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Advances in Multi-scale Mechanical Characterization of Materials with Optical Methods

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Message from the Guest Editor

Dear Colleagues,

It is my great pleasure to announce this Special Issue “Advances in Multi-scale Mechanical Characterization of Materials with Optical Methods”, which will appear in *Materials* next year.

Optical Methods (OM) are naturally suited for mechanical characterization of materials in view of their capability to accurately measure displacements, strains and stresses in real time and to gather full field information without altering specimen conditions. OM cover a full-range of wavelengths from X-ray to visible lights and infrared. A definite strength of OM is the possibility of changing measurement scales by properly modulating wave frequencies and setting parameters of experimental setups. The multi-scale ability is fundamental in complex fields like bioengineering, MEMS, high precision metrology, etc.

This Special Issue will focus on the advances in the multi-scale mechanical (statical and dynamical) characterization of materials with optical methods. The aim is to provide a forum on the state-of-the-art and frontier applications of OM for material characterization.



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Special Issue



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Message from the Editorial Board

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