

Schedule by Category (I)

Category Section	March 17 (Sat.)		March 18 (Sun.)		March 19 (Mon.)		March 20 (Tue.)	
	AM	PM	AM	PM	AM	PM	AM	PM
SP Special Symposium								
SP.1 Roadmap for Smart Society by Synergies with Cloud and IoT edges -Future Prediction by Points of View from Computer Science and Semiconductor Physics-		G201 12:58 ~ 17:46						
SP2 Fundamental Research on Space and Matter and Its Advanced Industrial Application		G203 13:15 ~ 18:00						
SP3 Seize the fortune by the forelock!		C304 13:30 ~ 17:25						
SP4 How to Promote the Activity of Young Researchers to Save Japan in a Crisis of Decline in the Strength of Science and Technology		A204 13:00 ~ 18:00						
SP5 JSAP-SPIE Joint Symposium		C104 13:45 ~ 18:00						
SP6 The Progress and Prospect of the Integrated MEMS (10th Anniversary Symposium of the Study Group of the Integrated MEMS)				G201 13:00 ~ 18:30				
SP7 Pioneer a Comfortable Future Society -Collaboration Between Polymer Science and Applied Physics-						E201 13:00 ~ 17:30		
SP8 Japanese Technology as Foundation of Expanding Semiconductor Industry along with AI, IoT, and Big Data --- in conjunction with young generation's voice ---					G201 10:00 ~ 12:00			
S Symposium								
S1 Thermoacoustic				F102 13:45 ~ 18:05				
S2 Progress in Materials and Devices Technology for Advanced Use of Renewable Energy					F102 10:15 ~ 12:15	F102 13:45 ~ 17:15		
S3 The synchrotron radiation micro beam technology for the real elucidation of biological effect of radiation				A304 13:15 ~ 16:30				
S4 Polarization imaging for lightwave sensing				C303 13:45 ~ 17:30				
S5 Progress in studies on material conversion and processing with high-power lasers				A404 13:15 ~ 18:00				
S6 Quantum Computer and Quantum Simulator				A302 13:30 ~ 16:45				
S7 New developments on technologies for flexible ceramics coatings and inorganic/organic hybrid flexible devices			C103 09:15 ~ 11:45	C103 13:30 ~ 18:00				
S8 The forefront of tip-enhanced Raman spectroscopy				F210 13:45 ~ 17:45				
S9 Fundamentals and applications of piezoelectric thin-film devices				C104 13:00 ~ 17:00				
S10 Ion Beam and Surface Analysis: Recent Progress in Secondary Ion Mass Spectrometry (SIMS) and Its Application to Organic Analysis				C201 13:45 ~ 17:30				
S11 Advanced 3D atomic imaging to develop new materials and devices technologies						C103 13:45 ~ 17:45		
S12 Recent progresses in development of electron sources and their novel applications						C102 13:45 ~ 17:45		
S13 Synthesis and plasma processing for 2D sheet materials -from ultra-thin films to atomically thin layered materials-				C204 13:45 ~ 18:00				
S14 Evolution of nanowire devices and physics for IoT era				F104 13:30 ~ 17:45				
S15 What is "neuromorphic hardware" ?				D104 13:15 ~ 17:00				
