

# Schedule by Category I

| Category<br>Section   | September 17 (Wed.)  |                      | September 18 (Thu.) |                       | September 19 (Fri.)  |                      | September 20 (Sat.)  |                     |
|---|----------------------|----------------------|---------------------|-----------------------|----------------------|----------------------|----------------------|---------------------|
|   | AM                   | PM                   | AM                  | PM                    | AM                   | PM                   | AM                   | PM                  |
| <b>1. Applied Physics in General</b>                                |                      |                      |                     |                       |                      |                      |                      |                     |
| Symposium   |                      |                      |                     | A23<br>13:30 ~ 17:00  |                      |                      | A23<br>13:30 ~ 16:45 |                     |
| 1.1 Interdisciplinary and General Physics                           | A23<br>10:00 ~ 12:30 |                      | PB1<br>9:30 ~ 11:30 |                       |                      |                      |                      |                     |
| 1.2 Education   |                      |                      | PB2<br>9:30 ~ 11:30 |                       |                      |                      |                      |                     |
| 1.3 Novel Technologies and Frontier Engineering Science             |                      | A23<br>14:00 ~ 16:00 | PB3<br>9:30 ~ 11:30 |                       | PA1<br>9:30 ~ 11:30  |                      |                      |                     |
| 1.4 Energy conversion and storage                                   |                      |                      | PB4<br>9:30 ~ 11:30 |                       | A23<br>9:30 ~ 12:30  |                      |                      |                     |
| 1.5 Resources and environment                                       |                      |                      | PB5<br>9:30 ~ 11:30 |                       | A24<br>10:30 ~ 12:15 |                      |                      |                     |
| 1.6 Magnetic field and its application                              |                      |                      |                     | A24<br>14:00 ~ 18:30  |                      |                      |                      |                     |
| 1.7 Instrumentation and measurement, metrology                      |                      |                      |                     |                       | PA2<br>9:30 ~ 11:30  | A24<br>14:00 ~ 17:30 |                      |                     |
| 1.8 Ultrasonic  |                      |                      |                     | A15<br>14:00 ~ 18:30  | PA3<br>9:30 ~ 11:30  |                      |                      |                     |
| <b>2. Ionizing Radiation</b>  |                      |                      |                     |                       |                      |                      |                      |                     |
| Symposium   |                      |                      |                     |                       |                      | B2<br>13:30 ~ 16:15  |                      |                     |
| 2. Ionizing Radiation (Poster)                                      |                      |                      |                     | PA6<br>16:00 ~ 18:00  |                      |                      |                      |                     |
| 2.1 Radiation physics and detectors                                 |                      | B2<br>13:15 ~ 17:30  |                     |                       |                      |                      |                      |                     |
| 2.2 Detection systems   |                      |                      |                     | B2<br>14:00 ~ 14:45   | B2<br>9:00 ~ 11:30   |                      | B2<br>9:00 ~ 12:00   | B2<br>13:00 ~ 15:00 |
| 2.3 Application of radiation, radiation generators and technologies |                      |                      | B2<br>9:00 ~ 12:45  |                       |                      |                      |                      |                     |
| <b>3. Optics and Photonics</b>                                      |                      |                      |                     |                       |                      |                      |                      |                     |
