8. Strategies for Advancing Energy Harvesting Performance

Introduction: As the power consumption of microelectromechanical devices is becoming ever lower, energy harvesting technologies have attracted much attention. Various electromechanical conversion methods, techniques, structures, and materials have been proposed and extensively studied. To realize the practical applications of energy harvesting technologies, it is crucial to develop and find strategies that enable energy harvesting with high performance including high power output, wide working bandwidth, high reliability, high adaptability and high stability. In view of this situation, the aim of this special session is to address the latest advances in strategies including but not limited to theories, methods, structures and materials to achieve high-performance energy harvesting. It also focuses on developing the engineering applications of energy harvesting technologies, including self-powered Internet of things systems and electronics, integration of vibration suppression and energy harvesting, etc. The scope of the special session is broad, contributions related to the following topics and other pertinent topics are welcome.

Topics:

- Advanced structures for high-performance energy harvesting
- Smart materials for high-performance energy harvesting
- Wideband energy harvesting methods
- Methods of efficient energy harvesting with vibration suppression capability
- Low space-consumed energy harvesters with high performance
- High-performance energy harvesters and their applications

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