

# List of publications Dr. F. A. Nüesch

## 1. Refereed publications (full list as of 1.1.2010)

1. F. Nüesch, J. E. Moser, M. Grätzel, "Sensitisation of TiO<sub>2</sub> colloidal particles by a merocyanine dye in its monomeric and aggregated states", *Chimia*, **47**, (1993), 272
2. J. E. Moser, F. Nüesch, M. Grätzel, "Vectorial energy vs. electron transfer in the sensitisation of TiO<sub>2</sub> colloidal particles by aggregates of a merocyanine dye", *Electrochem. Soc. Mett. Ext. Abstract*, **93**, (1993), 2140-2141
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5. F. Nüesch, J. E. Moser, V. Shklover, M. Grätzel, "Merocyanine aggregation in mesoporous networks.", *J. Am. Chem. Soc.*, **118**, (1996), 5420-5431
6. F. Nüesch, L. Si-Ahmed, B. François, L. Zuppiroli, "Derivatized electrodes in the construction of organic light emitting diodes", *Adv. Mater.*, **9** (3), (1997), 222-224
7. D. B. Romero, F. Nüesch, T. Benazzi, D. Adés, A. Siove, L. Zuppiroli, "Electroluminescence from carbazole dimers", *Adv. Mater.*, **9** (15), (1997), 1158
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12. F. Nüesch, L. J. Rothberg, E.W. Forsythe, Quoc Toan Le, Yongli Gao, "A Photoelectron spectroscopy study on the indium tin oxide treatment by acids and bases", *Appl. Phys. Lett.*, **74** (6), (1999), 880-882
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14. L. Zuppiroli, L. Si-Ahmed, K. Kamaràs, F. Nüesch, M. N. Bussac, D. Adés, A. Siove, E. Moons, M. Grätzel, "Self-assembled monolayers as interfaces for organic opto-electronic devices", *The Europ. Phys. Journal B*, **11**, (1999), 505-512
15. F. Nüesch, Y. Li, L. J. Rothberg, "Patterned surface dipole layers for high-contrast electroluminescent displays", *Appl. Phys. Lett.*, **75** (12), (1999), 1799-1801
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  40. F. Nüesch, A. Faes, L. Zuppiroli, F. S. Meng, K. C. Chen, and H. Tian, "Counterion effects in cyanine heterojunction photovoltaic devices," *Journal of Materials Science* **40** (6), 1353-1357 (2005)
  41. F. Nüesch, D. Berner, E. Tutis, M. Schaer, C. Q. Ma, X. S. Wang, B. W. Zhang, and L. Zuppiroli, "Doping-induced charge trapping in organic light-emitting devices," *Adv. Funct. Mater.* **15** (2), 323-330 (2005)
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  44. F. A. Castro, P. R. Bueno, C. F. O. Graeff, F. Nüesch, L. Zuppiroli, L. F. Santos, and R. M. Faria, "Crossover from capacitive to pseudoinductive charge-relaxation in organic/polymeric light-emitting diodes," *Appl. Phys. Lett.* **87** (1), 013505 (2005)
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89. J. H. Yum, e. Baranoff, B. E. Hardin, e. T. Hoke, M. D. McGehee, F. Nüesch, M. Grätzel, Md. K. Nazeeruddin, "Phosphorescent energy relay dye for improved light harvesting response in liquid dye-sensitized solar cells", *Energy and Environment*, in press (2010)
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91. D. M. Opris, M. Molberg, D. Crespy, P. Rupper, F. Nüesch<sup>1</sup>, C. Löwe, "High breakdown field dielectric elastomers using encapsulated polyaniline as high dielectric constant filler", *Adv. Func. Mater.*, submitted (2010)

## 2. Patents

- F. Nüesch, L. Si-Ahmed, L. Zuppiroli Swiss patent No. 1844/97, "Electroluminescent Device II"
- F. Nüesch, L. Si-Ahmed, F. Rotzinger, L. Zuppiroli, International Patent WO99/07028 "Electroluminescent Device"
- F. A. Castro, F. Nüesch, P. Chabreck, EU Patent Application, "Precision fabrics for thin film device electrodes" DE 102008055969.5 (2008)
- J. Heier, F. Nüesch, R. Hany, Swiss Patent application 01660/08, "Organischer Film und Herstellung eines organischen Films mit neuartigen optischen Eigenschaften"
- F. A. Castro, B. Chu, F. Nüesch, Swiss Patent application 01558/09, "Method for production of selective or laminar coatings in plastic electronics"
- B. Fan, R. Hany, F. Nüesch, Swiss Patent application 01475/09, "Multilayer thin film organic solar cell"

## 3. PhD thesis

F. Nüesch, "From Monomers to the Solid State. A photophysical investigation of a merocyanine Dye", Thesis No. 1358, (1995), Ecole Polytechnique Fédérale de Lausanne, Switzerland

## 4. Technical articles

1. F. Nüesch, „Sonnige Aussichten dank Polymersolarzellen“, *Plastics.NOW!*, Oktober 2007, p. 12-14
2. T. Lippert, M. Nagel, R. Fardel and F. Nüesch "Light-emitting polymer pixels deposited by laser induced forward transfer", *The Laser User*, Issue 56, Autumn 2009, 17-19
3. F. Nüesch, „Des plastiques semi-conducteurs pour l'électronique jetable“, *Bulletin SEV/AES*, Association pour l'électronique Suisse, Janvier-Février 2010