Thomas Kuczmik: University of Regensburg "Nonlocal background magnetoresistance in high mobility 2D spin injection devices"
12:00-13:30	Lunch
O 13 13:30-13:50	Lucas Thiel: University of Basel "Quantitative nanoscale vortex imaging using a cryogenic quantum magnetometer"
O 14 13:50-14:10	Rai Moriya: University of Tokyo "Dry transfer fabrication of magnetic tunnel junction built from magnetic atom intercalated TaS ₂ "

INV 12
 14:10-14:50
 Siddharta Omar: University of Groningen
 "Bias induced up to 100% spin injection/detection polarization and 90 μm spin relaxation length in graphene-hBN heterostructure"

INV 13 <u>Eiji Saitoh</u>: Tohoku University 14:50-15:30 "Spinon and Phonon in Spintronics"

15:30-15:50 Closing Remarks

Poster Session	No.	Title Poster Presenter
А	1	Valley-enhanced fast relaxation of gate-controlled donor qubits in silicon Andras Palyi
А	3	Spin Transport in the Persistent Photoconductor Al _{0.3} Ga _{0.7} As:Si <u>Tianhan Liu</u>
A	5	Electron and thermal transport studies in large MoSe ₂ single crystals Ram Shanker Patel
А	7	Electrical Detection of Antiferromagnetic-Ferromagnetic Phase Transition in Pd-doped FeRh Kenta Matsumoto
А	9	Photon-Assisted Tunneling in Carbon Nanotube Double Quantum Dots Edyta Natalia Osika
А	11	Spin Relaxation Mechanism in Heavily Doped n-type Silicon Mizue Ishikawa
А	13	Non-local Measurement of Asymmetric Anisotropic Magnetoresistance in Ferromagnet/Non-magnet Hetero Structures <u>Tian Li</u>
А	15	Comparison of current induced effective fields in Ta/CoFeB/MgO hetero-structure between epitaxial and amorphous Ta underlayers Hiromu Gamou
А	17	Exchange Stiffness in Transition-Metal Thin Films on MgO(001) Revisited: Mechanism and Electric-Field-Induced Modification Abdul-Muizz Pradipto
А	19	Electric field effect on exchange interaction in Co/Pt thin film Mio Ishibashi
Α	21	Optimization of Co/Fe ratio for efficient thermal spin injection in CoFeAl alloy Tatsuya Nomura

Poster Session	No.	Title Poster Presenter
A	23	Anomalous Hall effect of Mn ₂ CoAl films grown by low-temperature molecular beam epitaxy Keisuke Arima
А	25	Tuning of Magnetoconductance by Electrical Control of Band Alignment in a n^{\dagger} -(In,Fe) As/ p^{\dagger} -InAs Esaki Diode Anh Duc Le
А	27	Spin-to-charge conversion in a single $MoSe_2$ layer grown by van der Waals epitaxy on SiO_2/Si Matthieu Jamet
А	29	Spin transitions driven by electric dipole spin resonance in fluorinated single- and bilayer-graphene quantum dots Dariusz Pawel Zebrowski
А	31	Optimization of STIRAP-based state transfer under dissipation Stefano Chesi
А	33	Influence of Mn composition in Co ₂ MnSi films on magnetoresistance characteristics of Co ₂ MnSi-based giant magneto-resistance devices Masaki Inoue
А	35	Giant Enhancement of Nonlocal Spin Signals in n-Ge using Co ₂ FeAl _{0.5} Si _{0.5} Electrodes Makoto Tsukahara
A	37	Enhancement of spin mixing conductance by ferromagnetic layer Ryohei Nakamura
А	39	Local and non-local structural spin valves comprising Fe ₃ Si/FeSi ₂ /Fe ₃ Si trilayer films Ken-ichiro Sakai
А	41	Enhancement of dynamical thermal spin injection efficiency in FM/NM bilayer system Kazuto Yamanoi
А	43	Spin-current detection in magnetic multilayer with nano-constricted region Sho Inami

