

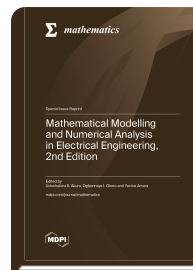
Special Issue Reprint

Mathematical Modelling and Numerical Analysis in Electrical Engineering, 2nd Edition

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The Second Edition of this Special Issue book, titled “Mathematical Modelling and Numerical Analysis in Electrical Engineering, 2nd Edition”, builds upon the success of the first edition published in August 2024. It continues to showcase cutting-edge applications of mathematical modelling and numerical analysis in electrical engineering. This edition comprises ten papers, demonstrating significant advancements across key research themes aligned with the objectives of the Special Issue. A feature paper by Hoang et al. presents an innovative rotational speed sensor based on FSM technology for superior and accurate speed measurement applications. Hoang et al. then applied harmonic modelling on eddy-current speed sensors. Garmut et al. present research on optimisation of IPMSM BLDC drives with neural network modelling. Cha et al. contribute a high-efficiency external rotor IPMSM using GPM and optimisation techniques. Nguyen et al.’s two studies employed subdomain modelling for the rapid analysis of WRSC and optimisation of a coaxial magnetic gear. Onokwai et al. implemented a combined metaheuristic algorithm with RSM to optimise GTPP performance. Baier et al. applied mathematical modelling on CSIs for grid-connected systems. Brezovnik et al. and Rahmanović et al. advanced mathematical approximation techniques for the fast analytical calculation of a spot-welding system and the comparative modelling of NO steel materials using Bézier curves, respectively.

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