

Final Report on the OECS12 Conference

Summary

The OECS12 - International Conference on Optics of Excitons in Confined Systems – (www.oecs12.org) took place in Paris at the Cité Internatiale Universitaire in Paris (september 11th-16th 2011). It has been the twelfth of a very successful series of conferences that started in 1987 in Rome. It was addressed to scientists who lead fundamental and applied research on the optical properties of excitons in novel condensed-matter nanostructures. The conference also intended to bring a link between the excitonic scientific community and the field of atomic physics.

The 2011 meeting, funded by the ESF, has been a great success with a record number of participants. It has brought together a large representative of the world leading actors in the field. The conference gathered around 350 participants, among them 104 students. The participants came from 27 different countries as follows: France 112, Germany 35, UK 31, Switzerland 22, Spain 19, Poland 17, Italy 15, Japan 13, Russian Federation 11, Brazil 9, Israel 7, United States 6, Canada 6, Colombia 5, Greece 5, Korea republic 4, China 4, Belgium 2, and one each from Austria, Ireland, Finland, Algeria, Denmark.

The conference scientific program was built following the recommendations of the international program (vote for invited speakers and review of submitted abstracts). The scientific program proposed 13 invited talks (30 mn) throughout the different session. One session, named POLATOM session was specifically dedicated to the discussion of the links between atomic physics and solid state physics (in particular Polariton condensate and quantum optics). Opening this POLATOM session, Jakob Reichel, from Laboratoire Kastler Brossel has been invited to give a 45 mn keynote. Out of the 284 submitted abstracts, the program committee has selected 71 contributions to be orally presented. Around 200 posters have been presented during three poster sessions.

An attractive social program was also proposed to the participants and was really appreciated. A choice of excursion in Paris or a visit of the LPN in Marcoussis was offered on Wednesday afternoon. The participant could also attend the banquet on Wednesday evening, which was a dinner on the first floor of the Eiffel tower. This banquet was an enjoyable experience even for parisian persons.

Our sponsors and partners have contributed to the success of this conference, allowing us to keep the registration fees at a moderate level. Present on site, our exhibitors have had the opportunity to meet and exchange with the attendees during convivial (friendly) coffee breaks and poster sessions. For the first time, the OECS conference got financial support from the IUPAP (International Union for Pure and Applied Physics), an important scientific label for an international conference.

The success of the conference was attested by the fact that the lecture hall was full until the very end of the conference. The poster sessions were also crowded with active discussions in each of them.



OECS 12 – Scientific content and discussions

The 12th edition of the International Conference on the Optics of Excitons in Confined systems was intended to scientists who lead fundamental and applied research on the optical properties of excitons in novel condensed-matter nanostructures. The 2011 meeting brought together in Paris many world leading actors in this domain, with the aim of stimulating the exchange of ideas, promoting international collaborations, and coordinating research on the newest exciton-related issues, such as quantum information science and exciton quantum-collective phenomena.

The meeting covered the following topics:

- Low-dimensional nanostructures: quantum wells, quantum wires and quantum dots
- Light-matter interaction in microcavities
- Quantum optics with excitons and polaritons
- Bose-Einstein condensation
- Quantum coherent phenomena
- Excitons in novel materials
- Optical spintronics

The scientific program of the conference was built using a two step process. In a first step, the members of the International Advisory and Program committees of the conference were asked to suggest invited speakers and to briefly describe the related publications. The Program committee rated these suggestions, leading to selection of 13 invited speakers. As can be seen below, world leading scientists, with research area covering in all the conference topics, accepted to give an invited talk at OECS12.

Andrey Akimov

University of Nottingham, United Kingdom
Application of picosecond acoustics to exciton spectroscopy

Mete Atature

Cavendish Laboratory, Cambridge, United Kingdom
Qubits and sensors: optics of quantum dots

Oliver Benson

Humboldt-Universität, Berlin, Germany
Fundamental Photonic Hybrid Systems Based on Defect Centers in
Diamond

Raphaël Butté

Ecole Polytechnique Fédérale de Lausanne, Switzerland
Light polarization features of polariton condensates in III-nitride
microcavities

Jean-Jacques Greffet

Laboratoire Charles Fabry, Orsay, France
Controlling light-matter interaction with nanoantennas

Gabriele Grosso

Ecole Polytechnique Fédérale de Lausanne, Switzerland
Polariton hydrodynamics: from solitons to vortex streets

Atac Imamoglu

ETH Swiss Federal Institute of Technology, Zurich, Switzerland
Observation of Kondo correlations in optical absorption

Andreas Muller

University of South Florida, Tampa, United States of America
Interference of Single Photons from Dissimilar Single Photon Sources

John Rarity

University of Bristol, United Kingdom
Can we make solid state quantum networks ?

Michael Reimer

Delft University of Technology, Netherland
Optical quantum dots in nanowire devices

Gregory Scholes

University of Toronto, Toronto, Canada
Quantum-coherent energy transfer in nanoscale systems

Claude Weisbuch

Ecole Polytechnique, Palaiseau, France
University of California, Santa Barbara, United States of America.
Cavity polariton: 20 years after

Joerg Wrachtrup

University of Stuttgart, Germany
Quantum spintronics with diamond defects

Pr. Claude Weisbuch who discovered microcavity polaritons in 1992, accepted to give an overview talk of 20 years of Cavity Polariton research, as the first talk of the conference.

Under the impulsion of the POLATOM European network, the OECS12 organizing committee decided to take advantage of the meeting to favour relations and collaborations between the solid state Bose Condensation community and the Atomic BEC community.

Pr. J. Reichel, from the Laboratory Kastler-Brossel in Paris kindly accepted to present his work at OECS12. Pr. Reichel's research activity is internationally acknowledged in the Atomic community. His work deals with Bose Condensation as well as Single atom Cavity QED. Besides the prominent impact of the fundamental research Pr. Reichel leads, his team is also involved in technological research, since the structures under study are obtained on atomic chips with optical fiber based microcavities.

A POLATOM session was organized on Wednesday September 14th, with Pr. Reichel's talk and four contributed talks on polariton condensation. This session was chaired by Pr. R. Phillips and lead to many discussions. It is also worth mentioning that Pr. J. Reichel attended the whole OECS12 conference and was involved in many scientific discussions with OECS12 participants.

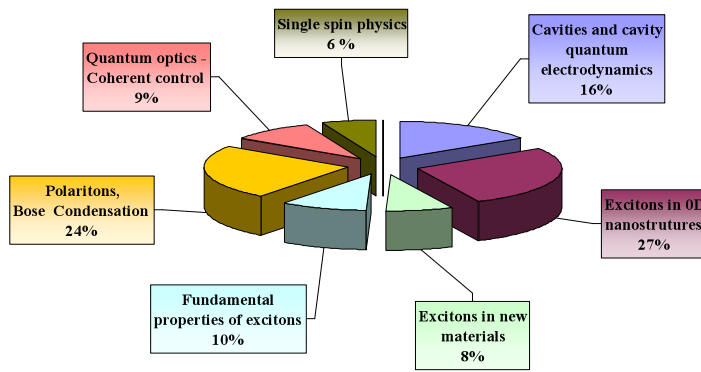


Figure 1 : distribution of the abstracts submission in the conference topics.

investigating single spin physics or CQED. The last quarter of the submissions concerned fundamental properties of excitons in 2D structures and new materials.