Poster Session	No.	Title Poster Presenter
A	45	Possibility of supercurrent conversion through a magnetic domain wall in a Ni-Fe wire Kohei Ohnishi
А	47	Resistance of the topological insulator edge channel due to nuclear spins Peter Stano
Α	49	Magnetism and nanostructure of Eu-doped GaN Akira Masago
Α	51	Hole density dependence of spin relaxation time in Be-doped InGaAsP bulk Kizuku Yamada
А	53	Effect of thermal annealing on hole spin relaxation of Be-doped InGaAsP bulk Shiima Tanigawa
А	55	Spin-Interference in Anisotropic Spin-Orbit Fields in Mesoscopic Rings Henri Saarikoski
Α	57	Spin polarization measurements of ferromagnetic materials using point contact Andreev reflection technique. Masanobu Shiga
А	59	Hydrogen transfer via quantum tunneling in metallic nanocontacts studied by point- contact spectroscopy Tatsuya Kawae
A	61	Polarized Neutron Reflectivity Study of Magnetic Structure in Fe ₃ Si/FeSi ₂ Superlattices Takayasu HANASHIMA
А	63	Wide-field Magnetometry by Frequency Modulation of Microwaves Based on Nitrogen-vacancy Centers in Diamond Shintaro Nomura
А	65	MnGa thin films with perpendicular magnetic anisotropy grown on BiSb topological insulator Nguyen Huynh Duy Khang

Poster Sessior	No.	Title Poster Presenter
A	67	Electronic Structure and Magnetic Anisotropies of Antiferromagnetic Transition-metal Difluorides
		Cinthia Antunes Correa
А	69	Control of valley dynamics in silicon quantum dots in the presence of an interface step Péter Boross
А	71	Data-driven atomic-layer alignments for large perpendicular magnetic anisotropy in Au- Fe thin films on MgO(001)
		Kohei Nozaki
А	73	Unconventional spin transport property in ferromagnetic / nonmagnetic bilayer channel Taisei Ariki
А	75	Magnetic Anisotropy in Insulating Dilute Ferromagnet (Ga,Mn)N
		Katarzyna Gas
А	77	Magnetization Switching of High Magnetic-Anisotropy Co/Pt Multilayers Induced by Spin-Orbit Torque
		Butsurin Jinnai
Α	79	Capacitance Spectroscopy of Dirac Fermions in HgTe Quantum Well
		Maxim Savchenko
Α	81	Current Induced Magnetic Domain Wall Motion in Pt/Co/Pd and Pd/Co/Pt System
		<u>Yicheng Guan</u>
Α	83	Control of Spin Helix Symmetry in Semiconductor Quantum Wells by Crystal Orientation
		Michael Kammermeier
А	85	Coherent spin-polarized tunneling in fully epitaxial magnetic tunnel junctions with a semiconductor GaO_x tunnel barrier
		<u>Hidekazu Saito</u>
А	87	Quantum Hall effects in In _{0.75} Ga _{0.25} As bilayer 2DEG with similar sheet electron densities
		Syoji Yamada

Poster Session	No.	Title Poster Presenter
A	89	Antenna Configuration Dependence of the Nonreciprocity of Magnetostatic Surface Wave Takashi Manago
A	91	Ferromagnetic properties and magnetic percolation threshold in MBE-grown (Zn , Mn , Sn) As_2 thin films
А	93	Enhancement of spin-orbit interaction in oxidized Cu thin films measured by weak anti-localization Ryoto Enoki
Α	95	Electronic structure of (Ga,Mn)As studied by in-situ high-resolution ARPES Seigo Souma
А	97	Dual-spacer nanojunctions exhibiting large current-perpendicular-to-plane giant magnetoresistance for ultrahigh density magnetic recording Zhenchao Wen
А	99	Extraordinary Hall effects and spin Hall effects in ternary alloy spin glasses Hiroki Taniguchi
Α	101	Terahertz control of magnetization using the Franz-Keldysh effect in a ferromagnet Tomoaki Ishii
A	103	Magnetotransport in narrow gap semiconductor InSb quantum wells Tada Masaki
А	105	Inverse spin Hall effect in single-crystal bismuth Masayuki Matsushima
А	107	Modulation of Spin-Transport and Magnetization Properties Due to Application of High Pressure Akihiro Mitsuda
А	109	Laser-induced spin dynamics in CoFeB/MgO/Ta tunnel junction with voltage control of magnetic anisotropy Yuta Sasaki

