

Schedule by Category (I)

Category Section	Sep. 8 (Tue.)		Sep.9 (Wed.)		Sep. 10 (Thu.)		Sep.11 (Fri.)	
	AM	PM	AM	PM	AM	PM	AM	PM
S Symposium								
NT1 Think about applied physics in space						Z16 13:30 ~ 17:15		
NT2 Critical Role of Semiconductor Technology: Shaping Auto Industry on "New Normal" Infrastructure and Challenges by Cutting-Edge Researchers					Z01 10:00 ~ 12:10			
NT3 To accelerate social implementations of applied-physics technologies related to integrated circuits							Z16 13:30 ~ 18:00	
T1 Recent studies of Boron Neutron Capture Therapy (BNCT)				Z14 13:30 ~ 16:15				
T2 Innovation and development of new business created by photonics III - Photonic startups launched from universities and national institutes-		Z04 13:30 ~ 17:05						
T3 The Third-generation dissimilar materials bonding and its application to the film growth control: Interface nanokubernetes	Z06 09:00 ~ 11:30	Z06 12:30 ~ 16:50						
T4 Extreme environmental nano-interface science connecting materials and devices	Z01 09:30 ~ 11:30	Z01 13:30 ~ 17:15						
T5 Innovation with all-solid-state batteries: from basics to future prospects				Z07 13:30 ~ 16:40				
T6 The interplay of ions and electrons in functional oxides towards new development of energy creating and storage devices						Z07 13:30 ~ 17:00		
T7 The fusion of multidimensional measurement technologies and data science toward the progress of bioimaging and biosensing techniques				Z06 13:30 ~ 17:30				
T8 Optical functions of thin films studied by various quantum beams	Z15 09:00 ~ 11:50	Z15 13:30 ~ 16:00						
T9 Frontier of Research on Mechanism of Plasma-induced Biological Reactions						Z03 13:30 ~ 17:20		
T10 Novel Function and Technology Based on Ensemble Phenomenon				Z03 13:30 ~ 17:35				
T11 Recent Progress in Nonvolatile Memory technologies - Spintronic, Phase-change, Resistive and Ferroelectric-				Z08 13:30 ~ 17:20				
T12 Advanced measurement technology realized by superconductor -Recent applications of SQUID-						Z01 13:30 ~ 17:05		
T13 Recent progress in Advanced Ion Microscopy: Application to nano materials / devices and life science						Z15 13:30 ~ 17:45		
T14 Materials Science and Advanced Electronics Created by Singularity of Nitride Semiconductors -Frontiers in defect physics: Concerted approach of characterization and theory-		Z02 13:30 ~ 17:30						
T15 Functionality and science of transparent crystals: Ecosystems created by deep ultraviolet emitters				Z02 13:30 ~ 18:00				
T16 Development of the engineering for the diverse stable phases ~Objectives for the future environment, energy materials and devices	Z28 10:00 ~ 12:15	Z28 13:30 ~ 17:45						
