

Abstract for an Invited Paper  
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**Solar to Fuel Conversion with Earth Abundant Materials**

DANIEL G. NOCERA, Massachusetts Institute of Technology

Studies in the Nocera group have led to the creation of a new earth-abundant catalyst that captures many of the functional elements of photosynthesis and in doing so provides a highly manufacturable and inexpensive method to effect a carbon-neutral and sustainable method for solar storage - solar fuels from water-splitting. This discovery enables an inexpensive 24/7 solar energy system for the individual, a capability that is attractive in the underdeveloped as well as the developed world.