

Room	Cap.	March 17 (Sat.)		March 18 (Sun.)		March 19 (Mon.)		March 20 (Tue.)	
		AM	PM	AM	PM	AM	PM	AM	PM
A202 (54-202)	121	9:00~11:15 12.6 Nanobiotechnology	13:00~18:30 12.6 Nanobiotechnology	9:00~11:45 12.6 Nanobiotechnology	13:15~18:40 S22 Semiconductor Device Simulation: Applications and Future Perspectives	9:00~12:15 10.5 Application of magnetic field	13:15~17:30 S16 Magneto Science now and the future		
A204 (54-204)	121	9:00~11:30 Tutorial	13:00~18:00 SP4 How to Promote the Activity of Young Researchers to Save Japan in a Crisis of Decline in the Strength of Science and Technology	9:00~11:45 12.3 Functional Materials and Novel Devices	13:15~18:15 12.3 Functional Materials and Novel Devices	9:00~11:45 12.3 Functional Materials and Novel Devices		9:00~11:45 12.3 Functional Materials and Novel Devices	13:15~15:15 12.3 Functional Materials and Novel Devices
A302 (54-302)	121			9:30~11:45 3.10 Optical quantum physics and technologies	13:30~16:45 S6 Quantum Computer and Quantum Simulator	9:00~11:45 3.10 Optical quantum physics and technologies	13:15~19:30 3.4 Biomedical optics	9:00~11:30 3.10 Optical quantum physics and technologies	
A304 (54-304)	121		14:00~18:30 2.1 Radiation physics and Detector fundamentals	10:00~11:45 2.3 Application, radiation generators, new technology	13:15~16:30 S3 The synchrotron radiation micro beam technology for the real elucidation of biological effect of radiation	9:00~11:45 2.3 Application, radiation generators, new technology	13:15~15:30 2.3 Application, radiation generators, new technology	9:00~12:00 2.2 Detection systems	13:15~16:30 2.2 Detection systems
A402 (54-402)	121	9:00~12:00 3.12 Nanoscale optical science and near-field optics	13:30~18:30 3.12 Nanoscale optical science and near-field optics	9:00~12:00 3.12 Nanoscale optical science and near-field optics	13:15~16:25 S28 Development of innovative functional materials based on mixed-anion compounds		13:30~17:15 3.9 Terahertz technologies	9:00~12:00 3.9 Terahertz technologies	13:15~17:00 3.9 Terahertz technologies
A404 (54-404)	121		13:15~17:00 3.16 Optics and Photonics English Session		13:15~18:00 S5 Progress in studies on material conversion and processing with high-power lasers	9:00~11:45 3.7 Laser processing	13:15~18:45 3.7 Laser processing		
B201 (53-201)	95		13:15~17:00 S18 pMAIRS: A cutting-edge technique revealing the molecular orientation even in an amorphous thin film having a surface roughness	9:30~11:45 3.15 Silicon photonics	13:15~17:30 3.15 Silicon photonics	9:30~11:45 3.15 Silicon photonics	13:15~19:00 3.3 Information photonics and image engineering		
B203 (53-203)	95	9:30~12:15 3.13 Semiconductor optical devices	13:15~16:45 3.2 Equipment optics and materials	9:00~12:00 3.13 Semiconductor optical devices	13:15~18:00 3.13 Semiconductor optical devices	9:00~11:45 3.13 Semiconductor optical devices	13:15~18:30 3.1 Basic optics and frontier of optics	9:30~11:30 3.1 Basic optics and frontier of optics	
