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Title:Tunable Terahertz Metamaterials Based on Electrically Controlled Piezoelectric Actuators

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Abstract:A new concept of tunable terahertz metamaterial with electrically controlled characteristics is suggested. Two versions of creating tunable metamaterials using piezoelectric cantilevers as controllable elements are designed. Configurations of tunable metamaterials designed as planar metal-dielectric structures of arrays of U-shaped resonators and square metal patches with piezoelectric actuators are proposed.

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