

Abstract Submitted
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Bonding of a silver sheath on textured-powder ribbons of green-state Bi-2212 superconductor KLAUS SMIT, PETER MCINTYRE, KYLE DAMBORSKY, FENG LU, NATHANIEL POGUE — A novel method is being developed for fabrication of textured-powder jelly-roll (TPJR) Bi-2212/Ag superconducting wire for applications in high-field magnets. In this process two silver foils must be fused together to enclose a ribbon of compacted, textured Bi-2212 fine powder. Fusing the silver foils must be accomplished with minimum heating of the superconducting powder filling. We are investigating methods using cold-welding, ultrasonic welding, and laser welding. Results of those investigations will be reported.

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