A blind statistic extraction of the most used significant words in the abstract gives a good overview of the conference most debated topics. It also allows to witness the appearance of new research areas in the physics of excitons. Two examples of this word statistical analysis is shown in figure 2. The size of the words is proportionnal to the number of occurrence and relevance to the topics.

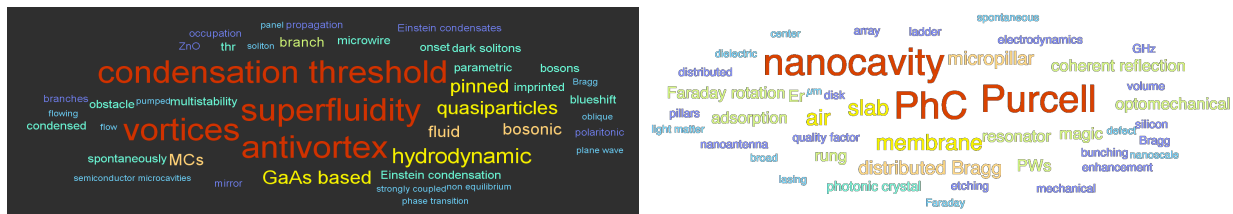


Figure 2: Blind statistic extraction of the most used significant words in the abstract for two topics. Left: polariton and condensation. Right: cavity and CQED.

This simple analysis shows that the physics of cavity polaritons is now dominated by the investigations of polariton fluid hydrodynamics, with the observation and modelisation of polariton superfluidity, vortices,... The same analysis performed on the word from the CQED topics reveals the usual words of the domain: photonic crystal, Purcell effect,... Yet two new domains appear to be developing. The first one concerns the use of plasmonic structures to control the electromagnetic field around excitonic structures (quantum wells or quantum dots). The second concerns the coupling of excitons or photons to acoustic waves. Regarding the increasing number of contributions addressing this research area, the OECS12 organizers decided to devote a full session to exciton, phonon, and optomechanics. Statistical analysis on the topics of single spin physics highlighted the predominance of the coupling of the hyperfine coupling on the manipulation of single spin. Although this issue has been largely debated for the last five years, new phenomena were discussed within OECS12, such as the observation of the Kondo effect in an optical measurement.

To build the conference scientific program, each abstract was reviewed by three members of the program committee, with a random attribution. For each topics, the abstracts presenting

the best marks were selected for oral presentations. The appendix show that final program for the conference, with 71 oral presentations, 14 invited talks and three poster sessions.

The scientific success of the conference was quite visible by the large audience for every session of the week, up to the very last talk on Friday 16th. Each talk led to stimulating discussions, sometimes initiated by the session chair when needed.

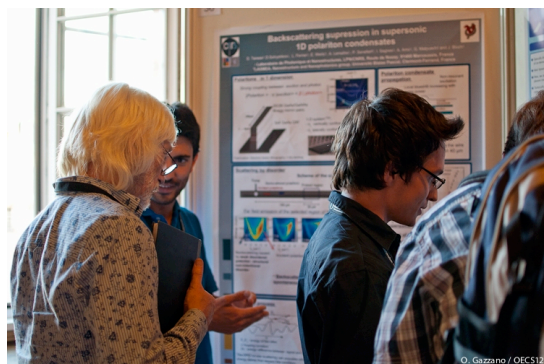
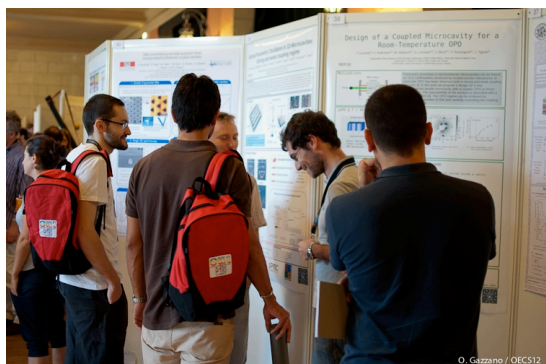
The poster sessions were a great success, with many scientific discussions, up to late in the evening for each of them.



Audience on Sept 12th 2011-10-20



Audience on the last session on Sept 16th



Pictures taken during the poster sessions

Feedback from participants on the conference

“Encore bravo pour une conférence parfaitement réussie »
[Claude Weisbuch \(France, US\)](#)

« I enjoyed the conference very much, the organization was perfect!”
[Oliver Benson \(Germany\)](#)

“Thank you once again for an amazing conference, this was probably the best organised one I have seen.”
[Mete Atature \(UK\)](#)

“The scientific quality was superb and content was extremely stimulating. The organization was excellent, the food was wonderful, and the excursion and banquet were very enjoyable. Thank you for a great conference!”
[Eric Stinaff \(US\)](#)

OECS 12 – Assessment of the results and impact on the future direction of the field

OECS 12 welcomed over 350 participants. This has to be compared with the 250 participants to OECS 11, which already represented a very large increase with respect to the 10 first OECS conferences. This is a clear signature of the success of OECS 12 in Paris, as well as a strong indication that the conference has now become a major event in the field. Besides the quality of the organisation that has become increasingly professional, a detailed assessment of the scientific content, as well as of the origin of the participants allows pointing out 3 main reasons for this recent evolution:

- (i) OECS covers topics in nano-physics and photonics that have an always increasing weight in fundamental and applied science.
- (ii) Beyond the original topics related to the physics of confined excitons in basic semiconductor structures (bulk, quantum wells, wires or dots), the much richer variety of structures that can now be processed as well as the development of new material, are attracting a larger number of physicists worldwide. This allows evaluating the future direction of the field and also gives an indication that the original title of the conference could now be changed for a more general title.
- (iii) Together with the enrichment of the field cited above, one now also assists to an intercommunity mixing and integration. This is the case e.g. with Cavity Quantum Electro-Dynamics that strongly developed in semiconductor nanostructures, with Bose Einstein Condensation that is now a common topic with atomic physics, or with acoustics in semiconductor nanostructures.

We point out that the OECS12 organizing committee, aware of this multi-fold evolution, was proactive in preparing the program, including sessions for CQED, Quantum optics, BEC, etc. An ESF “POLATOM” session was also planned with the aim of mixing atomic physics (Keynote talk of J. Reichel) with semiconductor physics in the field of BEC. Moreover, the original OECS mailing list was extended to include the traditional participants to the German NOEKS conference, which public was only a small fraction of the OECS conference.

Main results

Rather than an exhaustive and detailed summary of the OECS12 results, we focus here on major domains as well as on few emerging fields at OECS.

