

**Current positions**

Director of the Institute of Energy and Climate Research: Materials Synthesis and Processing (IEK-1), FZJ and Full Professor at RWTH Aachen University (both since 2014)

Spokesperson of DFG Priority Program SPP1959 “Fields Matter”

Coordinator of research platform “Oxides” (BMBF Festbatt)

Previous positions

Professor, Friedrich-Schiller-Universität Jena, Germany (2011-2014)

Head of Emmy Noether Group, TU Darmstadt, Germany (2007-2011)

Scientific degrees

PhD in Engineering Sciences, Université de Franche-Comté, France (2003)

Habilitation, TU Darmstadt (2012)

Recent research topics

Ceramic materials and functional layers, solid oxide fuel & electrolysis cells, gas separation membranes, solid-state batteries, gas turbines

Awards, honors, memberships

ACerS Robert L. Coble Award for Young Scholars (2011), FEMS Materials Science and Technology Prize (2011), DGM Masing-Prize (2010), Guest professorship at Tokyo Institute of Technology, Japan (2013, 2015)

Publications/Patents (5 most important)

- **A. Dash, R. Vaßen, O. Guillon, J. Gonzalez-Julian**, Molten salt shielded synthesis of oxidation prone materials, *Nat. Mater.* 18, 465–470 (2019) [doi:10.1038/s41563-019-0328-1](https://doi.org/10.1038/s41563-019-0328-1)
- **O. Guillon**, C. Elsässer, O. Gutfleisch, J. Janek, S. Korte-Kerzel, et al., Manipulation of matter by electric and magnetic fields: Toward novel synthesis and processing routes of inorganic materials, *Mater. Today* 21(5), 527-536 (2018) [doi:10.1016/j.mattod.2018.03.026](https://doi.org/10.1016/j.mattod.2018.03.026)
- **Q. Ma**, M. Balaguer, et int., **F. Tietz, N.H. Menzler, O. Guillon** Characterization and Optimization of $\text{La}_{0.97}\text{Ni}_{0.5}\text{Co}_{0.5}\text{O}_{3-\delta}$ -Based Air-Electrodes for Solid Oxide Cells, *ACS Appl. Energy Mater.* 1(6), 2784–2792 (2018) [doi:10.1021/acsaem.8b00456](https://doi.org/10.1021/acsaem.8b00456)
- **C.-L. Tsai**, V. Roddatis, et int., **M. Bram**, P. Heitjans, **O. Guillon**, $\text{Li}_7\text{La}_3\text{Zr}_2\text{O}_{12}$ Interface Modification for Li Dendrite Prevention, *ACS Appl. Mater. Inter.* 8(16), 10617–10626 (2016) [doi:10.1021/acsami.6b00831](https://doi.org/10.1021/acsami.6b00831)
- **O. Guillon, J. Gonzalez-Julian**, B. Dargatz, T. Kessel, G. Schierning, et al., Field-Assisted Sintering Technology/Spark Plasma Sintering: Mechanisms, Materials, and Technology Developments, *Adv. Eng. Mater.* 16(7), 830 (2014) [doi:10.1002/adem.201300409](https://doi.org/10.1002/adem.201300409)