

List of publications

Oral conferences

1. Dewalque, J., *et al.*, *TiO₂ mesoporous thin films acting as photoelectrode in dye-sensitized solar cells*. MRS Fall Meeting, Boston, USA, December 2008.
2. Henrist, C., *et al.*, *Repeated thermal treatments applied to ordered TiO₂ mesoporous thin film: effect on the film crystallization and surface area*. ESF conference: Nanotechnology for Sustainable Energy, Obergurgl Austria, July 2010.
3. Dewalque, J., *et al.*, *TiO₂ templated multilayer films used as high efficiency photoelectrode in liquid or solid DSSCs*. MRS Spring Meeting, San Francisco, USA, April 2012.

Posters

1. Dewalque, J., *et al.*, *Mesoporous TiO₂ Thin Films for Photovoltaic Applications*. 6th International Mesostructured Materials Symposium, Namur, Belgium, September 2008.
2. Dewalque, J., *et al.*, *Mesoporous TiO₂ Thin Films for Photovoltaic Applications*. Electroceramics XI, Manchester, UK, August 2008.
3. Dewalque, J., *et al.*, *TiO₂ thin films (1 μm) with ordered porosity used as high performance photoelectrode in DSSC*. ESF conference: Nanotechnology for Sustainable Energy, Obergurgl, Austria, July 2010.
4. Mathis, F., *et al.*, *Analysis of thin layers for photovoltaic application: comparison between RBS and ellipsometry on the determination of roughness and porosity*. 10th European Conference on Accelerators in Applied Research and Technology, Athens, Greece, September 2010.
5. Dubreuil, O., *et al.*, *Study of dye coloration and electrolyte impregnation in mesoporous TiO₂ for DSSC fabrication*. 20th International Conference on Ion Beam Analysis (IBA 2011), Itapema, Brazil, April 2011.
6. Vertruyen, B., *et al.*, *Mesoporous TiO₂ thin films by soft-templating : How to reach crystallization without mesostructure collapse?* 7th Belgian Crystallography Symposium, Brussels, Belgium, October 2012.
7. Dewalque, J., *et al.*, *Long term stability of TiO₂ templated multilayer films used as high efficiency photoelectrode in liquid DSSCs*. Third International Conference on Multifunctional, Hybrid and Nanomaterials, Sorrento, Italy, March 2013.
8. Henrist, C., *et al.*, *Hierarchical Porous TiO₂ thin films by soft and dual templating: A quantitative approach of specific surface and porosity*. Third International Conference on Multifunctional, Hybrid and Nanomaterials, Sorrento, Italy, March 2013.

Publications

Papers

1. Henrist, C., *et al.*, *Control of the porosity of anatase thin films prepared by EISA: Influence of thickness and heat treatment*. Microporous Mesoporous Mater., 2008. **117**(1-2): p. 292-296.
2. Dewalque, J., *et al.*, *TiO₂ multilayer thick films (up to 4 μm) with ordered mesoporosity: Influence of template on the film mesostructure and use as high efficiency photoelectrode in DSSCs*. J. Mater. Chem., 2011. **21**(20): p. 7356-7363.
3. Dubreuil, O., *et al.*, *TiO₂ mesoporous thin films studied by Atmospheric Ellipsometric Porosimetry: A case of contamination*. Microporous Mesoporous Mater., 2011. **145**(1-3): p. 1-8.
4. Mayer, M., *et al.*, *Rutherford backscattering analysis of porous thin TiO₂ films*. Nucl. Instrum. Methods Phys. Res., Sect. B, 2012. **273**: p. 83-87.
5. Dewalque, J., *et al.*, *Microstructural evolution of a TiO₂ mesoporous monolayer film under calcination: Effect of stabilization and repeated thermal treatments on the film crystallization and surface area*. Thin Solid Films, 2012. **520**(16): p. 5272-5276.
6. Henrist, C., *et al.*, *Hierarchical porous TiO₂ thin films by soft and dual templating: A quantitative approach of specific surface and porosity*. Under review in Thin Solid films, October 2012.
7. Toussaint, C., *et al.*, *Templated Ti-doped hematite film as high efficiency water splitting electrode*. Under review in Journal of Power sources, February 2013.
8. Dewalque, J., *et al.*, *Stability of templated and nanoparticles DSSCs : Photovoltaic and electrochemical investigation of degradation mechanisms at the photoelectrode interface*. Submitted to Electrochimica acta, April 2013.