NUMERICAL STUDY ON THE MECHANICAL PERFORMANCE OF GRAPHENE BRIDGES ON SILLICON THIN FILM TRANSISTORS

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SUMMARY: Finite Element Method (FEM) was adopted to design a graphene conductive bridge, which is regarded to have excellent mechanical, optical, and electrical properties, on the Si thin film transistors (TFTs). This paper demonstrates, by experimental and numerical methods, how the graphene film makes the Si TFT device mechanically stable.