Cover photo:
On-wafer high-frequency testing of an optoelectronic transceiver device for bidirectional data transmission over an optical multimode fiber. A vertical-cavity surface-emitting laser (VCSEL) is monolithically integrated with a PIN-type photodiode. Electrical contacts are established by two ground–signal–ground microwave probes. In the photo, the optical fiber with 125 µm outer diameter is displaced from the chip. For actual operation, the fiber is butt-coupled with a distance of only about 30 µm. See the related article on transceiver chips.