| Symposium   |                      |                      |                     |                       |                      | C7<br>13:30 ~ 17:15  |                      |                     |
| 3.1 Basic optics and frontier of optics                             |                      |                      |                     |                       | C1<br>9:00 ~ 12:30   | C1<br>14:00 ~ 18:45  | PA1<br>9:30 ~ 11:30  |                     |
| 3.2 Materials and equipment optics                                  | C7<br>9:00 ~ 11:30   | C7<br>13:30 ~ 17:45  |                     | PA1<br>13:30 ~ 15:30  |                      |                      |                      |                     |
| 3.3 Information photonics and image engineering                     |                      |                      |                     | PA2<br>13:30 ~ 15:30  | S11<br>9:30 ~ 12:30  | S11<br>14:00 ~ 16:45 |                      |                     |
| 3.4 Biomedical optics   |                      |                      |                     |                       | PA4<br>9:30 ~ 11:30  |                      | C7<br>9:00 ~ 11:45   | C7<br>13:00 ~ 14:45 |
| 3.5 Laser devices and materials                                     |                      |                      |                     | PA3<br>13:30 ~ 15:30  |                      | C8<br>13:30 ~ 18:15  | C8<br>9:00 ~ 12:00   | C8<br>13:00 ~ 14:30 |
| 3.6 Ultrashort-pulse and high-intensity lasers                      |                      |                      |                     | PA4<br>13:30 ~ 15:30  | C2<br>9:00 ~ 12:30   | C2<br>14:00 ~ 18:15  | C2<br>9:15 ~ 12:00   |                     |
| 3.7 Laser processing  | S9<br>9:30 ~ 11:45   | S9<br>13:15 ~ 18:00  | S9<br>9:30 ~ 11:45  | S9<br>13:15 ~ 17:15   | PA5<br>9:30 ~ 11:30  |                      |                      |                     |
| 3.8 Optical measurement technology and devices                      | S8<br>9:00 ~ 12:00   | S8<br>13:30 ~ 17:00  | S8<br>9:00 ~ 12:00  | S8<br>13:30 ~ 17:00   | PA6<br>9:30 ~ 11:30  |                      |                      |                     |
| 3.9 THz technology  |                      |                      |                     | PA5<br>13:30 ~ 15:30  | C6<br>9:00 ~ 12:30   | C6<br>14:00 ~ 18:30  | C6<br>9:00 ~ 12:00   | C6<br>13:00 ~ 15:00 |
| 3.10 Optical quantum physics and technologies                       |                      |                      | C2<br>9:00 ~ 12:15  | C2<br>14:00 ~ 18:45   | PA7<br>9:30 ~ 11:30  |                      |                      |                     |
| 3.11 Photonic structures and phenomena                              |                      | C8<br>13:30 ~ 15:30  | C8<br>10:00 ~ 12:30 | C8<br>14:00 ~ 17:45   |                      |                      |                      |                     |
|   |                      | PA2<br>16:00 ~ 18:00 |                     |                       |                      |                      |                      |                     |
| 3.12 Nanoscale optical science and near-field optics                | C1<br>9:00 ~ 12:30   | C1<br>13:45 ~ 17:45  | C1<br>9:00 ~ 12:30  | C1<br>13:30 ~ 16:00   |                      |                      |                      |                     |
|   |                      |                      |                     | PB11<br>16:00 ~ 18:00 |                      |                      |                      |                     |
| 3.13 Semiconductor optical devices                                  | C6<br>11:00 ~ 12:30  | C6<br>14:00 ~ 16:45  | C6<br>9:15 ~ 12:00  | C6<br>13:30 ~ 18:00   | PA8<br>9:30 ~ 11:30  |                      |                      |                     |
| 3.14 Optical control devices and optical fiber                      |                      |                      | C7<br>9:00 ~ 12:15  | C7<br>14:00 ~ 18:00   | C7<br>9:00 ~ 12:00   | PA1<br>13:30 ~ 15:30 |                      |                     |
| 3.15 Silicon photonics  |                      | PA3<br>16:00 ~ 18:00 | A18<br>9:30 ~ 11:45 | A18<br>13:15 ~ 17:15  | A18<br>9:30 ~ 11:45  |                      |                      |                     |

## How to Read a Table

|   | September 17 (Wed.) |   | September 18 (Thu.) |                    | September 19 (Fri.) |                     | September 20 (Sat.) |                     |
|---|---------------------|---|---------------------|--------------------|---------------------|---------------------|---------------------|---------------------|
|   | AM                  | PM  | AM                  | PM                 | AM                  | PM                  | AM                  | PM                  |
