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Design and Characterization of Energy Catalytic Materials

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Deadline for manuscript submissions:

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Message from the Guest Editors

The rapid growth of global energy demand has greatly promoted the utilization of various energy systems and the development and transformation of energy catalytic materials. Photocatalysis, electrochemical catalysis, thermal catalysis, and photo–electrochemical/thermal coupled catalysis systems offer potential routes to address the increasing environmental and energy-related issues. The Special Issue, Design and Characterization of Energy Catalytic Materials, will include a comprehensive overview and in-depth research paper addressing recent progress in energy catalysis. Studies of advanced characterization techniques and design methods in this field are highly encouraged.

Potential topics include, but are not limited to:

- Photocatalysis;
- Electrochemical catalysis;
- Photo-electrochemical/Photo-thermal catalysis;
- Carbon dioxide reduction;
- Hydrogen evolution;
- Nitrogen reduction;
- Fuel cells;
- Hydrogen peroxide production;
- Pollutants removal;
- Biomass conversion;
- Thermodynamics;
- In situ techniques;
- Fabrication methodology.





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Message from the Editor-in-Chief

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Journal Rank: JCR - Q1 (Metallurgy and Metallurgical Engineering) / CiteScore - Q2 (*Condensed Matter Physics*)

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