Special Issue

Electrocatalysts for Oxygen/Hydrogen-Involved Reactions

Message from the Guest Editors

Oxygen/hydrogen-involved reactions are at the core of many energy storage and conversion technologies—for example, water electrolysis, ammonia synthesis, carbon dioxide reduction, fuel cells, metal–air batteries, and hydrogen peroxide synthesis. However, the low efficiency and poor durability of oxygen/hydrogen-involved electrode materials have greatly limited their application and development. Therefore, the design and synthesis of high-performance electrocatalysts for these reactions are urgent. This Special Issue is devoted to reporting novel electrocatalysts or electrochemical systems for oxygen/hydrogen-involved reactions. We invite researchers to contribute original articles and reviews, which include, but are not limited to, the following topics:

- electrochemical water splitting;
- electrocatalyst for oxygen evolution reaction of hydrogen evolution reaction:
- 4e- or 2e- oxygen reduction evolution for H2O or H2O2:
- electrocatalytic N2 reduction to ammonia;
- electrocatalytic CO2 reduction reaction:
- metal-air battery.

Guest Editors

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About the Journal

Message from the Editor-in-Chief

As the premier open access journal dedicated to molecular chemistry, now in its 29th year of publication, the papers published in *Molecules* span from classical synthetic methodology to natural product isolation and characterization, as well as physicochemical studies and the applications of these molecules as pharmaceuticals, catalysts, and novel materials. Pushing the boundaries of the discipline, we invite papers on all major fields of molecular chemistry and multidisciplinary topics bridging chemistry with biology, physics, and materials science, as well as timely reviews and topical issues on cutting-edge fields in all of these areas.

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