Poster Session	No.	Title Poster Presenter
А	111	Topological Spin Currents in Graphene Nanoribbons
		Ren Itoh
А	113	Magnon diffusion in nanoporous magnet Takumi Sugiura
А	115	Tunable Magnonic Crystals with Alternating Dzyaloshinskii-Moriya Interactions
		Seung-Jae Lee
А	117	Visualization of Propagating Spin-Wave Packets and Dispersion Relation Cleated by a Laser Pulse in NiFe Thin Films
		Akira Kamimaki
А	119	Enhancement of spin orbit interaction in GaAs quantum well by inserting GaInP
		Juyoung Yoon
А	121	Electron transport induced by the magnon scattering of the thermal gradient
		Koujiro Hoshi
А	123	Spin defect centers in nanostructured diamonds for applications in quantum optics and quantum sensing
		Masazumi Fujiwara
А	125	Transport and optical properties of (110) GaAs quantum wells for photon-spin quantum state conversion using heavy hole states
		Tomohiro Nakagawa
А	127	Creation of long-lived magnons by nonlinear spin dynamics
		Hiroto Sakimura
А	129	Single-shot measurement of a nuclear spin in an NV center in diamond
		Riyo ENYO
А	131	Quantum teleportation transfer from a photon to a nucleon in diamond
		Hiroki Kano

Poster Session	No.	Title Poster Presenter
A	133	Perpendicular magnetic anisotropy on epitaxial L_11 -CuPt Shunsuke Yamada
А	135	Adaptive quantum manipulation over geometrical spin qubits under a zero field Kouyou Kuramitani
A	137	Spin Hall Efficiency in Heavy-Element-Free Compounds Yong-Chang Lau
Α	139	Geometric quantum entanglement manipulation with a polarized microwave in an NV center in diamond Kodai Nagata
Α	141	Experimental Study on Nonlinear Magnetization Dynamics in sub-micron wide NiFe wires Genki Okano
А	143	Optimal frequency for microwave-assisted magnetization reversal in exchange coupled composite media Shoko Suzuki
А	145	Time-resolved imaging of spin wave transmission through an air gap Keita Matsumoto
А	147	Resistive switching device in laterally configured CoFeB /NiO bilayer system Yosuke Nakano
А	149	Enhancement of Interface Anisotropy Energy by Fluoride Introduction at CoFeB/Al ₂ O ₃ and CoFeB/MgO Interfaces Weidong Li
А	151	Geometric Effects on Rashba Spin Interferometers Junsaku Nitta
А	153	Hot electron effect on drift spin transport in GaAs quantum well Yoji Kunihashi

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	Α	155	Conversion of electric and magnetic fields by combining piezoelectric and magnetoelastic effects
			Tsubasa Sasaki
	Α	157	Spin-dependent transport in NiFe / Pt bilayer system Sakura Asano
	Α	159	Superconducting Proximity Effect in Ferromagnetic Semiconductor (In,Fe)As
	A	108	Superconducting Frommity Elect in Terromagnetic Semiconductor (in, re/As
			Taketomo Nakamura
	Α	161	Numerical simulations of the Coulomb blockade microscopy: probing the local properties
			of the planar quantum dots with the scanning gate technique
			Elzbieta Wach
	Α	163	Modulation of translational mode frequency of magnetic vortex caused by interfacial Dzyaloshinskii-Moriya interaction
			Yuki Goto
	Α	165	Hyperfine Spin Relaxation in a GaAs Single Electron Quantum Dot
			Leon Camenzind
	Α	167	Reversible oxidation of cobalt under ionic liquid gate voltage in Pt/Co/AlO trilayer structure
			Minsik Kong
	Α	169	Spin injection into multilayer graphene from highly spin-polarized Co ₂ FeSi Heusler alloy
			D.; M., i.e.
			Rai Moriya
	Α	171	Microscopic Knight-shift measurements in the quantum-Hall breakdown system
			Katsushi Hashimoto
	Α	173	Spatially resolved separation of spin and charge diffusion in a two-dimensional electron gas
			Yuansen Chen
	Α	175	Spin-dependent transport in hole quantum dots
			A.R. Hamilton

