

Abstracts

An Infrared Fiber-Optic Radiometer for Controlled Microwave Heating (Short Papers)

S. Drizlikh, A. Zur and A. Katzir. "An Infrared Fiber-Optic Radiometer for Controlled Microwave Heating (Short Papers)." 1990 *Transactions on Microwave Theory and Techniques* 38.5 (May 1990 [T-MTT] (Special Issue on Applications of Lightwave Technology to Microwave Devices, Circuits, and Systems)): 675-677.

An infrared fiber-optic radiometer was used as a linear feedback element for noncontact temperature control of a microwave heating system. The temperature of water was monitored and maintained at about 42° C with a standard deviation of $\pm 0.15^\circ$ C and a maximum deviation of $\pm 0.45^\circ$ C. This controlled system would be very useful for medical, industrial, and domestic applications.

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