

An Algorithm for the Metrological Comparison of Two Photothermal Methods for Measurements of the Properties of Materials

R. Ivanov^C

*Facultad de Fisica, Universidad Autonoma de Zacatecas, Zacatecas, ZAC, Mexico
rumen5252@yahoo.com.mx*

E. Marin

*Centro de Investigacion en Ciencia Aplicada y Tecnologia Avanzada, Instituto Politecnico Nacional, Colonia
Irrigacion, Mexico D.F., Mexico*

G. Gutierrez-Juarez

Instituto de Fisica, Universidad de Guanajuato, Leon, GTO., Mexico

J.L. Pichardo-Molina,^S Calderòn, and Moreno

Centro de Investigaciones en Optica, Leon, GTO., Mexico

We describe an algorithm designed for comparing photothermal methods, which is based on the knowledge of the value of a certain parameter related to the signal/noise ratio. This comparison allows us to select between two methods and choose the more adequate one, in order to precisely determine thermal properties of materials. The usefulness of the algorithm is demonstrated on the basis of digital simulations.