

Newsletter, June 2012

Working groups meeting of COST Plasmonics will be co-located with Nanophotonics and Metamaterials conference at the EOS Annual meeting in Aberdeen, UK
September 25-28, 2012

http://www.myeos.org/events/eosam2012_tom3

Regular participation reimbursement scheme applies.

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

All partners are welcome to submit the entries to Papers, Jobs and Events sections.

COST Plasmonics activities are currently on-hold, awaiting approval of the budget for the budget year 2012-2013 by the COST office. Most importantly, the Domain Committee of the MPNS domain (to where COST Plasmonics belongs) requested the COST Committee of Senior Officials to take a decision about the continuation of the Action.

Papers

Plasmonic nanosensors with inverse sensitivity by means of enzyme-guided crystal growth
L. Rodríguez-Lorenzo, R. de la Rica, R. A. Álvarez-Puebla, L. M. Liz-Marzán & M. M. Stevens
Nat. Mater. doi:10.1038/nmat3337 (2012)

<http://www.nature.com/nmat/journal/vaop/ncurrent/abs/nmat3337.html>

see also

Plasmonic nanosensors: Inverse sensitivity

M. Käll

Nat. Mater. 11, 570 (2012)

http://www.nature.com/nmat/journal/v11/n7/full/nmat3365.html?WT.ec_id=NMAT-201207

"Digitally" Addressable Focusing of Light into a Subwavelength Hot Spot

T. S. Kao, E. T. F. Rogers, J. Y. Ou, and N. I. Zheludev

Nano Lett. 12, 2728 (2012)

<http://pubs.acs.org/doi/abs/10.1021/nl2043437>

Dynamics of Four-Photon Photoluminescence in Gold Nanoantennas

P. Biagioni, D. Brida, J.-S. Huang, J. Kern, L. Duò, B. Hecht, M. Finazzi, and G. Cerullo

Nano Lett. 12, 2941 (2012)

<http://pubs.acs.org/doi/abs/10.1021/nl300616s>

Second-Harmonic Generation Imaging of Metal Nano-Objects with Cylindrical Vector Beams

G. Bautista, M. J. Huttunen, J. Mäkitalo, J. M. Kontio, J. Simonen, and M. Kauranen

Nano Lett. 12, 3207 (2012)

<http://pubs.acs.org/doi/abs/10.1021/nl301190x>

Noise-Assisted Crystallization of Opal Films

W. Khunsin, A. Amann, G. Kocher-Oberlehner, S. G. Romanov, S. Pullteap, H. C. Seat, E. P. O'Reilly, R. Zentel, C. M. Sotomayor Torres,
Adv. Funct. Mater. 22, 1812 (2012)

<http://onlinelibrary.wiley.com/doi/10.1002/adfm.201102605/abstract>

Energy dissipation in energy transfer mediated by optical near-field interactions and their interfaces with optical far-fields

M. Naruse, P. Holmström, T. Kawazoe, K. Akahane, N. Yamamoto, L. Thylén, and M. Ohtsu
Appl. Phys. Lett. 100, 241102 (2012)

http://apl.aip.org/resource/1/applab/v100/i24/p241102_s1

Enhanced optical transmission through tapered metallic gratings

H. Shen and B. Maes

Appl. Phys. Lett. 100, 241104 (2012)

http://apl.aip.org/resource/1/applab/v100/i24/p241104_s1

Experimental demonstration of ultra-compact directional couplers based on silicon hybrid plasmonic waveguides

F. Lou, Z. Wang, D. Dai, L. Thylén, and L. Wosinski

Appl. Phys. Lett. 100, 241105 (2012)

http://apl.aip.org/resource/1/applab/v100/i24/p241105_s1

Biosensors: One molecule at a time

M. Käll

Nat. Nanotechnol. 7, 347 (2012)

<http://www.nature.com/nnano/journal/v7/n6/full/nnano.2012.92.html>

Colloidal Nanoplasmonics Special Issue

Langmuir 28, Issue 24, 8825-9180 (2012)