- 0D :

The vast majority (one half) of the results are related to the physics of quantum dots. The QD community is traditionally very large and keeps being driven by the goal of manipulating and generating single quantum bits. One objective is to optically initialize a single spin and control its coherence. Another active research area is cavity quantum electrodynamics with single quantum dot, with the objective of fabricating bright sources of quantum light or of implementing a highly efficient single photon single quantum dot interface.

- Polaritons :

In 1992, Claude Weisbuch (opening talk at OECS12) and co-workers observed the first signature of microcavity-polaritons. This gave a strong impulse that later

experienced two major breakthrough: parametric scattering (Baumberg, 2000) and BEC (Le Si Dang – Deveaud, 2006). The polariton community at OECS represented about $\frac{1}{4}$ of the submissions with now a strong emphasis on polariton fluid hydrodynamics, superfluidity and vortices. Moreover, the POLATOM session allowed gathering together the atomic BEC community with the polariton BEC community.

- New fields at OECS:

Besides fields like Single-spin physics, CQED and Quantum Optics, that now represent 2 sessions each, new topics are emerging at OECS. (i) The coupling between light and mechanical oscillators is attracting more interest and semiconductor nanostructures now allow fabricating opto-mechanical nano-resonators (see e.g. I. Favero). (ii) ultra-fast optical pulses are used to generate acoustic waves in semiconductors, up to THz frequencies (A. Akimov). (iii) NV centers in Diamond coupled to a GaP photonic crystal are used to fabricate single quantum emitters (O. Benson). Of course, the importance of these 3 results at OECS does not reside per say in their originality, since they are extracted from communities (opto-mechanics, acouto-optics, NV centers) that existed long before their connexion to OECS, with their own conferences. Rather, the novelty is the strong connexions that are now developing between these fields and the OECS community, thanks to the new developments in semiconductor nanostructure fabrication and processing.

Future Evolution

The current trend of connexion and integration between the basic “exciton in semiconductors” community and other fields is only at its beginning. Predictable evolution is in further developments of quantum sources and manipulation of light-matter excitations, with potential applications in quantum optics and transport. The ever growing control of nanostructure fabrication and processing will become the common substrate for developments interesting a community much larger than the semiconductor community which constituted the original OECS public.

The traditional driving force of the semiconductor physics is the possibility to develop practical devices that can be used on a large scale. As such, open questions will concern the ultimate possibility to gain a sufficient control on the fabrication of solid state quantum devices (nanolasers, quantum light sources, quantum gates...) for deployment in other communities like optical quantum computing, quantum cryptography, metrology... Besides, the physics of basic and fundamental properties of excitations in semiconductors is declining at OECS. This is a natural trend, given the development of newer fields and the strong interest for developing nano-devices at the present time. Nevertheless, if this contribution was to further decline, one could predict future difficulties in the deep understanding and control of the underlying semiconductor physics.

Last, we note a still missing important field at OECS: the physics of carbon-based nanostructures (Graphene, Carbone nanotubes) is not or very little represented. Future OECS conferences will certainly fill this gap.

Finally let us mention that the next OECS conference will take place in Rome in September 2013. Dr. Andrea d’Andrea, National Research Council of Italy (CNR) will be the Conference Chairman and Prof. Alexey Kavokin, from the University of Southampton, will chair the program committee.

Daily program overview

Monday 12 September		
08:45 - 09:15	Opening ceremony	
Mo1	Polariton - Bose condensation - Polatom 1	
09:15 - 09:45	Cavity Polaritons: 20 years after.	Claude Weisbuch
09:45 - 10:00	Polaritonic Mem: Tuneable Strong-coupling at room temperature in air-gap DBR/metal microcavities.	Gabriel Christmann
10:00 - 10:15	Dark Solitons in Polariton Superfluids.	Alberto Amo
10:15 - 10:30	Room Temperature Organic Polariton Lasing by Intra-Cavity Pumping.	Gleb Akselrod
10:30 - 11:00		coffee break
Mo2	Exciton in 0D nanostructures 1	
11:00 - 11:30	Optical quantum dots in nanowire devices.	Mickael Reimer
11:30 - 11:45	Exciton polarization in a single nanowire quantum dot.	Sasakura Hiroataka
11:45 - 12:00	Adiabatic Rabi Passage in Semiconductor Quantum Dots.	Peter Brereton
12:00 - 12:15	Electric-Field Control of Excitons in Quantum Dots.	Garnett Bryant
12:15 - 12:30	Signatures of Carrier Multiplication in the Ultrafast Quantum Optical Emission.	Franz Schulze
12:30 - 02:00		Lunch
Mo3	Single spin 1	
02:00 - 02:30	Observation of Kondo correlations in optical absorption.	Atac Imamoglu
02:30 - 02:45	The Kondo exciton: a quantum quench towards strong spin-reservoir correlations.	Hakan Tureci
02:45 - 03:00	A Spintronic Source of Circularly Polarized Single Photons.	Heinz Kalt
03:00 - 03:15	Optical orientation of isolated Mn ²⁺ ions IN GaAs.	Ilya Akimov
03:15 - 03:30	Direct estimation of the correlation time of overhauser field in single quantum dots.	Reina Kaji
03:30 - 04:00		coffee break
Mo4	Cavity and CQED 1	
04:00 - 04:30	Fundamental photonic hybrid systems based on defect centres in diamond.	Oliver Benson
04:30 - 04:45	Efficient and Broadband Control of the Spontaneous Emission in Photonic Nanowires.	Julien Claudon
04:45 - 05:00	Observation of photon blockade and two-photon resonance in QD cavity QED.	Thomas Volz
05:00 - 05:15	Anna's type interference for probing the mode symmetry in photonic structures.	Anna Vinattieri
05:15 - 05:30	From weak to strong coupling of quantum emitters in metallic nano-slit bragg cavities: light up-conversion, photon beaming and rabi-splitting.	Nitzan Livneh
MoP	Poster session	
05:30 - 07:00		
07:00 - 08:00	Welcome reception	

