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Title:Fishnet metamaterial from an equivalent circuit perspective

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Abstract:An equivalent circuit for the double-fishnet metamaterial is proposed. All lumped elements are inferred from the interpretation of the electric and magnetic fields as well as the surface currents generated when the structure is excited with a normally incident plane wave. The approach provides a physical meaningful circuit representation of the electromagnetic response of the double-fishnet metamaterial and underlines the tight link between the fishnet metamaterial and the extraordinary transmission phenomenon. © 2012 American Institute of Physics.

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