The 83rd

JSAP Autumn Meeting 2022

September 20 (Tue.) - 23 (Fri.), 2022

Kawauchi-Kita Campus, Tohoku University & Online

Call for Papers

3 Steps to Contribute a Presentation

Join JSAP

Regular Membership

Admission Fee: 10,000 JPY

Annual Due*: 10,000 JPY

*Annual due will be waived for the first year.

Graduate Student/ Student Membership

Admission Fee: 3,000JPY

Annual Due*: 3,000 JPY

*Annual due will be waived for the first year.

Submit

Submission Deadline:

June 21 (Tue.), 2022 (17:00, JST)

No late submission is accepted after the deadline.

Online submission will open on May 25 (Wed.).

Register

Early-bird Registration (until August 23, 2022)

Non-student (JSAP Member / Partner Society Member): 12,000 JPY

Non-student (Non-member) : 23,000JPY

JSAP Senior Member: 4,000 JPY

Student(Speaker): 3,000 JPY

Late Registration (from September 1, 2022)

Non-student (JSAP Member / Partner Society Member): 18,000 JPY

Non-student (Non-member) : 30,000JPY

JSAP Senior Member: 7,000 JPY

Student(Speaker): 5,000

*Students who will be attending online without presenting are waived from the registration fee.

*Online registration will open on May 25.

Submission Deadline

June 21 (Tue.), 2022 (5:00pm, JST)

*No late submission is accepted.

Call for Papers

Papers are solicited for the following sessions and symposia.

The date and section of your presentation will be determined by our program committee and informed you in early July. Your papers may be forwarded from a regular session to a symposium and vice versa.

Regular Sessions

Category	Section	
Focused Session "AI Electronics"	31.1.	(Keywords) brain-inspired computer, neuromorphic, neural network, synapse device, memory, learning mechanism, STDP, combinational optimization, annealing, quantum machine learning, quantum AI, optical computing, reservoir computing, physical reservoir
1 Interdisciplinary Physics and Related Areas of Science and Technology	1.1	Interdisciplinary and General Physics
	1.2	Education
	1.3	Novel technologies and interdisciplinary engineering
	1.4	Energy conversion, storage, resources and environment
	1.5	Instrumentation, measurement and Metrology
	1.6	Ultrasonics
2 Ionizing Radiation	2.1	Detection Devices
	2.2	Radiation physics fundamentals & applications, radiation generators, new technology
	2.3	Accelerator Mass Spectrometry, Accelerator Beam Analysis
	2.4	Medical application
	2.5	Radiation-induced phosphors
3 Optics and Photonics	3.1	Basic optics and frontier of optics (merged with formerly 3.2 Equipment optics and materials)
	3.2	Information photonics and image engineering (formerly 3.3)
	3.3	Biomedical optics (formerly 3.4)
	3.4	Laser system and materials (formerly 3.5)
	3.5	Ultrashort-pulse and high-intensity lasers (formerly 3.6)
	3.6	Laser processing (formerly 3.7)
	3.7	Optical measurement, instrumentation, and sensor (formerly 3.8)
	3.8	Terahertz technologies (formerly 3.9)
	3.9	Optical quantum physics and technologies (formerly 3.10)
	3.10	Photonic structures and phenomena (formerly 3.11)
	3.11	Nanoscale optical science and near-field optics (formerly 3.12)
	3.12	Semiconductor optical devices (formerly 3.13)
	3.13	Optical control devices and optical fibers (formerly 3.14)
	3.14	Silicon photonics and integrated photonics (formerly 3.15)
4 JSAP-OPTICA Joint Symposia	4.1	Plasmonics and Nanophotonics
	4.2	Photonics Devices, Photonic Integrated Circuit and Silicon Photonics
	4.3	Lasers and laser materials processing
	4.4	Information Photonics
	4.5	Nanocarbon and 2D Materials
	4.6	Terahertz Photonics
	4.7	Quantum Optics and Nonlinear Optics
6 Thin Films and Surfaces	6.1	Ferroelectric thin films
	6.2	Carbon-based thin films
	6.3	Oxide electronics
	6.4	Thin films and New materials
	6.5	Surface Physics, Vacuum
	6.6	Probe Microscopy
7 Beam Technology and Nanofabrication	7.1	X-ray technologies
	7.2	Applications and technologies of electron beams
	7.3	Micro/Nano patterning and fabrication
	7.4	Buried interface sciences with quantum beam
	7.5	Ion beams
	7.6	Atomic/molecular beams and beam-related new technologies
8 Plasma Electronics *All-English session is scheduled in the section 8.6	8.1	Plasma production and diagnostics
	8.2	Plasma deposition of thin film, plasma etching and surface treatment
	8.3	Plasma nanotechnology
	8.4	Plasma life sciences
	8.5	Plasma phenomena, emerging area of plasmas and their new applications
	8.6	Plasma Electronics English Session
	8.7	Plasma Electronics Invited Talk
	8.8	Plasma Electronics Award Speech

Regular Sessions (continued)