Tuesday 13 September		
Tu1	Quantum optics, coherent control 1	
08:30 - 09:00	Can we make solid state quantum networks?	John Rarity
09:00 - 09:15	Coherent coupling between distant excitons revealed by two-dimensional nonlinear hyperspectral imaging.	Jacek Kasprzak
09:15 - 09:30	Optical gating of resonant fluorescence in single quantum dots.	Carole Diederichs
09:30 - 09:45	Coherent transfer from time-bin state of light to electron spins in a semiconductor.	Hideo Kosaka
09:45 - 10:00	Coherence properties of resonance fluorescence emission from single quantum dots in planar microcavities.	Ata Ulhaq
10:00 - 10:15	Quantum optical properties of a single quantum emitter coupled to metallic nanoparticles.	Salvatore Savasta
10:15 - 10:30	Quantum optics with donor-bound electrons.	Caspar Van Der Wal
10:30 - 11:00		coffee break
Tu2	Exciton, phonons, optomechanics	
11:00 - 11:30	Application of picosecond acoustics to exciton spectroscopy.	Andrey Akimov
11:30 - 11:45	Polariton mediated resonant Raman scattering of folded acoustic phonons.	Bernard Jusserand
11:45 - 12:00	GaAs Disks OptoMechanics.	Ivan Favero
12:00 - 12:15	Directional Modulation of the Optical Emission of a single Nanowire Using Surface Acoustic Waves.	Hubert Krenner
12:15 - 2:00		Lunch
Tu3	Fundamental properties, excitons in quantum wells	
02:00 - 02:15	Stong damping of positively charged exciton photoluminescence in a weak coupling with hole-cyclotron replicas of acceptor bound trion.	Joanna Jadczyk
02:15 - 02:30	Coulomb Drag of Optically Generated Electron-Hole Bilayer in Coupled Quantum Wells.	Michale Stern
02:30 - 02:45	Long-lived electron and hole spin coherence in ZnSe based quantum wells.	Dmitri Yakovlev
02:45 - 03:00	Hole spin polarization in P-type GAAS/ALAS resonant tunneling diodes.	Yara Galvao Gobato
03:00 - 03:15	Bragg polaritons: Strong coupling and amplification in an unfolded microcavity.	P.G. Sawidis
03:15 - 03:30	n-GaAs microcavity as an efficient faraday rotator.	Rakshyakar Giri
03:30 - 04:00		coffee break
Tu4	Polariton - Bose condensation - Polatom 2	
04:00 - 04:30	Polariton hydrodynamics: from solitons to vortex steets.	Gabriele Grosso
04:30 - 04:45	Spontaneous and triggered vortices in polariton OPO superfluids.	Francesca Marchetti
04:45 - 05:00	Ultra-strong coupling in mid-infrared metal cavities.	Pierre Jouy
05:00 - 05:15	Superconductivity mediated by excitons and exciton polaritons.	Alexey Kavokin
05:15 - 05:30	All-optical control of vortex formation and movement in a polariton quantum fluid.	Milena Degiorgi
TuP	Poster session	
05:30 - 07:00		

Wednesday 14 September		
We1	Exciton in 0D nanostructures 2	
08:30 - 09:00	Single spin physics of diamond defect centers.	Joerg Wrachtrup
09:00 - 09:15	Spin limited exciton dephasing in CdSe colloidal quantum dots.	Paula Borri
09:15 - 09:30	Neutral and charged excitons in graphene quantum dots.	Pawel Hawrylak
09:30 - 09:45	Exciton dynamics in graded-bandgap quantum wires.	Justyna Szeszko
09:45 - 10:00	Excitonic Recombination Kinetics in indirect (In,Al)As/AlAs quantum dots.	Daniel Dunker
10:00 - 10:15	Optical properties of site-controlled single quantum dots.	Andreas Schramm
10:15 - 10:45		<i>coffee break</i>
We2	Polariton - Bose condensation - Polatom 3	
10:45 - 11:30	Atomic BECs and single atoms interacting with optical fiber microcavities.	Jakob Reichel
11:30 - 11:45	Observation of bright polariton solitons.	Dmitry Krizhanovskii
11:45 - 12:00	Coherence of indirect excitons in a ring trap.	Alexander Gorbunov
12:00 - 12:15	Half-Solitons : A New Type Of Topological Excitation.	Hugo Flayac
12:15 - 12:30	Three-valued all-optical spin flip-flop based on zero dimensional polaritons.	Roland Cerna
12:30 - 2:30		<i>Lunch</i>
02:30 - 06:30	Excursion	
08:30 - 00:30	Banquet	

Thursday 15 September		
Th1	Cavity and CQED 2	
09:00 - 09:30	Controlling light-matter interaction with nano-antennas.	Jean-Jacques Greffet
09:30 - 09:45	Towards Efficient Single Photon Emitters Based on CdTe/ZnTe Quantum Dots.	Tomasz Jakubczyk
09:45 - 10:00	Cavity-assisted two-photon decay of biexcitons.	Ulrich Hohenester
10:00 - 10:15	Giant optical nonlinearity in a strongly-coupled quantum dot-micropillar system.	Loic Lanco
10:15 - 10:30	Stimulated emission in the strong coupling regime with a single quantum-dot emitter.	Christopher Gies
10:30 - 11:00		<i>coffee break</i>
Th2	Excitons in new materials	
11:00 - 11:30	Quantum-coherent energy transfer in nanoscale systems.	Gregory Scholes
11:30 - 11:45	Coherent ultrafast rabi oscillations in metal-J-aggregate hybrid nanostructures.	Parinda Vasa
11:45 - 12:00	Energy transfer in carbon nanotube/organic chromophore assemblies.	Jean-Sébastien Lauret
12:00 - 12:15	Magneto-raman imaging of dirac fermion modes in graphene on graphite.	Khaled Karrai
12:15 - 12:30	Direct observation of bound-exciton-polaritons in ZnO whispering gallery microcavity.	Sun Liaoxin
12:30 - 02:00		<i>Lunch</i>
Th3	Exciton in 0D nanostructures 3	
02:00 - 02:15	Exited stadi quantum couplings, dynamics and optical switching of an artificial molecule.	Jonathan Finley
02:15 - 02:30	Laser spectroscopy of a single quantum dot as a nano-sensor of its electrical environment.	Julien Houel
02:30 - 02:45	Temperature insensitive optical alignment of the exciton in nanowire embedded GaN/AlN quantum dots.	Andrea Balocchi
02:45 - 03:00	Tunable Luminescence Lifetimes of Molecular Excitons in Coupled Quantum Dots.	Eric Stinaff
03:00 - 03:15	Shallow quantum dots strongly coupled to an electron reservoir: observation of Mahan excitons in quantum dots.	J.V Bree
03:15 - 03:30	Photoinduced coupling of a quantum dot to an electron continuum.	Florian Seilmeier
03:30 - 04:00		<i>coffee break</i>
Th4	Single spin 2	
04:00 - 04:30	Qubits and sensors: optics of quantum dots.	Mete Atature
04:30 - 04:45	Mn-doped Quantum Dot in a Strong Optical Field: Optical-Stark Effect and Dressed Excitonic States.	Claire Le Gall
04:45 - 05:00	Hole spin mixing in InAs quantum dot molecules.	Juan I. Climente
05:00 - 05:15	optical pumping and inversion of the hole spin polarization in InAs quantum dots.	Maria Chamorro
05:15 - 05:30	Direct measurement of the hyperfine interaction of valence band holes using single quantum dots.	Evgeny Chekhovich
ThP	Poster session	
05:30 - 07:00		

