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Suppression of transmission minima and maxima with structured metal surface YONGYUAN ZHU, QIANJIN WANG, CHENGPING HUANG, JIAQI LI, Nanjing University, NATIONAL LABORATORY OF SOLID STATE MICROSTRUCTURES TEAM — Extraordinary optical transmission through perforated metal films has received much attention recently. In this paper, we propose a method for studying the transmission properties, in which the Fourier coefficient of reciprocal lattice vectors is manipulated. Especially, due to a zero Fourier coefficient, the suppression of transmission minima and maxima has been experimentally observed. The results open a new way to tailor the transmission properties of light.

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