|   |                     | S2 (Short)<br>13:30 ~ 13:52<br>→ Poster (PB)<br>16:00 ~ 18:00 | PA1<br>9:30 ~ 11:30 | A3<br>9:00 ~ 12:00 | A2<br>9:00 ~ 12:15  | A2<br>13:15 ~ 17:00 | B1<br>9:00 ~ 12:00  | B1<br>13:00 ~ 14:30 |
| Short oral presentation followed by poster presentation |                     |   |                     | Session Room       | Session Time        |                     |                     |                     |

# Schedule by Category II

| Category<br>Section  | September 17 (Wed.) |   | September 18 (Thu.)  |                      | September 19 (Fri.) |                      | September 20 (Sat.) |                      |
|--|---------------------|---|----------------------|----------------------|---------------------|----------------------|---------------------|----------------------|
|  | AM                  | PM  | AM                   | PM                   | AM                  | PM                   | AM                  | PM                   |
| <b>6. Thin Films and Surfaces</b>  |                     |   |                      |                      |                     |                      |                     |                      |
| Symposium  |                     |   |                      | A1<br>13:00 ~ 17:00  |                     |                      |                     |                      |
|  |                     |   |                      | A10<br>13:15 ~ 18:15 |                     |                      |                     |                      |
|  |                     |   |                      |                      | A4<br>9:15 ~ 12:30  | A4<br>14:00 ~ 17:00  |                     |                      |
|  |                     |   |                      |                      |                     |                      |                     |                      |
| 6.2 Carbon-based thin films  | A8<br>10:00 ~ 11:45 | A8<br>13:15 ~ 18:00   | A8<br>9:00 ~ 11:45   | A8<br>13:15 ~ 19:00  | PB1<br>9:30 ~ 11:30 |                      |                     |                      |
| 6.3 Oxide-based electronics  | A10<br>9:00 ~ 11:45 | A10<br>13:15 ~ 17:45  | A10<br>9:15 ~ 11:45  | PA7<br>16:00 ~ 18:00 | A10<br>9:15 ~ 11:45 | A10<br>13:15 ~ 19:00 | A10<br>9:30 ~ 12:00 | A10<br>13:00 ~ 15:00 |
| 6.4 New thin-film materials  |                     | A11<br>13:15 ~ 18:00  | A11<br>9:00 ~ 11:45  | A11<br>13:15 ~ 18:15 | PB2<br>9:30 ~ 11:30 |                      |                     |                      |
| 6.5 Surface physics and vacuum   | A6<br>9:30 ~ 12:00  | A6<br>13:30 ~ 15:45   |                      |                      | PB3<br>9:30 ~ 11:30 |                      |                     |                      |
| 6.6 Probe microscopy   |                     |   |                      | PA8<br>16:00 ~ 18:00 | A8<br>9:30 ~ 12:15  | A8<br>13:45 ~ 19:00  |                     |                      |
| <b>7. Beam Technology and Nanofabrication</b>  |                     |   |                      |                      |                     |                      |                     |                      |
| Symposium  | A13<br>9:30 ~ 12:15 | A13<br>13:45 ~ 16:30  |                      |                      |                     |                      |                     |                      |
|  |                     |   |                      | A13<br>13:15 ~ 18:45 |                     |                      |                     |                      |
| 7.1 X-ray technologies   |                     |   |                      | PB1<br>13:30 ~ 15:30 |                     | A13<br>13:15 ~ 17:00 |                     |                      |
| 7.2 Electron microscopes, evaluation, measurement and analysis   |                     |   |                      | PB2<br>13:30 ~ 15:30 | A14<br>9:00 ~ 11:45 |                      |                     |                      |
| 7.3 Lithography  | A14<br>9:00 ~ 12:30 |   |                      | PB3<br>13:30 ~ 15:30 |                     |                      |                     |                      |
| 7.4 Nanoimprint  |                     |   |                      |                      |                     |                      | A13<br>9:30 ~ 11:30 | A13<br>13:00 ~ 15:00 |
| 7.5 Particle/photon-beam-induced surface reactions   |                     |   | A13<br>9:00 ~ 9:45   |                      |                     | PA2<br>13:30 ~ 15:30 |                     |                      |
| 7.6 Ion beams  |                     |   |                      | A14<br>13:15 ~ 18:15 |                     | PA3<br>13:30 ~ 15:30 |                     |                      |
| 7.7 Vacuum nanoelectronics and electron sources  |                     |   |                      |                      |                     | A14<br>13:00 ~ 17:15 |                     |                      |