Friday 16 September		
Fr1	Polariton - Bose condensation - Polatom 4	
08:30 - 09:00	Light polarization features of polariton condensates in III-NITRIDE microcavities.	Raphael Butté
09:00 - 09:15	Bose-einstein condensation of cavity-quasiparticles: photons vs. exciton-polaritons.	Elena Kammann
09:15 - 09:30	Gain mechanism of polariton lasing in ZnO microwires.	Aurélien Trichet
09:30 - 09:45	Nonequilibrium exciton-polariton condensates in a ZNO-based microcavity.	Helena Franke
09:45 - 10:00	Very long spatial and temporal spontaneous coherence of 2D polariton condensates across the parametric threshold.	Rita Spano
10:00 - 10:15	Bose-einstein condensation, superfluidity and quantum optics of fractal structures.	Eric Akkermans
10:15 - 10:45		<i>coffee break</i>
Fr2	Quantum optics, coherent control 2	
10:45 - 11:15	Interference of single photons from dissimilar single photon sources.	Andreas Muller
11:15 - 11:30	Coherent Control of the Emission in a Single Conjugated Quantum Wire.	Laurent Legrand
11:30 - 11:45	Complete control of a single spin by a single light pulse.	David Gershoni
11:45 - 12:00	Towards Quantum Plasmonics: Plasmon mediated Qubit-Qubit Entanglement.	Alejandro Gonzalez-Tudela
12:00 - 12:15	Precession of a single hole spin.	Andrew Ramsay
12:15 - 12:30	High-speed electric-field control of an exciton spin.	Anthony Bennett
12:30 - 01:00	Closing ceremony	

Poster sessions

Monday 12 September - 05:30 -07:00 pm

MoP	
LONG-TIME PHOTOLUMINESCENCE KINETICS IN QUANTUM DOTS	Karel Kral
EXCITONS ON DOPED AND UNDOPED PARABOLIC QUANTUM WELLS	Americo Tabata
MULTISTABILITY AND DYNAMICS OF TWO-COMPONENT POLARITON-FLUIDS	Emiliano Cancellieri
Magneto-excitons in quasi-one-dimensional electron-hole bilayer nanotubes	Mehran Bagheri
EXCITON DEPHASING IN Pbs QUANTUM DOTS BY X-POINT PHONONS	Paola Borri
Effects of bistability and hysteresis in terahertz-emitting microcavities	Ivan Savenko
Rapid Calculation Method of Biexciton and Scattering Two-Exciton States	Hiroshi Ajiki
Excitonic Magnetosusceptibility of Cylindrical Quantum Dots and Quantum Rods	Piotr Schillak
Bistabilities in 1D polaritonic condensates	Ivan Savenko
DISPERSION AND DAMPING OF MULTI-QUANTUM WELL POLARITONS FROM RESONANT BRILLOUIN SCATTERING BY FOLDED ACOUSTIC MODES	Bernard Jusserand
A coupled quantum dot optical amplifier: Raman transitions between spin singlet and triplet states	Kathrina Weiss
Interlayer excitons in strongly correlated electron systems	Louk Rademaker
Polariton wave dephasing induced by uniform electric field in GaAs/GaAlAs quantum well.	Dmitry Loginov
Temperature dependence of the emission from strongly elongated InGaAs/GaAs quantum dots	Anna Musial
ARTIFICIAL MAGNETIC FIELD FOR COUPLED CAVITY ARRAYS	Onur Umucalilar
Exciton spin relaxation in InAs/GaAs quantum dots	Juan I. Climente
Few emitters cavity quantum electrodynamics: from cooperativity to individualization	Stefano Portolan
Effect of kinetic s-d exchange of electrons in diluted magnetic CdMnSe/ZnSe and CdSe/ZnMnSe structures with self-organized quantum dots.	Irina Reshina
RELAXATION KINETICS OF ELECTRICALLY PUMPED GALLIUM NITRIDE-BASED POLARITON LASERS	Ivan Iorsh
Optical Hysteresis of Hybrid Metal-Semiconductor Nano-Dimer	Victor Malyshev
ULTRAFAST ALL OPTICAL CONTROL OF WAVE-PARTICLE DUALITY OF CAVITY PHOTONS	Salvatore Savasta
Fluorophenethylamine based perovskite microcavities working in the strong coupling regime	Emmanuelle Deleporte
PSEUDO SPIN FARADAY ROTATION ON MICROCAVITY POLARITON	Franklin Matinaga
MICROSCOPIC THEORY OF ELECTRON-HOLE DROPS IN MULTIVALLEY SEMICONDUCTORS	Tomohiro Tamaya
Role of the hole density on the magnetization and carrier dynamics of Ga _{0.93} Mn _{0.07} As	Jean Besbas
ELECTRICAL CONTROL OF THE EXCITON CHARGE IN GaAs QUANTUM DOTS GROWN BY DROPLET EPITAXY	Bernhard Urbaszek
