

# Pavlos Savvidis

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## Positions

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<b>Assist. Prof. Dept of Material Science &amp; Technology, University of Crete, Greece</b>		8/04-present
<b>Affiliated with Inst. of Electronic Structure &amp; Laser - FORTH</b>		
<b>Marie Currie Senior Researcher</b>	04/11-06/11	03/12-05/12
<b>Physics Department, University of Southampton, UK</b>		
<b>Visiting Professor</b>		06/08-10/08
<b>Cavendish Labs, Cambridge University, UK</b>		
<b>Postdoctoral Research Fellow,</b>		03/04-06/04
<b>University of Southampton, Southampton, UK</b>		
<b>Postdoctoral Research Fellow</b>		01/02-11/03
<b>University of California, Santa Barbara, USA</b>		

## Education

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<b>Ph.D. in Physics, University of Southampton, Southampton, UK</b>	10/98-09/01
<i>Polariton Dynamics in Semiconductor Microcavities</i>	
<b>B.S. in Physics, University of Athens, Athens, Greece</b>	9/94 - 6/98

## Honors-Awards

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1. Postdoctoral Fellowship from DARPA, Phys. Dept., UC Santa Barbara, USA	01/02-11/03
2. Best Postgraduate Poster Award, Physics Department, Univ. of Southampton, UK	2000
3. Full academic scholarship for graduate studies, Univ. of Southampton, UK	1998-2001
4. Scholarship of excellence (National Scholarship Foundation), Athens, Greece	1996
5. First prize in Armenian National Olympiad in Physics	1991

## Teaching and Tutoring

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Since my arrival to Crete I have been tutoring:

- 6 Master students, 7 PhD students
- 5 postdocs

At present I am teaching the following classes:

- Semiconductor Physics
- Computer control & Automation Lab

## Publicity

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1. Perspective, “Intertwining Electron Tunneling with Light” *Science* **336**, 679 (2012)
2. News and Views, “Bosonic condensates: Polariton pendulum”, *Nature Physics* **8**,183 (2012).
3. News and Views, “Polariton spin transport”, David Pile, *Nature Photonics* **6**, 637 (2012)
4. News and Views, “Solid-state physics: Polaritronics in view”, *Nature* **453**, 297 (2008).
5. New Scientist, “Quantum lasers: Half light, half matter”, April (2009)
6. Semiconductor Today, “Light-enhanced wet etch eats into GaN”, May (2009)
7. Photonics Spectra, “Polariton LEDs Deliver Quantum Efficiency”, July (2008)
8. Physics World, “Polaritronics' forges ahead” , May 19 (2008)
9. Laser Focus World, “Polariton LED is electrically pumped”, July (2008)
10. Chemical & Engineering News, “Exotic Lighting”, Vol. **86**, May (2008)
11. News and Views article, “Half-Matter, half-light amplifier”, *Nature* **405**, 629 (2000).
12. “Amplifier from Half-Breed Particles”, *Phys. Rev. Focus* **5**, story 6, 10 February (2000), available online at <http://focus.aps.org/v5/st6.html>
13. “Mongrel Particles Act like Bosons”, *Photonics Spectra* May p. 24 (2000). “Thin films trap hybrid particles”, Vacuum Solutions March/April p. 5 (2000).

## Research Grants

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FP7- ERC starting Grant, “POLAFLOW”, Collaborating partner (2012-2017) **126k €**  
Greek Ministry of Education, ARISTEIA, APPOLO, Principal investigator, (2012–2015) **316k €**  
FP7-PEOPLE-2011-IRSES, Polaritonic TeraHertz Devices, POLATER (2011-2014) **70k €**  
FP7- Initial Training Network, “INDEX”, Principal investigator (2011-2015) **350k €**  
FP7- Initial Training Network, “ICARUS”, Principal investigator (2009-2013) **410k €**  
FP7- Initial Training Network, “CLERMONT4”, Principal investigator (2009-2013) **350k €**  
Greek Ministry of Education, Thalys, Principal investigator, partner (20012–2015) **120k €**  
Greek Ministry of Education, Herakleitos II, Principal investigator (20011–2014) **45k €**  
Greek Ministry of Education, Pythagoras II, Principal investigator (2004–2007) **80k €**  
Greek Research Council, PENED 03, Principal investigator (2004–2007) **80k €**