B301 (53-301)	95	9:00~12:15 15.1 Bulk crystal growth	16:00~18:30 15.1 Bulk crystal growth	9:00~12:00 13.1 Fundamental properties, surface and interface, and simulations of Si related materials	13:00~15:45 13.1 Fundamental properties, surface and interface, and simulations of Si related materials	9:00~12:00 3.6 Ultrashort-pulse and high-intensity lasers	13:15~19:30 3.6 Ultrashort-pulse and high-intensity lasers	9:00~12:00 3.6 Ultrashort-pulse and high-intensity lasers	13:15~16:45 7.1 X-ray technologies
B303 (53-303)	95		16:00~19:15 3.14 Optical control devices and optical fibers	9:00~10:15 CS1 3.5 & 3.14 Code-sharing session 10:30~11:30 3.14 Optical control devices and optical fibers	13:15~16:30 11.5 Junction and circuit fabrication process, digital applications	9:00~11:45 1.6 Ultrasonics	13:15~18:15 11.4 Analog applications and their related technologies	9:45~12:45 7.2 Applications and technologies of electron beams	14:00~16:15 7.2 Applications and technologies of electron beams
B401 (53-401)	95		13:00~17:00 S17 Numerical simulation technology active in superconducting materials - Physical phenomena, crystal growth and application design-			9:00~12:00 11.1 Fundamental properties	13:15~16:00 11.1 Fundamental properties	10:30~12:00 7.3 Micro/Nano patterning and fabrication	13:00~16:15 7.3 Micro/Nano patterning and fabrication
B403 (53-403)	95	9:00~11:15 3.5 Laser system and materials	13:15~18:00 3.5 Laser system and materials		13:15~18:30 11.2 Thin and thick superconducting films, coated conductors and film crystal growth		13:15~16:30 11.3 Critical Current, Superconducting Power Applications	9:00~11:45 7.5 Ion beams	

Room	Cap.	March 17 (Sat.)		March 18 (Sun.)		March 19 (Mon.)		March 20 (Tue.)	
		AM	PM	AM	PM	AM	PM	AM	PM
C101 (52-101)	164	9:30~12:30 13.4 Si wafer processing /Si based thin film /Interconnect technology/ MEMS/ Integration technology	16:00~17:30 13.4 Si wafer processing /Si based thin film /Interconnect technology/ MEMS/ Integration technology			9:15~11:45 13.4 Si wafer processing /Si based thin film /Interconnect technology/ MEMS/ Integration technology	13:45~19:05 S24 Integrated Sensor Systems for Ubiquitous Health Care Applications	9:15~12:15 13.4 Si wafer processing /Si based thin film /Interconnect technology/ MEMS/ Integration technology	13:45~16:45 13.4 Si wafer processing /Si based thin film /Interconnect technology/ MEMS/ Integration technology
C102 (52-102)	164	9:00~11:30 Tutorial	13:45~18:30 S21 Novel physical properties and applications of ternary compounds	9:00~12:00 6.3 Oxide electronics	13:45~18:00 6.3 Oxide electronics	9:00~12:00 6.3 Oxide electronics	13:45~17:45 S12 Recent progresses in development of electron sources and their novel applications	9:00~12:15 6.3 Oxide electronics	13:45~16:30 6.3 Oxide electronics
C103 (52-103)	164	9:00~11:30 Tutorial	13:45~18:00 6.4 Thin films and New materials	9:15~11:45 S7 New developments on technologies for flexible ceramics coatings and inorganic/organic hybrid flexible devices	13:30~18:00 S7 New developments on technologies for flexible ceramics coatings and inorganic/organic hybrid flexible devices	9:00~12:15 6.4 Thin films and New materials	13:45~17:45 S11 Advanced 3D atomic imaging to develop new materials and devices technologies	9:00~12:00 6.4 Thin films and New materials	