S16 Magneto Science now and the future						A202 13:15 ~ 17:30		
S17 Numerical simulation technology active in superconducting materials -Physical phenomena, crystal growth and application design-		B401 13:00 ~ 17:00						
S18 pMAIRS: A cutting-edge technique revealing the molecular orientation even in an amorphous thin film having a surface roughness		B201 13:15 ~ 17:00						
S19 New sensor technologies based on advanced nanobiodevices and machine learning						D102 13:15 ~ 16:45		
S20 Progress of compound semiconductor device technologies: what can learn from history of GaAs device development		E201 13:15 ~ 16:20						
S21 Novel physical properties and applications of ternary compounds		C102 13:45 ~ 18:30						
S22 Semiconductor Device Simulation: Applications and Future Perspectives				A202 13:15 ~ 18:40				
S23 Is Ge substituting for Si?						G203 13:30 ~ 17:10		
S24 Integrated Sensor Systems for Ubiquitous Health Care Applications						C101 13:45 ~ 19:05		
S25 Visualizing a brilliant future for Japanese semiconductor industry & Research						G201 13:15 ~ 17:35		
S26 A new era of defect research starting with field fusion		C302 13:45 ~ 17:30						
S27 Ge Technology - Electron / Photon / Phonon / Spin - Innovation of Group-IV Semiconductors -				C304 13:00 ~ 17:25				
S28 Development of innovative functional materials based on mixed-anion compounds				A402 13:15 ~ 16:25				
S29 Materials Science and Advanced Electronics Created by Singularity of Nitride Semiconductors: How far can we control the defects? Advanced characterization and functional exploration						E202 13:30 ~ 17:30		
S30 Recent progress of crystalline silicon solar cells for terawatt power generation		D101 13:00 ~ 18:30						
S31 Women in Photovoltaics at JSAP						D101 13:15 ~ 18:00		
S32 Challenge to heat dissipation problems by organic-inorganic materials -Forefront of physics and application-						C304 13:15 ~ 18:50		

Schedule by Category (II)

Category Section	March 17 (Sat.)		March 18 (Sun.)		March 19 (Mon.)		March 20 (Tue.)	
	AM	PM	AM	PM	AM	PM	AM	PM
CS Code-sharing session								
CS1 3.5 & 3.14 Code-sharing session			B303 09:00 ~ 10:15					
CS2 3.11 & 3.12 Code-sharing session					C301 09:00 ~ 11:45			
CS3 3.11 & 13.6 Code-sharing Session				C301 13:45 ~ 18:15				
CS4 6.5 & 7.6 Code-sharing session						F214 13:45 ~ 17:00		
CS5 6.6 & 12.2 Code-sharing session					F210 09:45 ~ 12:00			
CS6 10.1 & 10.2 & 10.3 Code-sharing session					D104 09:00 ~ 12:00	D104 13:00 ~ 14:30		
1 Interdisciplinary Physics and Related Areas of Science and Technology								
1.1 Interdisciplinary and General Physics		P1 13:30 ~ 15:30		F202 13:15 ~ 18:30				
1.2 Education			P1 09:30 ~ 11:30					
1.3 Novel technologies and interdisciplinary engineering		P2 13:30 ~ 15:30	F202 09:00 ~ 11:45					