## Reviewing

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Journals: Nature, Nature Phys., Nature Comm., Modern Rev. Phys.  
Phys. Rev. Lett., Appl. Phys. Lett., Physical Review B

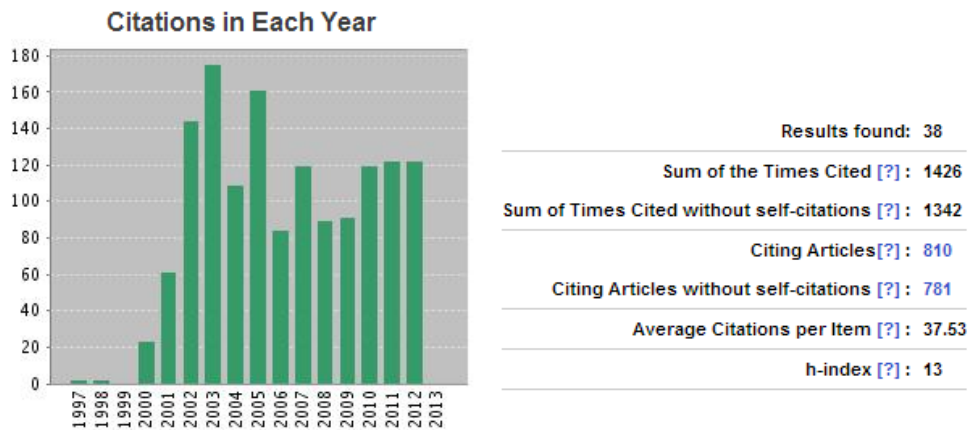
Grants: FP7 People: ERC Advanced Investigator Grants, ITN, IEF, IIF, IOF

National: Greek-Slovak international cooperation grants

## Publications and Conferences

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- More than 43 articles in international peer reviewed journals
- 12 invited presentations at international conferences
- H factor=13; more than 1426 citations to my articles



