

**Current positions**

Director of the Helmholtz Institute Ulm, KIT, Germany (since 2018)
Head Electrochemistry for Batteries, HIU-KIT, Germany (since 2014)
Professor, Karlsruhe Institute of Technology, Germany (since 2014)

Previous position

Professor, University of Muenster, Germany (since 2010 - 2014)

Scientific degree

PhD in Chemical Sciences University of Rome I, Italy (1993)

Recent research topics

Electrode Materials; Liquid, polymer and solid Electrolytes; Green binders; Li-, Na-, Mg-, Ca- and Zn- batteries; Supercapacitors

Awards, honors, memberships

Research Award of the Electrochemical Society, Inc. Battery Div. (2012)
Society of Electrochemistry Fellow (2015)
Member of the Leopoldina Academy (since 2019)

Publications (5 most important)

- X. Gao, A. Mariani, S. Jeong, X. Liu, X. Dou, M Ding, A. Moretti, S. Passerini, Prototype rechargeable magnesium batteries using ionic liquid electrolytes *J. Power Sources* (2019) [doi:10.1016/j.jpowsour.2019.03.049](https://doi.org/10.1016/j.jpowsour.2019.03.049)
- T. Ates, M. Keller, J. Kulisch, T. Adermann, S. Passerini, Development of an all-solid-state lithium battery by slurry-coating procedures using a sulfidic electrolyte, *Energy Storage Materials* (2019) [doi:10.1016/j.ensm.2018.11.011](https://doi.org/10.1016/j.ensm.2018.11.011)
- X. Liu, H. Zhang, D. Geiger, J. Han, A. Varzi, U. Kaiser, A. Moretti, S. Passerini, Calcium vanadate sub-microfibers as highly reversible host cathode material for aqueous zinc-ion batteries, *Chemical Communications* (2019) [doi:10.1039/c8cc07243d](https://doi.org/10.1039/c8cc07243d)
- U. Ulissi, S. Ito, S.M. Hosseini, A. Varzi, Y. Aihara, S. Passerini, High Capacity All-Solid-State Lithium Batteries Enabled by Pyrite-Sulfur Composites, *Advanced Energy Materials* (2018) [doi:10.1002/aenm.201801462](https://doi.org/10.1002/aenm.201801462)
- C. Vaalma, D. Buchholz, M. Weil, S. Passerini, A cost and resource analysis of sodium-ion batteries, *Nature Reviews Materials* (2018) [doi:10.1038/natrevmats.2018.13](https://doi.org/10.1038/natrevmats.2018.13)