1.4 Energy conversion, storage, resources and environment					P1 09:30 ~ 11:30		F102 09:00 ~ 12:15	
1.5 Instrumentation, measurement and Metrology						P1 13:30 ~ 15:30	F202 09:15 ~ 12:00	F202 13:45 ~ 16:00
1.6 Ultrasonics			F102 10:00 ~ 11:45		B303 09:00 ~ 11:45	P2 13:30 ~ 15:30		
2 Ionizing Radiation								
2.1 Radiation physics and Detector fundamentals		A304 14:00 ~ 18:30				P7 16:00 ~ 18:00		
2.2 Detection systems							A304 09:00 ~ 12:00	A304 13:15 ~ 16:30
2.3 Application, radiation generators, new technology			A304 10:00 ~ 11:45		A304 09:00 ~ 11:45	A304 13:15 ~ 15:30		
						P7 16:00 ~ 18:00		
3 Optics and Photonics								
3.1 Basic optics and frontier of optics						B203 13:15 ~ 18:30	B203 09:30 ~ 11:30	P1 13:30 ~ 15:30
3.2 Equipment optics and materials		B203 13:15 ~ 16:45	P2 09:30 ~ 11:30					
3.3 Information photonics and image engineering					P2 09:30 ~ 11:30	B201 13:15 ~ 19:00		
3.4 Biomedical optics						A302 13:15 ~ 19:30		P2 13:30 ~ 15:30
3.5 Laser system and materials	B403 09:00 ~ 11:15	B403 13:15 ~ 18:00		P1 13:30 ~ 15:30				
CS1 3.5 & 3.14 Code-sharing session			B303 09:00 ~ 10:15					
3.6 Ultrashort-pulse and high-intensity lasers					B301 09:00 ~ 12:00	B301 13:15 ~ 19:30	B301 09:00 ~ 12:00	P3 13:30 ~ 15:30
3.7 Laser processing					A404 09:00 ~ 11:45	A404 13:15 ~ 18:45	P1 09:30 ~ 11:30	
3.8 Optical measurement, instrumentation, and sensor					C303 09:00 ~ 12:15	C303 13:45 ~ 19:00	P2 09:30 ~ 11:30	C303 13:45 ~ 16:45
3.9 Terahertz technologies					P3 09:30 ~ 11:30	A402 13:30 ~ 17:15	A402 09:00 ~ 12:00	A402 13:15 ~ 17:00
3.10 Optical quantum physics and technologies			A302 09:30 ~ 11:45		A302 09:00 ~ 11:45	P3 13:30 ~ 15:30	A302 09:00 ~ 11:30	
3.11 Photonic structures and phenomena						C301 13:45 ~ 18:30	P3 09:30 ~ 11:30	C301 13:00 ~ 16:30
CS2 3.11 & 3.12 Code-sharing session					C301 09:00 ~ 11:45			
CS3 3.11 & 13.6 Code-sharing Session				C301 13:45 ~ 18:15				
3.12 Nanoscale optical science and near-field optics	A402 09:00 ~ 12:00	A402 13:30 ~ 18:30	A402 09:00 ~ 12:00	P9 16:00 ~ 18:00		F310 13:30 ~ 17:30		
CS2 3.11 & 3.12 Code-sharing session					C301 09:00 ~ 11:45			
3.13 Semiconductor optical devices	B203 09:30 ~ 12:15	P3 13:30 ~ 15:30	B203 09:00 ~ 12:00	B203 13:15 ~ 18:00		B203 09:00 ~ 11:45		
3.14 Optical control devices and optical fibers		P4 13:30 ~ 15:30	B303 10:30 ~ 11:30					
		B303 16:00 ~ 19:15						
CS1 3.5 & 3.14 Code-sharing session			B303 09:00 ~ 10:15					
3.15 Silicon photonics			B201 09:30 ~ 11:45	B201 13:15 ~ 17:30	B201 09:30 ~ 11:45		P4 09:30 ~ 11:30	
3.16 Optics and Photonics English Session		A404 13:15 ~ 17:00		P10 16:00 ~ 18:00				

Schedule by Category (III)

Category Section	March 17 (Sat.)		March 18 (Sun.)		March 19 (Mon.)		March 20 (Tue.)	