## Publications

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1. Electrically-Controlled Strong Coupling and Polariton Bistability in Double Quantum Wells, C. Coulson, G. Christmann, P. Christofolini, C. Grossmann, J.J. Baumberg, S.I. Tsintzos, G. Konstantinidis, Z. Hatzopoulos and P.G. Savvidis, Phys. Rev. B 87, 045311 (2013)
2. Dynamics of a polariton condensate transistor switch, C. Anton, TCH. Liew , G. Tosi , Maria Dolores Martin , T. Gao , Z. Hatzopoulos , PS. Eldridge , PG. Savvidis , L. Vina, Appl. Phys. Lett. 101, 261116 (2012)
3. Optically-induced vortex lattices in a semiconductor quantum fluid, G. Tosi, G. Christmann, N.G. Berloff, P. Tsotsis, T. Gao, Z. Hatzopoulos, P.G. Savvidis, J.J. Baumberg, Nature Comm. 3,1243 (2012)
4. The Non-linear Optical Spin Hall Effect and Long-Range Spin Transport in Polariton Lasers, E. Kammann, T.C.H. Liew, H. Ohadi, P. Cilibrizzi, A.V. Kavokin, P. Tsotsis, Z. Hatzopoulos, P.G. Savvidis, P.G. Lagoudakis, Phys. Rev. Lett. 109, 036404 (2012)
5. Piezoelectric InAs/GaAs quantum dots with reduced fine-structure splitting for the generation of entangled photons, S. Germanis, A. Beveratos, G.E. Dialynas, G. Deligeorgis, P.G. Savvidis, Z. Hatzopoulos, N.T. Pelekanos, Physical Review B 86, 035323 (2012)
6. Polariton ring condensates and sunflower ripples in an expanding quantum liquid, G. Christmann, G. Tosi, N.G. Berloff, P. Tsotsis, P. Eldridge, Z. Hatzopoulos, P.G. Savvidis and J. J. Baumberg, Phys. Rev. B 85, 235303 (2012)
7. Polariton condensate transistor switch, T. Gao, P.S. Eldridge, T.C.H Liew, S.I. Tsintzos, G. Stavrinidis, G. Deligeorgis, Z. Hatzopoulos, P.G. Savvidis, Phys. Rev. B (2012)
8. Controlling quantum tunnelling with light, P. Cristofolini, G. Christmann, S. I. Tsintzos, G. Deligeorgis, G. Konstantinidis, Z. Hatzopoulos, P.G. Savvidis and J. J. Baumberg, Science 336, 704 (2012)
9. Sculpting oscillators with light within a nonlinear quantum fluid”, G. Tosi, G. Christmann, N.G. Berloff, P. Tsotsis, T. Gao, Z. Hatzopoulos, P.G. Savvidis, J.J. Baumberg, Nature Physics 8, 183 (2012)
10. Lasing threshold doubling at the crossover from strong to weak coupling regime in GaAs microcavity , P. Tsotsis, P. S. Eldridge, T. Gao, S. I. Tsintzos, Z. Hatzopoulos, and P. G. Savvidis, New Journal of Physics 14, 023060 (2012)

