

Elizaveta Mensi



- Highest Graduation:** PhD in Chemical Technology (2011) from Luleå University of Technology, Sweden
- Current Position:** Scientist at the Laboratory for Molecular Engineering of Optoelectronic Nanomaterials (LIMNO), EPFL, Lausanne
- Experience:** Postdoc at KTH, Stockholm, Sweden; Assistant Professor at LTU, Luleå, Sweden
- Research Interest:** Electrode materials for water splitting, PEM-based water electrolysis
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Most Important Publication/Presentation:

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Research Project:

Efficient energy storage, e.g. in the form of a chemical fuel such as hydrogen, is required to successfully integrate intermittent renewable energy sources into the global energy supply of the future. Hydrogen can be produced electrochemically by alkaline water electrolysis, a well-established and commercially available technology. However, water electrolysis costs need to be further reduced in order for this technology to become economically competitive with traditional fossil fuel based routes of hydrogen production. Water oxidation half-reaction presents the bottleneck of the overall water electrolysis due to its sluggish kinetics and large overpotentials. This project aims at developing inexpensive, robust and stable at realistic operation conditions catalytically active electrode materials for alkaline water oxidation based on naturally occurring minerals, steels and other alloys.

(with SCCER HaE 2019-2020)