Special Issue

Advanced Materials Joining and Manufacturing Techniques

Message from the Guest Editors

Materials joining and welding is an essential component of manufacturing technology and is one of the main ways to manufacture parts for a wide range of products from giant structures to micro and nano devices such as pipelines, aircrafts, automobiles, medical devices and microelectronics. With the continuous emergence of engineering materials and applications, various advanced technologies have been developed on a macro and micro scale. Advances in welding and joining help to achieve unique joint properties, join complex structures or materials, reduce costs, improve productivity and quality, and select suitable material for new products. This Special Issue aims to summarize recent advances in all aspects of welding and joining, including microstructure, mechanical properties, corrosion performance, and other properties. Studies on the material characterization of the joint and technique development are of interest. The main content of this Special Issue includes, but is not limited to, arc welding, laser welding, friction stir welding, micro joining, additive manufacturing (deposition with wire or powder), and other relevant advanced techniques.

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Message from the Editorial Board

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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