LUMINESCENCE FROM COUPLED CAVITY ARRAYS AT FINITE TEMPERATURE	Kenji Kamide
POLARITON LASING IN PHOTONIC CRYSTAL CAVITIES	Daniele Bajoni
INTERACTION OF QUANTIZED EXCITON POLARITONS WITH NONRESONANT PUMP PULSE IN GaAs THIN FILMS	Shohei Ohta
OPTICAL PARAMETRIC PROCESSES IN COUPLED CAVITY ARRAYS	Celestino Creatore
Polarization properties of emission and localization effects in InAs/InP quantum dashes	Grzegorz Sek
Thermodynamic properties and collective excitations in 2D dipolar gases	Alexey Filinov
STROBE LIGHTING THE ULTRAFAST PHONON EMISSION BY A QUANTUM DOTS LAYER	Emmanuel Peronne
COEXISTENCE OF EXCITON AND POLARITON-LASING IN A NON-POLAR GAN-BASED MICROCAVITY	Georg Rossbach
EXCITON AND BIEXCITON DIAMAGNETIC SUSCEPTIBILITY IN QUANTUM RINGS AND DOTS CALCULATED BY PATH INTEGRAL QUANTUM MONTE CARLO	Peter McDonald
CHARGE TRANSFER MAGNETOEXCITON AT VERTICALLY COUPLED QUANTUM DOTS	Willian Gutierrez Nino
ULTRA-FAST POLARITON RELAXATION DYNAMICS IN AN ORGANIC SEMICONDUCTOR MICROCAVITY	Tersilla Virgili
DESIGN OF A COUPLED MICROCAVITY FOR ROOM-TEMPERATURE OPO	Timothee Lecomte
OPTICAL PARAMETRIC OSCILLATIONS IN 1DMICROCAVITIES: STRONG AND WEAK COUPLING REGIME	Vincenzo Ardizzone
Deterministic integration of pyramidal quantum dot systems with photonic crystal cavities	Alessandro Surrente
POLARITON CONDENSATION IN A DISORDERED POTENTIAL	Carlos Anton
Interaction induced localization of polariton condensates in a 1D periodic potential	Dimitrii Tanese
Quantum Dots in Tapered Photonic Wires as High-Efficiency Single-Photon Sources	Joel Bleuse
Optically monitoring the switching dynamics of a Mn spin in a quantum dot in a magnetic field	Doris Reiter
AlN photonic crystal nanocavities probed with GaN quantum dots	Delphine Neel
QUANTUM INTERFERENCE IN QUANTUM DOTS: ENGINEERING EXCITON-MN SPIN INTERACTION	Marek Korkusinski
OPTICAL PROPERTIES OF CdSe/CdS CORE/SHELL QUANTUM DOTS - SnO ₂ NANOCOMPOSITE	Konstantin Drozdov
Controlling Tamm plasmon polariton states in organic microcavities	Robert Brueckner
Acousto-optical control of multistable cavity polariton systems	Sergei Gavrilov
ULTRAFAST CARRIER DYNAMICS IN ORGANIC-INORGANIC PEROVSKITE QUANTUM WELLS	Jean-Sébastien Lauret
Theory of Kerr rotation and resonant spin amplification in p-doped nanostructures	Kamil Korzekwa
FORMATION OF SPONTANEOUS MAGNETIZATION IN CDMNTE QUANTUM DOTS	Lukasz Klopotowski
Theory of the Nonlinear Optical Response of a Strongly Coupled Quantum Dot-Microcavity System	Egor Muljarov
Parametric scattering vs Bose condensation under pumping at the exciton resonance wavelength in GaAs microcavities	Andray Demenev
Entangled photon absorption by semiconductor nanostructures: excitonic effects	Luis Quiroga
High excitation spectroscopy of single self-assembled CdTe quantum dots	Krzysztof Kuklinski
Nitrogen Incorporation in MOVPE-grown GaInAs Quantum Dots	Romain Carron
DOT-IN-ROD NANOCRYSTALS: AN IDEAL SINGLE PHOTON SOURCE FOR QUANTUM CRYPTOGRAPHY	Ferruccio Pisanello
Fine structure of X, X ₂ ⁻ , and XX ⁻ excitonic complexes in CdTe/ZnTe quantum dots	Tomasz Kazimierzczuk
DYNAMICS OF CONVENTIONAL VORTICITY IN EXCITON POLARITON CONDENSATES	Konstantinos Lagoudakis
THEORY OF THE ULTRAFAST RESPONSE OF COUPLED EXCITON-PLASMON MODES IN METAL-J-AGGREGATE HYBRID NANOSTRUCUTRES	Erich Runge
EFFECT OF Mn IONS ON THE SPIN DYNAMICS OF CONFINED EXCITONS	Maria Brasil
New (211)B InAs quantum dots with ultra-small FSS for entangled photon sources	Sawas Germanis
In/Ga intermixing beyond the emission energy blueshift of annealed InAs/GaAs quantum dots	Siheh Jaziri
COHERENCE PROPERTIES OF QUANTUM DOT RESONANCE FLUORESCENCE	Clemens Matthiesen
RESONANT REFLECTION SPECTROSCOPY OF DOT CAVITY SYSTEMS.	John Rarity
QUANTUM OSCILLATIONS FROM NEUTRAL EXCITONS	Marcio Daldin Teodoro

