

## John F. Mitchell

Senior Scientist in the Emerging Materials Group  
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John F. Mitchell is a Senior Scientist in the Emerging Materials Group at Argonne National Laboratory and Associate Director of the Materials Science Division. He received his A.B. in chemistry from Cornell University in 1987 and his Ph.D. from the University of Chicago in 1993 for theoretical studies of defect structures and order-disorder transitions of early transition metal chalcogenides. From 1993-1996, he was a DOE Distinguished Postdoctoral Fellow at Argonne's Materials Science Division, where his research involved synthesis of superconducting cuprates and then synthesis and crystal growth of rare earth manganites exhibiting colossal magnetoresistance. Appointed to the Argonne staff in 1996, his current research emphasizes strategic synthesis, crystal growth, and structural studies of transition metal oxides and chalcogenides using neutron and x-ray scattering. Scientific areas of interest include: correlated electron systems spanning 3d to 5d oxides, geometric frustration, multiferroics, and oxide battery electrode materials. Mitchell is author or co-author of more than 250 peer-reviewed articles resulting from this research. He has coordinated the development team for a high-resolution powder diffractometer at the Advanced Photon Source. He has also led a project in the DOE Center of Excellence in Synthesis and Processing entitled "Spin Polarized Transport in Complex Oxides." Since 2010 he has been appointed to lead Argonne's strategic initiative in Materials and Molecular Design and Discovery. He was awarded the DOE Early Career Award and the Presidential Early Career Award for Scientists and Engineers in 1999 and 2000, respectively, and the University of Chicago Distinguished Performance Award for Argonne Scientists in 2006. In 2002, he was elected Fellow of the American Physical Society.