

Abstract Submission to EPRI SCTF 5

Search for New Cuprate Compounds at Stanford University

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EPRI has underway a three-year program at Stanford University to explore novel cuprate compounds as future platform materials for superconducting and magnetic systems. This effort utilizes “ion beam assisted deposition (IBAD),” a technology developed by EPRI at Stanford in the 1990s. Initial efforts focus on use of IBAD to grow metastable films of the cubic phase of copper monoxide. We will report on experimental progress to date as well as the use of frontier computational methods to model expected physical properties of this structure.