| 7.8 New beam-application technologies  |                     |   | A13<br>10:00 ~ 11:30 |                      |                     |                      |                     |                      |
| <b>8. Plasma Electronics</b>   |                     |   |                      |                      |                     |                      |                     |                      |
| Symposium  |                     |   |                      | S1<br>13:30 ~ 17:30  |                     |                      |                     |                      |
| 8. Plasma Electronics: English Session   | S10<br>9:00 ~ 12:00 | S10<br>15:00 ~ 18:00  |                      |                      |                     |                      |                     |                      |
| 8. Plasma Electronics: Invited Lecture of Overseas Researcher  |                     | S10<br>13:15 ~ 14:45  |                      |                      |                     |                      |                     |                      |
| 8. Plasma Electronics: Award Speech  |                     |   | S1<br>9:15 ~ 11:30   |                      |                     |                      |                     |                      |
| 8.1 Plasma production and control  | PB1<br>9:30 ~ 11:30 |   |                      |                      | S8<br>9:00 ~ 12:00  | S8<br>13:15 ~ 14:30  |                     |                      |
| 8.2 Plasma measurements and diagnostics  |                     | S11<br>16:30 ~ 18:00  |                      | PB4<br>13:30 ~ 15:30 |                     |                      |                     |                      |
| 8.3 Plasma deposition of thin film and surface treatment   |                     |   |                      | PB5<br>13:30 ~ 15:30 | S9<br>9:00 ~ 12:00  | S9<br>13:15 ~ 14:30  |                     |                      |
| 8.4 Plasma etching   |                     |   |                      | PB6<br>13:30 ~ 15:30 |                     | S10<br>14:15 ~ 19:00 |                     |                      |
| 8.5 Plasma nanotechnology  |                     |   |                      | PB7<br>13:30 ~ 15:30 |                     |                      | S9<br>9:00 ~ 12:00  | S9<br>13:00 ~ 14:15  |
| 8.6 General plasma phenomena, emerging area of plasmas and their new applications                      | PB2<br>9:30 ~ 11:30 |   |                      |                      |                     | S8<br>14:45 ~ 18:30  | S8<br>9:00 ~ 12:00  | S8<br>13:00 ~ 14:30  |
| <b>9. Applied Materials Science</b>  |                     |   |                      |                      |                     |                      |                     |                      |
| 9.1 Nanowires, nanoparticles   |                     |   | A6<br>9:00 ~ 12:00   | A6<br>13:30 ~ 18:00  | A6<br>9:00 ~ 12:00  | PA4<br>16:00 ~ 18:00 |                     |                      |
| 9.3 Nanoelectronics  |                     | PB1<br>13:30 ~ 15:30  |                      |                      | A7<br>10:00 ~ 11:45 | A7<br>13:15 ~ 16:45  |                     |                      |
| 9.4 Thermoelectric conversion  |                     |   | A7<br>9:00 ~ 12:00   | A7<br>13:00 ~ 17:30  |                     | PA5<br>16:00 ~ 18:00 |                     |                      |
| 9.5 New functional materials and new physical properties   |                     | PB2<br>13:30 ~ 15:30  |                      |                      |                     | A6<br>13:15 ~ 17:30  |                     |                      |
| <b>10. Spintronics and Magnetism</b>   |                     |   |                      |                      |                     |                      |                     |                      |
| Symposium  |                     |   |                      | S2<br>13:30 ~ 17:15  |                     |                      |                     |                      |
| 10.1 Creation of new materials   | S2<br>9:00 ~ 11:45  | S2 (Short)<br>13:30 ~ 13:52<br>→ Poster (PB)<br>16:00 ~ 18:00 | S2<br>9:00 ~ 11:45   |                      |                     |                      |                     |                      |
| 10.2 Spin torque, spin current, circuits, and measurement technologies                                 |                     | S2 (Short)<br>13:52 ~ 14:38<br>→ Poster (PB)<br>16:00 ~ 18:00 |                      |                      |                     |                      | S2<br>9:00 ~ 12:00  | S2<br>13:00 ~ 15:00  |
