



# On the use of periodic photothermal methods for materials diagnosis

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Auteur	Autrique, Laurent [1], Perez, Laetitia [2], Scheer, Emmanuel [3]
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Mots-clés	Frequency [4], Parametric [5], Thermal [6]
Résumé en anglais	This work aims the analysis of valuation methods devoted to materials diagnosis in order to provide an efficient estimation in practical operational conditions and environment (by the observation of a thermal tracer representative of a damage). The followed methodology consists in implementing observation techniques based on a periodic photo-thermal excitation so that the observation of the heated structure response allows to identify characteristic parameters of the studied materials. In most cases, simplistic hypotheses required for analytical model validation are not satisfied. Thus, analysis in the frequency domain requires the computing of a specific finite elements method.
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## Liens

- [1] <http://okina.univ-angers.fr/l.autrique/publications>
- [2] [http://okina.univ-angers.fr/publications?f\[author\]=1862](http://okina.univ-angers.fr/publications?f[author]=1862)
- [3] [http://okina.univ-angers.fr/publications?f\[author\]=1863](http://okina.univ-angers.fr/publications?f[author]=1863)
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