Tuesday 13 September - 05:30 -07:00 pm

TuP

Exciton polarization, fine structure splitting and quantum dots asymmetry under uniaxial stress	Lixin He
STRAIN-INDUCED VALENCE-BAND MIXING ON PHOTOLUMINESCENCE POLARIZATION IN INDIVIDUAL QUANTUM DOTS	Satoru Adachi
EXCITON EMISSION INDUCED BY MICROWAVE IRRADIATION OF GaAs QUANTUM WELLS AND SINGLE HETEROJUNCTIONS	Ilya Baskin
Quantum Dot Nuclear Spins	Priska Studer
Spectrum of an electron spin coupled to an unpolarised bath of nuclear spins	Oleksandr Tsypliyatyev
A STUDY OF PULSED FOUR-WAVE MIXING IN SEMICONDUCTOR QUANTUM DOT - METAL NANOPARTICLE HYBRIDS	Emmanuel Paspalakis
BAND-GAP RENORMALIZATION IN QUANTUM DOT EXCITONS UNDER QUASI-RESONANT EXCITATION	Anna Nowak
REALIZATION OF STRONG PHOTON ANTIBUNCHING IN WEAKLY NONLINEAR PHOTONIC MOLECULES	Motoaki Bamba
CONTROLLING THE SPONTANEOUS EMISSION RATE WITH NEW PLASMON-PHOTON HYBRID MODES	Steffen Michaelis
Extremely Long Photoluminescence Lifetime in Single InGaAs Site-Controlled Quantum Dots	Gediminas Juska
IMPACT OF BIEXCITONS ON THE RELAXATION OF POLARITONS IN III-NITRIDE BASED MULTI QUANTUM WELL MICROCAVITIES	Pierre Corfdir
Suppression of Zeeman splitting in the microcavity parametric oscillator	Dmitry Krizhanovskii
AT THE INTERFACE BETWEEN P-TYPE AND N-TYPE DOPED MOTT INSULATORS	Marcel Hoek
Fully-hybrid ZnO microcavity based on ZnO bulk material: from fabrication to strong-coupling regime at room temperature	Jesus Zuniga-Perez
Electron-Nuclear spin Dynamics in II-VI Semiconductor Quantum Dots	Claire Le Gall
Emission of Exciton and Biexciton Dressed states in a CdTe Quantum Dot	Claire Le Gall
Spin polarized electroluminescence and spin photocurrent in hybrid Semiconductor /Ferromagnetic heterostructures: an asymmetric problem	Pierre Renucci
Photoluminescence of GaAs single quantum dot embedded into AlGaAs nanowire	Georgy Cirlin
Exciton-polaritons in a strongly coupled ZnO-perovskite hybrid microcavity	Emmanuelle Deleporte
OPTICAL PROPERTIES OF EXCITONS AND ACCEPTOR- EXCITON COMPLEXES IN ZNO QDS EMBEDDED IN A SiO2 MATRIX	Lobna Dallali
Photonic Crystal Nanolasers, Modulation and Coherence Characteristics	Alexios Beveratos
CHARGE DISTRIBUTION AT VOLCANO-SHAPED QUANTUM DOT WITH CAPTURED MAGNETOEXCITON	Fredy Rodriguez
Power Dependence of Exciton Formation Times Measured by Means of Exciton Spin Splitting	Elena Kozhemyakina
MOLLOW TRIPLET STATES ON A POLARITON LASER	Franklin Matinaga
Polaron exciton in quantum wires	Aleksandr Maslov
Importance of shape anisotropy in the band-edge fine structure of nearly-spherical wurtzite and zincblende CdSe quantum dots	Iwan Moreels
SELF ASSEMBLED III-VQUANTUM EMITTERS GROWN ON SI AND GE SUBSTRATES	Marco Abbarchi
UNIDIRECTIONAL NUCLEAR SPIN ALIGNMENT IN QUANTUM DOTS IN THE REGIME OF ULTRA-LOW POWER PUMPING	Alexander Tartakovskii
Emission characteristics of a highly correlated system of a quantum dot coupled to two distinct micropillar cavity modes	Stefanie Weiler
EXCITONIC PROPERTIES OF TWO-DIMENSIONAL LAYERED (C6H5C2H4-NH3)2-PbI4 PEROVSKITE	Karine Gauthron
Nonlinear optical properties of confined excitons in spherical QDs with an electric field	Jefferson Florez
ULTRA-LARGE TUNING OF PHOTONIC MODES FOR EFFICIENT SILICON-BASED EMITTERS	Massimo Gurioli
Phonon replica dynamics in high quality GaN epilayers: the non thermal and thermal regime	Anna Vinattieri
Polariton relaxation in a completely hybrid ZnO micro-cavity	Laurent Orosz
PATH INTEGRAL STUDY OF OPTICALLY DRIVEN QUANTUMDOT EXCITONS AND BIEXCITONS COUPLED TO PHONONS	Martin Glaeszl
Suppression of the backscattering in supersonic 1D polariton condensates	Dimitrii Tanese
CONTROLLING THE STATE OF AN INTERACTING QUANTUM-DOT SYSTEM BY ADIABATIC RAPID PASSAGE	Celestino Creatore
Fine structure of Gamma-X mixed exciton states in indirect band-gap (In,Al)As/AlAs quantum dots measured by spin-flip Raman scattering	Joerg Debus
Exciton-exciton collisions in carbon nanotubes: organic or inorganic nanostructures ?	Guillaume Cassabois
ENERGY RELAXATION IN POLARITON CONDENSATES	Michiel Wouters
Probing cavity feeding and light-matter coupling in a micropillar through reflection spectroscopy	Loic Lanco
ENHANCED PAIR SCATTERING OF 'ORIENTED POLARITONS' IN STRONGLY-COUPLED DQW TUNNELLING MICROCAVITIES	Gabriel Christmann
Phonon assisted relaxation dynamics in strongly coupled organic microcavities	Niccolo Somaschi
Asymmetric excitonic photoluminescence spectra in coupled InGaAs Quantum Wells	Jens Repp
ULTRALOW THRESHOLD CROSSOVER FROM POLARITON TO PHOTON LASING IN GAAS MICROCAVITY	Peter S. Eldridge
Line dragging of exciton in a quantum dot under optical resonant driving	Emmanuel Baudin
Simulation of Coupling Between a Planar Photonic Resonator and a Nonlinear Quantum Dot	Stefan Declair
Coherent injection of microcavities polariton through two photon excitation	Godefroy Leménager
High frequency tuning of Photonic Crystal Nanocavity Modes using Surface Acoustic Waves	Daniel Fuhrmann
Spontaneous Pattern Formation in a Polariton Condensate	Francesco Manni
Trapped dipolar exciton fluids : experimental evidence for across-over between correlated regimes	Yehiel Shilo
SYMMETRIES AND THE POLARIZED OPTICAL SPECTRA OF EXCITON COMPLEXES IN QUANTUM DOTS	Marc-André Dupertuis
STOKES-VECTOR ANALYSIS OF THE EXCITON-POLARITON EMISSION FROM A ZNO-BASED MICROCAVITY	Chris Sturm
BLACK HOLES AND HAWKING EMISSION IN SPINOR POLARITON CONDENSATES	Dmitry Solnyshkov
Using Hybrid Quantum Dot -Metal Nanoparticle Systems to Connect the Dots	Garnett Bryant
EXCITONIC RECOMBINATION IN WURTZITE InAs NANOWIRES	Michael Moeller
SILICON NITRIDE PHC NANOCAVITIES AS VERSATILE PLATFORM FOR VISIBLE SPECTRAL RANGE DEVICES	Ferruccio Pisanello
Theory of superradiant emission from dense ensembles of quantum dots	Pawel Machnikowski
Polariton States bound to Natural Defects in GaAs/AlAs Planar Microcavities	Joanna Zajac
Observation of Sawtooth Dynamic Nuclear Polarization in singly Mn-doped InAs/GaAs quantum dots	Olivier Krebs
SCREENING AND SPREADING OF INDIRECT EXCITONS	Alexander Chplik
Time resolved spectroscopy of p shell excitons in CdTe/ZnTe quantum dots	Tomasz Smolenski
Sharp spin modes of few interacting electrons in nanofabricated quantum dots	Andrea Gamucci
BLOCH-MODE EXPANSION: A NEW COMPUTATIONAL TOOL FORPHOTONIC CRYSTAL STRUCTURES	Vincenzo Savona
COHERENT EMISSION FROM MATHIEU MODES IN AN ELLIPTIC METAL-ORGANIC MICROCAVITY	Christoph Reinhardt

