

Prénom : Damien

Nom : Barakel

Liste de Publications 2009-2013 :

● [Publications dans revues internationales à comité de lecture \[ACL RI\]](#)

1. D. Maestre, O. Palais, D. Barakel, M. Pasquinelli, C. Alfonso, F. Gourbilleau, M. De Laurentis, A. Irace, « Structural and optoelectronic characterization of Si-SiO₂/SiO₂ multilayers with applications in all Si tandem solar cells », Journal of Applied Physics (2010) 107 Issue: 6
2. R. Torres, V. Vervisch, M. Halbax, T. Sarnet, P. Delaporte, M. Sentis, J. Ferreira, D. Barakel, S. Bastide, F. Torregrosa, H. Etienne, L. Roux «Femtosecond laser texturization for improvement of photovoltaic cells: Black Silicon », Journal Of Optoelectronics And Advance Materials (2010) 12 Issue :3 pp 621-625

● [Colloque international avec actes édités \[ACT INT\]](#)

1. J. Ferreira, O. Palais, M. Pasquinelli and D. Barakel, "Is n-type multicrystalline silicon the best candidate for short-term high-efficiency lower cost solar cells?", International Conference on Renewable Energies and Power Quality (ICREPQ'10) – Granada, Spain, March 2010
2. K. Lagha, MS Belkaid, M. Pasquinelli, D. Barakel, L. Escoubas, «Annealing of ZnO and SnO₂ transparent conductive oxides», proceedings de l'International Conference on Renewable Energies and Power Quality (ICREPQ'11) et Renewable Energy & Power Quality Journal (2011)
3. V. Mong-the Yen, , D. Barakel, I. Périchaud, O. Palais, "Investigation of self interstitial influences in Light and Dark Induced Degradation in p-type compensated Silicon", Energy Procedia, Volume 27, 2012, Pages 76–81
4. L. Bounaas, N. Auriac, B. Grange, D. Barakel, M. pasquinelli "Development of high efficiency back passivated silicon solar cells with screen printed contacts", Energy Procedia, Volume 27, 2012, Pages 598-603
5. B. Rezgui, V. Mong-The Yen, I. Périchaud, D. Barakel, M. Pasquinelli and O. Palais, "Behaviour of Light Induced Defect Generation and Carrier Lifetime Degradation in Solar Grade Silicon ", Materials Science Forum Vol. 725 (2012) pp 141-144
6. L. Ottaviani, O. Palais, D. Barakel, M. Pasquinelli "Minority Carrier Lifetime Measurements in Specific Epitaxial 4H-SiC Layers by the Microwave Photoconductivity Decay", Materials Science Forum, Vol 615-617 (2009) pp 295-298

Liste de Communications 2009-2013 :

● [Colloque international sans actes \[COM\]](#)

1. M. Pasquinelli, D. Maestre, K. Lagha, D. Barakel, J. Le Rouzo, C. Alfonso, O. Palais, "Cellules Solaires Silicium : du matériau aux dispositifs", CASAMANSUN ENR2010 – Zinguinchor
2. K. Lagha, MS. Belakaid, S. Maifi, M. Pasquinelli, D. Barakel, L. Escoubas, « Tin oxide in heterojunction solar cells », Poster at the International Photovoltaic Technical Conference Thin Film 2010, 27th-28th May, Aix-en-Provence, France
3. J. Le Rouzo, C. Alfonso, M. Amin Ali, D. Barakel, L. Roussel and D. Maestre, "Optical characterization of silicon nanowires synthesized by electroless etching process", Conference at the International Photovoltaic Technical Conference Thin Film 2010, 27th-28th May, Aix-en-Provence, France
4. K. Lagha, MS. Belkaid, M. Pasquinelli, D. Barakel, L. Escoubas, « Annealing of ZnO and SnO₂ transparent conductive oxides », Conference at the "International Conference on Renewable Energies and Power Quality (ICREPQ'11)", Las Palmas de Gran Canaria 13-15 April, 2011.
5. V. Mong-The Yen, O. Palais, M. Pasquinelli, D. Barakel and I. Périchaud, "Relationship between interstitial oxygen, substitutional carbon, resistivity and minority carrier lifetime in metallurgical multicrystalline silicon", International Conference on Renewable Energies and Power Quality (ICREPQ'11) – Gran Canaria, Spain, March 2011
6. V. Mong-The Yen, O. Palais, I. Périchaud, D. Barakel and M. Pasquinelli, "Investigation of light induced degradation (lid) phenomenon in different multicrystalline silicon", EPSECE 27TH – European Photovoltaic Solar Energy Conference and Exhibition september 2011

• Colloque national sans actes

1. K. Lagha, M. S. Belkaid, S. Maifi, M. Pasquinelli, D. Barakel, L. Escoubas, « Propriétés des films SnO₂ et ZnO déposés par APCVD », Poster présenté à Dispositifs Electroniques Organiques – DIELOR 2010, 11-13 Octobre 2010, Giens, France

Collaborations (nationales et/ou internationales) avec d'autres laboratoires de Recherche :

- Sao Paolo University, Bresil

Participations aux projets de recherche (période 2009-2013):

- Projet CAPES-COFECUB (2009-2013), Déplacement effectué au Bresil pendant 11 jours (juin 2012). Caractérisations de matériaux SrTiO₃.
- responsable scientifique du projet ANR Equipex DURASOL (étude du vieillissement des panneaux solaires) en partenariat avec le CEA INES (Chambery). Responsable de la plateforme scientifique DURASOL de Marseille.

- Expert international sur la normalisation photovoltaïque mandaté par AMU à l'UTE (Union technique de l'électricité) dans la commission UTE-UF-82 (Systèmes de conversion photovoltaïque de l'énergie solaire).