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JOSEPHSON JUNCTIONS WITH TUNGSTEN NANORODS AS WEAK LINKS

We present a first step towards creation of a heterostructure with two superconducting leads and tungsten nanorods connecting them. We show that such a trilayer exhibits Josephson properties and thus realizes a superconducting junction with a spin-orbit active weak link. Specific features revealed in current-voltage curves of the junctions under microwave irradiation are caused by a resonant interaction of the Josephson generation with standing waves in the long junctions (the so-called zero-field steps).

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