SPP9

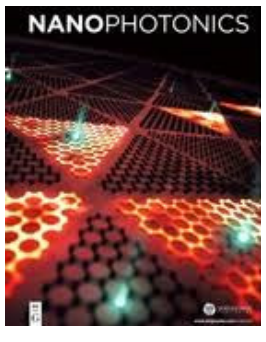
The 9th International Conference on
Surface Plasmon Photonics
May 26 – May 31, 2019 Copenhagen, Denmark

Welcome to Scandic Copenhagen

Program SPP9, Sunday May 26

15:00 - 18:00 - Registration

17:00 - 18:00 - Welcome reception with snacks and drinks



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Program SPP9, Monday 27 May

07:00-09:00	**Registration**	
09:00-09:15	**Welcome with Professor Sergey I. Bozhevolnyi**	
09:15-10:15	**Thomas Ebbesen, Invited plenary speaker** University of Strasbourg, France *Polaritons in Material Science* Room Grand Hall & Amalienborg	
10:15 - 10:45	**Coffee Break**	
	Sessions a room Grand Hall	**Sessions b room Amalienborg**
	Session 1a **Metasurfaces 1** Chair: Din Ping Tsai	Session 1b **Quantum Plasmonics 1** Chair: Martijn Wubs
10:45 - 11:20	**Federico Capasso, Invited speaker** Harvard University, Massachusetts, US *Polariton Metasurface Optics*	**Francisco J García-Vidal, Invited speaker** Universidad Autónoma de Madrid, Spain *Organic molecules strongly coupled to plasmonic cavities*
11:20 - 11:45	**Peining Li** CIC Nanogune, Spain *Infrared hyperbolic metasurface based on nanostructured van der Waals materials*	**Benjamin Vest** Institut d'Optique Graduate School, France *Revisiting quantum optics with single surface plasmons*
12:00 - 13:30	**Lunch**	
	Session 2a **Metasurfaces 2** Chair: Joel Yang	Session 2b **Quantum Plasmonics 2** Chair: Antonio Fernández-Domínguez
13:30 - 14:05	**Hatice Altug, Invited speaker** EPFL Lausanne, CH *Nanophotonic Metasurfaces for Biosensors and Bioimaging*	**Jeremy Baumberg, Invited speaker** University of Cambridge, UK *Plasmonic Nano-Actuators: Moving Nanomachines by Light*
14:05 - 14:30	**Jose Garcia-Guirado** ICFO, Spain *Enantio-Selective Sensing Using Plasmonic Racemic Arrays*	**Ya-Lun Ho** University of Tokyo, Japan *On-chip fabricated non-transfer plasmonic-waveguide nanolaser*
14:30 - 14:50	**Inki Kim** **Carlsberg Foundation Scholarship** POSTECH, South Korea *Geometric metasurfaces enabled transformative flat optical devices*	**Xiao Xiong** **Carlsberg Foundation Scholarship** A*STAR, Singapore *Quantum plasmonic immunoassay sensin*
14:50 - 15:20	**Coffee Break**	
	Session 3a **Bio Sensing** Chair: Alain Dereux	Session 3b **Graphene Plasmonics 1** Chair: Joel Cox
15:20 - 15:55	**Romain Quidant, Invited speaker** ICFO, Spain *Dielectric nanoresonators for reconfigurable planar optics and biosensing*	**Frank Koppens, Invited speaker** ICFO, Spain *Topological plasmons, polaritonic metasurfaces and twist-plasmonics*
15:55 - 16:20	**Oara Neumann** Rice University, Texas, US *Plasmonic Nanostructures for Imaging & Targeting Drug Delivery*	**Dmitri Svintsov** Moscow Institute of Physics and Technology, Russia *Plasmon-assisted terahertz detection in graphene transistors*
16;20 - 16:40	**Jacob Engelberg** **Carlsberg Foundation Scholarship** Hebrew University of Jerusalem, Israel *Near-IR Wide Field-of-View Huygens Metalens for Outdoor Imaging Applications*	**Álvaro Cuartero** **Carlsberg Foundation Scholarship** Universidad Autónoma de Madrid, Spain *Light-Forbidden Transitions in Plasmon-Emitter Interactions beyond the Weak-Coupling Regime*
18:00 - 19:00	City Hall Reception	

