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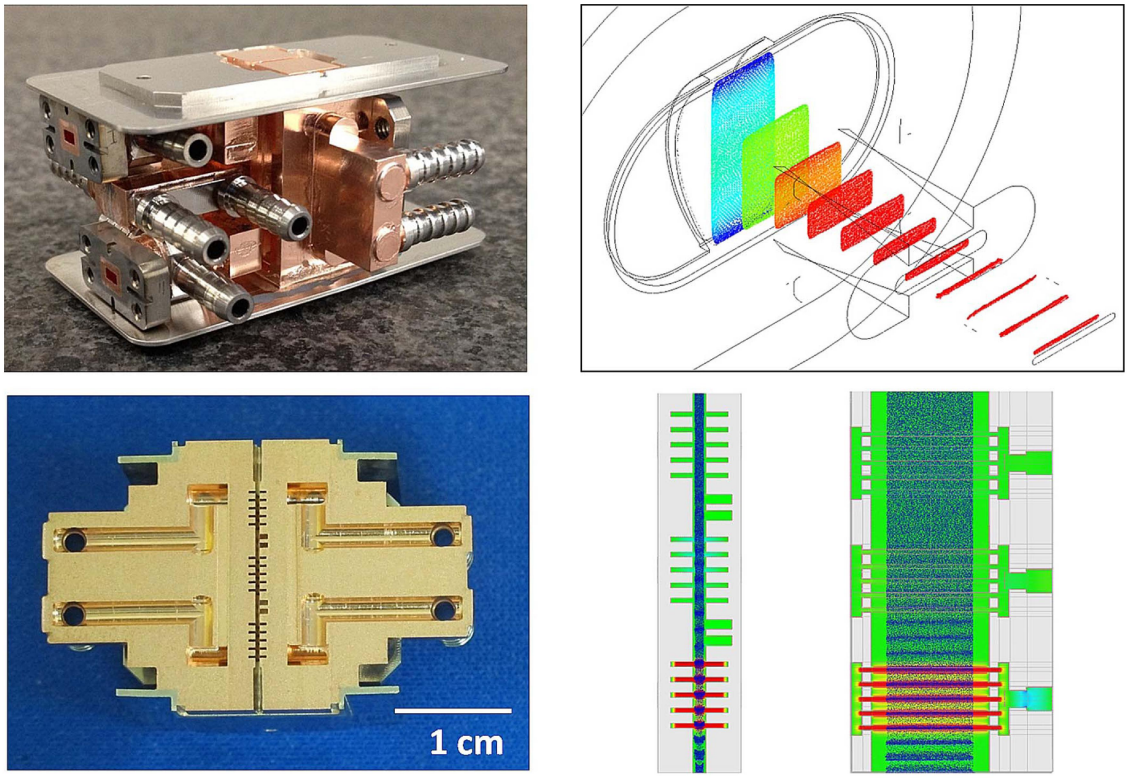
SPECIAL ISSUE ON VACUUM ELECTRONICS



7.7 kW peak power W-band sheet beam extended interaction klystron, circuit and device simulations.

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About the Cover: The cover shows photographs of a W-band sheet beam extended interaction klystron circuit, assembly and sectioned views, together with two simulations of the device. The MICHELLE electron gun simulation depicts slices of the 19.5 kV, 3.5 A beam at 1 mm intervals. Below is a Neptune simulation of the beam-wave circuit interaction. The amplifier achieves a peak power of 7.7 kW at 94 GHz, which is unprecedented for an amplifier at this frequency and operating voltage and which demonstrates the high power-to-voltage ratio made possible by sheet beam technology. See "Demonstration of a Multikilowatt, Solenoidally Focused Sheet Beam Amplifier at 94 GHz," by Pasour *et al.*, beginning on page 1630.