Photoacoustic thermal characterization of spark-processed porous silicon

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ABSTRACT

A non-separation approach to determine the spark-processed porous silicon thermal parameters is presented. This thermal characterization was performed through application of the photoacoustic technique, in combination with compositional models for spark-processed porous silicon samples. The thermal parameters obtained are in agreement with existing studies about the composition of this material. This approach opens the possibility of performing the thermal characterization of other porous semiconductors and analogous materials. © 1996 American Institute of Physics.

INDEX TERMS

- **INSPEC**
  - **Controlled Indexing**
    ELECTRIC SPARKS , PHOTOACOUSTIC SPECTROSCOPY , PHOTOLUMINESCENCE , POROUS MATERIALS , THERMAL DIFFUSIVITY
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