

Annexes

1.1. Partenaires académiques

1.1.1. Laboratoire XLIM

1.1.1.1. Résumé

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| Nom du laboratoire | Institut de Recherche XLIM, UMR 7252 |
| Adresse complète | Université de Limoges/CNRS, 123 av. Albert Thomas, 87060 Limoges Cedex |
| Directeur du laboratoire | Dominique CROS |
| Section CNRS | 8 |
| Contact scientifique | Bernard RATIER - bernard.ratier@unilim.fr |
| Objectifs | Etude et modélisation de dispositifs pour l'électronique organique |
| Site web | www.xlim.fr et www.unilim.fr |

1.1.1.2. Domaines de compétences

- Cellules solaires organiques et hybrides
- Transistors
- Diodes électroluminescentes
- Développement d'électrodes transparentes conductrices
- Etudes des propriétés optoélectroniques
- Modélisation électromagnétique des dispositifs

1.1.1.3. Personnels permanents impliqués

- Rémi ANTONY, MCF, remi.antony@unilim.fr
- Johann BOUCLÉ, MCF, johann.boucle@unilim.fr
- Catherine DI BIN, MCF, cathy.dibin@xlim.fr
- Bruno LUCAS, MCF-HDR, bruno.lucas@unilim.fr
- Bernard RATIER, PR, bernard.ratier@unilim.fr
- Thierry TRIGAUD, MCF, thierry.trigaud@unilim.fr

1.1.1.4. Publications significatives (10 max)

1. J. Bouclé, J. Ackermann,
"Solid-state dye-sensitized and bulk heterojunction solar cells using TiO₂ and ZnO nanostructures: recent progress and new concepts at the borderline"
Polymer International 61, 3, (2012) 355
2. Ratier B, Nunzi JM, Aldissi M, Kraft TM, Buncel E,
"Organic solar cell materials and active layer designs-improvements with carbon nanotubes: a review"
Polymer International Volume: 61 Issue: 3 (2012) 342-354
3. El Amrani A., Lucas B., Ratier B.
"The effect of the active layer thickness on the performance of pentacene-based phototransistors"
Synthetic Metals 161, Issues 23-24 (2012) 2566-2569
4. Melhem H., Simon P., Beouch L., Goubard F., Boucharef M., Di Bin C., Leconte Y, Ratier B, Herlin-Boime N, Boucle J.
"TiO₂ Nanocrystals Synthesized by Laser Pyrolysis for the Up-Scaling of Efficient Solid-State Dye-Sensitized Solar Cells"
Advanced Energy Materials 1, 5 (2011) 908-916

5. E.J. SPADAFORA, R. DEMADRILLE R, RATIER B, B. GREVIN
"Imaging the Carrier Photogeneration in Nanoscale Phase Segregated Organic Heterojunctions by Kelvin Probe Force Microscopy"
Nano Letters Volume: 10 Issue: 9 (2010), 3337-3342 Published: SEP 2010
6. Radbeh R., Parbaile E., Chakaroun M., Ratier B., Aldissi M., Moliton A.
"Enhanced Efficiency of Polymeric Solar Cells via Alignment of Carbon Nanotubes"
Polymer International 59, 11 (2010) 1514-1519
7. R. Radbeh, E. Parbaile, J. Bouclé, C. Di Bin, A. Moliton, V. Coudert, F. Rossignol, B. Ratier
"Nanoscale Control of the Network Morphology of High Efficiency Polymer Solar Cells by the use of high material concentration in the liquid phase"
Nanotechnology, Volume 21, Issue 3, Article number : 035201, 22 January 2010
8. M. CHAKAROUN, B. LUCAS, B. RATIER, C. DEFRANOUX, J.P. PIEL, M. ALDISSI
"High quality transparent conductive electrodes in organic photovoltaic devices"
Thin Solid Films, (2009), Vol. 518, Issue 4, pp.1250-1253
9. A.K. PANDEY, J.M. NUNZI, B. RATIER, A. MOLITON
"Size effect on organic optoelectronics devices : example of photovoltaic cell efficiency"
Physics Letters A; vol.372, issue 8, 18 february 2008, pp.1333-1336
10. Monestier F., Simon J.J., Torchio P., Escoubas L., Ratier B., Hojeij W., Lucas B., Moliton A., Cathelinaud M., Defranoux C. Optical modelling of organic solar cells based on CuPc and C60
Applied Optics 47, 13 (2008)