<http://pubs.acs.org/toc/langd5/28/24>

Optical nano-imaging of gate-tunable graphene plasmons

J. Chen, M. Badioli, P. Alonso-Gonzalez, S. Thongrattanasiri, F. Huth, J. Osmond, M. Spasenovic, A. Centeno, A. Pesquera, P. Godignon, A. Zurutuza Elorza, N. Camara, F. Javier Garcia de Abajo, R. Hillenbrand & Frank H. L. Koppens

Nature, doi:10.1038/nature11254 (2012)

<http://www.nature.com/nature/journal/vaop/ncurrent/full/nature11254.html>

Active nanoplasmonic metamaterials

O. Hess, J. B. Pendry, S. A. Maier, R. F. Oulton, J. M. Hamm & K. L. Tsakmakidis

Nat. Mater. 11, 573 (2012)

http://www.nature.com/nmat/journal/v11/n7/full/nmat3356.html?WT.ec_id=NMAT-201207

Plasmonics in the mid-infrared

R. Stanley

Nat. Photon. 6, 409 (2012)

http://www.nature.com/nphoton/journal/v6/n7/full/nphoton.2012.161.html?WT.ec_id=NPHOTO N-201207

High-Resolution Resistless Nanopatterning on Polymer and Flexible Substrates for Plasmonic Biosensing Using Stencil Masks

O. Vazquez-Mena, T. Sannomiya, M. Tosun, L. G. Villanueva, V. Savu, J. Voros, and J. Brugger

ACS Nano 6, 5474 (2012)

<http://pubs.acs.org/doi/abs/10.1021/nn301358n>

Metallodielectric Hybrid Antennas for Ultrastrong Enhancement of Spontaneous Emission

X.-W. Chen, M. Agio, and V. Sandoghdar
Phys. Rev. Lett. 108, 233001 (2012)
<http://prl.aps.org/abstract/PRL/v108/i23/e233001>

Jobs

Postdoc position in ultrafast optics and magneto(spin)plasmonics (plasmonics + magnetism) at Chalmers, Göteborg, Sweden

This postdoc position is within our new line of research – combination of nanoplasmonic and ferromagnetic materials = magnetoplasmonics that also spills into spintronics research. We primarily use spectroscopic magneto-optical Kerr effect (MOKE) to characterize the interaction of plasmons and magnetization in nanoferrromagnets. With this project we will expand our MOKE capabilities to the resolution in low fs- time domain.

Requirements: Previous experience with ultrafast optical studies is a prerequisite. Strong interest / previous experience in nanooptics / nanoplasmonics as well as in time-resolved MOKE is a merit.

Position starts ASAP

(<http://web1.reachmee.com/i003/chalmers/eng/vacdetail.aspx?commadsegno=560&postback%20=%20vacancies.aspx>)

Contact: Alexandre 'Sascha' Dmitriev, alexnd@chalmers.se

<http://www.chalmers.se/ap/EN/research/bionanophotonics/research/functional>

Postdoc positions at the University of Eastern Finland, Joensuu, Finland

Contact: Pasi Vahimaa, Pasi.Vahimaa@joensuu.fi

<http://www.uef.fi/fysmat>.

Events

NFO'12 - Near-Field Optics, nanophotonics and related techniques at San Sebastian, Basque country, Spain

September 3-7, 2012

POST-DEADLINE POSTER SUBMISSIONS: until July 15th

<http://www.nfo12.org/en/home>

Quantum Nano-Optics Workshop (satellite of NFO conference) at ICFO, Barcelona, Spain

September 10-11, 2012

<http://quantumnano-optics.icfo.eu/>

33rd Progress in Electromagnetics Research Symposium (PIERS) in Taipei, Taiwan

March 25-28, 2013

<http://piers.org/piers/submit/survey.php>

Optics Within Life Sciences (OWLS), Genoa, Italy

July 4-6, 2012

<http://www.owls2012.org/>

International school of quantum electronics, Advances on nanophotonics IV

July 17-29 2012, Erice – Sicily, Italy

<http://w3.uniroma1.it/nanophotonic/>

Registration deadline: June 15, 2012

SPIE Photonics West, San Francisco, CA, USA

February 2-7, 2013

Abstracts submission: July 2012

http://spie.org/photonics-west.xml?WT.mc_id=RPW13CE

[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/>