| 10.3 Giant magnetoresistance (GMR), tunnel magnetoresistance (TMR) and magnetic recording technologies |                     | S2 (Short)<br>14:38 ~ 14:56<br>→ Poster (PB)<br>16:00 ~ 18:00 |                      |                      | S2<br>9:00 ~ 11:45  |                      |                     |                      |
| 10.4 Semiconductors, organic, optical, and quantum spintronics   |                     | S2 (Short)<br>14:56 ~ 15:06<br>→ Poster (PB)<br>16:00 ~ 18:00 |                      |                      |                     | S2<br>13:15 ~ 17:15  | S10<br>9:00 ~ 12:00 |                      |

# Schedule by Category III

| Category<br>Section   | September 17 (Wed.)  |                      | September 18 (Thu.)  |                       | September 19 (Fri.) |                      | September 20 (Sat.)  |                      |
|---|----------------------|----------------------|----------------------|-----------------------|---------------------|----------------------|----------------------|----------------------|
|   | AM                   | PM                   | AM                   | PM                    | AM                  | PM                   | AM                   | PM                   |
| <b>11. Superconductivity</b>  |                      |                      |                      |                       |                     |                      |                      |                      |
| 11. Superconductivity (Poster)  |                      |                      | PB6<br>9:30 ~ 11:30  |                       |                     |                      |                      |                      |
| 11.1 Fundamental properties   |                      |                      |                      | A21<br>13:00 ~ 18:00  | A21<br>9:00 ~ 12:30 | A21<br>13:45 ~ 16:15 |                      |                      |
| 11.2 Thin films, thick films, coated conductors and thin film crystal growth      |                      |                      |                      |                       | A20<br>9:00 ~ 12:15 | A20<br>13:30 ~ 16:15 |                      |                      |
| 11.3 Critical current, superconducting power applications                         |                      | A21<br>14:00 ~ 18:00 |                      |                       |                     |                      |                      |                      |
| 11.4 Analog application and its related technologies                              |                      |                      |                      |                       | A22<br>9:00 ~ 12:30 | A22<br>14:00 ~ 17:15 | A22<br>10:30 ~ 12:00 |                      |
| 11.5 Junction, circuit fabrication process and digital applications               | A20<br>11:00 ~ 12:30 | A20<br>14:00 ~ 16:45 |                      |                       |                     |                      |                      |                      |
| <b>12. Organic Molecules and Bioelectronics</b>                                   |                      |                      |                      |                       |                     |                      |                      |                      |
| Symposium   |                      |                      |                      | A1<br>13:00 ~ 17:00   |                     |                      |                      |                      |
|   |                      |                      |                      |                       | A4<br>9:15 ~ 12:30  | A4<br>14:00 ~ 17:00  |                      |                      |
| 12.1 Fabrications and Structure Controls  | A5<br>9:00 ~ 11:45   | A5<br>13:00 ~ 18:00  | A5<br>9:00 ~ 12:00   | PB12<br>16:00 ~ 18:00 |                     |                      |                      |                      |
| 12.2 Characterization and Materials Physics                                       | PA1<br>9:30 ~ 11:30  | A2<br>13:15 ~ 18:00  | A2<br>9:00 ~ 12:00   | A2<br>13:30 ~ 17:45   |                     |                      |                      |                      |
| 12.3 Functional materials and novel devices                                       | A3<br>9:00 ~ 11:45   | A3<br>13:15 ~ 17:00  | A3<br>9:00 ~ 11:45   | A3<br>13:15 ~ 17:45   |                     | PA6<br>16:00 ~ 18:00 |                      |                      |
| 12.4 Organic light-emitting devices and organic transistors                       | A4<br>9:00 ~ 11:45   | A4<br>13:15 ~ 18:00  | A4<br>9:00 ~ 11:45   | A4<br>13:15 ~ 18:00   | A5<br>9:00 ~ 11:45  | A5<br>13:15 ~ 15:30  | A4<br>9:00 ~ 12:00   | A4<br>13:00 ~ 15:00  |
|   |                      |                      |                      |                       |                     | PA7<br>16:00 ~ 18:00 |                      |                      |