	AM	PM	AM	PM	AM	PM	AM	PM
6 Thin Films and Surfaces								
6.1 Ferroelectric thin films					C104 09:00 ~ 12:15	C104 13:15 ~ 18:30	P5 09:30 ~ 11:30	
6.2 Carbon-based thin films			F206 09:00 ~ 11:30	F206 13:45 ~ 18:00	F206 09:00 ~ 12:15	P4 13:30 ~ 15:30 F206 16:15 ~ 19:00		
6.3 Oxide electronics			C102 09:00 ~ 12:00	C102 13:45 ~ 18:00	C102 09:00 ~ 12:00	P5 13:30 ~ 15:30	C102 09:00 ~ 12:15	C102 13:45 ~ 16:30
6.4 Thin films and New materials		C103 13:45 ~ 18:00			C103 09:00 ~ 12:15	P6 13:30 ~ 15:30	C103 09:00 ~ 12:00	
6.5 Surface Physics, Vacuum				P2 13:30 ~ 15:30	F214 09:15 ~ 12:15			
CS4 6.5 & 7.6 Code-sharing session						F214 13:45 ~ 17:00		
6.6 Probe Microscopy		P5 13:30 ~ 15:30	F210 09:00 ~ 12:30			F210 13:15 ~ 17:30		
CS5 6.6 & 12.2 Code-sharing session					F210 09:45 ~ 12:00			
7 Beam Technology and Nanofabrication								
7.1 X-ray technologies								B301 13:15 ~ 16:45
7.2 Applications and technologies of electron beams							B303 09:45 ~ 12:45	B303 14:00 ~ 16:15
7.3 Micro/Nano patterning and fabrication							B401 10:30 ~ 12:00	B401 13:00 ~ 16:15
7.4 Buried interface sciences with quantum beam	F202 09:00 ~ 12:15							
7.5 Ion beams							B403 09:00 ~ 11:45	
7.6 Atomic/molecular beams and beam-related new technologies (CS4 Code-sharing session with 6.5)						F214 13:45 ~ 17:00		
8 Plasma Electronics								
8.1 Plasma production and diagnostics		C204 13:15 ~ 18:30						
8.2 Plasma deposition of thin film, plasma etching and surface treatment						C204 13:45 ~ 18:15	C204 09:00 ~ 12:15	
8.3 Plasma nanotechnology					C201 09:00 ~ 12:00			
8.4 Plasma life sciences						C201 13:45 ~ 19:00		
8.5 Plasma phenomena, emerging area of plasmas and their new applications		C201 13:15 ~ 18:15	C204 10:15 ~ 10:45					P4 13:30 ~ 15:30
8.6 Plasma Electronics English Session			C204 09:00 ~ 10:15					
8.7 Plasma Electronics Invited Talk			C204 11:00 ~ 11:30					
8.8 Plasma Electronics Award Ceremony			C204 11:30 ~ 11:45					
9 Applied Materials Science								
9.1 Dielectrics, ferroelectrics							P6 09:30 ~ 11:30	F104 13:45 ~ 16:45
9.2 Nanowires and Nanoparticles					F104 09:15 ~ 12:00	F104 13:30 ~ 15:30	F104 09:30 ~ 11:30	
9.3 Nanoelectronics		F210 13:30 ~ 17:15	P4 09:30 ~ 11:30					
9.4 Thermoelectric conversion	F102 09:00 ~ 12:15	F102 13:45 ~ 18:30		P3 13:30 ~ 15:30				
9.5 New functional materials and new phenomena		F202 13:45 ~ 17:15	P5 09:30 ~ 11:30					
10 Spintronics and Magnetics								
CS6 10.1 & 10.2 & 10.3 Code-sharing session					D104 09:00 ~ 12:00	D104 13:00 ~ 14:30		
10.1 Emerging materials in spintronics and magnetics (including fabrication and characterization methodologies)		P10 16:00 ~ 18:00				D104 14:45 ~ 19:00		
10.2 Fundamental and exploratory device technologies for spin		D104 13:00 ~ 15:30	D104 09:00 ~ 09:45					
10.3 Spin devices, magnetic memories and storages			D104 10:00 ~ 12:00					
10.4 Semiconductor spintronics, superconductor, multiferroics		P10 16:00 ~ 18:00					D104 09:00 ~ 12:00	D104 13:00 ~ 16:00
10.5 Application of magnetic field					A202 09:00 ~ 12:15			
11 Superconductivity								
11.1 Fundamental properties					B401 09:00 ~ 12:00	B401 13:15 ~ 16:00		
11.2 Thin and thick superconducting films, coated conductors and film crystal growth					B403 13:15 ~ 18:30			
11.3 Critical Current, Superconducting Power Applications			P6 09:30 ~ 11:30			B403 13:15 ~ 16:30		
11.4 Analog applications and their related technologies						B303 13:15 ~ 18:15		
11.5 Junction and circuit fabrication process, digital applications					B303 13:15 ~ 16:30			

Schedule by Category (IV)

Category	March 17 (Sat.)		March 18 (Sun.)		March 19 (Mon.)		March 20 (Tue.)	
