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New Advances in Perovskite and Metal Oxide Photocatalysts and Electrocatalysts

Guest Editors:

Dr. Hatem Amin
Faculty of Chemistry and Biochemistry, Ruhr University Bochum, 44801 Bochum, Germany

Dr. Yasser Hassan
Department of Chemistry and Earth Sciences, College of Arts and Sciences, Qatar University, 2713 Doha, Qatar

Dr. Hassan A. Alhazmi
Department of Pharmaceutical Chemistry and Pharmacognosy, College of Pharmacy, Jazan University, Jazan, Saudi Arabia

Deadline for manuscript submissions:
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Message from the Guest Editors

Metal oxides, particularly perovskite oxides with a general formula ABO_3, represent the nexus of sustainable chemistry. In the field of electrocatalysis, perovskite and transition metal oxides have been investigated as catalysts for many reactions, including the oxygen evolution reaction (OER), the oxygen reduction reaction (ORR), hydrogen evolution (HER), and CO_2 reduction. In addition, they showed efficient photocatalytic properties.

This Special Issue showcases the recent advances in the development of perovskites and metal oxides materials for electro- and/or photo-catalysis. This includes both experimental and theoretical approches to improve the overall performance of the catalytic reactions by optimizing the physico-chemical properties of reaction components (catalysts, electrolytes, and membranes), operating conditions, and reactor designs. We therefore welcome all original papers and reviews encompassing the above subject line for submission.