C104 (52-104)	164	9:00~11:30 Tutorial	13:45~18:00 SP5 JSAP-SPIE Joint Symposium		13:00~17:00 S9 Fundamentals and applications of piezoelectric thin-film devices	9:00~12:15 6.1 Ferroelectric thin films	13:15~18:30 6.1 Ferroelectric thin films		
C201 (52-201)	142		13:15~18:15 8.5 Plasma phenomena, emerging area of plasmas and their new applications		13:45~17:30 S10 Ion Beam and Surface Analysis: Recent Progress in Secondary Ion Mass Spectrometry (SIMS) and Its Application to Organic Analysis	9:00~12:00 8.3 Plasma nanotechnology	13:45~19:00 8.4 Plasma life sciences		
C202 (52-202)	201	10:00~12:00 17.2 Graphene	13:45~17:45 17.2 Graphene	9:00~12:15 17.2 Graphene	13:45~16:00 17.2 Graphene		13:45~18:30 17.3 Layered materials	10:00~12:15 17.3 Layered materials	13:45~15:30 17.3 Layered materials
C204 (52-204)	201		13:15~18:30 8.1 Plasma production and diagnostics	9:00~10:15 8.6 Plasma Electronics English Session 10:15~10:45 8.5 Plasma phenomena, emerging area of plasmas and their new applications 11:00~11:30 8.7 Plasma Electronics Invited Talk 11:30~11:45 8.8 Plasma Electronics Award Ceremony	13:45~18:00 S13 Synthesis and plasma processing for 2D sheet materials -from ultra-thin films to atomically thin layered materials-		13:45~18:15 8.2 Plasma deposition of thin film, plasma etching and surface treatment	9:00~12:15 8.2 Plasma deposition of thin film, plasma etching and surface treatment	
C301 (52-301)	142				13:45~18:15 CS3 3.11 & 13.6 Code-sharing Session	9:00~11:45 CS2 3.11 & 3.12 Code-sharing session	13:45~18:30 3.11 Photonic structures and phenomena		13:00~16:30 3.11 Photonic structures and phenomena
C302 (52-302)	220		13:45~17:30 S26 A new era of defect research starting with field fusion	9:00~12:15 13.7 Compound and power electron devices and process technology	13:45~19:00 13.7 Compound and power electron devices and process technology	9:00~12:15 13.7 Compound and power electron devices and process technology	13:45~18:30 13.7 Compound and power electron devices and process technology		
C303 (52-303)	142	10:00~12:00 17.1 Carbon nanotubes & other nanocarbon materials	13:45~18:00 17.1 Carbon nanotubes & other nanocarbon materials	10:00~12:00 17.1 Carbon nanotubes & other nanocarbon materials	13:45~17:30 S4 Polarization imaging for lightwave sensing	9:00~12:15 3.8 Optical measurement, instrumentation, and sensor	13:45~19:00 3.8 Optical measurement, instrumentation, and sensor		13:45~16:45 3.8 Optical measurement, instrumentation, and sensor
C304 (52-304)	220		13:30~17:25 SP3 Seize the fortune by the forelock!		13:00~17:25 S27 Ge Technology - Electron / Photon / Phonon / Spin - Innovation of Group-IV Semiconductors -	9:30~11:45 22.1 Joint Session M	13:15~18:50 S32 Challenge to heat dissipation problems by organic-inorganic materials - Forefront of physics and application-	9:15~11:45 22.1 Joint Session M	12:45~17:00 22.1 Joint Session M

Room	Cap.	March 17 (Sat.)		March 18 (Sun.)		March 19 (Mon.)		March 20 (Tue.)	
