Sessions with invited speakers

Sunday, 8 November

afternoon

Nanoparticles: Advances in Fabrication, Characterization, and Regulatory Challenges. *DeSimone*, *Glotzer*, *Nel*

Monday, 9 November

morning

Spectroscopic Ellipsometry I. *Woollam*
Nanoparticles and Self-Assembly. *Stellacci*
Graphene and 2D Carbon Nanostructures. *Ruoff*, *Gölzhäuser*
History Session: Centennials of Wireless Broadcasting. *Lee*, *Adams*, *Rutherford*
Nanowires and Nanoparticles I. *Curri*
Advanced Interconnect Etch. *Kurihara*
Plasma Processing for Photovoltaics. *Smets*, *Howling*
Photocatalytic Coatings. *Anpo*
Pulsed Plasmas in Surface Engineering. *Cremer*, *Anders*
Vibrational Spectroscopy and Surface Reactions. *Teplyakov*
TiO_2 Surfaces and Interfaces. *Diebold*
Thin Films: Growth and Characterization I. *Gupta*
Metals and Nitrides (Atomic Layer Deposition/Chemical Vapor Deposition). *Leskela*
Vacuum Contamination and Pumping. *Smith*

afternoon

Spectroscopic Ellipsometry II. *Arwin*, *Collins*
Protein and Cell Interactions at Interfaces I. *Blau*
Epitaxial Graphene on SiC. *Stroscio*, *Rotenberg*
Nanowires and Nanoparticles II. *Yang*
Plasma Challenges at the 22-nm Node and Beyond. *Wise*, *Adam*, *Vahedi*
Atmospheric Pressure Plasmas. *Selwyn*
Semiconductor Surfaces and Interfaces I: Ge and III-Vs. *Hinkle*, *Mikkelsen*
Formation and Reactivity of Nanoclusters. *Linic*, *Cuenya*
Chalcogenide Photovoltaics. *Gessert*
Energy Applications and Scaling. *Hupp*, *Prinz*, *Levy*, *Putkonen*

Tuesday, 10 November

morning

Spectroscopic Ellipsometry III. *Aspnes*
Protein and Cell Interactions at Interfaces II. *Latour*
High-Efficiency and Quantum Structure Photovoltaics. *Heremans*, *Sharps*
Complex and Multifunctional Oxides. *Ramesh*
Graphene and Carbon-Based Electronics. *Lau*, *de Heer*
Modeling Nanoscale Phenomena. *Müser*
Advanced Front-End-of-Line and Back-End-of-Line Etch. *Banna*
Atmospheric Plasma Processing and Microplasmas. *Gherardi*
Hard and Nanocomposite Coatings. *Mitterer*
Reactions on Metals and Bimetallics. *Mullins*
Glancing Angle Deposition I. *Koratkar*
Atomic Layer Deposition/Chemical Vapor Deposition: Basics, Organics, Electronics. *Abelson*, *Gleason*, *Shimogaki*

afternoon

Nanoparticle and Nanoscale Surface Chemistry I. *Holbrook*
Biofouling. *Liedberg*, *Bryers*
High-K Dielectrics on High Mobility Substrates. *Goel*
Graphene: Characterization, Properties, and Applications. *McEuen*, *Avouris*
Organic Photovoltaics I. *Ginger*, *Darling*
Fundamentals of Plasma-Surface Interactions I. *Goeckner*
Glancing Angle Deposition II. *Zhang*
Nonthermal Chemistry/Ion, Electron Processes. *Orlando*, *Rowntree*
Wide Bandgap Semiconductors. *Baski*, *Pollmann*
Catalysis: Mechanisms and Morphology. *Rodriguez*
Computational Modeling and Analysis of Thin Films. *Sholl*
Surface Science for Tribology. *Putterman*
Applied Surface Science Poster Session. *Huerta*