Program SPP9, Tuesday 28 May

	Sessions a room Grand Hall	Sessions b room Amalienborg
	Session 4a **Quantum Plasmonics 3** Chair: Maiken Mikkelsen	Session 4b **Electron- Plasmon Interactions 1** Chair: Nicolas Stenger
09:00 - 09:35	**Teri W. Odom, Invited speaker** Northwestern University, Illinois, US *Conformal Solid-state Emitters Coupled to Plasmonic Nanoparticle Arrays*	**Jennifer A. Dionne, Invited speaker** Stanford University, California, US *The Light Years: Combined optical and environmental electron microscopy to visualize plasmonic processes with atomic-scale resolution*
09:35 - 10:00	**Tomas Neuman** University of the Basque Country / CSIC, Spain Controlling molecular vibrations through resonant surface-enhanced Raman scattering	**Valerio Di Giulio** ICFO, Spain Probing out-of-equilibrium optical excitations with fast electrons
10:00 - 10:20	**Adriana Canales Ramos** **Carlsberg Foundation Scholarship** Chalmers University of Technology, Sweden *Collective Strong Light-Matter Coupling in Hierarchical Microcavity-Plasmon-Exciton Systems*	**Marty Oelschläger** **Carlsberg Foundation Scholarship** Humboldt University Berlin, Germany *Non-conservative Dispersion Forces and Collective Interface Plasmon- Polaritons*
10:15 - 10:45	**Coffee Break**	
	Session 5a **Quantum Plasmonics 4** Chair: Anatoly Zayats	Session 5b **Graphene Plasmonics 2** Chair: Philippe Tassin
10:40 - 11:15	**Luis Martín-Moreno, Invited speaker** University of Zaragoza, Spain *Theory on Waveguide QED with molecules*	**Javier F. García de Abajo, Invited speaker** ICFO, Spain *Plasmonics in Two-Dimensional Crystals*
11:15 - 11:40	**Eduardo Brioso Dias** ICFO, Spain Fundamental limits in the coupling between light and 2D polaritons using point and line scatterers	**Sanshui Xiao** Technical University of Denmark, Denmark *Graphene plasmonic photodetector with the bandwidth beyond 110 GHz*
12:00 - 13:30 13:15 - 13:30	**Lunch** **Neaspec presentations, room ?**	
	Session 6a **Novel Phenomena & Applications 1** Chair: Uriel Levy	Session 6b **Graphene Plasmonics 3** Chair: Javier García de Abajo
13:30 - 14:05	**Mark Brongersma, Invited speaker** Stanford University, California, US *Optical Emission and Absorption Near a Metasurface Mirror*	**Rainer Hillenbrand, Invited speaker** CIC nanoGUNE, Spain *Phonon Polariton Nanophotonics based on 2D Materials*
14:05 - 14:30	**Shai Tsesses** Technion, Israel *Optical skyrmions: a new texture of light*	**Pablo Alonso-González** University of Oviedo, Spain *In-Plane Anisotropic and Ultra-Low Loss Polaritons in a Natural van der Waals Crystal*
14:30 - 14:50	**Souvik Ghosh** **Carlsberg Foundation Scholarship** Indian Institute of Science, India *Active nanomanipulation with magnetically actuated mobile plasmonic nanotweezers*	**Aleksandr Petrov** **Carlsberg Foundation Scholarship** Moscow Institute of Physics and Technology, Russia *Perturbation theory for two-dimensional hydrodynamic plasmons*
14:50 - 15:10	**Coffee Break**	
	Session 7a **Electron- Plasmon Interactions 2** Chair: Mark Brongersma	Session 7b **Novel Plasmonic Materials 1** Chair: Jer-Shing Huang
15:10 - 15:45	**Alexandre Bouhelier, Invited speaker** CNRS, France *Electrically-connected optical tunnel antennas as atomic-scale transducers*	**Alexandra Boltasseva, Invited speaker** Purdue University, Indiana, US *Tailorable Nanophotonics with 2D and Transdimensional Materials*
15:45 - 16:10	**Philippe Tassin** Chalmers University, Sweden *Asymmetric plasmon propagation and propagation length enhancement in current-carrying graphene*	**Katja Hoeflich** Helmholtz-Zentrum Berlin für Materialien und Energie, Germany *The resonant behavior of a single plasmonic helix*
16:10 - 16:35	**Philip Trøst Kristensen** Humboldt-Universität zu Berlin, Germany *Second quantization of plasmonic resonators using quasinormal modes*	**Joel Douglas Cox** University of Southern Denmark *Nonlinear atom-plasmon interactions enabled by nanostructured graphene*
16:35 - 17:10	**Anatoly V. Zayats, Invited speaker** King's College London, UK *Hot-electron effects in electrically-driven plasmonic nanostructures: sensing, chemistry and artificial synapses*	**Nicholas X. Fang, Invited speaker** Massachusetts Institute of Technology, Massachusetts, US *Quasi-2D Plasmons in Optical Coatings: From Emission Engineering to NanoKirigami*

