

Design and optimization of low-power DC-DC converter for efficient fuel cell applications

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The abstract presents the design and optimization of a low-power DC-DC converter tailored for efficient fuel cell applications [1]. The study focuses on developing a converter system that minimizes power losses and maximizes energy efficiency within the context of fuel cell technology [2-6]. Through a comprehensive analysis of converter topologies, control strategies, and optimization techniques, the research aims to address the specific power requirements and operational characteristics of fuel cells [7-8]. The proposed converter design seeks to enhance the overall performance and reliability of fuel cell systems by achieving optimal power conversion efficiency while minimizing energy wastage, thereby contributing to the advancement of sustainable energy technologies.

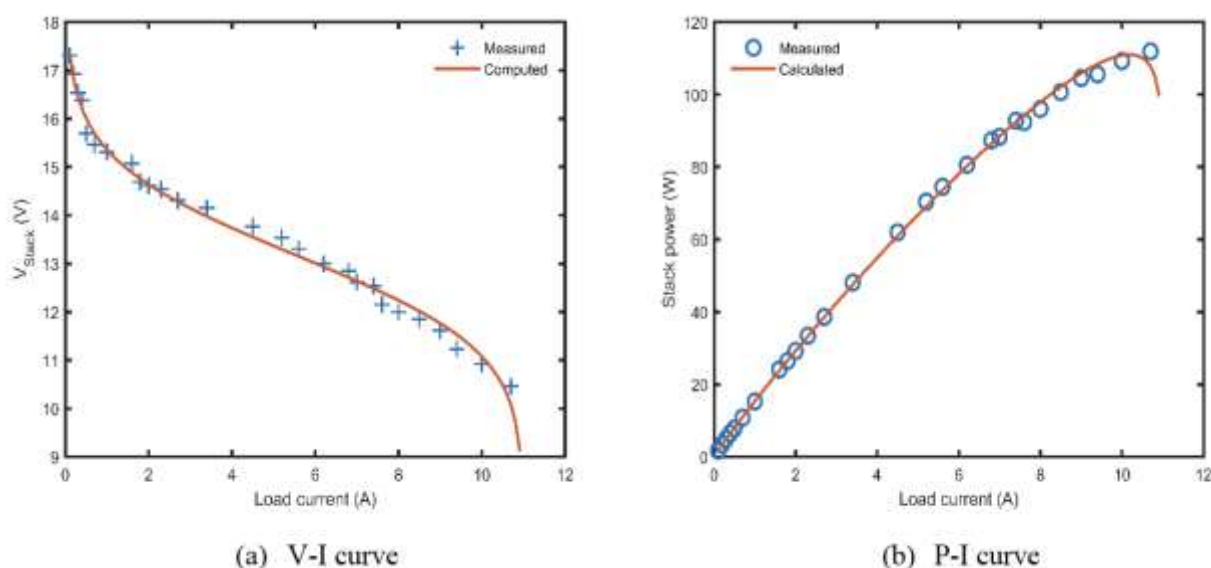


Fig. 1. Polarization curves of 100W Horizon PEMFCs' stacks as in our previous data in [1]

Acknowledgement: The authors would like to acknowledge the support and contribution of the Centre for Emerging Learning Technology (CELT), in The British University in Egypt for providing all the simulation facilities needed.

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