T17 Science of 2-dimensional materials: New science and applications of 2-dimensional materials and their integrated structures						Z29 13:30 ~ 18:30		
T18 Leading edge of phonon engineering					Z13 09:30 ~ 11:40	Z13 13:00 ~ 16:50		
T19 What comes after " Materials Informatics"	Z03 10:00 ~ 12:15	Z03 13:30 ~ 16:45						
FS Focused Session "AI Electronics"								
FS.1 Focused Session "AI Electronics"			Z28 09:00 ~ 12:30	Z28 13:30 ~ 19:00				
CS Code-sharing session								
CS.1 Code-sharing Session of 2.4 & 7.5	Z25 09:00 ~ 12:15	Z25 13:15 ~ 16:45						
CS.2 Code-sharing Session of 3.2 & 12.3		Z13 12:45 ~ 15:30						
CS.3 Code-sharing Session of 3.3 & 4.4				Z10 13:00 ~ 17:00				
CS.4 Code-sharing Session of 4.5 & 17	Z23 09:00 ~ 12:30		Z26 09:00 ~ 12:00					
CS.5 Code-sharing Session of 6.1 & 13.3 & 13.5					Z24 08:45 ~ 12:00			
CS.6 Code-sharing Session of 6.5 & 7.6				Z05 12:30 ~ 16:30				
CS.7 Code-sharing Session of 7.4 & 9.5			Z24 09:00 ~ 11:45	Z24 13:00 ~ 17:00				
CS.8 Code-sharing Session of 8.3 & 9.2 & 13.6			Z21 08:30 ~ 11:30					
1 Interdisciplinary Physics and Related Areas of Science and Technology								
1.1 Interdisciplinary and General Physics			Z22 10:30 ~ 12:00	Z22 13:00 ~ 15:45				
1.2 Education					Z22 09:00 ~ 11:45	Z22 13:00 ~ 14:15		
1.3 Novel technologies and interdisciplinary engineering			Z22 09:30 ~ 10:15					
1.4 Energy conversion, storage, resources and environment		Z22 13:00 ~ 16:45						
1.5 Instrumentation, measurement and Metrology	Z22 09:30 ~ 11:30							
1.6 Ultrasonics						Z22 15:00 ~ 18:30		

Schedule by Category (II)

Category Section	Sep. 8 (Tue.)		Sep.9 (Wed.)		Sep. 10 (Thu.)		Sep.11 (Fri.)	
	AM	PM	AM	PM	AM	PM	AM	PM
2 Ionizing Radiation								
2.1 Radiation physics and Detector fundamentals	Z14 08:30 ~ 11:30							
2.2 Detection systems						Z14 12:45 ~ 18:30		
2.3 Application, radiation generators, new technology					Z14 08:30 ~ 11:45			
2.4 Accelerator Mass Spectrometry, Accelerator Beam Analysis (*Code-sharing Session with 7.5)	Z25 09:00 ~ 12:15	Z25 13:15 ~ 16:45						
2.5 Medical application			Z14 08:30 ~ 11:30					
2.6 Radiation-induced phosphors							Z14 08:30 ~ 11:30	Z14 12:30 ~ 18:15
3 Optics and Photonics								
3.1 Basic optics and frontier of optics				Z17 13:00 ~ 19:45				
3.2 Equipment optics and materials	Z21 09:00 ~ 11:45							
CS.2 Code-sharing Session of 3.2 & 12.3		Z13 12:45 ~ 15:30						
3.3 Information photonics and image engineering	Z20 08:30 ~ 12:00							
CS.3 Code-sharing Session of 3.3 & 4.4				Z10 13:00 ~ 17:00				
3.4 Biomedical optics						Z28 13:30 ~ 19:30		
3.5 Laser system and materials	Z19 09:00 ~ 12:00							
3.6 Ultrashort-pulse and high-intensity lasers					Z19 08:45 ~ 11:45	Z19 13:00 ~ 17:15		
3.7 Laser processing			Z18 09:15 ~ 12:00	Z18 13:00 ~ 19:00				
