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| Title: | A Systematic Review of Energy Harvesting from Biomechanical Factors |
| Authors: | Bajrang, C. (/jspui/browse?type=author&value=Bajrang%2C+C.) |
| Keywords: | Thermoelectric generation Triboelectric generation Piezoelectric generation |
| Issue Date: | 2019 |
| Publisher: | Oriental Scientific Publishing Company |
| Citation: | Biomedical and Pharmacology Journal, 12(4),pp. 2063-2073. |
| Abstract: | Conversion of human mechanical energy to usable electrical energy may seem like something from science fiction for the earliest generation of electronical engineers. But owing to the recent scientific advancements, it is no longer just a fiction but a reality. Researchers are working hard-time to improvise this idea by making attractive advancements in the field every day. This particular advancement gets much attention because it seems to be the most likely candidate to limit the usage of batteries, which have become a paradigm in the commercial world. Harvesting human energy can eliminate the limitations of scientific advancements in the portable and implantable devices due to the usage of batteries as their power source. There are several methods by which energy can be harvested from human activities, including but not restricted to thermoelectric generation, piezoelectric generation and triboelectric generation. These biomechanical phenomena can be tamed for commercial electricity usage under various circumstances. This paper provides a detailed review on these methods and the advancements made so far by researchers all around the globe. |
| Description: | Only IISERM authors are available in the record. |
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