Thursday 15 September - 05:30 -07:00 pm

ThP	
Exciton condensation and superfluidity in TmSeTe compounds	Peter Wachter
PHOTOLUMINESCENCE DYNAMICS OF SPACER LAYER CARRIERS IN MULTI STACKED QUANTUM DOTS	Osamu Kojima
DYNAMICS OF EXCITON RECOMBINATION IN ENSEMBLE OF InAlAs/AlAs QUANTUM DOTS	Timur Shamirzaev
SINGLE PHOTON SOURCES & MULTIMODE ENTANGLEMENT IN SEMICONDUCTOR MICROCAVITIES	Vincenzo Savona
OPTICALLY ERASING DISORDER IN SEMICONDUCTOR MICROCAVITIES WITH DYNAMIC NUCLEAR POLARIZATION	Vincenzo Savona
LONG RANGE ELECTRON TUNNELING INDUCED BY INTERACTION BETWEEN FERMI-EDGE POLARITONS AND EXCITON-POLARITONS	Yulia Preezant
Controlling the dynamics of an atom-cavity system by pure dephasing : basics and applications to nanophotonics	Alexia Auffeves
PHOTOLUMINESCENCE AND EXCITONIC TRANSPORT IN A QUANTUM-DOT SYSTEM FORMED BY AMORPHOUS Si NANOCCLUSERS EMBEDDED WITHIN A SiNx MATRIX	Taisia Korchagina
SELF-ASSEMBLED QUANTUM DOT-BASED QUANTUM MEMORY	Qin Wang
MACROSCOPIC COHERENT EMISSION INDUCED BY PLASMON/EXCITON STRONG COUPLING	Joel Bellessa
SURFACE PLASMON-ASSISTED OPTICAL PROPERTIES IN CdSe-AU HYBRID QUANTUM DOTS	Koo-Chul Je
Strongly coupling a cavity to inhomogeneous ensembles of emitters : potential for long lived solid-state quantum memories	Igor Diniz
OPTICAL PHONON SCATTERING OF CAVITY POLARITONS IN AN ELECTROLUMINESCENT DEVICE	Angela Vasanelli
EXPLORING THE VECTORIAL NONLINEAR COHERENT RESPONSE OF A STRONGLY CONFINED EXCITON IN AN INDIVIDUAL QUANTUM DOT	Jacek Kasprzak
CLIMBING THE POLARITON LADDER OF AN EXCITON-CAVITY SYSTEM	Jacek Kasprzak
Giant Rabi splitting in metallic clusters	Ivan Savenko
EXCITONIC STATES IN QUANTUM DOTS: INTERPLAY BETWEEN ZEEMAN AND COULOMB INTERACTIONS	Daniel Oberli
Room temperature single photon source.	Samir Bounouar
High Resonant Reflection Efficiency From Bragg (In,Ga)As MQW Heterostructure	Sergey V. Poltavtsev
TRANSITION FROM STRONG COUPLING TO EXCITONIC LASING IN A ZNO MICROCAVITY	Christelle Brimont
COMPARATIVE STUDY OF POLAR (0001) AND SEMIPOLAR (11-22) GaN/Al _{0.5} Ga _{0.5} N QUANTUM DOTS	Mathieu Leroux
Freezing Ultrashort Light Pulses By Exciton-Polariton Interference in Glass	Thomas Taylor
MAGNETO-PHOTOLUMINESCENCE AS A PROBE OF PHASES IN QUANTUM HALL MULTI-LAYERS	Yury Pusep
POLARIZATION PROPERTIES OF EXCITONIC QU-BITS IN SINGLE SELF-ASSEMBLED QUANTUM DOTS	Catherine Tonin
AHARANOV-BOHM EFFECT FOR AN EXCITON IN A TWO-DIMENSIONAL QUANTUM RING	Clara Gonzalez-Santander
SHAPE ANISOTROPY CAN REDUCE EXCITON FINE STRUCTURE SPLITTING IN SELF-ASSEMBLED INAS/INP QUANTUM DOTS.	Michal Zielinski
WANDERING AND SELF-TRAPPED ACOUSTIC EXCITON-POLARONS IN COUPLED MACROMOLECULES AND COUPLED SEMICONDUCTOR NANOWIRES AND NANORIBBONS	Yury Kosevich
NEUTRAL AND NEGATIVELY CHARGED MAGNETIC EXITON IN NARROW QUANTUM RING	Iliia Mikhailov
SINGLE-MODE LASER OPERATION WITH MANY-BODY GAIN IN SEMICONDUCTOR MICROCAVITIES	Kenji Kamide
OPTICAL ALIGNMENT OF THE EXCITON IN ZnO NANOPARTICLES	Andrea Balocchi
INFLUENCE OF THE PILLAR GEOMETRY ON THE EMISSION PROPERTIES OF ZnSe-BASED MONOLITHIC MICROCAVITIES	Kathrin Sebald
CARRIER RELAXATION MECHANISMS IN CdS/ZnS CORE-SHELL QUANTUM DOTS: AUGER RELAXATION	Ibtissem Zgaren
NON-LINEAR DYNAMICS AND RING-SHAPED LUMINESCENCE OF ULTRA-COLD INDIRECT EXCITONS	Mathieu Alloing
Polaritons with high quality factor in a hybrid ZnO-based microcavity	Meletios Mexis
Room temperature luminescence from silicon on insulator photonic crystal defect nanocavities with and without self-assembled Ge-islands	Stefan Lichtmannecker
SPIN EFFECTS IN RESONANT TUNNELING DIODES WITH SI DELTA DOPING IN THE QUANTUM WELL	Yara Galvao Gobato
Dynamics of the transition from weak to strong exciton-photon coupling regime in a semiconductor microcavity: angle resolved measurements	Vasily Belykh
Lasing characteristics of small mode volume organic microcavities	Markas Sudzius
MULTI-EXCITONIC COMPLEXES IN SINGLE GaAs/AlGaAs QUANTUM DOTS	Fujio Minami
OPTICAL TRANSFORMATION OF ZERO-DIMENSIONAL CONFINEMENT IN THE CdTe/CdMgTe MULTIPLE QUANTUM WELLS	Maciej Molas
Excitons in high-order optical transitions in carbon nanotubes	Christophe Voisin
Time-resolved investigation of excitation energy transfer in carbon nanotubes/porphyrin compounds	Christophe Voisin
FDTD description of strong coupling regime in InP photonic crystal microcavity	Jose Llorens
PROPERTIES OF LOCALIZED AND EXTENDED RANDOM LASER MODES IN NANOCRYSTALLINE ZnO POWDERS	Heinz Kalt
Slow hole spin dynamics in InAs quantum dots	Benoit Eble
The Observation of Strong Coupling Between Exciton and Photon in ZnO Whispering Gallery Cavity at High Temperature and its Tuning	Saifeng Zhang
ELECTRO-OPTICAL BISTABILITY AND HYSTERESIS IN QUANTUM DOTS NEAR A HETEROINTERFACE	Andey Malyshev
CARRIER AND NUCLEAR SPIN PUMPING IN SYMMETRIC GaAs QUANTUM DOTS GROWN BY DROPLET EPITAXY ON (111)A SUBSTRATES	Bernhard Urbaszek
VOLTAGE CONTROLLED SPIN POLARIZATION IN N-TYPE RESONANT TUNNELING DIODES INCORPORATING INAS SELF ASSEMBLED QUANTUM DOTS	Yara Galvao Gobato
VALENCE BAND POLARIZATION OF WURTZITE InP NANOWIRES	Everton Gadret
SPONTANEOUS AND IMPRINTED VORTICES IN NON-EQUILIBRIUM POLARITON CONDENSATES	Dipankar Sarkar
Pseudo-diamagnetism of exciton condensates	Yuri Rubo
Onset and dynamics of vortices in polariton OPO superfluids	Guilherme Tosi
CIRCULAR POLARIZATION OF P-I-N MAGNETIC RESONANT TUNNELING DIODES	Yara Galvao Gobato
Effects of inter-wall resonance interactions and exciton localization on the optical properties of self-assembled double-walled molecular nanotubes.	Erik Bloemsmma
HYDRODYNAMIC FORMATION AND OPTICAL STORAGE OF VORTEX-ANTIVORTEX PAIRS IN A POLARITON QUANTUM FLUID	Dario Ballarini
Polarization controlled single photon emitter	Maria Maragkou
Distinguishing photon and polariton lasing from a GaAs microcavity by analysis of a two-threshold behavior	Jean Tempel
REMOTE DIPOLAR INTERACTIONS FOR OBJECTIVE DENSITY CALIBRATION AND FLOW CONTROL OF EXCITONIC FLUIDS	Kobi Cohen
INTERACTIONS IN A POLARITON QUANTUM FLUID STUDIED BY TWO-DIMENSIONAL FOURIER TRANSFORM SPECTROSCOPY	Verena Kohnle
SPATIAL CARRIER DISTRIBUTION IN TYPE-II MULTI-LAYER QUANTUM-DOT STRUCTURES	Rossano Lang
Influence of a single Mn dopant on the Hanle effect of trions in InAs/GaAs quantum dots	Emile Benjamin
QUANTUM OPTICAL CONTROL OF NUCLEAR SPIN POLARIZATION AROUND DONOR-BOUND ELECTRONS	Alok Chaubal
g-factors and diamagnetic coefficients of InAs/InP quantum dots: a comparison between theory and experiment	Joost Van Bree
EXCITON ENERGY TRANSFER IN INORGANIC/ORGANIC HYBRID STRUCTURES	Ryoko Shimada
POLARIZATION-DEGENERATE QUANTUM DOT EMISSION IN PHOTONIC CRYSTAL CAVITIES	Ruth Oulton