oster ession	No.	Title Poster Presenter
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A	179	Spin valve effects in trilayered films comprising nitrogen-doped carbon interlayers Satoshi Takeichi
В	2	Using Spin Polarized STM Spectroscopy to determine the Topological Transition in 1D Rashba Nanowire
		Denis Chevallier
В	4	Valley spin valves in periodically buckled honeycomb lattices Son-Hsien Chen
В	6	Systematic study of spin transport in Si nanowires with axial doping gradient in lateral spin valve configurations
		Konstantinos Kountouriotis
В	8	Robust signature of the topological phase transition in the edge spin densities of the Majorana nanowires
		Marcel Serina
В	10	Green's Function of the Magnetic Topological Insulator in a Gradient Expansion Approach
		Yusuke Hama
В	12	Finite-Temperature Conductance of Helical and Fractional Helical Luttinger Liquids Pavel Aseev
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В	14	Fe ₃ Si/Ge/Fe ₃ Si trilayers on GaAs(001)
		Jens Herfort
В	16	Comparison of quantum Hall breakdown characteristics in GaAs/AlGaAs and InGaAs/InP quantum wells between spin-polarized filling factor v=1 and v=3 states
		David Guy Austing
В	18	Microscopic Origin of Dzyaloshinskii-Moriya Interaction at the Co/Pt interface
		Sanghoon Kim

Poste Sessio	r on No.	Title Poster Presenter
В	20	Chirality-induced anomalous Hall effect: Bridging a gap between weak and strong coupling regimes
		Kazuki Nakazawa
В	22	antiferromagnet
		<u>Hideki Narita</u>
В	24	Spin Hall effect in ferromagnets measured by spin-torque FMR
		Kensho Tanaka
В	26	Spin Transport in Fully Epitaxial CoFe/p-Ge/Fe ₃ Si Structures
		Masahiko Ikawa
В	28	Spin-vorticity coupling in a Dirac electron fluid
		Takumi Funato
В	30	Interplay between spin and charge in thin Bismuth single crystalline films grown on Ge (111)
		Matthieu Jamet
В	32	Imaging global vortex in CoFeB nanotubes
		Denis Vasyukov
В	34	Antisymmetric Magnetoresistance via domain wall propagations in a non-collinear antiferromagnetic wire
		Satoshi Sugimoto
В	36	Materials dependence of spin-to-charge current conversion at non-magnetic metal/oxide interface
		Hanshen Tsai
В	38	Electrical Detection of Nuclear Spin-Echo Signals in an Electron Spin Injection System
		Zhichao Lin
В	40	Local magnetoresistance in a $Co_2FeAl_{0.5}Si_{0.5}/n^{\dagger}$ —Ge lateral spin valve
		Soichiro Oki

Poster Session	No.	Title Poster Presenter
В	42	Donor-Induced Spin Relaxation in n-Ge Michihiro Yamada
В	44	Spin Seebeck voltage enhancement by $Ta_{50}W_{50}$ with large spin Hall angle Fumiya Nakata
В	46	Spin Pumping into Superconductors Hiroto Adachi
В	48	Magnetic and electric properties of the stacking film with quasi antiferromagnetic layer Gen Nagashima
В	50	Observation of spin relaxation in GaInNAs quantum well and InGaAs Quantum well Takuya Kamezaki
В	52	Resistively-detected NMR lineshape variations in a quantum point contact M. H. Fauzi
В	54	Material design for Ge based magnetic semiconductor Hikari Shinya
В	56	Fabrication of quasi antiferromagnetic layer by 90-degree magnetic coupling through magnetic oxide layer Yudai Hirayama
В	58	Observation of Spin Relaxation in Fe Doped InP Bulk Masayuki Iida
В	60	The fluctuation of efficiencies of charge-spin and charge-heat conversions Hiroki Okada
В	62	Electric field dependence of spin drift velocity in non-degenerate Si Soobeom Lee