		AM	PM	AM	PM	AM	PM	AM	PM
D101 (56-101)	240	9:45~11:45 16.3 Bulk, thin-film and other silicon-based solar cells	13:00~18:30 S30 Recent progress of crystalline silicon solar cells for terawatt power generation	9:00~11:45 16.3 Bulk, thin-film and other silicon-based solar cells	13:15~18:00 16.3 Bulk, thin-film and other silicon-based solar cells	9:15~11:45 16.3 Bulk, thin-film and other silicon-based solar cells	13:15~18:00 S31 Women in Photovoltaics at JSAP		
D102 (56-102)	240	9:00~11:45 12.4 Organic light-emitting devices and organic transistors	13:15~18:30 12.4 Organic light-emitting devices and organic transistors		13:15~19:30 12.4 Organic light-emitting devices and organic transistors	9:00~11:45 12.4 Organic light-emitting devices and organic transistors	13:15~16:45 S19 New sensor technologies based on advanced nanobiodevices and machine learning	9:00-12:00 12.4 Organic light-emitting devices and organic transistors	
D103 (56-103)	240	11:00~12:00 Award Ceremony	17:00~18:45 Award Ceremony	9:00~11:45 15.7 Crystal characterization, impurities and crystal defects	13:15~19:30 15.7 Crystal characterization, impurities and crystal defects	9:00~12:15 15.6 Group IV Compound Semiconductors (SiC)	13:30~18:00 15.6 Group IV Compound Semiconductors (SiC)	9:00-12:00 15.6 Group IV Compound Semiconductors (SiC)	13:15~17:00 15.6 Group IV Compound Semiconductors (SiC)
D104 (56-104)	240		13:00~15:30 10.2 Fundamental and exploratory device technologies for spin	9:00~9:45 10.2 Fundamental and exploratory device technologies for spin 10:00~12:00 10.3 Spin devices, magnetic memories and storages	13:15~17:00 S15 What is "neuromorphic hardware" ?	9:00~12:00 CS6 10.1 & 10.2 & 10.3 Code-sharing session	13:00~14:30 CS.6 10.1 & 10.2 & 10.3 Code-sharing session 14:45~19:00 10.1 Emerging materials in spintronics and magnetics (including fabrication and characterization methodologies)	9:00-12:00 10.4 Semiconductor spintronics, superconductor, multiferroics	13:00~16:00 10.4 Semiconductor spintronics, superconductor, multiferroics
E201 (57-201)	420		13:15~16:20 S20 Progress of compound semiconductor device technologies: what can learn from history of GaAs device development	9:00~12:15 21.1 Joint Session K	13:45~17:15 21.1 Joint Session K	10:00~11:45 21.1 Joint Session K	13:00~17:30 SP7 Pioneer a Comfortable Future Society -Collaboration Between Polymer Science and Applied Physics-	9:00-11:30 21.1 Joint Session K	13:00~16:00 21.1 Joint Session K
E202 (57-202)	420	9:00~11:45 15.4 III-V-group nitride crystals	13:15~18:30 15.4 III-V-group nitride crystals	9:00~11:45 15.4 III-V-group nitride crystals	13:15~19:30 15.4 III-V-group nitride crystals	9:00~11:45 15.4 III-V-group nitride crystals	13:30~17:30 S29 Materials Science and Advanced Electronics Created by Singularity of Nitride Semiconductors: How far can we control the defects? Advanced characterization and functional exploration	9:00-11:45 15.4 III-V-group nitride crystals	
F102 (61-102)	135	9:00~12:15 9.4 Thermoelectric conversion	13:45~18:30 9.4 Thermoelectric conversion	10:00~11:45 1.6 Ultrasonics	13:45~18:05 S1 Thermoacoustic	10:15~12:15 S2 Progress in Materials and Devices Technology for Advanced Use of Renewable Energy	13:45~17:15 S2 Progress in Materials and Devices Technology for Advanced Use of Renewable Energy	9:00-12:15 1.4 Energy conversion, storage, resources and environment	