11. Phonon-driven resonantly enhanced polariton luminescence in organic microcavities, N. Somaschi, L. Mouchliadis, D. Coles, I. E. Perakis, D. G. Lidzey, P. G. Lagoudakis, and P.G. Savvidis, *Proc. SPIE* 8260, 82600Q (2012)
12. Ultrafast polariton population built-up mediated by molecular phonons in organic microcavities, N. Somaschi, L. Mouchliadis, D. Coles, I. E. Perakis, D.G. Lidzey, P.G. Lagoudakis, P.G. Savvidis, *Appl. Phys. Lett.* **99**, 143303 (2011)
13. Polarization Resolved Single Dot Spectroscopy of (211)B InAs Quantum Dots, S. Germanis, G.E. Dialynas, G. Deligeorgis, P.G. Savvidis, Z. Hatzopoulos, and N. T. Pelekanos, *AIP Conf. Proc.* 1399, 417 (2011)
14. Bragg polariton luminescence from a GaN membrane embedded in all dielectric microcavity, E. Trichas, N.T. Pelekanos, E. Iliopoulos, E. Monroy, K. Tsagaraki, A. Kostopoulos, P.G. Savvidis, *Appl. Phys. Lett.* **98**, 221101 (2011)
15. Bragg polaritons: Strong coupling and amplification in an unfolded microcavity, A. Askitopoulos, L. Mouchliadis, I. Iorsh, G. Christmann, J.J. Baumberg, M.A. Kaliteevski, Z. Hatzopoulos, P.G. Savvidis, *Phys. Rev. Lett.* **106**, 076401 (2011)
16. Oriented polaritons in strongly-coupled asymmetric double quantum well microcavities G. Christmann, A. Askitopoulos, G. Deligeorgis, Z. Hatzopoulos, S. I. Tsintzos, P.G. Savvidis, J. J. Baumberg, *Appl. Phys. Lett.* **98**, 081111 (2011)
17. Piezoelectric InAs (211)B quantum dots grown by molecular beam epitaxy: structural and optical properties, GE Dialynas, S. Kalliakos, C. Xenogianni, M. Androulidaki, T. Kehagias, P. Komninou, P.G. Savvidis, Z. Hatzopoulos, N. T. Pelekanos, *J. Appl. Phys.* **108**, 103525 (2010)
18. G. Christmann, C. Coulson, J.J. Baumberg, N. T. Pelekanos, Z. Hatzopoulos, S. I. Tsintzos, and P.G. Savvidis, "Control of polariton scattering in resonant-tunnelling semiconductor microcavities", *Phys. Rev. B* **82**, 113308 (2010)
19. S.I. Tsintzos, P.G. Savvidis, G. Deligeorgis, Z. Hatzopoulos, N.T. Pelekanos, "Room temperature GaAs polariton LED", *Appl. Phys. Lett.* **94**, 071109 (2009) **Cited 12 times**
20. M. Trichas, M. Kayabaki, E. Iliopoulos, N.T. Pelekanos, P.G. Savvidis, "Resonantly enhanced selective photochemical etching of GaN", *Appl. Phys. Lett.* **94**, 173505 (2009)
21. G. E. Dialynas, A. Pantazis, M. Androulidaki, K. Tsagaraki, G. Constantinidis, Z. Hatzopoulos, C. Xenogianni, E. Trichas, S. Tsintzos, P. G. Savvidis, N. T. Pelekanos "InAs nanostructures on polar GaAs surfaces" *Int. Journal of Nanotechnology* **6**, 124 (2009)
22. P. Savvidis, "Polariton LEDs delivery quantum efficiency", *Photonics Spectra* **42**, 76 (2008)
23. S.I. Tsintzos, N.T. Pelekanos, G. Konstantinidis, Z. Hatzopoulos, P.G. Savvidis, "A GaAs polariton light-emitting diode operating near room temperature", *Nature* **453**, 372 (2008) **cited 55 times**
24. Dialynas, G.E. Xenogianni, C, Tsintzos, S, Trichas, E, Savvidis, P.G, Constantinidis, G, Renard, J., Gayral, B., Hatzopoulos, Z., Pelekanos, N.T, "Anti-binding of biexcitons in (211)B InAs/GaAs piezoelectric quantum dots" *Physica E*, **40**, 2113 (2008)
25. Dialynas, G.E., Chatzidimitriou, N., Kalliakos, S., Tsintzos, S., Savvidis, P.G., Hatzopoulos, Z., Pelekanos, N.T. "Single dot spectroscopy on InAs/GaAs piezoelectric quantum dots" *Phys Status Solidi (a)* **205**, 2566 (2008)
26. M. Trixas, M. Kayabaki, P. Tsotsis, E. Iliopoulos, N.T. Pelekanos, P.G. Savvidis "Selective photochemical etching of GaN films following laser lift-off." *Phys Status Solidi (a)* **205**, 2509 (2008)
27. S. Tsintzos, P.G. Savvidis, G. Konstantinidis, Z. Hatzopoulos, N.T. Pelekanos "Development of electrically-pumped microcavity lasers" *Phys Status Solidi (c)* **5**, 3594 (2008)
28. P.G. Savvidis, L. G. Connolly, M. S. Skolnick, D. G. Lidzey and J. J. Baumberg, "Ultrafast polariton dynamics in strongly coupled zinc porphyrin microcavities at room temperature", *Phys. Rev. B*, **74**, 113312 (2006)

