catalysts

an Open Access Journal by MDPI

IMPACT FACTOR 3.9

CITESCORE 6.3

Catalysts for Oxygen Reduction Reaction

Guest Editors:

Dr. Zhenghua Tang
School of Environment and Energy, South China University of Technology, Guangzhou 510006, China

Dr. Ligui Li
School of Environment and Energy, South China University of Technology, Guangzhou 510006, China

Prof. Dr. Shouzhong Zou
Department of Chemistry, American University, Washington, DC 20016, USA

Deadline for manuscript submissions:
closed (30 September 2018)

Message from the Guest Editors

The ever-increasing demand for energy and the negative environmental impacts imposed by using fossil fuels have called for efficient energy conversion and storage technologies. Polymer electrolyte membrane fuel cells (PEMFCs) and lithium air (oxygen) batteries are among the most promising technologies to answer this call. Oxygen reduction reaction (ORR) is a cathode reaction in PEMFCs and lithium-oxygen batteries. The sluggish ORR requires the development of highly-efficient ORR catalysts before these technologies are viable and can be widely deployed in the market. Consequently, tremendous research efforts have been made in ORR catalysts and many highly-active and stable catalysts have emerged. This Special Issue aims to cover recent progress and trends in synthesizing, characterizing and evaluating advanced electrocatalysts for ORR, as well as a theoretical understanding of ORR that provides rational design guides for high performance ORR catalysts.