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Physics of one-dimensional hybrids based on carbon nanotubes

Gao, Jia

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List of publications

From Zernike Institute for Advanced Materials:

Charge transfer excitons in low band gap polymer based solar cells and the role of processing additives.

M. C. Scharber, C. Lungenschmied, H. J. Egelhaaf, G. Matt, M. Bednorz, T. Fromherz, J. Gao, D. Jarzab, M. A. Loi, *Energy. Environ. Sci.*, (2011), DOI: 10.1039/c1ee02181h.

Low-Temperature Behaviour of Charge Transfer Excitons in Narrow-Bandgap Polymer-Based Bulk Heterojunctions.

D. Jarzab, F. Cordella, J. Gao, M. C. Scharber, H. J. Egelhaaf, M. A. Loi, *Adv. Eng. Mater.* **1**, 604 (2011).

Electronic interactions between “pea” and “pod”: the case of oligothiophenes encapsulated in carbon nanotubes.

J. Gao, P. Blondeau, P. Salice, E. Menna, B. Bártovec, C. Hébert, J. Leschner, U. Kaiser, M. Milko, C. Ambrosch-Draxl, M. A. Loi, *Small* **7**, 1807 (2011).

Selective Wrapping and Supramolecular Structures of Polyfluorene-Carbon Nanotube Hybrids.

J. Gao, M. A. Loi, E. J. F. de Carvalho, M. C. dos Santos, *ACS Nano* **5**, 3993 (2011).

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Encapsulation of Conjugated Oligomers in Single-Walled Carbon Nanotubes: Towards Nanohybrids for Photonic Devices.

M. A. Loi, J. Gao, F. Cordella, P. Blondeau, E. Menna, B. Bartova, C. Hebert, S. Lazar, G. A. Botton, M. Milko, C. Ambrosch-Draxl, *Adv. Mater.* **22**, 1635 (2010).

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Size-Dependent Electron Transfer from Colloidal PbS Nanocrystals to Fullerene.

A. Gocalinska, M. Saba, F. Quochi, M. Marceddu, K. Szendrei, J. Gao, M. A. Loi, M. Yarema, R. Seyrkammer, W. Heiss, A. Mura, G. Bongiovanni, *J. Phys. Chem. Lett.* **1**, 1149 (2010).

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