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Editorial

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The contributions to our new issue combine, again, truly diverse topics: from a book review on Energy Harvesting; a forecast on conventional ceramic capacitors in their application to the Internet of Things; the chaotic behavior in systems, governed by the Duffing equation; over sophisticated nano-coatings of piezoelectric materials to an optimized integrated thermoelectric system. These contributions, hopefully, will meet again the interest of our readership and ensure enjoyable reading.

Energy harvesting, as a scientific discipline, comprises a vast field of highly specialized areas. From electromagnetic (inductive), piezoelectric and magnetostrictive techniques to thermoelectric, photovoltaic and wind energy harvesting. Not everyone necessarily feels familiar with all of these areas to the very detail and a handy reference book can help elucidate general principles and provide in-depth information. Gladly, we include in our new issue a review on *Energy Harvesting* by R. A. Kishore, A. M. C. Wu, A. Kumar and S. Priya. This new book turns out to be a comprehensive guide for any interested reader of our fascinating field of research.

With *IoT energy storage-a forecast* by Fredrik Häggström and Jerker Delsing, state-of-the-art energy storage is scrutinized for application in what is called the Internet of Things (IoT). The authors elaborate on the question if current storage technology has the capacity to support long-lived devices, empowered by energy extraction from the environment, also in the near future.

An improvement of conventional material for piezoelectric energy harvesting is demonstrated in *Nano-mixture Coating and Geometrical Configuration Impact on Cantilever Based Piezoelectric Energy Harvesting System* by Dinesh R. Palikhel, Tyrus A. McCarthy, and Jagdish P. Sharma. The approach is designed to pursue the pivotal question of how to increase the power harvesting capability when extracting vibrational energy from intermodal transport systems.

Nonlinearity is a fascinating physico-mathematical phenomenon and often gives rise to chaotic behavior. In *Chaotic Behavior of Duffing Energy Harvester* by Amir Bahrami, and Majid Tayarani, a wide bandwidth energy harvester is theoretically dealt with under excitation by multiple excitation frequencies. The analysis attempts to provide a criterion for the evolution of chaotic behavior in systems, described by the Duffing equation, and thereby a means for control of such resonators in a useful way.

Finally, in *Integrated Thermoelectric Energy Generator and Organic Storage Device* by Mohammad Y. Al-Haik, Abdulmohsen A. Alothman and Muhammad R. Hajj, the authors present a thorough analysis of an integrated system, converting thermal into electrical energy, emphasizing thereby on the operational efficiency of the system.

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