| 12.5 Organic solar cells  | PA2<br>9:30 ~ 11:30  | A1<br>13:15 ~ 18:00  | A1<br>9:00 ~ 12:00   |                       | A1<br>9:00 ~ 11:45  | A1<br>13:15 ~ 18:30  |                      |                      |
| 12.6 Nanobiotechnology  |                      |                      | PA1<br>9:30 ~ 11:30  |                       | A3<br>9:30 ~ 11:45  | A3<br>13:15 ~ 18:00  | A3<br>9:30 ~ 12:15   |                      |
| 12.7 Medical Engineering and Biochips   | A7<br>9:00 ~ 11:45   |                      | PA2<br>9:30 ~ 11:30  |                       | A2<br>9:00 ~ 11:45  | A2<br>13:15 ~ 18:30  | A2<br>9:00 ~ 12:00   | A2<br>13:00 ~ 15:00  |
| <b>13. Semiconductors A (Silicon)</b>   |                      |                      |                      |                       |                     |                      |                      |                      |
| Symposium   |                      | A19<br>13:15 ~ 17:45 |                      |                       |                     |                      |                      |                      |
|   |                      | A14<br>13:30 ~ 17:30 |                      |                       |                     |                      |                      |                      |
| 13.1 Basic Properties, Surface and Interface Phenomena, and Stimulation           |                      |                      |                      |                       | A15<br>9:30 ~ 12:00 | A15<br>13:30 ~ 16:45 | PA2<br>9:30 ~ 11:30  |                      |
| 13.2 Insulator technology   |                      |                      |                      |                       | A17<br>9:00 ~ 12:30 | A17<br>14:00 ~ 17:00 | PA3<br>9:30 ~ 11:30  |                      |
| 13.3 Si Process · Interconnect · MEMS · Integration                               |                      | PA1<br>13:30 ~ 15:30 | A19<br>9:00 ~ 12:30  | A19<br>14:00 ~ 17:45  | A19<br>9:00 ~ 12:30 | A19<br>14:00 ~ 18:00 | A19<br>9:00 ~ 12:15  |                      |
| 13.4 Devices/Integration Technologies   | PA3<br>9:30 ~ 11:30  | A16<br>14:00 ~ 17:45 | A16<br>9:00 ~ 12:00  | A16<br>13:30 ~ 17:15  |                     |                      |                      |                      |
| 13.5 Si-English Session   |                      |                      | A15<br>10:30 ~ 12:15 |                       |                     |                      |                      |                      |
| <b>14. Semiconductors B (Exploratory Materials, Physical Properties, Devices)</b> |                      |                      |                      |                       |                     |                      |                      |                      |
| 14.1 Physical properties of exploratory materials                                 |                      |                      |                      |                       | PB4<br>9:30 ~ 11:30 | A27<br>14:00 ~ 18:45 | A27<br>9:00 ~ 11:45  |                      |
| 14.2 Ultrathin films and quantum nanostructures                                   |                      |                      | A27<br>9:00 ~ 12:30  | A27<br>14:00 ~ 19:00  | A27<br>9:00 ~ 12:30 | PB1<br>13:30 ~ 15:30 |                      |                      |
| 14.3 Electron devices and Process technology                                      |                      |                      | A22<br>9:00 ~ 12:15  | A22<br>14:00 ~ 18:00  |                     | PB2<br>13:30 ~ 15:30 |                      |                      |
| 14.4 Optical properties and light-emitting devices                                |                      |                      | A24<br>9:00 ~ 12:30  | PB8<br>13:30 ~ 15:30  | A26<br>9:00 ~ 12:15 | A26<br>13:45 ~ 18:45 | A26<br>9:15 ~ 11:45  | A26<br>13:00 ~ 14:30 |
| 14.5 Compound solar cells   |                      | A28<br>14:00 ~ 17:15 | A28<br>9:30 ~ 12:30  | A28<br>14:00 ~ 18:15  | A28<br>9:00 ~ 12:30 | PB3<br>13:30 ~ 15:30 |                      |                      |
| <b>15. Crystal Engineering</b>  |                      |                      |                      |                       |                     |                      |                      |                      |
| Symposium   |                      |                      |                      |                       | C5<br>8:30 ~ 11:45  | C5<br>13:15 ~ 18:00  |                      |                      |
| 15.1 Bulk crystal growth  |                      |                      |                      | PB9<br>13:30 ~ 15:30  |                     |                      | A17<br>9:00 ~ 12:00  | A17<br>13:00 ~ 15:00 |
