

Abstract Submitted
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Remotely Tunable Nonlinear Metamaterial at Microwave Frequency SHELBY LEE, Marietta College, SINHARA SILVA, JIANGFENG ZHOU, University of South Florida — We demonstrate a remotely tunable metamaterial at microwave frequency. The metamaterial consists of a two-gap split ring resonator with varactor diodes integrated in to one of the gaps. By varying a microwave pump signal remotely, the capacitance of the varactor diodes can be controlled. Thus we can tune the working frequency of the metamaterial. Our metamaterials enable an easily-applicable approach to realize tunable frequency without an external bias circuit compared to other tunable metamaterials.

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