

**Jeffrey J. Urban, Ph.D.**  
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***Education and Training:***

<b>Institution</b>	<b>Major</b>	<b>Degree</b>	<b>Year</b>
The Pennsylvania State University	Biochemistry & Molecular Biology	B.S.	1998
Harvard University	Physical Chemistry	M.S., Ph.D.	2004

***Research and Professional Experience:***

Jan 2012-present     **Facility Director**, Inorganic Facility, The Molecular Foundry, Lawrence Berkeley National Laboratory

Sep. 2010-Dec. 2012     **Deputy Facility Director**, Inorganic Facility, The Molecular Foundry, Lawrence Berkeley National Laboratory

Nov. 2007-present     **Staff Scientist**, The Molecular Foundry, Lawrence Berkeley National Laboratory

Nov. 2004-Oct. 2007     **Postdoctoral Research Fellow**, University of Pennsylvania, and I.B.M. T.J. Watson Research Center

***Publications:*** (others available at: <http://tinyurl.com/q8ks6jf>)

1. **Jeffrey J. Urban**, Wan Soo Yun, Qian Gu and \*Hongkun Park, "Synthesis of single-crystalline perovskite nanowires composed of barium titanate and strontium titanate," *J. Am. Chem. Soc.* 124, 1186 (2002).
2. Wan Soo Yun, **Jeffrey J. Urban**, Qian Gu and \*Hongkun Park, "Ferroelectric properties of individual barium titanate nanowires investigated by scanned probe microscopy," *Nano Lett.* 2, 447-450 (2002).
3. Robert Y. Wang, Joseph P. Feser, Xun Gu, Kin Man Yu, Rachel A. Segalman, Arun Majumdar, \*Delia J. Milliron, and \***Jeffrey J. Urban**, "Universal and solution-processable precursor to bismuth chalcogenide thermoelectrics", *Chem. Mater.*, 22(6), 1943-1945 (2010).
4. \***Jeffrey J. Urban**, Dmitri V. Talapin, Elena V. Shevchenko, Cherie R. Kagan, and \*C.B. Murray "Synergism in binary nanocrystal superlattices leads to enhanced p-type conductivity in self-assembled PbTe/Ag<sub>2</sub>Te thin films," *Nature Materials* 6(2) 115-121 (2007).
5. Rizia Bardhan, Lester O. Hedges, Cary L. Pint, Ali Javey, \*Stephen Whitelam and \***Jeffrey J. Urban**, "Uncovering the intrinsic size-dependence of hydriding phase transitions in nanocrystals", *Nature Materials*, 12, 905-912 (2013).
6. \*Joseph P. Feser, Emory Chan, Arun Majumdar, Rachel A. Segalman and \***Jeffrey J. Urban**, "Ultralow thermal conductivity in inorganic CdSe nanocomposites with controlled grain size", *Nano Lett.*, 13(5), 2122-2127 (2013).

***Synergistic Activities:***

1. Symposium Co-Organizer: US-Japan Frontiers of Engineering Symposium, National Academy of Engineering, Summer 2014, DOE NSRC Meeting on Nanocrystals, Argonne, 2012, Electronic Materials Symposium, Santa Clara, 2009-2012, APS March Meeting, Symposium on Thermoelectric Materials Physics, 2012, MRS Spring Meeting, Directed

Assembly and Self-Assembly: Device Applications, 2010; Proposal Reviewer for: NSF DMRE on Materials Genome, 2014, DOE-BES Early Career Research Proposals, 2014, NSF Proposal in SSMC, 2014, Petroleum Research Fund, 2014, NWO, Netherlands Scientific Programs, 2013, DOE-BES, Program Renewal for Organic PV, 2013, LBNL, Lab Directed R&D Proposals, 2012, UC Berkeley, France-Berkeley Fund, 2009-2012, ARPA-E, BEETIT program proposals, 2010; Refereed > 50 manuscripts for >15 journals including Nature, Nature Materials, Nature Nanotechnology, Nature Communications, Nano Letters, Advanced Materials, and Journal of the American Chemistry Society.

2. Scientific Outreach: Invited speaker for scientific public outreach symposium at Berkeley Repertory Theater, “Great in 8”, presenting 8 great research ideas to a general public audience >300 people in audience.

3. Selected Awards & Honors

National Academy of Engineering US Frontiers of Engineering Symposium Organizer (2014); National Academy of Engineering US Frontiers of Engineering Attendant (2013); Outstanding Performance Award, Materials Sciences Division, Lawrence Berkeley National Labs (2011). Outstanding Alumni Award in the Sciences, Drew University (2010); Drexel Outstanding Research Award for MSE (2008).