

Special Issue

Piezoelectric Materials and Piezoelectric Robots

Message from the Guest Editors

As a typical functional material, piezoelectric materials have the merits of small size, high power density, high displacement resolution, high sensitivity, and more. The research of piezoelectric materials is mainly focused on the development of new materials and their new applications. Furthermore, the applications of piezoelectric materials include piezoelectric robots, piezoelectric actuators, ultrasonic motors, piezoelectric sensors, piezoelectric transducers, nano manipulations, piezoelectric microjets, piezoelectric pumps, and more. The piezoelectric robot is a new concept for the robot using the piezoelectric element as the actuating element. The unique merits of this approach include a large working range, high resolution (nanometer level), large load-carrying ability, and multi-DOF motion. The demand for robots with high performance in cross-scale and multi-DOF motion has been continuously increasing in recent years, which the piezoelectric robot can satisfy well. This Special Issue aims to provide a forum for researchers to generate, exchange, and follow up on the ideas, recent trends, and achieved results related to new piezoelectric materials.

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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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