29. M. Zervos, C. Xenogianni, G. Deligeorgis, M. Androulidaki, P.G. Savvidis, Z. Hatzopoulos and N.T. Pelekanos, InAs quantum dots grown by molecular beam epitaxy on GaAs (211)B polar substrates *Physica Status Solidi (c)* **3**, 3988 (2006)
30. P. Robrish, Jing Xu, Shigeki Kobayashi, P.G. Savvidis, Borys Kolasa, Greg Lee, Dan Mars and SJ Allen, Loss and Gain in Bloch Oscillating Super-Superlattices: THz Stark Ladder Spectroscopy, *PHYSICA E* **32**, 325 (2006)
31. SJ Allen, P.G. Savvidis, Borys Kolasa, Shigeki Kobayashi, Peter Robrish, Greg Lee, Dan Mars Dynamical Conductivity In Bloch Oscillating Semiconductor Super-Superlattices, *Mater. Res. Soc.* **891**, EE4.3 (2005)
32. P.G. Savvidis, B. Kolasa, G. Lee and S.J. Allen, “Resonant Crossover of Terahertz Loss to the Gain of a Bloch Oscillating InAs/AlSb Superlattice”, *Phys. Rev. Lett.* **94**, 196802 (2004). **cited 65 times**
33. J. Xu, G.J. Ramian, J.F. Galan, P.G. Savvidis, A.M. Scopatz, R.R. Birge, S.J. Allen, K.W. Plaxco, “Terahertz Circular Dichroism Spectroscopy: a potential approach to unbiased, *in situ* life detection”, *Astrobiology* **3** 489 (2003) **cited 20 times**
34. P.G. Savvidis, P.G. Lagoudakis, “Teaching polaritons new tricks”, *Semiconductor Science & Technology* **18**, S311 (2003) **cited 15 times**
35. P.G. Savvidis, J.J. Baumberg, D. Porras, D.M. Whittaker, M.S. Skolnick, J.S. Roberts “Ring emission and exciton-pair scattering in semiconductor microcavities”, *Phys. Rev. B* **64** 073309 (2002) **cited 27 times**
36. P.G. Lagoudakis, P.G. Savvidis, J.J. Baumberg, P. Littlewood, D.M. Whittaker, M.S. Skolnick, J.S. Roberts “Stimulated spin dynamics of polaritons in semiconductor microcavities”, *Phys. Rev. B* **65** R161310 (2002) **cited 56 times**
37. R. Butte, M. Emam-Ismaïl, A. Lemaître, R.M. Stevenson, M.S. Skolnick, D.M. Whittaker, A.I. Tartakovskii, J.J. Baumberg, P.G. Savvidis, J.S. Roberts, “Pump angle and laser energy dependence of stimulated scattering in microcavities”, *Physica Status Solidi (a)* **190**, pp. 333 (2002)
38. J.J. Baumberg, P.G. Savvidis, P.G. Lagoudakis, M.D. Martin, D.M. Whittaker, R. Butte, M.S. Skolnick, J.S. Roberts, “Polariton Traps in Semiconductor Microcavities”, *Physica E* **13**, pp. 385 (2002)
39. M. S. Skolnick, R. M. Stevenson, A. I. Tartakovskii, R. Butté, M. Emam-Ismaïl, D. M. Whittaker, P. G. Savvidis, J. J. Baumberg, A. Lemaître, V. N. Astratov and J. S. Roberts, “Polariton-polariton interactions and stimulated scattering in semiconductor microcavities”, *Materials Science and Engineering C*, **19**, pp. 407 (2002)
40. P.G. Savvidis, C. Ciuti, J.J. Baumberg, M.S. Skolnick, D.M. Whittaker and J.S. Roberts “Off-branch polaritons and multiple scattering in semiconductor microcavities”, *Phys. Rev. B* **64** 075311 (2001). **cited 68 times.**
41. P.G. Savvidis, J.J. Baumberg, R.M. Stevenson, M.S. Skolnick, D.M. Whittaker and J.S. Roberts, “Angle-resonant stimulated polariton amplifier”, *Phys. Rev. Lett.* **84**, p. 1547 (2000). **cited 456 times.**
42. R.M. Stevenson, V.N. Astratov, M.S. Skolnick, D.M. Whittaker, M. Emam-Ismaïl, A.I. Tartakovskii, P.G. Savvidis, J.J. Baumberg and J.S. Roberts, “Continuous Wave Observation of Massive Polariton Redistribution by Stimulated Scattering in Semiconductor Microcavities”, *Phys. Rev. Lett.* **85**, p. 3680 (2000). **cited 260 times.**
43. P.G. Savvidis, J.J. Baumberg, R.M. Stevenson, M.S. Skolnick, D.M. Whittaker and J.S. Roberts, “Asymmetric angular emission in semiconductor microcavities”, *Phys. Rev. B* **62** p. R13278 (2000). **cited 56 times.**
44. J.J. Baumberg, P.G. Savvidis, R.M. Stevenson, A.I. Tartakovskii, M.S. Skolnick, D.M. Whittaker and J.S. Roberts, “Parametric oscillation in a vertical microcavity: A polariton