Category	Section	
9 Applied Materials Science	9.1	Dielectrics, ferroelectrics
	9.2	Nanoparticles, Nanowires and Nanosheets
	9.3	Nanoelectronics
	9.4	Thermoelectric conversion
	9.5	New functional materials and new phenomena
10 Spintronics and Magnetics *English presentations are welcomed in this category. Outstanding presentations by student speakers will be awarded by Professional Group of Spintronics.	10.1	Emerging materials in spintronics and magnetics (including fabrication and charactrization methodologies)
	10.2	Fundamental and exploratory device technologies for spin
	10.3	Spin devices, magnetic memories and storages
	10.4	Spintronics in semiconductor, topological material, superconductor, and multiferroics
	10.5	Application of magnetic field
11 Superconductivity	11.1	Fundamental properties
	11.2	Thin and thick superconducting films, coated conductors and film crystal growth
	11.3	Critical Current, Superconducting Power Applications
	11.4	Analog applications and their related technologies
	11.5	Junction and circuit fabrication process, digital applications
12 Organic Molecules and Bioelectronics	12.1	Fabrications and Structure Controls
	12.2	Characterization and Materials Physics
	12.3	Functional Materials and Novel Devices
	12.4	Organic light-emitting devices and organic transistors
	12.5	Organic solar cells
	12.6	Nanobiotechnology
	12.7	Biomedical Engineering and Biochips
13 Semiconductors	13.1	Fundamental properties, surface and interface, and simulations of Si related materials
	13.2	Exploratory Materials, Physical Properties, Devices
	13.3	Insulator technology
	13.4	Si processing /Si based thin film / MEMS / Equipment technology
	13.5	Semiconductor devices/ Interconnect/ Integration technologies
	13.6	Nanostructures, quantum phenomena, and nano quantum devices
	13.7	Compound and power devices, process technology and characterization
	13.8	Optical properties and light-emitting devices
	13.9	Compound solar cells
15 Crystal Engineering	15.1	Bulk crystal growth
	15.2	II-VI and related compounds
	15.3	III-V-group epitaxial crystals, Fundamentals of epitaxy
	15.4	III-V-group nitride crystals
	15.5	Group IV crystals and alloys
	15.6	Group IV Compound Semiconductors (SiC)
	15.7	Crystal characterization, impurities and crystal defects
16 Amorphous and Microcrystalline Materials	16.1	Fundamental properties, evaluation, process and devices in disordered materials
	16.2	Energy Harvesting
	16.3	Bulk, thin-film and other silicon-based solar cells
17 Nanocarbon Technology	17.1	Carbon nanotubes & other nanocarbon materials
	17.2	Graphene
	17.3	Layered materials
Joint Session K "Wide bandgap oxide semiconductor materials and devices"	21.1	(Keywords) thin film growth, characterization of physical properties, transparent conductive oxide film, electronic devices, optical devices, novel functional materials & development of novel technologies
Joint Session M "Phonon Engineering"	22.1	(Keywords) material development and material properties, measurement methods, theory and simulation, thermal conduction and phonon transport, nanoscale and low dimensional system, band engineering, coherent control, phonon polariton, magnon, thermal management and design technology, device application, thermoelectrics, thermal storage, thermal insulation, micro/nanomechanics, heat dissipation, thermal conversion, nano-structure/device fabrication technology
Joint Session N "Informatics"	23.1	(Keywords) materials informatics, measurement informatics, data science, data mining, machine learning, sparse modeling, deep learning, Bayes optimization, data assimilation, high-throughput, Automation, Robotics

Symposium

See https://meeting.jsap.or.jp/english/symposium (*will update in late May)

Submission Guidelines (for contributed papers)

1 Qualification

Speakers of contributed presentation (oral and poster presentations) should be JSAP Regular Members, JSAP Student Members and JSAP's Partner Societies* Members.

*JSAP's partner societies: American Physical Society (APS), CSOE(Chinese Society for Optical Engineering), European Optical Society (EOS), European Physical Society (EPS), Institute of Physics (IOP), Korean Physical Society (KPS), OPTICA (formerly OSA), Optical Society of Japan (OSJ), Optical Society of Korea (OSK), Physics Education Society of Japan (PESJ), Physical Society of Republic of China (PSROC), International Society for Optical Engineering (SPIE), Physics Society of the Philippines(SPP) and Taiwan Photonics Society (TPS).

2. Handling of abstract (PDF)

1) Our program committee draws up a program according to speakers' requests. However, the program committee may forward your abstract to another category for the benefit of the overall program.
2) JSAP holds the copyright on the submitted abstracts, and all the submitted abstracts will be published on the online conference program and extended abstracts DVD.
3) The abstracts submitted to the JSAP-OPTICA Joint Symposia (held only in JSAP Autumn Meeting) will be also published in OPTICA's Optics InfoBase. JSAP grants to OPTICA a perpetual, non-exclusive, royalty-free license to use them in any type of media including print or electronic.
4) The maximum number of submission per person is 3.

3. JSAP Young Scientist Presentation Award

JSAP Young Scientist Presentation Award will be presented to young JSAP members (under 34 years of age as of April 1, 2023) who have presented outstanding papers.

A poster presentation is not eligible for the award.

To apply for the award, please select "apply" upon online submission. Applicants for the award will be indicated as such in the program.