

## JIAN LUO

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### EDUCATION

Tsinghua U. (Beijing)	Materials Science and Engineering	B.Eng.	1994
Tsinghua University	Electronics and Computer Technology (dual-degree)	B.Eng.	1994
M.I.T. (Cambridge, MA)	Materials Science and Engineering	M.S.	1999
M.I.T.	Ceramics (minor in Solid State Physics)	Ph.D.	2001

### APPOINTMENTS

2013 – present	Professor	University of California, San Diego
2012	Professor	Clemson University
2009 – 2012	Associate Professor	
2003 – 2009	Assistant Professor	
2005 (1 month)	Summer Faculty Researcher	Oak Ridge National Laboratory
2001 – 2003	Member of Technical Staff	Lucent Technologies, Inc. Bell Labs and OFS Fitel

### SELECTED AWARDS AND HONORS

- Brimacombe Medal, “for significant contributions of understanding materials interfaces, especially developing grain boundary phase diagrams and uncovering the mysterious mechanisms of liquid metal embrittlement and activated sintering.” The Minerals, Metals & Materials Society (TMS), 2019
- Fellow, The American Ceramic Society (ACerS), 2016
- Vannevar Bush Faculty Fellow (formerly “National Security Science and Engineering Faculty Fellow”), U.S. Department of Defense, 2014-2020
- Air Force Office of Scientific Research Young Investigator, 2007 (*Metallic Materials* program)
- National Science Foundation CAREER award, 2005 (*Ceramics* program)
- 2018 Chair and 2016 Vice Chair, Gordon Research Conference, Solid State Studies in Ceramics.
- Chair (2012-2013), Vice Chair (2011-2012), and Secretary (2010-2011) of the Basic Science Division, The American Ceramic Society (ACerS)

### SELECTED PUBLICATIONS

- J. Luo, “Viewpoint: The Scientific Questions and Technological Opportunities of Flash Sintering: From a Case Study of ZnO to Other Ceramics,” *Scripta Materialia*, 146: 260-266 (2018)
- S. Yang, N. Zhou, H. Zheng, S. P. Ong, and J. Luo, “First-order Interfacial Transformations with a Critical Point: Breaking the Symmetry at a Symmetric Tilt Grain Boundary,” *Physical Review Letters*, 120, 085702 (2018).
- T. Hu, S. Yang, N. Zhou, Y. Zhang, J. Luo, “Role of Disordered Bipolar Complexions on the Sulfur Embrittlement of Nickel General Grain Boundaries,” *Nature Communications*, 9, 2764 (2018).
- Z. Yu, P. R. Cantwell, Q. Gao, D. Yin, Y. Zhang, N. Zhou, G. S. Rohrer, M. Widom, J. Luo\*, and M. P. Harmer\*, “Segregation-Induced Ordered Superstructures at General Grain Boundaries in a Ni-Bi Alloy,” *Science*, 358, 10197 (2017)
- J. Gild, Y. Zhang, T. Harrington, S. Jiang, T. Hu, M. C. Quinn, W. M. Mellor, N. Zhou, K. Vecchio, J. Luo\*, “High-Entropy Metal Diborides: A New Class of High-Entropy Materials and a New Type of Ultrahigh Temperature Ceramics.” *Scientific Reports*, 6, 37946 (2016).
- J. Luo\*, H. Cheng, K. M. Asl, C. J. Kiely, and M. P. Harmer\*, “The Role of a Bilayer Interfacial Phase on Liquid Metal Embrittlement,” *Science*, 333, 1730 (2011)