Future Directions for Cuprate Conductors

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Abstract - Superconducting cuprate conductors present several challenges and research opportunities related to the areas of performance and cost. In order to meet these challenges, a combination of radical new approaches is required. This paper proposes several novel ideas and demonstrates early results in some of these areas.

Index Terms - Crystal anisotropy engineering, Cuprate superconductors, Flux pinning, Liquid assisted growth, Tc enhancement, Uniaxial strain.