

Özden Çelikbilek

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4 Rue Alexander Fleming, 38400
St Martin D'Hères, France

Offering solid competencies and proven track record documented by B.S. degree in Chemistry, followed by M.S. degree in Material Science and proceeding PhD in Electrochemistry paired with three year laboratory experience in solid oxide fuel cell components.

- Education**
- PhD, Solid State Electrochemistry** [2013-Present]
University of Grenoble Alpes, France
- Master Degree, Erasmus Mundus - Material Science Exploiting Large Scale Facilities-MaMaSELF** [2012-2013]
University of Montpellier II, France
- University of Torino, Italy [2011-2012]
- Bachelor of Science, Chemistry** [2006-2010]
Middle East Technical University, Turkey
- Experience**
- PhD, LEPMI and SIMAP Laboratories in Grenoble INP** [2013-Present]
Labelled Laboratory of excellence, CEMAM (The Centre of Excellence of Multifunctional Architected Materials) sponsored by the National Research Agency
3 years of PhD on the investigation of the complex relationships between material properties, processing, micro/nano structure and electrode performance coupled with 3D FEM modelling
Supervisor: Prof. Dr. Elisabeth Djurado
- Msc, European Synchrotron Radiation Facility, ID26** [2013]
Six months of full-time internship in accordance with master thesis subject on the investigation of stoichiometry and valence state of rare-earth doped ceria via high brilliant synchrotron radiation.
Supervisor: Dr. Pieter Glatzel
- Msc, Chemistry and Crystallochemistry of Materials (C2M), Univ. Montpellier II** [2012-2013]
Master thesis on the investigation of the stoichiometry and valence states of ceria based compounds with varied concentration of rare earth-substituents and their influence on the oxygen mobility mechanism.
Supervisor: Prof. Dr. Werner Paulus

Undergraduate Research, Conducting Polymers and their Applications

Middle East Technical University

[2009-2011]

Research on the effect of donor (D) and acceptor (A) units on the structure property relationships, design, synthesis, characterization and electropolymerization of D-A-D type polymer systems.

Supervisor: Prof. Dr. Ahmet M. Onal

Techniques

XAS: XANES	Focused Ion Beam / SEM
X-ray Diffraction	Synchrotron tomography
Impedance Spectroscopy	Reconstruction of images
Scanning-Transmission Electron Microscopy (SEM-TEM)	

Publications

1. **Celikbilek, O.**, Icli-Ozkut, M., Algi, F., Onal, A.M., Cihaner, A., *Donor-acceptor polymer electrochromes with cyan color: Effect of alkyl chain length on doping processes, Org Electron*, 13, 206-213, (2012).
2. Sar, J., **Celikbilek, O.**, Villanova, J., Dessemond, L., Martin, C., Djurado, E., *Three dimensional analysis of Ce_{0.9}Gd_{0.1}O_{1.95}-La_{0.6}Sr_{0.4}Co_{0.2}Fe_{0.8}O_{3-δ} oxygen electrode for solid oxide cells, J. Eur. Ceram. Soc.* **35**, 2-10 (2015).
3. **Celikbilek O.**, Jauffres D., Burriel M., Dessemond L., Martin C.L., Djurado E., *A coupled experimental/numerical approach for tuning high-performing SOFC-cathode, Journal of Materials Chemistry A, to be submitted*

International communications

1. **6th International Conference on Fundamentals and Development of Fuel Cells, FDFC**, Toulouse, France, February 2015, *Towards architected SOFC electrodes: A study of micro/nano-structural evolution*, (oral) **O. Celikbilek**, M. Burriel, L. Dessemond, E. Djurado and C. L. Martin
2. **MAT4ENERGY Workshop**, Grenoble, France, June 2014, *Effect of sintering on the microstructural properties of a composite cathode for SOFC*, (poster) **O. Celikbilek**, M. Burriel, E. Djurado
3. **Second International Workshop on Nano Materials for Energy Conversion, NMEC-2014**, Vietnam, Nov. 2014, *Composite cathodes towards improved performances for IT-SOFC*, (poster), **O. Celikbilek**, M. Burriel, L. Dessemond, E. Djurado

National communications (France)

1. **Colloque Labex CEMAM**, Grenoble, France, January 2016, *A coupled experimental/numerical approach for tuning high-performing SOFC-cathode*, (poster) **O. Celikbilek**, M. Burriel, C. Martin, E. Djurado

2. **GdR-HySPàC-2015**, Porticcio, France, October 2015, *Microstructural control of electrochemical properties of innovative oxygen electrode for SOFCs: experimental vs modelling*, (oral) **O. Celikbilek**, D. Jauffres, M. Burriel, L. Dessemond, C. Martin, E. Djurado
3. **Congrès de la Société Chimique de France, SCF-2015**, Lille, France, July 2015, *A study of micro/nano-structural evolution of a composite cathode for SOFC*, (poster) **O. Celikbilek**, M. Burriel, L. Dessemond, E. Djurado
4. **Journée de Printemps de la section Rhône-Alpes de la Société Chimique de France**, Lyon, France, June 2015, *Composite cathodes towards improved performances for IT-SOFC*, (poster) **O. Celikbilek**, D. Jauffres, M. Burriel, L. Dessemond, C. Martin, E. Djurado
5. **Journée de printemps Section Rhône-Alpes de la Société Chimique de France**, Chambéry, France, June 2014, *Micro/nano-structural evolution of a composite cathode for SOFC*, (poster) **O. Celikbilek**, M. Burriel, E. Djurado
6. Colloque Labex CEMAM, Grenoble, France, July 2014, *Architected electrodes for energy conversion: SOFCs, SOECs*, (poster) O. Celikbilek, M. Burriel, C. Martin, E. Djurado

Languages

English: Highly proficient in written and spoken English

French: Basic communicational skills / working knowledge