catalysts

an Open Access Journal by MDPI

IMPACT FACTOR 4.0

CITESCORE 7.6

Application of Graphene-Based Materials in Nanocatalysis

Guest Editors:

Dr. Yongping Zheng
Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences, Shenzhen, China

Prof. Dr. Kyeongjae Cho
Department of Materials Science & Engineering, The University of Texas at Dallas, Richardson, TX 75080, USA

Deadline for manuscript submissions:
closed (31 August 2021)

Message from the Guest Editors

Graphene is one of the most promising functional materials, consisting of a single layer of carbon atoms. Its unique two-dimensional (2D) honeycomb structure gives graphene high thermal and electrical conductivity and large specific surface area. Thus, it has been extensively used as a key component for developing advanced catalysts in various reactions ranging from catalytic oxidation to reduction and coupling reactions. Graphene, as a 2D substrate material, can also bridge between naturally existing enzymatic biocatalysts and synthetic heterogeneous catalysts to realize non-precious-metal catalyst design. To stimulate further development, this Special Issue welcomes the submission of review, perspective, and original research articles on graphene-based catalysts for both thermal catalysis and electrocatalysis.