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Piezoelectric Materials and Piezoelectric Robots

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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

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