Abstract Submitted
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Electron transport in graphene monolayers[1] JUN-QIANG LIU, DANIEL VALENCIA, University of Puerto Rico at Mayaguez — We demonstrate electronic transmission of a monolayer can be reduced when covered by a nanoribbon. The transmission reduction occurs at different energies determined by the width of the nanoribbon. We explain the transmission reduction by using of interference between the wavefunctions in the monolayer and the nanoribbon. Furthermore, we show the transmission reduction of a monolayer is combinable and propose a concept of "combination of control" for nano-application design.

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