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Optomechanics: Science and Applications

Guest Editor:

Prof. Dr. Tongcang Li
Department of Physics and Astronomy and School of Electrical and Computer Engineering, Purdue University, 525 Northwestern Ave, West Lafayette, IN 47907, USA

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Message from the Guest Editor

This Special Issue is devoted to publishing recent advancements in optomechanics, which investigates the interaction between photons and mechanical motions. There have been many remarkable developments in optomechanics recently. Quantum behaviors have been observed in different optomechanical systems, including nanofabricated resonators, optically levitated nanoparticles, and LIGO's 40-kilogram mirrors. Optomechanical systems have also found essential applications in acceleration and rotation sensing, precision measurements, quantum state transduction, and beyond.

This Special Issue brings worldwide experts together to discuss the latest research in all fields of optomechanics. Topics include but are not limited to the following:

- Cavity optomechanics;
- Levitated optomechanics;
- Superfluid optomechanics;
- Optomechanical crystals;
- Optomechanics with 1D and 2D materials;
- Optomechanical transduction;
- Optomechanical sensing;
- Spin optomechanics;
- Hybrid optomechanical devices.