

Plasmonics and Metamaterials Optical and Photonics Congress and Tabletop Exhibits

Collocated with OSA's Frontiers in Optics/Laser Science

**October 19-23, 2008
Rochester, New York, USA**

Submission Deadline: May 19, 2008

Hotel Reservation Deadline: September 17, 2008

Pre-registration Deadline: September 25, 2008

About Plasmonics and Metamaterials

The OSA topical meeting "Plasmonics and Metamaterials" will bring together the two scientific communities of plasmonics and metamaterials, both of which deal with tailored nanoscale metal/dielectric structures. The meeting will cover all experimental and theoretical aspects of this rapidly emerging field ranging from fundamental science to applications/products, such as, for example, biological sensing. The scope especially comprises linear optical characterization, polarization manipulation, near-field optics, sub-wavelength focusing, enhanced nonlinear optical phenomena, ultrafast optics, and quantum optics. Furthermore, corresponding novel approaches regarding nanofabrication and quantitative numerical simulation are of particular interest. A special session on applications with respect to "Sub-Wavelength Imaging" will be held in conjunction with the OSA Frontiers in Optics meeting.

Topics to Be Considered

- Fundamentals of plasmonics
- Metamaterials
- Enhanced phenomena in nanoplasmonics and metamaterials
- Ultrafast and nonlinear phenomena in nanoplasmonics and metamaterials
- Subwavelength imaging
- Plasmonics and metamaterial applications and devices
- Biological and chemical sensing using plasmonics

Program Committee

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Nikolay Zheludev, *Univ. of Southampton, UK*

Exhibitors

Please see <http://www.frontiersinoptics.com/ExhibitHall/default.aspx>.

Plasmonics and Metamaterials Invited Speakers

MMA1, **Optical Bulk Metamaterials**, Xiang Zhang; Univ. of California at Berkeley, USA

MMA4, **Surface Plasmon Optics for Enhanced Light-Matter Interaction**, Romain Quidant^{1,2}; ¹ICFO, Inst. de Ciències Fotoniques, Spain, ²ICREA-Inst. Catalana de Recerca i Estudis Avançat, Spain

MMB3, **Transformation Optics with Metamaterials: A New Paradigm for Science of Light**, Vladimir M. Shalaev, A. V. Kildishev, W. Cai, U. K. Chettiar, E. E. Narimanov; Purdue Univ., USA.

MMC1, **Mapping Surface Plasmons on a Single Metallic Nanoparticle**, M. Kociak¹, J. Nelayah¹, O. Stephan¹, S. Mazzucco¹, F.J. Garcia de Abajo², R. Bernard¹, Christian Colliex¹; ¹Lab de Physique des Solides, Univ. Paris-Sud, France, ²Inst. de Optica - Consejo Superior De Investigaciones Cientificas, Spain

MMD1, **Time-Domain Terahertz Plasmonics: Unmasking the Hidden Dynamics in Metals**, Abdul Elezzabi; Univ. of Alberta at Edmonton, Canada

MMD5, **Active Terahertz Metamaterial Devices**, Hou-Tong Chen¹, John F. O'Hara¹, Abul K. Azad¹, David Shrekenhamer², Willie Padilla², Joshua M. O. Zide³, Arthur Gossard³, Richard D. Averitt⁴, Antoinette J. Taylor¹; ¹Los Alamos Natl. Lab, USA, ²Dept. of Physics, Boston College, USA, ³Univ. of California at Santa Barbara, USA, ⁴Dept. of Physics, Boston Univ., USA

MTuA6, **Nonlinear Optics of Metamaterials**, Yuri Kivshar, David A. Powell; Australian Natl. Univ., Australia

MTuB3, **Adaptive Control in Nanoplasmonics**, Walter Pfeiffer¹, Tobias Brixner², Dmitri V. Voronine², F. Javier García de Abajo³, Martin Aeschlimann⁴, Michael Bauer⁵; ¹Univ. of Bielefeld, Germany, ²Univ. Würzburg, Germany, ³Inst. de Optica, Spain, ⁴Technische Univ. Kaiserslautern, Germany, ⁵Univ. Kiel, Germany

MTuC1, **Experiments on Three-Dimensional Photonic Metamaterials**, Harald Giessen; Univ. Stuttgart, Germany

MTuD2, **Low-Dimensional Optical Waves and Plasmonic Waveguides**, Junichi Takahara; Osaka Univ., Japan

MWA4, **Applications of Nanoplasmonics**, Naomi Halas; Rice Univ., USA

MWD3, **Plasmonic Nano-Guides and Circuits**, Sergey I. Bozhevolnyi; Univ. of Southern Denmark, Inst. of Sensors, Signals and Electrotechnics, Denmark

MThA7, **Nonlinear Excitation of Surface Plasmons**, Lukas Novotny, Stefano Palomba; Univ. of Rochester, USA

MThB1, **Ultrafast Photoemission Electron Microscopy: Imaging Light with Electrons on the Femto-Nano Scale**, Hrooje Petek^{1,2}, Atsushi Kubo^{1,3,4}; ¹Univ. of Pittsburgh, USA, ²Donostia Intl. Physics Ctr., Spain, ³Precursory Research for Embryonic Science and Technology (PRESTO), Japan Science and Technology Agency, Japan, ⁴Graduate School of Pure and Applied Sciences, Univ. of Tsukuba, Japan

MThD1, **Plasmonic Photovoltaic and Photonic Switching Devices**, Harry Atwater; Caltech, USA

MThD6, **Metal Coated Nano-Cavities for Plasmonic and Metallic Nano-Lasers**, Martin T. Hill; Eindhoven Univ. of Technology, Netherlands

This meeting was collocated with FiO/LS 2008.

A consolidated program with all collocated meetings (FiO, LS, OF&T and META) is available with the FiO 2008 meeting archive and includes an agenda of sessions, abstracts, subject index, and key to authors and presiders.