

Optimum Design for Cathode Microstructure of Solid Oxide Fuel Cell

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Abstract : In this present work, 3D reconstruction of cathode of SOFC is developed with various volume fractions and porosity. Three Phase Boundary (TPB) of construction of such derived micro structures is calculated. The neural network is used to optimize the porosity and volume fraction of each phase to reach a structure with maximum TPB.

Keywords : fuel cell, solid oxide, TPB, 3D reconstruction

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