Poster Session	No.	Title Poster Presenter
В	64	Refracting-Facet Spin Photodiode based on Fe/x-AlO _x /p-InGaAs Schottky Junction
		Ronel Christian Intal Roca
В	66	Band-Offset Engineering for Control of the Spin Relaxation Hiroshi AKERA
В	68	Spin Dependent Coupling between Quantum Dots and Topological Quantum Wires
		Silas Hoffman
В	70	Nernst Voltage Generated by Magnon Hall Effect on Magnetic Skyrmion System
		Yuhki Shimada
В	72	Dynamics of angular momentum in a spin-phonon system
		Jotaro Nakane
В	74	Large scale density functional calculations for high entropy alloys by order—N all- electron screened KKR Green's function method
		Tetsuya Fukushima
В	76	High-temperature ferromagnetism in n-type and p-type Fe-doped ferromagnetic semiconductors
		Nguyen Thanh Tu
В	78	Microscopic Theory of Spin-wave Spin Torque induced by Temperature Gradient
		Terufumi Yamaguchi
В	80	Fermi Level Position and Bands Offsets Determination in (Ga,Mn)N by Contactless Electroreflectance
		Maciej Sawicki
В	82	Spin properties of excitons in InAs/InP(001) quantum dashes emitting at 1.55 μ m
		Marcin Syperek
В	84	Novel Gap Closure from Magnetic Textures in Superconductors.
		Chris James Fortune Carroll

Poster Session	No.	Title Poster Presenter
В	86	Influence of above-barrier illumination on spin relaxation time of InGaAs/InAlAs multiple quantum wells Ken Morita
В	88	Quantum dynamics of skyrmions in chiral magnets Christina Psaroudaki
В	90	Temperature dependent Spin-Orbit torque in perpendicularly magnetized Pt(Pd)/Co system Yuki Hibino
В	92	First-Principles Materials Design of Spin-Valley Topological Oxides Kunihiko Yamauchi
В	94	Weak anti-localization in In _{0.75} Ga _{0.25} As two-dimensional electron gas bilayer samples Syoji Yamada
В	96	Spin injection into Si through an amorphous SiO_xN_y tunnel barrier Ryosho Nakane
В	98	Quantum Oscillation of Anomalous Hall Conductivity Induced by Magnetic Skyrmions on Topological Insulator Surfaces Yasufumi Araki
В	100	Effective Hamiltonian approach to optical chirality in Weyl spin-orbit system Hideo Kawaguchi
В	102	Dynamics of the Electric-Field Induced Magnetization in Antiferromagnetic Chromium Oxide: Faraday Rotation Measurement Shun Hikita
В	104	First-Principles Materials Design on TM-doped ZnSnAs ₂ ; TM = V, Cr, Mn, Fe, Co, and Ni Hidetoshi Kizaki
В	106	Magnetic-Field Dependence of the Coherent Magnons in an Antiferromagnet NiO Kensho Kawamoto

Poster Session	No.	Title Poster Presenter
В	108	Non-local opto-electrical spin injection and detection in germanium at room temperature Matthieu Jamet
В	110	Electric-field effect on spin-wave resonance in nanoscale CoFeB/MgO magnetic tunnel junctions Takaaki Dohi
В	112	Design of Surface Plasmon Antennas on Gate-defined Lateral Quantum Dots Rio Fukai
В	114	Increase of tunneling magnetoresistance in trilayer structures composed of group–IV ferromagnetic semiconductor $Ge1_{-x}Fe_x$, MgO , and Fe Kosuke Takiguchi
В	116	Electrical Detection of Antiferromagnetic Dynamics Yuta Yamane
В	118	First-principles study on structural stability and magnetism in equiatomic quaternary Heusler alloys Fumiaki Kuroda
В	120	Microwave engineering and materials science for nitrogen-vacancy centers in diamond Eisuke Abe
В	122	New diluted magnetic semiconductors: Role of narrow band gaps Bo Gu
В	124	Spin current thorough helical magnets Jun-ichiro Ohe
В	126	Terahertz Spin-Wave Emission from Ferrimagnetic Domain walls SEHYEOK OH
В	128	Voltage control of magnetism in ion-gated Co/Pt with surface oxidation Takamasa Hirai