	AM	PM	AM	PM	AM	PM	AM	PM
12 Organic Molecules and Bioelectronics								
12.1 Fabrications and Structure Controls			G205 09:00 ~ 11:30	G205 13:15 ~ 18:00	G205 09:00 ~ 11:30		P7 09:30 ~ 11:30	
12.2 Characterization and Materials Physics		F104 13:45 ~ 18:15	F104 09:00 ~ 12:15	P11 16:00 ~ 18:00		G202 13:15 ~ 16:30		
CS5 6.6 & 12.2 Code-sharing session					F210 09:45 ~ 12:00			
12.3 Functional Materials and Novel Devices		P6 13:30 ~ 15:30	A204 09:00 ~ 11:45	A204 13:15 ~ 18:15	A204 09:00 ~ 11:45		A204 09:00 ~ 11:45	A204 13:15 ~ 15:15
12.4 Organic light-emitting devices and organic transistors	D102 09:00 ~ 11:45	D102 13:15 ~ 18:30	P7 09:30 ~ 11:30	D102 13:15 ~ 19:30	D102 09:00 ~ 11:45		D102 09:00 ~ 12:00	
12.5 Organic solar cells	G202 09:00 ~ 11:15	G202 12:45 ~ 18:45	G202 09:00 ~ 12:15	P4 13:30 ~ 15:30	G202 09:00 ~ 11:15		G202 09:00 ~ 11:45	
				G202 16:00 ~ 18:30				
12.6 Nanobiotechnology	A202 09:00 ~ 11:15	A202 13:00 ~ 18:30	A202 09:00 ~ 11:45	P5 13:30 ~ 15:30				
12.7 Biomedical Engineering and Biochips	F306 09:00 ~ 12:15	F306 13:45 ~ 15:30	F306 09:00 ~ 12:15	F306 13:45 ~ 18:30	F306 09:00 ~ 12:15			
		P11 16:00 ~ 18:00						
13 Semiconductors								
13.1 Fundamental properties, surface and interface, and simulations of Si related materials			B301 09:00 ~ 12:00	B301 13:00 ~ 15:45				
				P12 16:00 ~ 18:00				
13.2 Exploratory Materials, Physical Properties, Devices				P6 13:30 ~ 15:30	F202 09:30 ~ 12:15	F202 13:45 ~ 18:15		
13.3 Insulator technology	F206 09:00 ~ 12:30	F206 13:45 ~ 18:15		P7 13:30 ~ 15:30				
13.4 Si wafer processing /Si based thin film /Interconnect technology/ MEMS/ Integration technology	C101 09:30 ~ 12:30	P7 13:30 ~ 15:30			C101 09:15 ~ 11:45		C101 09:15 ~ 12:15	C101 13:45 ~ 16:45
		C101 16:00 ~ 17:30						
13.5 Semiconductor devices and related technologies		P8 13:30 ~ 15:30	G203 09:00 ~ 12:15	G203 13:15 ~ 18:00	G203 09:00 ~ 12:00			
13.6 Nanostructures, quantum phenomena, and nano quantum devices		F314 14:00 ~ 17:30	P8 09:30 ~ 11:30					
CS3 3.11 & 13.6 Code-sharing Session				C301 13:45 ~ 18:15				
13.7 Compound and power electron devices and process technology		P12 16:00 ~ 18:00	C302 09:00 ~ 12:15	C302 13:45 ~ 19:00	C302 09:00 ~ 12:15	C302 13:45 ~ 18:30		
13.8 Optical properties and light-emitting devices			G204 09:30 ~ 11:30	G204 13:15 ~ 17:30	G204 09:00 ~ 11:45	G204 13:15 ~ 15:15	G204 09:45 ~ 11:45	
						P9 16:00 ~ 18:00		
