

# Abstracts

## Proposal for an Electrically Tunable Surface Plasmon Light Emitter (Letters)

---

*A. Singh, H.L. Hartnagel and D.C. Tiwari. "Proposal for an Electrically Tunable Surface Plasmon Light Emitter (Letters)." 1981 Transactions on Microwave Theory and Techniques 29.10 (Oct. 1981 [T-MTT]): 1117-1119.*

A new scheme is proposed to generate infrared waves by exciting thin-slab plasmon waves by hot-electron injection via a tunneling thin insulator. These plasmon waves are coupled out by a periodic structure, and, by way of example, this is demonstrated for a Karp structure. The calculated numerical values of the example at a wavelength of 15 - $\mu\text{m}$ , show that standard semiconductor technology can be used to fabricate the device.

 [Return to main document.](#)