3.8 Optical measurement, instrumentation, and sensor		Z19 13:00 ~ 20:00						
3.9 Terahertz technologies						Z24 13:25 ~ 17:30	Z24 10:00 ~ 11:45	Z24 13:30 ~ 17:00
3.10 Optical quantum physics and technologies					Z21 09:30 ~ 12:00	Z21 13:00 ~ 17:00		
3.11 Photonic structures and phenomena					Z18 09:30 ~ 12:15	Z18 13:10 ~ 17:30	Z18 09:30 ~ 12:15	Z18 13:15 ~ 16:00
3.12 Nanoscale optical science and near-field optics					Z17 09:00 ~ 12:00	Z17 13:00 ~ 18:15	Z17 09:00 ~ 12:00	
3.13 Semiconductor optical devices			Z13 08:30 ~ 11:30	Z13 12:30 ~ 16:30				
3.14 Optical control devices and optical fibers	Z16 09:15 ~ 12:00	Z16 13:00 ~ 18:30						
3.15 Silicon photonics and integrated photonics				Z19 13:00 ~ 17:30				
4 JSAP-OSA Joint Symposia 2020								
4.1 Plasmonics and Nanophotonics			Z16 10:00 ~ 12:00	Z16 13:00 ~ 17:45				
4.2 Photonics Devices, Photonic Integrated Circuit and Silicon Photonics			Z23 10:00 ~ 12:00					
4.3 Lasers and laser materials processing					Z16 09:00 ~ 12:00		Z16 09:00 ~ 12:00	
4.4 Information Photonics								
4.4 Information Photonics (*Code-sharing Session with 3.3)				Z10 13:00 ~ 17:00				
4.5 Nanocarbon and 2D Materials (*Code-sharing Session with 17)	Z23 09:00 ~ 12:30		Z26 09:00 ~ 12:00					
4.6 Terahertz Photonics				Z23 13:00 ~ 17:00				
4.7 Quantum Optics and Nonlinear Optics					Z23 08:30 ~ 11:45			
4.8 OSA Special Lecture			Z16 08:30 ~ 09:30					
6 Thin Films and Surfaces								
6.1 Ferroelectric thin films	Z17 09:00 ~ 11:45	Z17 13:00 ~ 16:15						
CS.5 Code-sharing Session of 6.1 & 13.3 & 13.5					Z24 08:45 ~ 12:00			
6.2 Carbon-based thin films	Z05 09:00 ~ 12:00	Z05 13:00 ~ 19:00						
6.3 Oxide electronics	Z07 09:15 ~ 11:30		Z07 09:00 ~ 11:30				Z07 09:00 ~ 11:30	Z07 13:00 ~ 16:45
6.4 Thin films and New materials			Z05 09:15 ~ 11:15		Z05 08:30 ~ 11:30	Z05 12:30 ~ 17:30		
6.5 Surface Physics, Vacuum			Z17 10:00 ~ 11:00					
CS.6 Code-sharing Session of 6.5 & 7.6				Z05 12:30 ~ 16:30				
6.6 Probe Microscopy			Z06 08:30 ~ 12:00			Z06 12:30 ~ 17:30	Z06 08:30 ~ 11:30	
7 Beam Technology and Nanofabrication								
7.1 X-ray technologies			Z25 09:00 ~ 10:15					
7.2 Applications and technologies of electron beams			Z25 10:30 ~ 11:00					
7.3 Micro/Nano patterning and fabrication				Z25 13:00 ~ 14:30				
7.4 Buried interface sciences with quantum beam (*Code-sharing Session with 9.5)			Z24 09:00 ~ 11:45	Z24 13:00 ~ 17:00				
7.5 Ion beams (*Code-sharing Session with 2.4)	Z25 09:00 ~ 12:15	Z25 13:15 ~ 16:45						
7.6 Atomic/molecular beams and beam-related new technologies (*Code-sharing Session with 6.5)				Z05 12:30 ~ 16:30				

Schedule by Category (III)

Category Section	Sep. 8 (Tue.)		Sep.9 (Wed.)		Sep. 10 (Thu.)		Sep.11 (Fri.)	
