# Abstracts

## The Capabilities and State of the Art of Gunn and LSA Devices

*L.F. Eastman. "The Capabilities and State of the Art of Gunn and LSA Devices." 1969 G-MTT International Microwave Symposium Digest of Technical Papers 69.1 (1969 [MWSYM]): 163-169.*

Ridley and Watkins conceived of the idea that electrons in solids could be forced to undergo a change in energy and mass that would lead to bulk negative resistance. Hilsum later developed the idea as it applied to Gallium Arsenide with high electric fields applied. Ridley subsequently pointed out the natural tendency of such bulk negative resistance devices to form high-field, traveling domains. Quite independently from the development of these analytical concepts, Gunn experimentally discovered microwave transit-time oscillations in Gallium Arsenide subjected to high electric fields.

❑ Return to main document.