1. Annexes

1.1. Partenaires académiques

1.1.1. Laboratoire SPrAM

1.1.1.1.Résumé

Nom du laboratoire	Structures et Propriétés d'Architectures Moléculaires (SPrAM), UMR 5819 (CEA, CNRS, UJF)
Adresse complète	INAC/SPrAM, CEA Grenoble, 17 rue des Martyrs, 38054 Grenoble, Cedex 9.
Directeur du laboratoire	Jean-Pierre TRAVERS
Section CNRS	03 – 11 et 13
Contact scientifique	David DJURADO - david.djurado@cea.fr
Objectifs	Elaboration et études des propriétés de nouveaux matériaux pour l'(opto)électronique organique.
Site web	http://inac.cea.fr/spram et http://inac.cea.fr/Phocea/Vie_des_labos/Ast/ast_service.php?id_unit=10

1.1.1.2.Domaines de compétences

- Chimie des (macro)molécules conjuguées
- Synthèse et fonctionnalisation de nanocristaux semiconducteurs
- Cellules solaires organiques et hybrides
- Transistors
- Etudes des propriétés de transport
- Etudes des propriétés structurales
- Etude de nouveaux semiconducteurs : polymères et petites molécules

1.1.1.3.Personnels permanents impliqués

- Dmitry Aldakov, CR CNRS, dmitry.aldakov@cea.fr
- Frédéric Chandezon, Chercheur CEA, frederic.chandezon@cea.fr
- Pascale Chenevier, Chercheur CEA, pascale.chenevier@cea.fr
- Renaud Demadrille, Chercheur CEA, renaud.demadrille@cea.fr
- David Djurado, DR CNRS, david.djurado@cea.fr
- Jérôme Faure-Vincent, Chercheur CEA, jerome.faure-vincent@cea.fr
- Benjamin Grévin, CR CNRS, benjamin.grevin@cea.fr
- Brigitte Pépin-Donat, DR CNRS, brigitte.pepin-donat@cea.fr
- Patrice Rannou, CR CNRS, patrice.rannou@cea.fr
- Peter Reiss, Chercheur CEA, peter.reiss@cea.fr
- Saïd Sadki, Pr. UJF, said.sadki@cea.fr
- Jean-Pierre Travers, DR CNRS, jean-pierre.travers@cea.fr

1.1.1.4. Publications significatives (10 max)

1 "*Simplified transient space-charge-limited current measurements of mobility using transimpedance amplifier*", M.Z. Szymanski, B. Luszczynska, J.M. Verilhac , P. Reiss, D. Djurado
***Organic Electronics* 14 (2013) 230–235**

2 "*Mapping the 3D distribution of CdSe nanocrystals in highly oriented and nanostructured hybrid P3HT–CdSe films grown by directional epitaxial crystallization*" L. Roiban, L. Hartmann, A. Fiore, D. Djurado, F. Chandezon, P. Reiss, J.-F. Legrand, S. Doyle, M. Brinkmann and O. Ersen
***Nanoscale,* 4 (2012) 7212–7220**

3 "*Charge transport in poly(3-hexylthiophene):CdSe nanocrystals hybrid thin films investigated with time-of-flight measurements*" E. Couderc, N. Bruyant, A. Fiore, F. Chandezon, D. Djurado, P. Reiss and J. Faure-Vincent
***Applied Physics Letters* 101 (2012) 133301**

4 "*Comparison of simulations to experiment for a detailed analysis of space-charge-limited transient current measurements in organic semiconductors*"
M. Z. Szymanski, I. Kulszewicz-Bajer, J. Faure-Vincent and D. Djurado
***Physical Review B* 85 (2012) 195205 (8)**

5 "*Triarylamine Substituted Arylene Bisimides as Solution Processable Organic Semiconductors for Field Effect Transistors. Effect of Substituent Position on Their Spectroscopic, Electrochemical, Structural, and Electrical Transport Properties*" A. Pron, R. R. Reghu, R. Rybakiewicz, H. Cybulski, D. Djurado, J. V. Grazulevicius, M. Zagorska, I. Kulszewicz-Bajer and J.-M. Verilhac
***Journal of Physical Chemistry C* 115 (2011) 15008–15017**

6 *"Influence of polymorphism on charge transport properties in isomers of fluorenone-based liquid crystalline semiconductors"* F. Lincker, A.J. Attias, F. Mathevet, B. Heinrich, B. Donnio, J.L. Fave, P. Rannou and R. Demadrille,
***Chemical Communications* 48 (26) (2012) 3209-3211**

7 "*Local contact potential difference of molecular self-assemblies investigated by Kelvin probe force microscopy*"
E.J. Spadafora, M. Linares, W. Z.N. Yahya, F. Lincker, R. Demadrille, B. Grévin.
***Applied Physics Letters*, 99 (23) (2011) 233102**

8 "*Imaging the Carrier Photogeneration in Nanoscale Phase Segregated Organic Heterojunctions by Kelvin Probe Force Microscopy*" E.J.Spadafora, R. Demadrille, B. Ratier, B. Grévin,
***Nano Letters* 10 (9) (2010) 3337-3342**

9 "*High Open-Circuit Voltage Solar Cells Based on New Thieno[3,4-c]pyrrole-4,6-dione and 2,7-Carbazole Copolymers*"
A**.** Najari, P. Berrouard, C. Ottone, M. Boivin, Y.P. Zou, D. Gendron, W.O. Caron, P. Legros, C.N Allen, S. Sadki and M. Leclerc.
***Macromolecules* 45 (4) (2012) 1833-1838**

10 *"Electroactive materials for organic electronics: preparation strategies, structural aspects and characterization techniques"*A. Pron, P. Gawrys, M. Zagorska, D. Djurado and R. Demadrille
***Chemical Society Reviews* 39 (2010) 2577–2632**