Newsletter, February 2012

Working groups meeting of COST Plasmonics will be co-located with E-MRS Spring 2012 meeting, May 17, Strasbourg, France
Symposium O: Applied Nanoplasmonics: Nanoplasmonic Functional Materials and Devices
http://www.emrs-strasbourg.com/index.php?option=com_content&task=view&Itemid=132&id=480

During the meeting there will be given an outlook to FP7 MNP: FP7 NMP Call 2013 and the next framework program, by Dr. Marion Tobler - http://www.euresearch.ch/

Management Committee meeting of COST Plasmonics will be co-located with SPIE Photonics Europe, 16 - 19 April 2012, Square Brussels Meeting Centre, Brussels, Belgium
http://spie.org/app/program/index.cfm?fuseaction=conferencedetail&conference=8424
MC meeting: April 18th, late afternoon

New partner COST Action: Nanoscale insights into Ion Beam Cancer Therapy, Nano-IBCT. The Action focuses on biomedical applications of nanoparticles and study plasmon excitations in atomic clusters and nanoparticles, among other subjects. We are welcoming exploratory STSMs between the partners of both networks.
http://fias.uni-frankfurt.de/nano-ibct/

STSM: Short term Scientific Missions - if you plan a short (up to 6 months) visit to the partners lab - this is the instrument. Documents to be submitted to STSMs Coordinator Dorota Pawlak: Dorota.Pawlak@itme.edu.pl:
- CV of the applicant
- Acceptance letter of the host
- Work plan
- On-line application (for the form - please, contact Dorota)

COST Plasmonics sponsors the joint publications of the partners as 'Open Access' with various publishers (NPG, ACS, Wiley etc.). Please, send you enquiries to alexd@chalmers.se

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Every partner is welcome to submit the entries to Papers, Jobs and Events sections.

Papers

A simple model for the resonance shift of localized plasmons due to dielectric particle adhesion
T. J. Antosiewicz, S. P. Apell, V. Claudio, M. Käll
Opt. Exp. 20, 524 (2012)
http://www.opticsinfobase.org/abstract.cfm?URI=oe-20-1-524

Ultrafast Plasmon Propagation in Nanowires Characterized by Far-Field Spectral Interferometry
C. Rewitz, T. Keitzl, P. Tuchscherer, J.-S. Huang, P. Geisler, G. Razinskas, B. Hecht, and T. Brixner
Nano Lett. 12, 45 (2012)
http://pubs.acs.org/doi/abs/10.1021/nl202864n

Enhanced Optical Trapping and Arrangement of Nano-Objects in a Plasmonic Nanocavity
C. Chen, M. L. Juan, Y. Li, G. Maes, G. Borghs, P. Van Dorpe, and R. Quidant

Nano Lett. 12, 125 (2012)
http://pubs.acs.org/doi/abs/10.1021/nl2031458

Gap Surface Plasmon Waveguides with Enhanced Integration and Functionality
D. K. Gramotnev, M. G. Nielsen, S. J. Tan, M. L. Kurth, and S. I. Bozhevolnyi
Nano Lett. 12, 359 (2012)
http://pubs.acs.org/doi/abs/10.1021/nl203629m

Improved Sensitivity of Localized Surface Plasmon Resonance Transducers Using Reflection Measurements
O. Kedem, A. Vaskevich, and I. Rubinstein
J. Phys. Chem. Lett. 2, 1223 (2011)
http://pubs.acs.org/doi/abs/10.1021/jz200482f

Tunable Localized Plasmon Transducers Prepared by Thermal Dewetting of Percolated Evaporated Gold Films
A. B. Tesler, L. Chuntonov, T. Karakouz, T. A. Bendikov, G. Haran, A. Vaskevich, and I. Rubinstein
J. Phys. Chem. C 115, 24642 (2011)
http://pubs.acs.org/doi/abs/10.1021/jp209114j

Optimization of Localized Surface Plasmon Resonance Transducers for Studying Carbohydrate–Protein Interactions
G. Bellapadrona, A. B. Tesler, D. Grünstein, L. H. Hossain, R. Kikkeri, P. H. Seeberger, A. Vaskevich, and I.Rubinstein
Anal. Chem. 84, 232 (2012)
http://pubs.acs.org/doi/abs/10.1021/ac202363t