Wednesday, 11 November

morning

Nanoparticle and Nanoscale Surface Chemistry II. *Baer*
Electron Spectroscopies. *Yubero*
Array-Based Sensors and Diagnostics: Grand Challenges. *Wingren*, *Groll*, *Chilkoti*
Energy Frontiers Research Centers. *Rubloff*, *Bowers*
Spins in Graphene: Injection and Manipulation. *van Wees*, *Son*
Microfluidic Fundamentals and Inkjet Technology. *Nagel*, *Villermaux*, *Utada*, *Basaran*, *Shaqfeh*
Nanoscale Devices and Sensors, and Welch Award. *Hamers*
Plasma Diagnostics, Sensors, and Control I. *Dorf*
Plasma Deposition and Plasma-Assisted Atomic Layer Deposition. *Ryan*
Water/Surface Interactions and Environmental Chemistry I. *Grassian*
Nanostructuring Thin Films I. *Kalyanaraman*
Nanomechanics and Nanotribology. *Szlufarska*
Practical and Theoretical Aspects of Gas Dynamics. *George*

afternoon

Angle-Resolved X-Ray Photoelectron Spectroscopy. *Conard*
Quantitative Nanoscale Sensing at Biosurfaces and Interfaces. *Reimhult*, *Mayer*
Contacts, Interfaces, and Defects in Semiconductors. *Mohney*, *Houle*
Energy Frontiers Research Centers. *Klimov*, *Barbara*, *Prinz*, *Baldo*, *Zhu*
Graphene: Surface Characterization. *Lanzara*, *Kodambaka*
Inkjet Printing Technology: Advances and Challenges. *Bokor*, *Hanson*, *Chwalek*
Magnetism and Spin Injection in Semiconductors. *Shi*, *van 't Erve*
Nanotubes—Electronics and Functionalization. *Wong*, *Haddon*
Plasma Modeling. *Economou*
High Aspect Ratio and Deep Etching for 3D Integration and Memory. *Sakai*
Water/Surface Interactions and Environmental Chemistry II. *Strongin*
Surface Physics, Single Particle Imaging. *Sykes*
Advances in Surface Engineering for Friction and Wear Control. *Mate*
Modeling and Accelerators. *Li*

Thursday, 12 November

morning

Advances in Surface Analysis. *Potma*
Scanning Probe Studies of Biological Materials. *Korchev*
Oxide Semiconductors. *Veal*
Inkjet Technology: Novel and Emerging Applications. *Wallace*, *Boland*, *Kubby*
In Situ Spectroscopy—Interfacial Science and Catalysis. *Hemminger*, *Myneni*
Magnetization Dynamics, Imaging, and Spectroscopy. *Parkin*, *Fischer*
Graphene- and Carbon-Based MEMS/NEMS Devices. *Hone*
Manufacturing Issues for Beyond CMOS Nanoelectronics. *Huang*, *Pufall*, *Kong*, *Sung*
Characterization and Imaging at the Nanoscale. *Reichling*
Applications of Plasma-Surface Interactions. *Samukawa*
Surface Science of Hazardous Materials. *Leszczynski*, *Tripp*
Nanostructuring Thin Films II. *Desai*

afternoon

Chemical State Depth Profiling. *Hanley*
Micro- and Nanoengineering of Biointerfaces I. *Groves*
Advances in Microfluidics for BioMEMS. *Erickson*
Quantum Structures and Nitrides Devices. *Grandjean*, *Chyi*
In Situ Microscopy and Spectroscopy: Surface Reactions. *Weckhuysen*, *Aurbach*, *Yang*
Magnetic Thin Films: Multilayers and Nanostructures. *Childress*, *Fullerton*
Multiscale Interactions of Materials and Fabrication at the Micro- and Nano-scale I. *Carraro*
Manufacturing Issues in Nanoelectronics, Photovoltaics, and Solid-State Lighting. *Geer*
Fundamentals of Plasma–Surface Interactions II. *Cartry*
Plasma Diagnostics, Sensors, and Control II. *Sadeghi*
Nucleation and Growth—Metals. *Lukaszew*
Supramolecular Interfaces by Design. *Barth*
Next-Generation Processing. *Djayaprawira*

Friday, 13 November

morning

Practical Surface Analysis. *Hitzman*
Micro- and Nanoengineering of Biointerfaces II. *Kingshott*
In Situ Microscopy and Spectroscopy: Dynamic Nanoscale Processes. *Isabell*, *Zuo*, *Freitag*
Molecular/Organic-Based Magnetism. *Epstein*, *Yamashita*
Multiscale Interactions of Materials and Fabrication at the Micro- and Nanoscale. *Turner*
Plasma Science for Medical and Biological Applications. *Sakiyama*
Transparent Electronic Materials and Applications. *Facchetti* ■