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Microstructure evolution and mechanical properties of ZnAl2O4-reinforced Al2O3/Al2O3 joints brazed with a bismuth borate zinc glass

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Microstructure evolution and mechanical properties of

ZnAl₂O₄-reinforced Al₂O₃/Al₂O₃ joints brazed with a bismuth

borate zinc glass

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Abstract:

Amorphous bismuth borate zinc glass with a composition of

40Bi₂O₃-40B₂O₃-20ZnO (in mol.%) was used as a braze to join 95 wt.% purity

alumina ceramics (95Al₂O₃) in air. The interfacial phases in the brazed joints were

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