| 15.2 II-VI-group crystals and multicomponent crystals                             |                      |                      |                      |                       |                     | PB4<br>16:00 ~ 18:00 |                      |                      |
| 15.3 III-V-group epitaxial crystals   |                      |                      | A20<br>9:00 ~ 12:00  | A20<br>15:00 ~ 19:00  |                     | PB5<br>16:00 ~ 18:00 |                      |                      |
| 15.4 III-V-group nitride crystals   | C5<br>9:00 ~ 11:45   | C5<br>13:15 ~ 18:45  | C5<br>8:30 ~ 12:30   | C5<br>13:30 ~ 19:15   |                     | PB6<br>16:00 ~ 18:00 | C5<br>8:30 ~ 12:00   | C5<br>13:00 ~ 15:00  |
| 15.5 IV-group crystals and IV-IV-group mixed crystals                             |                      |                      |                      | PB10<br>13:30 ~ 15:30 | A16<br>9:30 ~ 12:00 | A16<br>13:30 ~ 18:15 |                      |                      |
| 15.6 IV-group-based compounds   | A17<br>9:00 ~ 12:30  | A17<br>14:00 ~ 18:00 | A17<br>9:00 ~ 12:30  | A17<br>14:00 ~ 17:15  | PB5<br>9:30 ~ 11:30 |                      |                      |                      |
| 15.7 Fundamentals of epitaxy  |                      |                      |                      | A20<br>13:15 ~ 14:45  |                     |                      |                      |                      |
| 15.8 Crystal evaluation, impurities and crystal defects                           |                      |                      |                      |                       |                     | PB7<br>16:00 ~ 18:00 | A20<br>9:00 ~ 13:00  |                      |
| <b>16. Amorphous and Microcrystalline Materials</b>                               |                      |                      |                      |                       |                     |                      |                      |                      |
| Symposium   |                      | A25<br>13:00 ~ 17:45 |                      |                       |                     |                      |                      |                      |
| 16.1 Fundamental properties and their evaluation in disordered materials          | PB3<br>9:30 ~ 11:30  |                      | A26<br>10:30 ~ 12:00 | A26<br>13:30 ~ 17:15  |                     |                      |                      |                      |
| 16.2 Processing technologies and devices  |                      |                      |                      |                       |                     |                      | A25<br>10:30 ~ 12:30 |                      |
| 16.3 Bulk, thin-film and other silicon-based solar cells                          | PB4<br>9:30 ~ 11:30  |                      | A25<br>9:00 ~ 12:30  | A25<br>13:45 ~ 18:15  | A25<br>9:00 ~ 12:30 | A25<br>13:45 ~ 18:00 | A25<br>9:00 ~ 10:15  |                      |

# Schedule by Category IV

| Category<br>Section   | September 17 (Wed.) |                      | September 18 (Thu.) |                      | September 19 (Fri.) |                      | September 20 (Sat.) |                     |
|---|---------------------|----------------------|---------------------|----------------------|---------------------|----------------------|---------------------|---------------------|
|   | AM                  | PM                   | AM                  | PM                   | AM                  | PM                   | AM                  | PM                  |
| <b>17. Nanocarbon Technology</b>  |                     |                      |                     |                      |                     |                      |                     |                     |
| Symposium   | S1<br>9:15 ~ 12:00  | S1<br>13:15 ~ 18:00  |                     |                      |                     |                      |                     |                     |
|   |                     |                      |                     | B3<br>13:15 ~ 18:30  |                     |                      |                     |                     |
| 17. Nanocarbon Technology (Poster)  |                     |                      | PA3<br>9:30 ~ 11:30 |                      |                     |                      |                     |                     |
| 17.1 Growth technology  |                     |                      |                     |                      | B3<br>9:00 ~ 11:45  | B3<br>13:15 ~ 17:30  | B3<br>9:00 ~ 10:45  |                     |
|   |                     |                      |                     |                      |                     |                      | B1<br>9:00 ~ 11:00  |                     |
