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SUPERVISION OF PHD THESES

1. *Investigation of the driving forces of metal-insulator transitions in LaSrFeNi-oxides: Correlation of crystallographic structure, electronic structure and transport*; Swiss National Science Foundation # 200021-116688; 01.08.2007 – 31.07.2010; Candidate Ms. Selma ERAT, Defense 24 June 2010, **ETH Zürich**, Materials Science Department Prof. L.J. Gauckler, Diss ETHZ # 19155
<http://e-collection.library.ethz.ch/eserv/eth:2123/eth-2123-01.pdf>
2. *Synthesis and assessment of mixed metal-oxide nanoparticles films and heterojunctions for solar photoelectrochemical hydrogen fuel production*; Swiss Federal Office of Energy # 153476; 01.02.2009 – 31.01.2012; Candidate Mr. Debajeet K. BORA; **University of Basel**, Dept. of Chemistry, Prof. E.C. Constable.
<http://edoc.unibas.ch/1451/>
http://edoc.unibas.ch/1451/1/Thesis_final_30.01.2012_print.pdf
3. *Effect of lattice volume and imperfections on the proton-phonon coupling in proton conducting lanthanide transition metal oxides: High pressure and high temperature neutron and impedance studies*; Swiss National Science Foundation # 200021-124812; <http://p3.snf.ch/project-124812> , 01.09.2009 – 31.08.2012; Candidate Ms. Qianli CHEN, **ETH Zürich**, Physics Department; Prof. Joel Mesot
4. *Oxide nanoparticle based gas sensors*; Swiss-Polish PhD School; 01.02.2010 – 31.01.2013; Candidate Ms. Dorota FLAK; **AGH Krakow**, Materials Science & Ceramics Department; Prof. Mieczyslaw Rekas
5. *Ion conducting thin films*; Sciex project with **Kaunas University of Technology**, Lithuania, 01.03.2011 – 28.02.2012; Candidate Mr. Edvinas NAVICKAS; Physics Department; Prof. S. Tamulevicius
6. *Defects in the bulk and on surfaces and interfaces of metal oxides with photo-electrochemical properties: In-situ photo-electrochemical and resonant x-ray and electron spectroscopy studies*, Swiss National Science Foundation # 200021_132126; <http://p3.snf.ch/project-132126> , 01.06.2011-31.05.2014; Candidate Mr. Yelin HU, **EPFL Lausanne**, Prof. Michael Grätzel
7. *Reaction-diffusion processes for the growth of patterned structures and architectures: Bottom-up approach for photoelectrochemical electrodes*, Swiss National Science Foundation # 200021-137868; <http://p3.snf.ch/project-137868> , 01.11.2011-31.10.2014; with **Univ. of Basel**, Prof. E.C. Constable