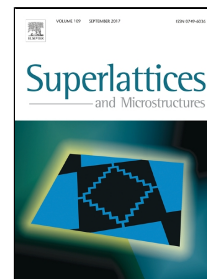


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Experimental investigation of the Contact Resistance of Graphene/MoS₂ interface treated with O₂ Plasma



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In this study, we investigate the contact resistances of different layered graphene film with MoS₂ film with Ti/Au electrodes under different O₂ plasma treatment time using the circular transmission line model (CTLTM). Annealing process followed O₂ plasma process to reduce the oxygen element introduced. Under the optimized condition of the O₂ plasma treatment, a relatively low contact resistance (~35.7 Ohm·mm) without back gate voltage in single-layer graphene/MoS₂ structure at room temperature was achieved compared with the existing reports.

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