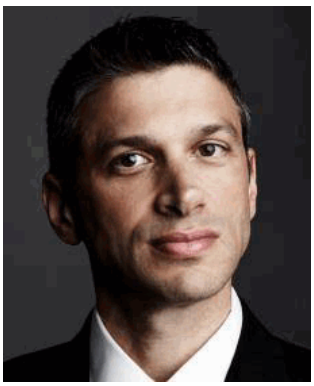
JEFFREY C. GROSSMAN



Professor of Materials Science and Engineering at MIT
Top Innovator

Jeffrey C. Grossman is a Professor in the Department of Materials Science and Engineering at the Massachusetts Institute of Technology. His research tackles the materials bottlenecks in energy conversion, energy storage, and clean water technologies. A MacVicar Fellow of MIT and a Fellow of the American Physical Society, Dr. Grossman has published more than 150 scientific papers, holds 17 current or pending U.S. Patents, and has recently appeared on a number of television/radio shows to discuss the future of clean energy and water including the Fred Friendly PBS series, the Ecopolis program on the Discovery Channel, and NPR's OnPoint Radio.

Jeffrey C. Grossman received his Ph.D. in theoretical physics from the University of Illinois, performed postdoctoral work at U.C. Berkeley, and was a Lawrence Fellow at the Lawrence Livermore National Laboratory. He returned to Berkeley as Director of a Nanoscience Center and Head of the Computational Nanoscience research group with focus on energy applications.

In summer 2009 Prof. Grossman joined MIT, assuming a position that was the result of an interdepartmental search organized by the School of Engineering, for faculty pursuing energy research. His group uses theory and simulation to gain fundamental understanding, develop new insights based on this understanding, and then use these insights to develop new materials for energy conversion and storage with improved properties – working closely with experimental groups at each step.

Professor Grossman's current research centers on the development of new solar thermal fuels, the design of nano-scale technologies for sequencing DNA in hours, three-dimensional photovoltaic panels, new materials to convert waste heat into electricity, and more. He has also developed entirely new ways to encourage idea generation and creativity in interdisciplinary science, including 'speedstorming,' a method of pair-wise idea generation that works similarly to a round-robin 'speed-dating' technique.

The topics of his scientific papers are solar photovoltaics, thermoelectrics, hydrogen storage, solar fuels, nanomechanical phenomena, and self-assembly.

Topics (Selection):

- Materials design for the future of clean energy and water
- Solving energy problems, one molecule at a time
- Making materials to combat climate change
- Water
- Climate