

CONRAD R. STOLDT
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SHORT BIOSKETCH

I. Education

1999	Ph.D. Physical & Materials Chemistry	Iowa State University
1994	B.A. Chemistry	University of Colorado at Boulder

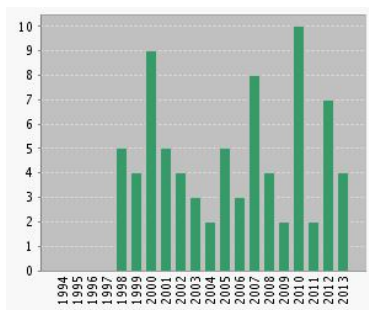
II. Current University Appointment

2009-present Associate Professor

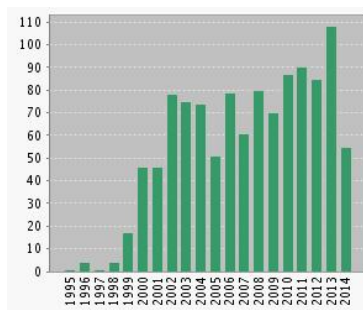
III. University Publications

Total citations: 1113 (Thomson-Reuters Web of Science; August/2014)

H-index: 22



Published Items in Each Year



Citations in Each Year

Representative publications:

Brian E. Francisco, Conrad R. Stoldt, and J.-Claude M'Peko, "Lithium-ion trapping from local structural distortions in NASICON electrolytes," *ACS Chemistry of Materials*, published online July, 2014 ([dx.doi.org/10.1021/cm5013872](https://doi.org/10.1021/cm5013872)).

T.A.Yersak, et al., "Solid State Enabled Reversible Four Electron Storage," *Advanced Energy Materials* 3 (2013) 120-127.

Brian A. Larsen, Kendall M. Hurst, W. Robert Ashurst, Natalie J. Serkova and Conrad R. Stoldt, "Mono and dialkoxysilane surface modification of superparamagnetic oxide nanoparticles for application as magnetic resonance imaging contrast agents," *J. Materials Research* 27 (2012) 1846-1852.

Brian E. Francisco, Christina M. Jones, Se-Hee Lee, and Conrad R. Stoldt, "Nanostructured all-solid-state supercapacitor based on Li₂S-P₂S₅ glass-ceramic

electrolyte,” *Appl. Phys. Lett.* 100 (2012) 103902.

H. Alex Macpherson and Conrad R. Stoldt, “Iron Pyrite Nanocubes: Size and Shape Considerations for Photovoltaic Application,” *ACS Nano* 6 (2012) 8940–8949.

IV. University Teaching Ratings since 2006

Average Instructor Rating: 4.92/6.00

Average Course Rating: 4.25/6.00

V. Current Sources of Research Funding

NSF (3), ARPA-E (1), Sandia National Laboratory (1)

VI. Current University Service

Associate Chair for Undergraduate Programs, Mechanical Engineering

Member of the Administrator Appraisal Committee (AAC), Boulder Faculty Assembly

VII. Current External Service

Associate Editor, *Nature Scientific Reports*

VIII. Summary of Activities

Conrad R. Stoldt is an Associate Professor and Associate Chair for Undergraduate Programs in the Department of Mechanical Engineering at the CU-Boulder. Dr. Stoldt leads an active research program in the design and processing of nanostructured materials for energy conversion and storage applications, and is a leader in the study of corrosion in semiconductor materials. Ongoing research areas include nanoparticle synthesis, thin film deposition by CVD and sputtering, analysis of corrosion mechanisms in electronic materials, and the manufacture of solid-phase electrode and electrolyte materials for energy storage. Dr. Stoldt has almost 20 years of experience in the fields of materials science and physical chemistry, and over this time has successfully managed numerous research contracts from DARPA, the Army Research Office, the DOE, the NSF, ARPA-E, NREL, Sandia Labs, and the State of Colorado. Currently, he serves as PI or co-PI on five research projects sponsored by the NSF, ARPA-E, and Sandia National Laboratory. With Professor S.-H. Lee in Mechanical Engineering, he co-founded Solid Power Inc. in 2012, a CU-Boulder spin-out chartered with the further development and commercialization of their all-solid-state lithium metal battery technology. Solid Power Inc. was recently awarded a highly competitive and prestigious research contract from the DOE’s ARPA-E to support battery R&D with the goal of large format cell and pack-level prototyping. Professor Stoldt’s teaching interests include materials science, thermodynamics, chemistry/physics, and data analysis.