| 17.2 Structural control and process   |                     | B1<br>14:00 ~ 17:15  |                     |                      |                     | B1<br>13:15 ~ 15:30  |                     |                     |
| 17.3 Exploration of new functions and evaluation of basic properties            |                     |                      |                     | B1<br>13:15 ~ 19:00  |                     | B1<br>15:45 ~ 18:15  |                     |                     |
| 17.4 Device application   | B1<br>9:00 ~ 11:45  | B1<br>13:15 ~ 14:00  |                     |                      | B1<br>9:15 ~ 11:45  |                      |                     |                     |
| <b>18. JSAP-OSA Joint Symposia</b>  |                     |                      |                     |                      |                     |                      |                     |                     |
| OSA President Special Lecture   |                     | C4<br>13:45 ~ 14:45  |                     |                      |                     |                      |                     |                     |
| 18.1 Plasmonics   |                     |                      |                     |                      | C3<br>9:00 ~ 12:30  | C3<br>14:00 ~ 18:00  | C3<br>9:00 ~ 12:30  |                     |
| 18.2 Bio- and Medical Photonics   |                     |                      | C4<br>9:30 ~ 12:30  | C4<br>13:45 ~ 17:30  | C4<br>9:30 ~ 12:30  |                      |                     |                     |
| 18.3 Laser Manufacturing  |                     |                      |                     |                      |                     | C4<br>13:30 ~ 17:00  |                     |                     |
| 18.4 Optical Micro-sensing, Manipulation, and Fabrications                      |                     |                      | C3<br>9:00 ~ 12:30  | C3<br>14:00 ~ 17:15  |                     |                      |                     |                     |
| 18.5 Opto-electronics   |                     |                      |                     |                      |                     |                      | C1<br>9:15 ~ 12:00  | C1<br>13:00 ~ 15:00 |
| 18.6 Information Photonics  |                     |                      |                     |                      |                     |                      | C4<br>9:00 ~ 11:45  | C4<br>12:45 ~ 15:00 |
| 18.7 Laser Photonics -XFEL and ultrafast optics-                                | C4<br>9:15 ~ 12:30  | C4<br>15:00 ~ 17:45  |                     |                      |                     |                      |                     |                     |
| 18.8 Carbon Photonics   | C3<br>10:15 ~ 12:30 | C3<br>15:00 ~ 17:30  |                     |                      |                     |                      |                     |                     |
| <b>19. Code-sharing session</b>   |                     |                      |                     |                      |                     |                      |                     |                     |
| 3.5/3.14 code-sharing session   |                     |                      |                     |                      | C8<br>9:00 ~ 12:00  |                      |                     |                     |
| 6.1/9.1 code-sharing session  |                     | PA4<br>16:00 ~ 18:00 | A9<br>9:00 ~ 11:45  | A9<br>13:15 ~ 18:30  | A9<br>9:00 ~ 11:45  | A9<br>13:15 ~ 17:45  |                     |                     |
| 14.3/15.4 code-sharing session  | A27<br>9:00 ~ 12:00 | A27<br>14:00 ~ 17:45 |                     |                      |                     |                      |                     |                     |
| 14.5/15.2 code-sharing session  |                     | A12<br>13:15 ~ 17:30 |                     |                      |                     |                      |                     |                     |
| 14.5/15.3/15.4 code-sharing session   |                     |                      |                     |                      | S1<br>9:00 ~ 12:30  |                      |                     |                     |
| <b>Joint Session K "Wide bandgap oxide semiconductor materials and devices"</b> |                     |                      |                     |                      |                     |                      |                     |                     |
| Joint Session K "Wide bandgap oxide semiconductor materials and devices"        |                     | PA5<br>16:00 ~ 18:00 | A12<br>9:15 ~ 11:45 | A12<br>13:15 ~ 17:30 | A12<br>9:00 ~ 11:45 | A12<br>13:15 ~ 17:45 | A12<br>9:00 ~ 11:45 |                     |