condensate or micro-optical parametric oscillation”, *Phys. Rev. B* **62** p. R16247 (2000). **cited 135 times**.

45. P.G. Savvidis, J.J. Baumberg, R.M. Stevenson, M.S. Skolnick, J.S. Roberts and D.M. Whittaker, “Angular-Assymmetric Nonlinear Polariton Dynamics in Semiconductor Microcavities”, *Physica Status Solidi (b)* **221**, pp. 77 (2000).
46. G.K. Savvidy, K.G. Savvidy and P.G. Savvidy, “Dual statistical systems and geometrical string”, *Physics Letters A*, **221**, Op. 233 (1996). **cited 16 times**

### **Selected conference presentations**

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1. Phonon-driven resonantly enhanced polariton luminescence in organic microcavities, N.Somaschi, L. Mouchliadis, D. Coles, I. Perakis, D. Lidzey, P.G. Lagoudakis, P. Savvidis Contributed talk, SPIE Photonics West 2012, 21 - 26 January 2012, San Francisco, USA
2. Lasing threshold doubling at the crossover from strong to weak coupling regime in GaAs microcavity, P. Tsotsis, P.S. Eldridge, T. Gao, S.I. Tsintzos, Z. Hatzopoulos, P.G. Savvidis, International Conference on Physics of Semiconductors, 31-st ICPS 2012, Zurich, Switzerland
3. Optically-induced vortex lattices in a semiconductor quantum liquid, G. Tosi, G. Christmann, N.G. Berloff, P. Tsotsis, T.Gao, Z. Hatzopoulos, P.G. Savvidis, J.J. Baumberg, International Conference on Physics of Semiconductors, 31-st ICPS 2012, Zurich, Switzerland, **(invited)**
4. Controlling quantum tunnelling with light, P. Cristofolini, C. Coulson, G. Christmann, G. Deligeorgis, Z. Hatzopoulos, S.I. Tsintzos, P.G. Savvidis, J.J. Baumberg, International Conference on Physics of Semiconductors, 31-st ICPS 2012, Zurich, Switzerland.
5. Polariton Condensate Transistor, T. Gao, P.S. Eldridge, T.C.H. Liew, S.I. Tsintzos, G. Stavriniadis, G. Deligeorgis, Z. Hatzopoulos, P.G. Savvidis, International Conference on Physics of Semiconductors, 31-st ICPS 2012, Zurich, Switzerland.
6. Spontaneous oscillations and Quantum Fluidics in a semiconductor microcavity, G. Tosi, G. Christmann, N.G. Berloff, P. Tsotsis, T. Gao, P.S. Eldridge, Z. Hatzopoulos, P.G. Savvidis and J.J. Baumberg, International Conference on Physics of Semiconductors, 31-st ICPS 2012, Zurich, Switzerland.
7. Formation dynamics of a polariton condensate on a semiconductor microcavity pillar, C. Antón, G. Tosi, M.D. Martín, L. Viña, T. Gao, Z. Hatzopoulos, G. Stavriniadis, P.G. Savvidis, J.J. Baumberg, International Conference on Physics of Semiconductors, 31-st ICPS 2012, Zurich, Switzerland.
8. The intrinsic optical spin Hall effect and long range spin transport in a radially expanding polariton condensate, E. Kammann, T.H.C. Liew, H. Ohadi, P. Cilibrizzi, P. Tsotsis, Z. Hatzopoulos, P.G. Savvidis, A.V. Kavokin, P. G. Lagoudakis, International Conference on Physics of Semiconductors, 31-st ICPS 2012, Zurich, Switzerland.
9. Manipulating polariton condensates on a chip, P.G. Savvidis, 5<sup>th</sup> International Conference on Micro - Nanoelectronics, Nanotechnologies and MEMS, Oct. 2012, Kokkini Hani, Heraklion, Crete, Greece. **(invited)**
10. Polariton Condensate Transistor, T. Gao, P.S. Eldridge, T.C.H. Liew, S.I. Tsintzos, G. Stavriniadis, G. Deligeorgis, Z. Hatzopoulos and P.G. Savvidis, 5<sup>th</sup> International Conference on Micro - Nanoelectronics, Nanotechnologies and MEMS, Oct. 2012, Kokkini Hani, Heraklion, Crete, Greece.
11. Lasing threshold doubling at the crossover from strong to weak coupling regime in GaAs microcavity, P. Tsotsis, P. S. Eldridge, T. Gao, S. I. Tsintzos, Z. Hatzopoulos, and P. G.

