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Electrocatalytic Hydrogen Evolution Reaction through Water Splitting

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Deadline for manuscript submissions:

closed (30 April 2024)

Message from the Guest Editors

Dear Colleagues,

The current Special Issue welcomes submitting original research papers and reviews on cost-effective and efficient electrocatalysts for producing clean hydrogen through water splitting. Several factors should be taken into consideration for fabricating a perfect electrocatalyst, including method of synthesis, catalytic performance, cost, and long-term operation. Despite the significant progress being made in this field, the challenges concerning insufficient electrochemical activity, poor durability, and fundamental understanding of mechanisms remain important issues to be tackled. Submissions may cover themes including but not limited to:

- Developing non-precious (single atom or noble metal-free) electrocatalysts;
- Designing bifunctional electrocatalysts;
- Advanced in situ and operando characterization of electrocatalysts;
- Theory-oriented screening of advanced electrocatalysts;
- Experimental and/or theoretical studies on the behavior of electrochemical interfaces and catalysis mechanisms.



