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Supercurrent in Graphene Josephson Transistors WENZHONG BAO, UC-Riverside, FENG MIAO, GANG LIU, CHUNNING LAU — We investigate electrical transport in single or bi-layer graphene devices coupled to superconducting electrodes. In these two-dimensional Josephson junctions, we observed gate tunable supercurrent, multiple Andreev reflections and hysteretic current-voltage characteristics. Latest experimental progress on dependence of supercurrent on temperature, number of layers and source-drain separation will be discussed.

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