Special Issue

Smart Non-destructive Testing and Inspection of Engineering Materials

Message from the Guest Editors

Non-destructive testing (NDT) methods are presented to evaluate material properties and components as well as the structural integrity of engineering materials. NDT encompasses inspection techniques that are utilized to detect, characterize, and measure the presence of mechanical damages and identify their mechanisms. NDT aims to increase the reliability of engineering components affordably without damaging the inspected parts. New inspection methods apply artificial intelligence using various sensors' data to evaluate defects and provide a rapid damage assessment. This Special Issue will compile recent developments in the field of smart NDT and inspection methods. The articles presented in this Special Issue will cover various topics, ranging from, but not limited to, the optimization of NDT and inspection methods, characterization of engineering materials using smart NDT methods, the functionalization of smart inspection methods, 3D geometrical inspection of materials, smart metallurgical inspection methods, among others. Topics are open to engineering materials and characterization for the development of applications.

Guest Editors

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Deadline for manuscript submissions

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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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