1. Record Nr. UNINA9911019711103321

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Titolo	Triboelectric Nanogenerators : Technology, Applications, and Commercialization
Pubbl/distr/stampa	Newark : , : John Wiley & Sons, Incorporated, , 2025 ©2025
ISBN	9783527837885 3527837884 9783527837892 3527837892 9783527837908 3527837906
Edizione	[1st ed.]
Descrizione fisica	1 online resource (321 pages)
Altri autori (Persone)	GuoHengyu WangJie ZhangChi ChenXiangyu ZhaoQing
Disciplina	621.3124
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	Comprehensive resource on the fundamentals, recent research developments, and applications of triboelectric nanogenerators (TENGs) Triboelectric Nanogenerators delivers a comprehensive overview of a lightweight, low cost, and high-efficiency sustainable mechanical energy harvesting technique that draws from the ambient environment and has high output and extremely flexible structural designs. The book starts with an introduction on triboelectric nanogenerator technology, then continues to discuss the latest fundamental studies about TENGs, including models of triboelectric effect, the discharge effect, and standardized evaluation. The next part explains new output performance promotion of TENGs for power generation applications,

including output promotion through multiple methods, as well as power management and effective energy storage. The last part explores new concepts inspired by the field of TENGs, including applications in sensing, actuation, data science, artificial intelligence (AI), the Internet of Things (IoT), and smart cities. Written by a team of highly qualified academics with significant research experience in the field, Triboelectric Nanogenerators includes information on: Triboelectric charge generation and discharge, highlighting how electrostatic energy is often wasted Energy potential of TENGs in comparison to other sources such as lithium-ion batteries and other types of batteries Methods to promote and configure output performance, such as through gas environments, liquid-solid interfaces, and electromechanical structures High-voltage output from TENGs and its potential for new applications in areas such as breakdown charge triggering, electrospraying, field emissions, and others Triboelectric Nanogenerators is an essential reference for scientists, engineers, students, and professionals in related fields seeking to understand this exciting energy harvesting technique and gain all of the knowledge needed to help further progress in the field.