	AM	PM	AM	PM	AM	PM	AM	PM
8 Plasma Electronics								
8.1 Plasma production and diagnostics	Z04 08:30 ~ 12:30	Z21 13:30 ~ 15:30						
8.2 Plasma deposition of thin film, plasma etching and surface treatment					Z03 09:00 ~ 11:00			Z03 13:30 ~ 16:15
8.3 Plasma nanotechnology				Z21 13:30 ~ 16:15				
CS.8 Code-sharing Session of 8.3 & 9.2 & 13.6			Z21 08:30 ~ 11:30					
8.4 Plasma life sciences		Z07 13:30 ~ 18:15						
8.5 Plasma phenomena, emerging area of plasmas and their new applications							Z05 09:30 ~ 11:15	Z05 13:30 ~ 17:30
8.6 Plasma Electronics English Session							Z03 08:30 ~ 09:30	
8.7 Plasma Electronics Invited Talk					Z03 11:00 ~ 11:30			
8.8 Plasma Electronics Award Speech								Z03 12:30 ~ 13:30
9 Applied Materials Science								
9.1 Dielectrics, ferroelectrics					Z26 08:30 ~ 10:45			
9.2 Nanoparticles, Nanowires and Nanosheets						Z26 13:00 ~ 15:30	Z26 08:30 ~ 12:00	
CS.8 Code-sharing Session of 8.3 & 9.2 & 13.6			Z21 08:30 ~ 11:30					
9.3 Nanoelectronics				Z26 13:00 ~ 17:15				
9.4 Thermoelectric conversion	Z18 08:30 ~ 11:30	Z18 12:30 ~ 17:15						
9.5 New functional materials and new phenomena (*Code-sharing Session with 7.4)			Z24 09:00 ~ 11:45	Z24 13:00 ~ 17:00				
10 Spintronics and Magnetics								
10.1 Emerging materials in spintronics and magnetics (including fabrication and characterization methodologies)							Z08 09:00 ~ 11:30	Z08 12:30 ~ 17:45
10.2 Fundamental and exploratory device technologies for spin					Z08 08:45 ~ 11:30	Z08 12:30 ~ 15:30		
10.3 Spin devices, magnetic memories and storages						Z08 16:00 ~ 18:00		
10.4 Semiconductor spintronics, superconductor, multiferroics	Z08 09:30 ~ 11:30	Z08 13:00 ~ 15:00						
10.5 Application of magnetic field	Z10 08:30 ~ 11:00							
11 Superconductivity								
11.1 Fundamental properties				Z27 13:00 ~ 19:45				
11.2 Thin and thick superconducting films, coated conductors and film crystal growth			Z27 08:30 ~ 12:00					
11.3 Critical Current, Superconducting Power Applications	Z27 09:00 ~ 11:30							
11.4 Analog applications and their related technologies					Z27 08:30 ~ 11:15		Z27 08:30 ~ 10:00	
11.5 Junction and circuit fabrication process, digital applications	Z24 09:30 ~ 11:45	Z27 13:00 ~ 17:30						
12 Organic Molecules and Bioelectronics								
12.1 Fabrications and Structure Controls							Z13 08:45 ~ 11:30	Z13 12:30 ~ 18:00
12.2 Characterization and Materials Physics					Z25 09:00 ~ 11:30	Z25 13:15 ~ 18:00	Z25 09:00 ~ 11:45	
12.3 Functional Materials and Novel Devices	Z13 09:30 ~ 11:45	Z13 15:45 ~ 17:15				Z27 13:00 ~ 16:15		
CS.2 Code-sharing Session of 3.2 & 12.3		Z13 12:45 ~ 15:30						
12.4 Organic light-emitting devices and organic transistors	Z11 09:00 ~ 11:45	Z11 13:00 ~ 15:15	Z11 09:00 ~ 12:30	Z11 13:30 ~ 18:00				
12.5 Organic solar cells					Z11 08:30 ~ 11:30	Z11 12:30 ~ 17:00	Z11 08:30 ~ 11:30	Z11 12:30 ~ 16:45
12.6 Nanobiotechnology					Z12 08:30 ~ 11:30	Z12 12:30 ~ 18:45	Z12 08:30 ~ 11:30	
12.7 Biomedical Engineering and Biochips	Z12 09:00 ~ 12:15	Z12 13:30 ~ 16:45	Z12 09:00 ~ 12:00					