F104 (61-104)	108		13:45~18:15 12.2 Characterization and Materials Physics	9:00~12:15 12.2 Characterization and Materials Physics	13:30~17:45 S14 Evolution of nanowire devices and physics for IoT era	9:15~12:00 9.2 Nanowires and Nanoparticles	13:30~15:30 9.2 Nanowires and Nanoparticles	9:30-11:30 9.2 Nanowires and Nanoparticles	13:45~16:45 9.1 Dielectrics, ferroelectrics
F202 (61-202)	90	9:00~12:15 7.4 Buried interface sciences with quantum beam	13:45~17:15 9.5 New functional materials and new phenomena	9:00~11:45 1.3 Novel technologies and interdisciplinary engineering	13:15~18:30 1.1 Interdisciplinary and General Physics	9:30~12:15 13.2 Exploratory Materials, Physical Properties, Devices	13:45~18:15 13.2 Exploratory Materials, Physical Properties, Devices	9:15-12:00 1.5 Instrumentation, measurement and Metrology	13:45~16:00 1.5 Instrumentation, measurement and Metrology
F206 (61-206)	108	9:00~12:30 13.3 Insulator technology	13:45~18:15 13.3 Insulator technology	9:00~11:30 6.2 Carbon-based thin films	13:45~18:00 6.2 Carbon-based thin films	9:00~12:15 6.2 Carbon-based thin films	16:15~19:00 6.2 Carbon-based thin films		
F210 (61-210)	108		13:30~17:15 9.3 Nanoelectronics	9:00~12:30 6.6 Probe Microscopy	13:45~17:45 S8 The forefront of tip-enhanced Raman spectroscopy	9:45~12:00 CS5 6.6 & 12.2 Code-sharing session	13:15~17:30 6.6 Probe Microscopy	9:00-10:30 15.2 II-VI and related compounds	
F214 (61-214)	99		13:45~17:30 15.3 III-V-group epitaxial crystals, Fundamentals of epitaxy			9:15~12:15 6.5 Surface Physics, Vacuum session	13:45~17:00 CS4 6.5 & 7.6 Code-sharing session	9:45-12:00 15.5 Group IV crystals and alloys	13:30~15:45 15.5 Group IV crystals and alloys
F306 (61-306)	108	9:00~12:15 12.7 Biomedical Engineering and Biochips	13:45~15:30 12.7 Biomedical Engineering and Biochips	9:00~12:15 12.7 Biomedical Engineering and Biochips	13:45~18:30 12.7 Biomedical Engineering and Biochips	9:00~12:15 12.7 Biomedical Engineering and Biochips			
F310 (61-310)	108	9:00~12:00 13.9 Compound solar cells		9:45~11:45 13.9 Compound solar cells	13:45~15:30 13.9 Compound solar cells	9:45~11:45 13.9 Compound solar cells	13:30~17:30 3.12 Nanoscale optical science and near-field optics		
F314 (61-314)	90		14:00~17:30 13.6 Nanostructures, quantum phenomena, and nano quantum devices						

Room	Cap.	March 17 (Sat.)		March 18 (Sun.)		March 19 (Mon.)		March 20 (Tue.)	
		AM	PM	AM	PM	AM	PM	AM	PM
G201 (63-201)	312		12:58~17:46 SP1 Roadmap for Smart Society by Synergies with Cloud and IoT edges -Future Prediction by Points of View from Computer Science and Semiconductor Physics-		13:00~18:30 SP6 The Progress and Prospect of the Integrated MEMS (10th Anniversary Symposium of the Study Group of the Integrated MEMS)	10:00~12:00 SP8 Japanese Technology as Foundation of Expanding Semiconductor Industry along with AI, IoT, and Big Data --- in conjunction with young generation's voice ---	13:15~17:35 S25 Visualizing a brilliant future for Japanese semiconductor industry & Research		
G202 (63-202)	312	9:00~11:15 12.5 Organic solar cells	12:45~18:45 12.5 Organic solar cells	9:00~12:15 12.5 Organic solar cells	16:00~18:30 12.5 Organic solar cells	9:00~11:15 12.5 Organic solar cells	13:15~16:30 12.2 Characterization and Materials Physics	9:00-11:45 12.5 Organic solar cells	
G203 (63-203)	100		13:15~18:00 SP2 Fundamental Research on Space and Matter and Its Advanced Industrial Application	9:00~12:15 13.5 Semiconductor devices and related technologies	13:15~18:00 13.5 Semiconductor devices and related technologies	9:00~12:00 13.5 Semiconductor devices and related technologies	13:30~17:10 S23 Is Ge substituting for Si?	9:00-11:45 16.1 Fundamental properties, evaluation, process and devices in disordered materials	13:15~15:30 16.1 Fundamental properties, evaluation, process and devices in disordered materials