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Program SPP9, Wednesday 29 May

	Sessions a room Grand Hall	Sessions b room Amalienborg
	Session 8a **Novel Phenomena & Applications 2** Chair: Mark Stockman	Session 8b **Novel Plasmonic Materials 2** Chair: Jacob Khurgin
09:00 - 09:35	**Nikolay I. Zheludev, Invited speaker** University of Southampton, UK *"Plasmonics" in free space & atomic-scale far-field all-optical displacement metrology*	**Harald Giessen, Invited speaker** University of Stuttgart, Germany *In-Situ Thin Film Nanoscale Hydrogenography in Magnesium Plasmonics*
09:35 - 10:10	**Nader Engheta, Invited speaker** University of Pennsylvania, Pennsylvania, US *4D Metamaterials: Salient Features and Potential Applications*	**Alexandre Dmitriev, Invited speaker** University of Gothenburg, Sweden *Magnetic, chemical and electrical steering of the nanoscale optical antennas*
10:10 - 10:40	**Coffee Break**	
	Session 9a **Ultrafast & Nonlinear Phenomena 1** Chair: Nikolay I. Zheludev	Session 9b **Hot Electrons 1** Chair: Hatice Altug
10:40 - 11:15	**Mark Stockman, Invited speaker** Georgia State University, Georgia, US *Quantum Solids in Ultrafast Strong Laser Fields: Topological Phenomena*	**Jacob Khurgin, Invited speaker** Johns Hopkins University, Maryland, US *Short yet eventful life of hot carriers in plasmonic metals*
11:15 - 11:40	**Lei Shi** Fudan University, China *Observation of Polarization Vortices in Momentum Space*	**Julian Gargiulo** Imperial College London, UK Measuring the energy of plasmonic hot-holes by single particle electrochemistry
11:40 - 12:00	**Emanuele Galiffi** **Carlsberg Foundation Scholarship** Imperial College London, UK *Singular Graphene Metasurfaces*	**Aurélian John-Herpin** **Carlsberg Foundation Scholarship** EPFL, Switzerland *Plasmon-enhanced infrared spectroscopy for highly sensitive molecular studies in complex biosystems*
13:00 - 18:00	Excursion (with lunch bag or sandwich before leaving)	
19:00 - 00:00	Conference Dinner at Scandic Copenhagen	