- Savvidis, 5<sup>th</sup> International Conference on Micro - Nanoelectronics, Nanotechnologies and MEMS, Oct. 2012, Kokkini Hani, Heraklion, Crete, Greece.
12. Manipulating polariton condensates on a chip, P.G. Savvidis, NewMaRE: New Materials and Renewable Energy, Sept. 2012, Tbilisi, Georgia (**invited**)
  13. Manipulating polariton condensates on a chip, P.G. Savvidis, 2<sup>nd</sup> International School on Spin-Optronics, July, 2012, St. Petersburg, Russia (**invited**)
  14. Manipulating polariton condensates on a chip, P.G. Savvidis, ESF Exploratory Workshop on Polaritonics: From Basic Research to Device Applications, March 2012, Rome, Italy.
  15. Ultralow threshold crossover from polariton to photon lasing in GaAs microcavity P Tsotsis, T Gao, P Eldridge, SI Tsintzos, Z Hatzopoulos, PG Savvidis, International Conference on Optics of Excitons in Confined Systems (OECS 12), Paris, France, Sept 2011
  16. Bragg polaritons: strong coupling and amplification in an unfolded microcavity, Savvidis PG, Askitopoulos A, Mouchliadis L, Iorsh I, Christmann G, Baumberg J, Kaliteevski M, International Conference on Optics of Excitons in Confined Systems (OECS 12), Paris, France, Sept 2011
  17. Enhanced pair scattering of oriented polaritons in strongly coupled DQW tunneling microcavities Christmann G, Cristofolini P, Askitopoulos A., Deligeorgis G, Hatzopoulos Z, Tsintzos SI, Savvidis PG, Baumberg J, International Conference on Optics of Excitons in Confined Systems (OECS 12), Paris, France, Sept 2011
  18. Phonon assisted relaxation dynamics in strongly coupled organic microcavities, Somaschi N, Mouchliadis L, Perakis I, Coles D, Lidzey DG, Lagoudakis PG, Savvidis PG, International Conference on Optics of Excitons in Confined Systems (OECS 12), Paris, France, Sept 2011
  19. Phonon assisted relaxation dynamics in strongly coupled organic microcavities, N. Somaschi, L. Mouchliadis, I.E. Perakis, D. Coles, D.G. Lidzey, P.G. Lagoudakis, P.G. Savvidis, UK Semiconductors 2011, Sheffield, UK, July 2011
  20. Bragg polaritons: Strong coupling and amplification in an unfolded microcavity, A. Askitopoulos, L. Mouchliadis, I. Iorsh, G. Christmann, J. J. Baumberg, M. A. Kaliteevski and P. G. Savvidis, International Conference on Physics of Light-Matter Coupling in Nanostructures (PLMCN11), Berlin, Germany, April 2011
  21. Ultralow threshold crossover from polariton to photon lasing in GaAs microcavity, P. Tsotsis, T. Gao, P. S. Eldridge, S. I. Tsintzos, Z. Hatzopoulos and P. G. Savvidis, International Conference on Physics of Light-Matter Coupling in Nanostructures (PLMCN11), Berlin, Germany, April 2011
  22. Transport vs Tunnelling Driven Phenomena in Biased Semiconductor Microcavities, ESF Conference on Cold Atoms, Semiconductor Polaritons and Nanoscience, Chersonissos, Crete, Greece, May 2011 (**invited**)
  23. Polaritonics: physics and devices, ESF School on Cold Atoms, Semiconductor Polaritons and Nanoscience, Chersonissos, Crete, Greece, May 2011 (**invited**)
  24. Polaritons in a quasiperiodic Bragg structure, A. Askitopoulos, L. Mouchliadis, I. Iorsh, Z. Hatzopoulos, M. A. Kaliteevski and P. G. Savvidis, 5<sup>th</sup> International Conference on Spontaneous Coherence in Excitonic Systems (ICSCE-5), Lausanne, Switzerland, Feb. 2011
  25. Oriented polaritons in strongly-coupled asymmetric double quantum well microcavities, G. Christmann, 1 A. Askitopoulos, 2 G. Deligeorgis, Z. Hatzopoulos, S. I. Tsintzos, P. G. Savvidis, J. J. Baumberg, 5<sup>th</sup> International Conference on Spontaneous Coherence in Excitonic Systems (ICSCE-5), Lausanne, Switzerland, Feb. 2011
  26. A New Generation of Electrically Driven Polariton Devices P.G. Savvidis, 41st Colloquium on The Physics of Quantum Electronics PQE-2011, Snowbird, UT, Jan. 2011. (**invited**)
  27. Polariton light emitting devices: efficiency and relaxation dynamics, S.I. Tsintzos, P.G. Savvidis, Tingge Gao, G. Deligeorgis, P. Tsotsis, Z. Hatzopoulos, N.T. Pelekanos,