Optically induced interaction of mangetic moments in hybrid metamaterials
A. E. Miroshnichenko, B. Luk'yanchuk, S. A. Maier, and Y. S. Kivshar
ACS Nano 6, 837 (2012)
http://pubs.acs.org/doi/abs/10.1021/nn204348j

Diffraction from carbon nanofiber arrays
R. Rehammer, Y. Francescato, A. I. Fernández-Domínguez, S. A. Maier, J. M. Kinaret, and E. E. B. Campbell
Opt. Lett. 37, 100 (2012)
http://www.opticsinfobase.org/abstract.cfm?URI=ol-37-1-100

Broadband light harvesting nanostructures robust to edge bluntness
Y. Luo, D. Y. Lei, S. A. Maier, and J. B. Pendry
Phys. Rev. Lett. 108, 023901 (2012)
http://prl.aps.org/abstract/PRL/v108/i2/e023901

Comment on 'Spaser action, loss compensation, and stability in plasmonic systems with gain'
S. A. Maier, and J. B. Pendry
Phys. Rev. Lett. 207, 259703 (2011)
http://prl.aps.org/abstract/PRL/v107/i25/e259703

Microwave Debye relaxation analysis of dissolved proteins: towards free-solution biosensing
T. H. Basey-Fisher, S. M. Hanham, H. Andresen, S. A. Maier, M. M. Stevens, N. M. Alford, and N. Klein
Appl. Phys. Lett. 99, 233703 (2011)
http://apl.aip.org/resource/1/applab/v99/i23/p233703_s1

Controllable coherent perfect absorption in a composite film
S. Dutta-Gupta, O. J. F. Martin, S. Dutta Gupta, and G.S. Agarwal
Opt. Exp. 20, 1330 (2012)

http://www.opticsinfobase.org/abstract.cfm?URI=oe-20-2-1330

A zeptoliter volume meter for analysis of single protein molecules
T. Sandén, R. Wyss, C. Santschi, G. Hassaïne, C. Deluz, O.J.F. Martin, S. Wennmalm, and H. Vogel
Nano Lett. 12, 370 (2011)
http://pubs.acs.org/doi/abs/10.1021/nl2036468

Influence of electromagnetic interactions on the lineshape of plasmonic Fano resonances
B. Gallinet, and O. J. F. Martin
ACS Nano 5, 8999 (2011)
http://pubs.acs.org/doi/abs/10.1021/nn203173r

Relation between near–field and far–field properties of plasmonic Fano resonances
B. Gallinet, and O. J. F. Martin
Opt. Exp. 19, 22167
http://www.opticsinfobase.org/abstract.cfm?URI=oe-19-22-22167

Plasmonic trapping with realistic dipole nanoantennas: Analysis of the detection limit
A. Lovera, and O. J. F. Martin
Appl. Phys. Lett. 99, 151104 (2011)
http://apl.aip.org/resource/1/applab/v99/i15/p151104_s1

Analytical description of Fano resonances in plasmonic nanostructures
B. Gallinet, and O. J. F. Martin
AIP Conference Proceedings 1398, 73 (2011)
http://proceedings.aip.org/resource/2/apcpcs/1398/1/73_1

Simulation of complex plasmonic circuits including bends
C. Dellagiacoma, T. Lasser, O. J. F. Martin, A. Degiron, J. J. Mock, and D. R. Smith
Opt. Exp. 19, 18979 (2011)
http://www.opticsinfobase.org/abstract.cfm?URI=oe-19-20-18979

Measurement and reduction of damping in plasmonic nanowires
P. Kusar, C. Gruber, A. Hohenau, J. R. Krenn
Nano Lett., Article ASAP (2012) http://pubs.acs.org/doi/abs/10.1021/nl203452d

Jobs

Nanobiotechnology Group Leader, The Nanoscience Cooperative Research Center CIC nanoGUNE Consolider , San-Sebastian, Basque Country (Spain)
http://www.nanogune.eu/en/join-us/nanobiotechnology-group-leader/

