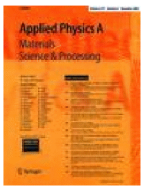

Thermal diffusivity and Biot number: A new experimental method

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Abstract A new simple method is presented for measuring thermal diffusivity and Biot number in cylindrical samples made of relatively highly conducting materials, subjected to laminar air flow. The basic idea is a heat source in the middle section of the sample, acting also as a thermocouple; only one additional temperature sensor at the cylinder basis is required to give all information, without requiring any hypothesis about the effective time dependence of the heat source.

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