## **Special Issue**

### **Piezoelectric Materials**

### Message from the Guest Editors

Efficient energy conversion materials have attracted great attention from an environmentally friendly point of view, especially in 21th century. Piezoelectric materials have a wide range of applications, for example, as ultrasonic transducers, actuators, pressure sensors, surface acoustic wave sensors, just to name a few. They are one of the key energy materials which can be used to carry out the conversion from mechanical energy to electric energy. Piezoelectric energy harvesting is one of the central issues in this field. To increase the conversion efficiency, it is necessary to acquire more fundamental insights into the microscopic origin of superior piezoelectric performances and the ferroelectric-ferroelastic phase transition behaviors. Moreover, the material design for an efficient lead-free piezoelectric system, the efficient coupling of differentorder parameters in multiferroics, and the nano-scale engineering of piezo-devices are other hot issues in this field. This Special Issue aims at encouraging researchers to describe the recent state-of-the-art developments and their achievements in these topics.

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### Deadline for manuscript submissions

closed (20 July 2019)



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### **About the Journal**

### Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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