Special Issue

Electrocatalysis/Photocatalysis for CO_2 Conversion, H_2 Production, and Pollutant Removal, 2nd Edition

Message from the Guest Editors

Electrocatalysis/photocatalysis are the acceleration of electroreactions/photoreactions via heterogeneous electrocatalysts/ photocatalysts to produce valuable chemicals or decompose harmful materials. Above all, electrocatalysis/photocatalysis have been considered as promising strategies for CO2-derived chemical and H2 production, which could provide various approaches to alleviate serious environmental problems.

This Special Issue will provide information about novel advanced electrocatalysts/photocatalysts for efficient CO2 conversion, H2 production, and pollutant removal. Thus, we welcome papers focusing on diverse synthesis methods and novel designs of crystal structures for electrocatalysts/photocatalysts to improve their electrochemical/photochemical performance with high stability, as well as theoretical reaction mechanisms at the molecular level occurring on well-designed catalytic surfaces. We encourage the submission of all types of papers including communications, research, and review papers covering all topics of innovative electrocatalysts/photocatalysts and their environmental applications.

Guest Editors

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Deadline for manuscript submissions

closed (28 February 2025)

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.6 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).

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