G204 (63-204)	100			9:30~11:30 13.8 Optical properties and light-emitting devices	13:15~17:30 13.8 Optical properties and light-emitting devices	9:00~11:45 13.8 Optical properties and light-emitting devices	13:15~15:15 13.8 Optical properties and light-emitting devices	9:45-11:45 13.8 Optical properties and light-emitting devices	13:45~15:00 16.2 Energy Harvesting
G205 (63-205)	100			9:00~11:30 12.1 Fabrications and Structure Controls	13:15~18:00 12.1 Fabrications and Structure Controls	9:00~11:30 12.1 Fabrications and Structure Controls			
P1 ~ P20	Poster Session		[13:30-15:30] 1.1 Interdisciplinary and General Physics 1.3 Novel technologies and interdisciplinary engineering 3.13 Semiconductor optical devices 3.14 Optical control devices and optical fibers 6.6 Probe Microscopy 12.3 Functional Materials and Novel Devices 13.4 Si wafer processing /Si based thin film /Interconnect technology/ MEMS/ Integration technology 13.5 Semiconductor devices and related technologies 15.1 Bulk crystal growth	[09:30-11:30] 1.2 Education 3.2 Equipment optics and materials 7 Beam Technology and Nanofabrication 9.3 Nanoelectronics 9.5 New functional materials and new phenomena 11 Superconductivity 12.4 Organic light-emitting devices and organic transistors 13.6 Nanostructures, quantum phenomena, and nano quantum devices	[13:30-15:30] 3.5 Laser system and materials 6.5 Surface Physics, Vacuum 9.4 Thermoelectric conversion 12.5 Organic solar cells 12.6 Nanobiotechnology 13.2 Exploratory Materials, Physical Properties, Devices 13.3 Insulator technology 15.3 III-V-group epitaxial crystals, Fundamentals of epitaxy	[09:30-11:30] 1.4 Energy conversion, storage, resources and environment 3.3 Information photonics and image engineering 3.9 Terahertz technologies 15.7 Crystal characterization, impurities and crystal defects 16.1 Fundamental properties, evaluation, process and devices in disordered materials 17 Nanocarbon Technology	[13:30-15:30] 1.5 Instrumentation, measurement and Metrology 1.6 Ultrasonics 3.10 Optical quantum physics and technologies 6.2 Carbon-based thin films 6.3 Oxide electronics 6.4 Thin films and New materials	[09:30-11:30] 3.7 Laser processing 3.8 Optical measurement, instrumentation, and sensor 3.11 Photonic structures and phenomena 3.15 Silicon photonics 6.1 Ferroelectric thin films 9.1 Dielectrics, ferroelectrics 12.1 Fabrications and Structure Controls 16.2 Energy Harvesting 16.3 Bulk, thin-film and other silicon-based solar cells	[13:30-15:30] 3.1 Basic optics and frontier of optics 3.4 Biomedical optics 3.6 Ultrashort-pulse and high-intensity lasers 8 Plasma Electronics 15.2 II-VI and related compounds 15.4 III-V-group nitride crystals
			[16:00-18:00] 10 Spintronics and Magnetics 12.7 Biomedical Engineering and Biochips 13.7 Compound and power electron devices and process technology		[16:00-18:00] 3.12 Nanoscale optical science and near-field optics 3.16 Optics and Photonics English Session 12.2 Characterization and Materials Physics 13.1 Fundamental properties, surface and interface, and simulations of Si related materials 13.9 Compound solar cells 15.6 Group IV Compound Semiconductors (SiC) 22.1 Joint Session M		[16:00-18:00] 2 Ionizing Radiation 9.2 Nanowires and Nanoparticles 13.8 Optical properties and light-emitting devices 15.5 Group IV crystals and alloys 21.1 Joint Session K		