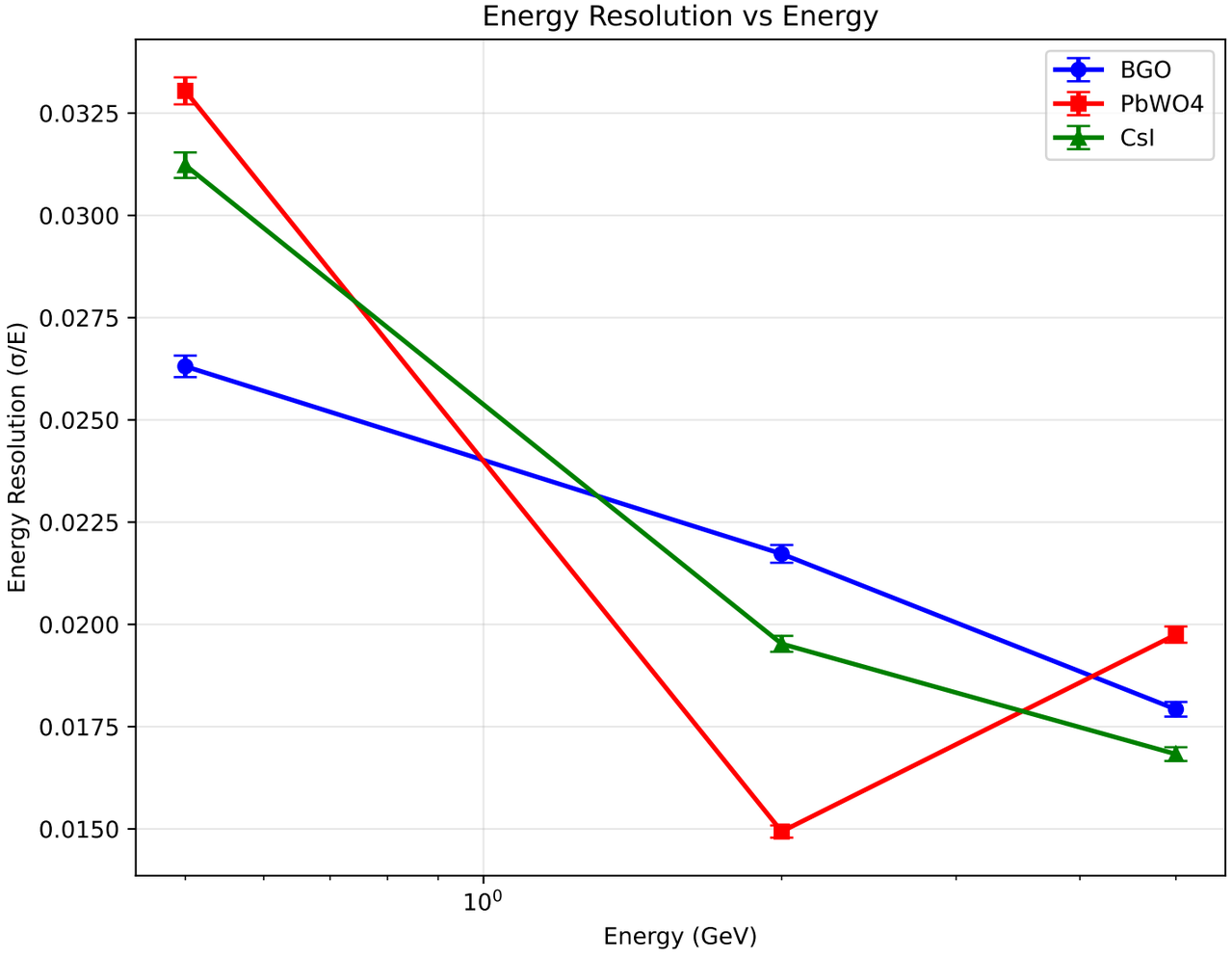
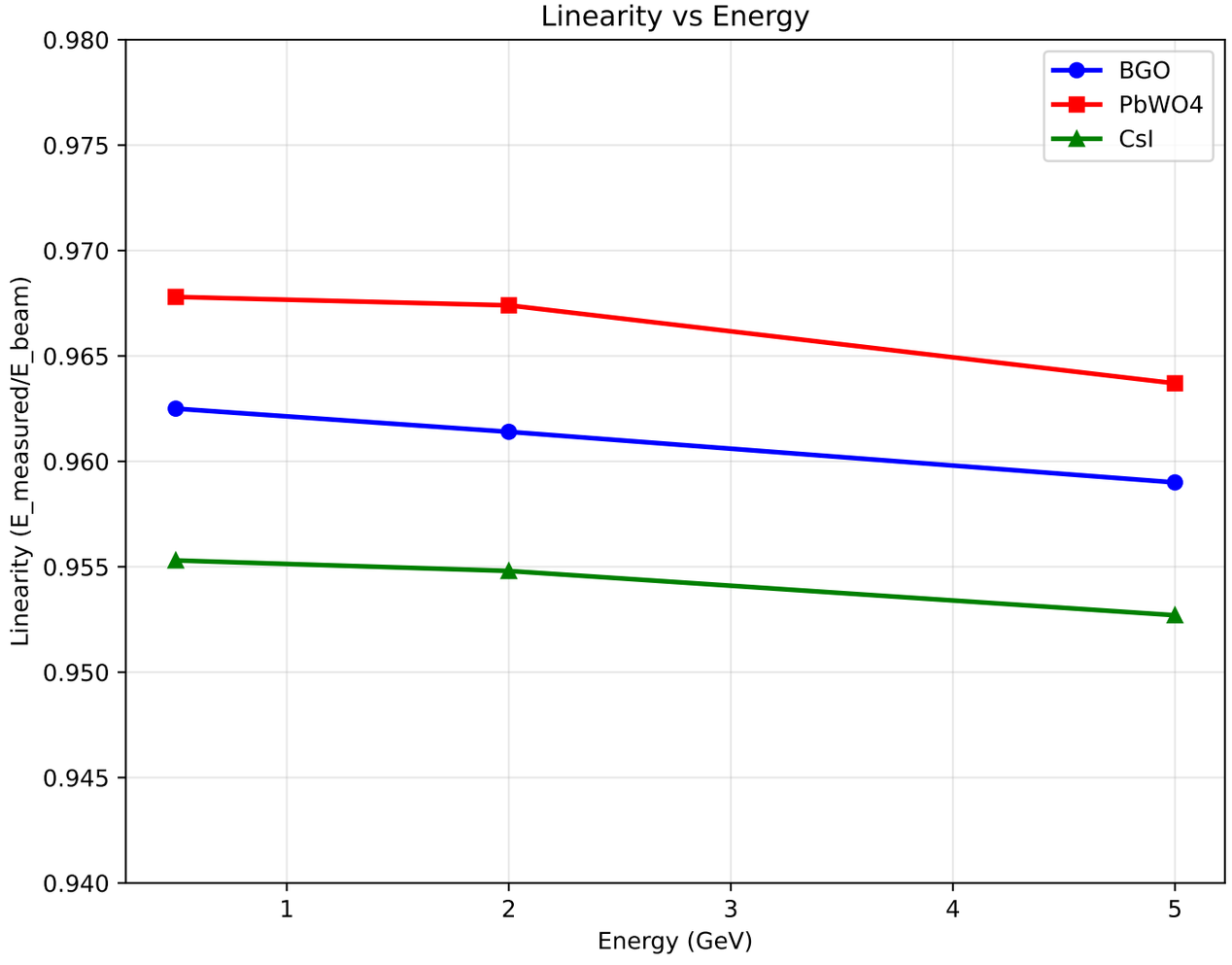
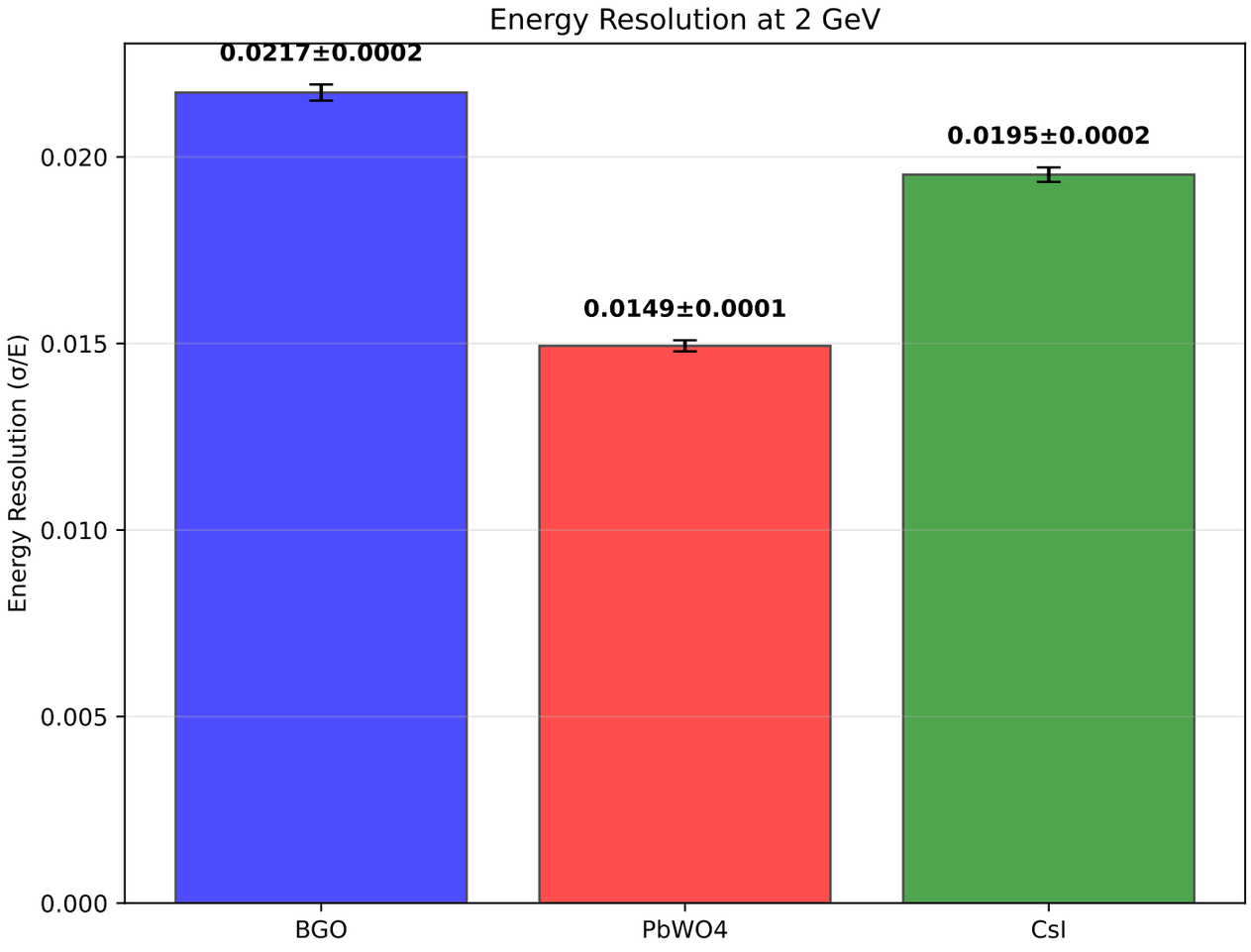
# Material Comparison: BGO vs PbWO4 vs CsI

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Material Performance Summary:

BGO (Bismuth Germanate):
• Best resolution at 5 GeV: 0.0179±0.0002
• Stable linearity: 0.961±0.001
• High density, compact design

PbWO4 (Lead Tungstate):
• Best resolution at 2 GeV: 0.0149±0.0001
• Excellent linearity: 0.966±0.002
• Fast, radiation hard

CsI (Cesium Iodide):
• Good high-energy resolution: 0.0168±0.0002
• Lower linearity: 0.954±0.001
• High light yield, cost effective

Optimal Choice: PbWO4
• Best overall resolution at 2 GeV
• Most stable linearity across energy range
• Suitable for precision calorimetry
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