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# Advances in Electrochemical Oxygen Evolution and Photocatalytic Reaction

Guest Editor:

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# **Message from the Guest Editor**

Oxygen evolution reactions (OERs) are very crucial for energy conversion in the realm of renewable energy technologies. Expensive metals such as Ir, Ru, and their oxides are currently considered standard materials for good OER performance. However, due to their high cost, low abundance, and low durability, exploration of other inexpensive alternatives with good OER capability has become a priority. Materials which are stable under OER conditions must be targeted for this particular case. Similarly, another branch which comes under renewable and clean energy is photocatalysis. It can be applied in various applications, such as water purification, ammonia synthesis, water splitting, CO2 reduction, electrochemical, etc. These electrochemical and photocatalytic applications are very promising but far from commercialization and need more research

Therefore, in this Special Issue, the synthesis, in-depth characterizations, and applications of nano- or micromaterials/hybrids into the domain of photo and electrochemical domains will be explored. New materials and techniques with enhanced performance, which add crucial knowledge to the existing science, will be considered.













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## **Message from the Editor-in-Chief**

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