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Integrated Circuits for Power Conversion: Modeling, Optimization, Design and Applications

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Message from the Guest Editors

With the increase of autonomous and electric vehicles such as drone, electric scooters and bikes, the miniaturization of power electronics becomes of critical importance. The development of small and efficient converters for driving these vehicles with the minimal weight and size is creating new ways. In general, a power integrated circuit includes a power stage and the intelligence which allows controlling such machines, however there are other many types of integrated circuits for power electronics which also play important roles in the power conversion such as monitoring integrated circuits.

This special issue aims to gather articles which will cover a vast range of integrated circuits for power electronics Topics include but are not limited to the following:

- battery monitoring and protection
- low power regulators and switching regulators
- drivers for wide band semiconductors(such as Gallium Nitride and Silicon Carbide)
- high-voltage and current meters
- power circuits' modeling, design methodology, optimization techniques and applications



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Special Issue



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Message from the Editor-in-Chief

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