Postdoc in nanofluidics and nanoplasmonics at Chalmers, Göteborg, Sweden
http://www.nature.com/naturejobs/science/jobs/238893-Post-Doc-Research-Position-in-Nanofluidics-and-Nanoplasmonics-at-Chalmers-University-of-Technology-Gothenburg-Sweden
Application deadline: February 15, 2012
Start of the position: Spring/summer 2012
Contact: Christoph Langhammer, clangham@chalmers.se;
Fredrik Westerlund, fredrikw@chalmers.se

Post-doctoral position(s) in plasmonics, biosensing or nanophotonics (up to 4 years) at Nanophotonics and Metrology Lab (NAM), EPFL, Lausanne, Swirzerland
Special interested in the following expertise: Biochemistry, with a strong background in surface functionalization and/or redox molecules; Nonlinear plasmonics.
Contact: Olivier Martin, olivier.martin@epfl.ch
http://nam.epfl.ch/openpos.html

PhD on modelling plasmonic nanostructures in complex surroundings (3 years) at Nanophotonics and Metrology Lab (NAM), EPFL, Lausanne, Swirzerland
Requirements: completed studies in physics, mathematics, or electrical engineering. Good analytical skills and taste for modelling and computer programming. Ability to interact with experimentalists.
Contact: Olivier Martin, olivier.martin@epfl.ch
http://nam.epfl.ch/openpos.html

PhD on Fano resonances in plasmonic systems (3 years) at Nanophotonics and Metrology Lab (NAM), EPFL, Lausanne, Swirzerland (a collaboration with a large industrial company, investigating Fano resonances in plasmonic nanostructures and their application to biosensing).
Requirements: completed studies in physics, mathematics, or electrical engineering. Very good analytical skills and theoretical creativity. Taste for modelling and computer programming, as well as interest for transposing original ideas into practical realization.
Contact: Olivier Martin, olivier.martin@epfl.ch
http://nam.epfl.ch/openpos.html

Events

META'12, 3rd international conference on metamaterials, photonics crystals and plasmonics
http://metaconferences.org/ocs/index.php/META/META12

OSA Integrated Photonics Research, Silicone and Nanophotonics conference
June 17-21 2012, Cheyenne Mountain Resort, Colorado Springs, USA
Abstracts submission: 14 February, 2012
http://www.osa.org/meetings/topical_meetings/ipr/default.aspx

EUPROMETA Doctoral School on Metamaterials: Introduction to metamaterials
May 7-11 2012, Louvain-la-Neuve, Belgium
http://school.metamorphose-vi.org/

2nd International Conference on Frontiers of Plasmonics (FOP)
April 8-12, 2012, Sichuan University, Chengdu, China
Abstracts submission: February 29, 2012
http://nano.iphy.ac.cn/FOP2/FOP2.html

PIERS 2012
August 17-23, 2012, Moscow, Russia
Abstract submission: March 20, 2012
http://piers.org/piers2012Moscow/

Metamaterials' 2012: The 6th International Congress on Advanced Electromagnetic Materials in Microwaves and Optics
September 17-22, 2012, St. Petersburg, Russia
Abstract submission: March 23, 2012
http://congress2012.metamorphose-vi.org/

International Brokerage Event with F2F meetings: a platform to initiate international R&D projects in nanotechnologies, materials and industrial processes and to boost the innovation. The event is supported by the European Commission.
May 24, Lausanne, Switzerland
Registration deadline: April 25, 2012
http://www.b2match.eu/meetatnano/

NFO12: Near-field Optics, Nanophotonics and Related Techniques 2012
September 3-6, 2012, Donostia – San Sebastian, Basque Country, Spain

Abstracts submission: April 26, 2012.
http://www.nfo12.org

2012 Gordon Research Conference: Plasmonics
June 10-15, 2012, Colby College, Waterville, ME, USA
Application: May 13, 2012
http://www.grc.org/programs.aspx?year=2012&program=plasmonics

[Partner network event, COST Action Nano-IBCT]
Symposium on atomic cluster collisions
July 18-23, 2013, Wuhan-Chongqing, China
http://fias.uni-frankfurt.de/isacc/
Previous meeting of the series: http://fias.uni-frankfurt.de/isacc2011/index.php/