13 Semiconductors								
13.1 Fundamental properties, surface and interface, and simulations of Si related materials						Z09 12:30 ~ 18:00		
13.2 Exploratory Materials, Physical Properties, Devices							Z01 08:30 ~ 11:30	Z01 12:30 ~ 15:30
13.3 Insulator technology							Z10 08:30 ~ 11:15	Z10 12:30 ~ 14:45
CS.5 Code-sharing Session of 6.1 & 13.3 & 13.5					Z24 08:45 ~ 12:00			
13.4 Si processing /Si based thin film / MEMS / Equipment technology			Z10 08:30 ~ 11:30		Z10 08:45 ~ 11:30	Z10 12:30 ~ 17:30		
13.5 Semiconductor devices/ Interconnect/ Integration technologies							Z09 08:30 ~ 11:45	Z09 12:45 ~ 17:15
CS.5 Code-sharing Session of 6.1 & 13.3 & 13.5					Z24 08:45 ~ 12:00			
13.6 Nanostructures, quantum phenomena, and nano quantum devices		Z10 13:00 ~ 16:00						
CS.8 Code-sharing Session of 8.3 & 9.2 & 13.6			Z21 08:30 ~ 11:30					
13.7 Compound and power electron devices and process technology					Z04 09:30 ~ 12:00	Z04 13:00 ~ 17:30	Z04 09:30 ~ 12:00	Z04 13:00 ~ 16:45
13.8 Optical properties and light-emitting devices			Z04 08:30 ~ 11:30	Z04 13:00 ~ 18:15				
13.9 Compound solar cells			Z15 09:00 ~ 12:00	Z15 13:00 ~ 15:45	Z15 08:45 ~ 12:30			

Schedule by Category (IV)

Category Section	Sep. 8 (Tue.)		Sep.9 (Wed.)		Sep. 10 (Thu.)		Sep.11 (Fri.)	
	AM	PM	AM	PM	AM	PM	AM	PM
15 Crystal Engineering								
15.1 Bulk crystal growth		Z14 13:00 ~ 16:45						
15.2 II-VI and related compounds			Z01 09:00 ~ 10:30					
15.3 III-V-group epitaxial crystals, Fundamentals of epitaxy				Z01 12:30 ~ 18:00				
15.4 III-V-group nitride crystals	Z02 09:00 ~ 11:45		Z02 09:00 ~ 11:30		Z02 09:00 ~ 11:30	Z02 13:00 ~ 19:15	Z02 09:00 ~ 12:00	Z02 13:00 ~ 18:15
15.5 Group IV crystals and alloys				Z12 13:00 ~ 18:00				
15.6 Group IV Compound Semiconductors (SiC)						Z23 13:15 ~ 18:00	Z23 09:00 ~ 11:30	
15.7 Crystal characterization, impurities and crystal defects								Z12 12:30 ~ 17:15
16 Amorphous and Microcrystalline Materials								
16.1 Fundamental properties, evaluation, process and devices in disordered materials		Z26 13:00 ~ 19:30						
16.2 Energy Harvesting	Z26 10:00 ~ 11:00							
16.3 Bulk, thin-film and other silicon-based solar cells								Z23 12:30 ~ 18:15
17 Nanocarbon Technology								
17.1 Carbon nanotubes & other nanocarbon materials		Z29 16:30 ~ 18:30					Z28 08:30 ~ 12:45	Z28 13:45 ~ 17:00
17.2 Graphene			Z29 08:30 ~ 12:30	Z29 13:30 ~ 18:00	Z28 08:30 ~ 12:00			
17.3 Layered materials					Z29 08:30 ~ 12:15		Z29 08:30 ~ 12:30	Z29 13:30 ~ 17:45
CS.4 Code-sharing Session of 4.5 & 17	Z23 09:00 ~ 12:30		Z26 09:00 ~ 12:00					
21 Joint Session K "Wide bandgap oxide semiconductor materials and devices"								
21.1 Joint Session K "Wide bandgap oxide semiconductor materials and devices"			Z20 09:00 ~ 12:00	Z20 13:00 ~ 17:45	Z20 09:00 ~ 12:15			
22 Joint Session M "Phonon Engineering"								
22.1 Joint Session M "Phonon Engineering"	Z09 09:00 ~ 11:45	Z09 13:00 ~ 18:30						
23 Joint Session N "Informatics"								
23.1 Joint Session N "Informatics"				Z09 13:00 ~ 18:00	Z09 08:30 ~ 11:30			