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# Frontiers in Advanced Power Equipment and Research in Condition Diagnostic and Sensing

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# Message from the Guest Editors

The fast growth of renewable electricity has resulted in new challenges regarding electrical grids. Any failures of the power equipment may lead to a serious blackout. Therefore, there is an urgent demand to develop advanced power equipment and both convenient and low-cost condition diagnostic and sensing methods to ensure the safety of electrical grids.

In this Special Issue, we aim to provide a forum for colleagues to report on the most up-to-date research results regarding the frontiers of advanced power equipment and research in condition diagnostic and sensing fields, as well as comprehensive surveys of state-of-the-art equipment in relevant specific areas.

The topics of interest include but are not limited to:

Novel power equipment structure design, parameter optimization, and implementation; Multi-physics coupling modeling and analysis, including electricity, temperature, and mechanical fields; Multi-functional sensor design and testing; Optical sensors for power equipment detection; MEMS sensors for power equipment detection; Distributed sensing methods; Smart sensing networks; Artificial intelligence-based signal processing algorithms; and Field application cases.



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# Message from the Editor-in-Chief

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