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Latest Papers Related to OWPT 2024 on the Topics of Devices, Components and Systems

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Message from the Guest Editors

Dear Colleagues,

Effective power transmission is essential for equipment operation, yet traditional approaches like wiring and batteries present challenges. Light-based methods, like Optical Wireless Power Transmission (OWPT) and Power over Fiber (PoF), show promise. OWPT excels in long-range coverage and minimal interference, while PoF utilizes optical fibers for reliable communication and surge protection.

These technologies find applications in various sectors, from IoT devices to industrial tools, electric vehicles, drones, and infrastructure in challenging environments. While the core technology is established, practical implementations are currently limited, necessitating ongoing research to enable diverse applications. Emphasizing benefits, identifying obstacles, and exploring innovative aspects in materials, devices, systems, and safety standards is crucial for driving societal transformation.

To highlight the latest research findings, we are launching a Special Issue seeking contributions on light sources, light-receiving devices, integration, systems, and applications in optical power transmission, encompassing a broad spectrum of disciplines.



