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Plastic Deformation of Metal/Graphene Composites with Bimodal Grain Size Distribution: a Brief Review

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Abstract. We briefly review the experimental data and analytical models that describe plastic deformation and fracture processes in metal/graphene composites with a bimodal grain size distribution of the metallic matrix. We demonstrate that such composites can have high strength combined with good ductility. The effects of dislocation plasticity, grain boundary sliding and fracture processes on the mechanical properties of such composites are discussed.

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