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MODELING CHARACTERISTICS OF FUEL CELLS WHICH USE THE AMBIENT AIR OXYGEN

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Abstract

A method of calculating the non-uniformity of the current density along the air electrodes of chemical current sources is proposed and experimentally verified. The mathematical model and the analysis results of several types and constructions of power sources with air gas-diffusion electrodes: a flat air-metal cells with convection or diffusion of oxygen to the electrode, disc air-metal cells, air-hydrogen electrochemical generators, etc. are following.