In this paper, the authors present a detailed performance-oriented analysis of a hybrid magnetic assembly used in a heat-pump magnetocaloric device. The study is part of the 6th IIF-IIR International Conference on Magnetic Refrigeration, organized by the International Institute of Refrigeration.

The authors, Insinga AR, Smith A, Bahl CRH, and Bjørk R., focus on evaluating the efficiency and effectiveness of the hybrid magnetic assembly in facilitating heat transfer, which is a critical aspect in the functioning of magnetocaloric devices. The analysis includes various performance metrics that are crucial for optimizing the device's operation.

This research is significant as it contributes to the ongoing efforts in developing more efficient and environmentally friendly cooling technologies, which have widespread applications in various industries, including data centers and refrigeration systems.