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Highly Selective Surface-Wave Resonators for Terahertz Frequency Range Formed by Metallic Bragg Gratings

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Highlights

- Formation of surface modes confined at a finite metallic grating is described.
- Grating can form a high-quality and highly selective Bragg resonator for THz waves.
- Formulas for the spectrum of such resonator including Q-factors were obtained.
- Q-factor of the fundamental mode has an optimum with respect to corrugation depth.
- In THz range, optimum depth values justify the shallow corrugation approach used.

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