- International Conference on Physics of Light-Matter Coupling in Nanostructures (PLMCN10), Cuernavaca, Mexico, April 2010
28. Ultrafast control of polariton stimulated scattering in semiconductor microcavities, G. Christmann, C. Coulson, C. Grossmann, J. J. Baumberg, N. T. Pelekanos, Z. Hatzopoulos, S. I. Tsintzos and P. G. Savvidis, International Conference on Physics of Light-Matter Coupling in Nanostructures (PLMCN10), Cuernavaca, Mexico, April 2010
  29. Ultrafast control of polariton stimulated scattering in semiconductor microcavities, G. Christmann, C. Coulson, J.J. Baumberg, N. T. Pelekanos, Z. Hatzopoulos, S. I. Tsintzos, P. G. Savvidis, CLEO/QELS Conference 2010, San Jose (2010).
  30. Relaxation dynamics in polariton light emitting devices, S. I. Tsintzos, Tingge Gao, N. T. Pelekanos, Z. Hatzopoulos, P. G. Savvidis, International Conference on Physics of Semiconductors 2010, ICPS 10, Seoul.
  31. Polarization resolved single dot spectroscopy on (211)B InAs/GaAs quantum dots, S. Germanis, G.E. Dialynas, G. Deligeorgis, P.G. Savvidis, Z. Hatzopoulos, N.T. Pelekanos, International Conference on Physics of Semiconductors 2010, ICPS 10, Seoul.
  32. Ultrathin Laterally Etched GaN Membranes of High Optical Quality, E. Trichas, N.T. Pelekanos, K. Tsagaraki, E. Iliopoulos, A. Kostopoulos and P.G. Savvidis, 19<sup>th</sup> European Workshop on Heterstructure Technology, Fodele, Crete, Greece, Oct. 2010
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