13.9 Compound solar cells	F310 09:00 ~ 12:00		F310 09:45 ~ 11:45	F310 13:45 ~ 15:30	F310 09:45 ~ 11:45			
				P13 16:00 ~ 18:00				
15 Crystal Engineering								
15.1 Bulk crystal growth	B301 09:00 ~ 12:15	P9 13:30 ~ 15:30						
		B301 16:00 ~ 18:30						
15.2 II-VI and related compounds							F210 09:00 ~ 10:30	P5 13:30 ~ 15:30
15.3 III-V-group epitaxial crystals, Fundamentals of epitaxy		F214 13:45 ~ 17:30		P8 13:30 ~ 15:30				
15.4 III-V-group nitride crystals	E202 09:00 ~ 11:45	E202 13:15 ~ 18:30	E202 09:00 ~ 11:45	E202 13:15 ~ 19:30	E202 09:00 ~ 11:45		E202 09:00 ~ 11:45	P6 13:30 ~ 15:30
15.5 Group IV crystals and alloys						P10 16:00 ~ 18:00	F214 09:45 ~ 12:00	F214 13:30 ~ 15:45
15.6 Group IV Compound Semiconductors (SiC)				P14 16:00 ~ 18:00	D103 09:00 ~ 12:15	D103 13:30 ~ 18:00	D103 09:00 ~ 12:00	D103 13:15 ~ 17:00
15.7 Crystal characterization, impurities and crystal defects			D103 09:00 ~ 11:45	D103 13:15 ~ 19:30	P4 09:30 ~ 11:30			
16 Amorphous and Microcrystalline Materials								
16.1 Fundamental properties, evaluation, process and devices in disordered materials					P5 09:30 ~ 11:30		G203 09:00 ~ 11:45	G203 13:15 ~ 15:30
16.2 Energy Harvesting							P8 09:30 ~ 11:30	G204 13:45 ~ 15:00
16.3 Bulk, thin-film and other silicon-based solar cells	D101 09:45 ~ 11:45		D101 09:00 ~ 11:45	D101 13:15 ~ 18:00	D101 09:15 ~ 11:45		P9 09:30 ~ 11:30	
17 Nanocarbon Technology								
17.1 Carbon nanotubes & other nanocarbon materials	C303 10:00 ~ 12:00	C303 13:45 ~ 18:00	C303 10:00 ~ 12:00					
17.2 Graphene	C202 10:00 ~ 12:00	C202 13:45 ~ 17:45	C202 09:00 ~ 12:15	C202 13:45 ~ 16:00	P6 09:30 ~ 11:30			
						C202 13:45 ~ 18:30	C202 10:00 ~ 12:15	C202 13:45 ~ 15:30
17.3 Layered materials								
21 Joint Session K "Wide bandgap oxide semiconductor materials and devices"								
21.1 Joint Session K "Wide bandgap oxide semiconductor materials and devices"			E201 09:00 ~ 12:15	E201 13:45 ~ 17:15	E201 10:00 ~ 11:45	P11 16:00 ~ 18:00	E201 09:00 ~ 11:30	E201 13:00 ~ 16:00
22 Joint Session M "Phonon Engineering"								
22.1 Joint Session M "Phonon Engineering"				P15 16:00 ~ 18:00	C304 09:30 ~ 11:45		C304 09:15 ~ 11:45	C304 12:45 ~ 17:00
T Tutorial								
T1 Tutorial by Shinya Sasaki & Ken Nakajima	C103 9:00~11:30							
T2 Tutorial by Masaru Kurihara	C104 9:00~11:30							
T3 Tutorial by Koki Takanashi	C102 9:00~11:30							
T4 Tutorial by Masakazu Nakamura	A204 9:00~11:30							