Poster Session		Title Poster Presenter
В	130	Quadrupolar effect in zero-field dynamic nuclear spin polarization of a single self-assembled InAlAs quantum dot Ryosuke Matsusaki
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В	132	Electric Field Controlled Thermo-Power Effects in La _{0.7} Ca _{0.3} MnO ₃ Thin Films Himanshu Sharma
В	134	Perpendicular magnetocrystalline anisotropy in 3d transition-metal thin films for
Б	134	spintronic devices
		Thao Thi Phuong Nguyen
В	136	Investigation of optical polarization in layered semiconductor GaSe slab
		Masaki Suzuki
В	138	Spin-torque ferromagnetic resonance of ionic-liquid gated Pt/Ni ₈₁ Fe ₁₉
		Satoshi Haku
В	140	Spin Relaxation Influence on Edelstein Magnetoresistance at Metal/Oxide Interfaces
		Junyeon Kim
В	142	Optical non-adiabatic geometric rotation with a degenerate spin under a zero field
		Yuhei Sekiguchi
В	144	Observation of temperature dependent Terahertz modulation in rare earth iron garnet
		Pritam Khan
В	146	Cross Sectional STM/STS Study on 2D-Topological Insulator InAs/GaSb QW Systems
		Shigeru Kaku
В	148	Dynamics of the Electric-Field Induced Magnetization in YIG Observed by Faraday Rotation
		Takashi Hasunuma
В	150	Spin transmission in collinear ferroic magnetic multilayer systems
		Felix Bastian Paul Fuhrmann

Poster Session	No.	Title Poster Presenter
В	152	Cu thickness dependence of alternating spin current generated via spin rotation coupling in surface acoustic waves Tomohide Yoshikawa
В	154	Analysis of Coupled Oscillation of Magnetic Vortices Excited by Spin Transfer Torque Taisuke Horaguchi
В	156	Magnetic tunnel junctions with semiconductor $CuIn_{1-x}Ga_xSe_2$ tunneling barrier Shinya Kasai
В	158	Enhancement of Spin Hall Effect Induced by Natural Oxidation of Cu Yuito Kageyama
В	160	Propagation of Spin-Wave Spin Current in Helical Multiferroics Shin Miyahara
В	162	Transport properties of Mn-doped Bi ₂ Se ₃ thin films Thierry Ferrus
В	164	Principal Investigations of Acceptor Qubits in Silicon Takashi Kobayashi
В	166	Kondo effect and superconducting transport in SiGe self-assembled quantum dots Kazutoshi Kawaguchi
В	168	Long Range Spin Wave Propagation in Ordered Ferromagnetic FeRh Takamasa Usami
В	170	The new methods for spin torque measurement Kungwon Rhie
В	172	Coherent Long-Distance Displacement of Individual Electron Spins Pierre Andre Mortemousque

Poster Sessior	ı No.	Title Poster Presenter
В	174	Spin and Charge Signatures of Topological Superconductivity in Rashba Nanowires
		Pawel Szumniak
В	176	Kondo-Fano resistance peak in a two-dimensional electron gas under strong magnetic field
		Makoto Onizaki
В	178	Spin Nernst Effect in Platinum
		<u>Arnab Bose</u>
В	180	Surface Acoustic Wave Generation by Ferromagnetic Resonance
		Swapnil Sopanrao Bhuktare
В	182	Spin defect centers in nanostructured diamonds for applications in quantum optics and quantum sensing
		Masazumi Fujiwara