



# GEMaC

## Groupe d'Étude de la Matière Condensée

### OEN – PUBLICATIONS 2010-2014

#### 2014

D. Canneson, L. Biadala, S. Buil, X. Quélin, C. Javaux, B. Dubertret, J.-P. Hermier,  
**"Blinking suppression and biexcitonic emission in thick-shell CdSe/CdS  
nanocrystals at cryogenic temperature",**  
Phys. Rev. B. **89**, 035303 (2014) – [HAL]

S. Derom, A. Bouhelier, A. Kumar, A. Leray, J.-C. Weeber, S. Buil, X. Quélin, J.-P.  
Hermier, G. Colas des Francs,  
**"Single molecule controlled emission in planar plasmonic cavity",**  
Phys. Rev. B **89**, 035401 (2014) – [HAL]

#### 2013

D. Canneson, S. Buil, X. Quélin, C. Javaux, B. Dubertret, J.-P. Hermier,  
**"Influence of the cluster's size of random gold nanostructures on the fluorescence**

**of single CdSe/CdS nanocrystals",**

Gold Bulletin **46**, 329 (2013) – [HAL]

F. Liu, L. Biadala, A. V. Rodina, D. R. Yakovlev, D. Dunker, C. Javaux, J.-P. Hermier, A. L. Efros, B. Dubertret, M. Bayer,

**"Spin dynamics of negatively charged excitons in CdSe/CdS colloidal nanocrystals",**

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J. Laverdant, J.-P. Hermier, X. Quélin, S. Buil,

**"From scattering regime to strong localization: a statistical analysis of the near-field intensity on random gold films",**

J. Nanophotonics **7**, 073589 (2013) – [HAL]

E. Chikoidze, T. Tchelidze, E. Popova, P. Maso, N. Ponjavidze, N. Keller and Y. Dumont,

**"Conductivity type inversion in wide bandgap antiferromagnetic FeTiO<sub>3</sub>",**

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C. Javaux, B. Mahler, B. Dubertret, A. Shabaev, A. V. Rodina, A. L. Efros,

D. R. Yakovlev, F. Liu, M. Bayer, G. Camps, L. Biadala, S. Buil, X. Quélin and J.-P. Hermier,

**"Thermal activation of non-radiative Auger recombination in charged colloidal nanocrystals",**

Nature Nanotechnology **8**, 206 (2013)

F. Pisanello, G. Leménager, L. Martiradonna, L. Carbone, S. Vezzoli, P. Desfonds, P. D. Cozzoli, J.-P. Hermier, E. Giacobino, R. Cingolani, M. de Vittorio, A. Bramati,

**"Non-blinking single-photon generation with anisotropic colloidal nanocrystals: towards room-temperature, efficient, colloidal quantum sources",**

Adv. Mater. **25**, 1974 (2013)

## **2012**

S. Buil, J. Laverdant, B. Berini, P. Maso, J.-P. Hermier, X. Quélin,

**"FDTD simulations of localization and enhancements on fractal plasmonics nanostructures",**

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D. Canneson, I. Mallek-Zouari, S. Buil, X. Quélin, C. Javaux, B. Dubertret, J.-P. Hermier,  
**"Enhancing the fluorescence of individual thick shell CdSe/CdS nanocrystals by coupling to gold structures",**  
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## 2011

D. Canneson, I. Mallek-Zouari, S. Buil, X. Quélin, C. Javaux, B. Mahler, B. Dubertret, J.-P. Hermier,  
**"Strong Purcell effect in single thick shell CdSe/CdS nanocrystals coupled to localized surface plasmons",**  
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**"Near-field intensity correlations on nanoscaled random silver/dielectric films",**  
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C. Vion, P. Spinicelli, L. Coolen, C. Schwob, J.-M. Frigerio, J.-P. Hermier, A. E. Maître,  
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**"Dots in rods as polarized single photon sources",**  
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I. Mallek-Zouari, S. Buil, X. Quélin, B. Mahler, B. Dubertret, J.-P. Hermier,  
**"Plasmon assisted single photon emission CdSe/CdS nanocrystals deposited on random gold film",**  
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F. Pisanello, L. Martiradonna, G. Lemenager, P. Spinicelli, A. Fiore, L. Manna, J.-P. Hermier, R. Cingolani, E. Giacobino, M. De Vittorio, A. Bramati,  
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Appl. Phys. Lett. **96**, 033101 (2010)

A. Quattieri, G. Morello, P. Spinicelli, M. T. Todaro, T. Stomeo, L. Martiradonna, M. de Giorgi, X. Quélin, S. Buil, A. Bramati, J.-P. Hermier, R. Cingolani, M. De Vittorio,  
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» Publications 2015-2020

» Publications 2006-2009