Program SPP9, Thursday 30 May

	Sessions a room Grand Hall	Sessions b room Amalienborg
	Session 10a **Quantum Plasmonics 5** Chair: Pierre Berini	Session 10b **Ultrafast & Nonlinear Phenomena 2** Chair: Peter Norlander
09:00 - 09:35	**Vladimir I Shalaev, Invited speaker** Purdue University, Indiana, US *High-speed, room-temperature quantum nanophotonics on a hybrid plasmonic-dielectric platform*	**Christoph Lienau, Invited speaker** Carl von Ossietzky University in Oldenburg, Germany *Watching electrons move: Towards ultrafast microscopy with novel plasmon-based light and electron sources*
09:35 - 10:10	**Timur Shegai, Invited speaker** Chalmers University of Technology, Sweden *Strong plasmon-exciton interactions at a single nanoantenna level*	Jean-Jacques Greffet, **Invited speaker** CNRS, France *Strong coupling of nano platelets and surface plasmon*
10:10 - 10:35	**Coffee Break**	
	Session 11a **Quantum Plasmonics 6** Chair: Oliver Benson	Session 11b **Novel Phenomena & Applications 3** Chair: Alejandro Manjavacas
10:35 - 11:10	**Päivi Törmä, Invited speaker** Alto University, Finland *Bose-Einstein condensation and K-point lasing in plasmonic lattices*	**John Pendry, Invited speaker** Imperial College, UK *Singularities and their limitations for field enhancement*
11:10 - 11:35	**Niclas Sven Mueller** Freie Universität Berlin, Germany *Plasmon-Polaritons in the Ultrastrong Coupling Regime in Gold Nanoparticle Crystals*	**Jared Strait** National Institute of Standards and Technology, Maryland, US *Revisiting the photon-drag effect in metal films*
11:35 - 12:00	**Tigran Shahbazyan** Jackson State University, Mississippi, US *Cooperative emission mediated by energy transfer to a plasmonic antenna*	**Eliran Talker** The Hebrew University of Jerusalem, Israel *Observation of plasmonic enhanced EIT and velocity selective optical pumping measurements with atomic vapor*
12:00 - 13:30 13:15 - 13.30	**Lunch** **Asger Sellerup Jensen, NKT presentations**	
	Session 12a **Hot Electrons 2** Chair: Naomi Halas	Session 12b **Metasurfaces 3** Chair: Päivi Törmä
13:30 - 14:05	**Peter Nordlander, Invited speaker** Rice University, Texas, US *Plasmon-induced hot carrier generation, relaxation, and applications*	**Thomas Zentgraf, Invited speaker** University of Paderborn, Germany *Nonlinear metasurface holography and imaging*
14:05 - 14:30	**Alexander Block** ICFO, Spain *Tracking Ultrafast Hot Electron Diffusion in Space and Time by Ultrafast Thermo-modulation Microscopy*	**Alexander S. Roberts** University of Southern Denmark, Denmark *Laser Writing of Bright Colors on Near-Percolation Plasmonic Reflector Arrays*
14:30 - 14:50	**Taeko Matsukata** **Carlsberg Foundation Scholarship** Tokyo Institute of Technology, Japan *Higher-order electric and magnetic multipole modes visualized by STEM-Cathodoluminescence*	**Marie Rider** **Carlsberg Foundation Scholarship** Imperial College London, UK *Topological quantum dots: a novel platform for Quantum Optics*
14:50 - 15:10	**Coffee Break**	
	Session 13a **Ultrafast & Nonlinear Phenomena 3** Chair: Jean-Jacques Greffet	Session 13b **Novel Plasmonic Materials 3** Chair: Alexandra Boltasseva
15:10 - 15:45	**Javier Aizpurua, Invited speaker** Material Physics Center CSIC-UPV/EHU, Spain *Ultrafast Photocurrents Induced by Single-Cycle Optical Pulses in Plasmonic Nanogaps*	**Shanhui Fan, Invited speaker** Stanford University, California, US *Aspects of plasmonic device theory: absence of one-way modes in non-reciprocal plasmonics, and graphene plasmonic reflectors*
15:45 - 16:10	**Fumihiko Kannari** Keio University *Fabrication and in situ evaluation of nano graphene wire employing ultrafast nanofocused surface plasmon polariton pulses*	**Debdatta Ray** EPFL, Lausanne, Switzerland *Extending the limits of conventional plasmonics with low temperature alloying of noble metals*
16:10 - 16:45	**Alejandro Manjavacas, Invited speaker** University of New Mexico, New Mexico, US *Collective effects on periodic arrays of plasmonic nanostructures*	**Naomi Halas, Invited speaker** Rice University, Texas, US *Sustainable Plasmonics: a focus on Aluminum*
18:00 - 21:00	Poster Session with sandwich and beverages	

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Program SPP9, Friday 31 May

	Sessions a room Grand Hall	Sessions b room Amalienborg
	Session 14a **Plasmonic Devices 1** Chair: Thomas Zentgraf	Session 14b **Novel Phenomena & Applications 4** Chair: Vladimir Shalaev
09:00 - 09:35	**Harry Atwater, Invited speaker** California Institute of Technology, California, US *Tunable Plasmonic Interactions in Graphene: Perfect Absorption, Near Field Modulation and Bright Spontaneous Emission*	**Francesco De Angelis, Invited speaker** Istituto Italiano di Tecnologia, Italy *3D plasmonic nanostructures for hybrid bio-interfaces*
09:35 - 10:00	**Martin Thomaschewski** University of Southern Denmark, Denmark *All-plasmonic directional coupler modulator based on strip-loaded waveguides on lithium niobate*	**Andre-Pierre Blanchard-Dionne** EPFL, Lausanne, Switzerland *Machine Learning for Color Generation Using Plasmonic Materials*
10:10 - 10:40	**Coffee Break**	
	Session 15a **Plasmonic Devices 2** Chair: Harry Atwater	Session 15b **Metasurfaces 4** Chair: Francesco De Angelis
10:40 - 11:05	**Evangelia Chatzianagnostou** Aristotle University of Thessaloniki, Greece *An Integrated Plasmo-photonic Interferometric Sensor for High-Sensitivity Refractometric Sensing*	**Yuan Sheng Fang** UC Berkeley, California, US *A Novel Layer-by-Layer Approach for Fabrication of Graded Plasmonic Gratings for Infrared Spectroscopy*
11:05 - 11:30	**Christian Haffner** ETH Zurich, CH *High-Quality Hybrid-Plasmonic Resonators for Low-Speed Applications*	**Shunsuke Murai** Kyoto University, Japan *Enhanced photoluminescence and directional white-light generation by plasmonic arrays on phosphor plates*
11:30 - 12:00	**Closing Ceremoney. Goodbye with a "To go lunch bag"**	