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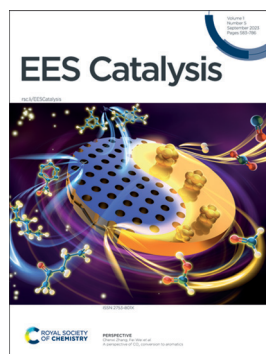
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See Sangaraju Shanmugam *et al.*, pp. 645–664. Image reproduced by permission of Sangaraju Shanmugam from *EES Catal.*, 2023, 1, 645.



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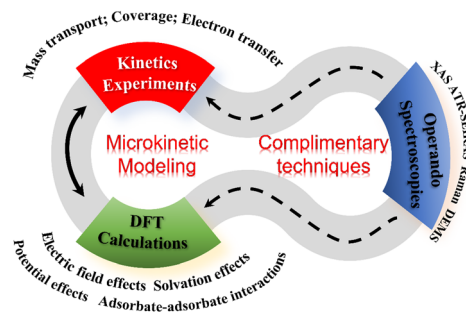
See Chenxi Zhang, Fei Wei *et al.*, pp. 677–686. Image reproduced by permission of Chenxi Zhang and Fei Wei from *EES Catal.*, 2023, 1, 677.

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Microkinetic studies for mechanism interpretation in electrocatalytic CO and CO₂ reduction: current and perspective

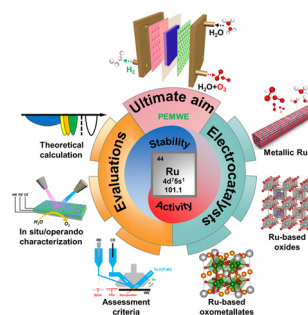
Xiaofei Lu, Keisuke Obata and Kazuhiro Takanabe*



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Strategies for the design of ruthenium-based electrocatalysts toward acidic oxygen evolution reaction

Liqiang Hou, Xiumin Gu, Xuemei Cui, Jiachen Tang, Zijian Li, Xien Liu* and Jaephil Cho*



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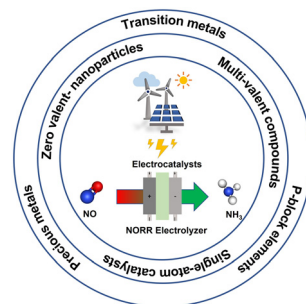


REVIEWS

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Recent advances in electrocatalytic NO_x reduction into ammonia

Harish Reddy Inta, Dinesh Dhanabal, Sridhar Sethuram Markandaraj and Sangaraju Shanmugam*

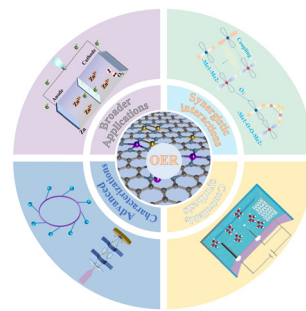


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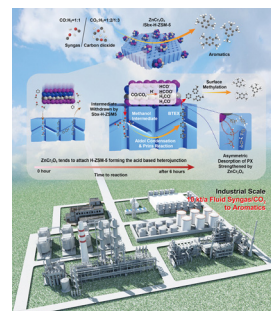
Xiaobo Zheng, Jiarui Yang and Dingsheng Wang*



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A perspective of CO_x conversion to aromatics

Guo Tian, Xiaoyu Liang, Hao Xiong, Chenxi Zhang* and Fei Wei*

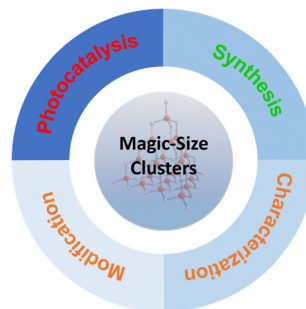


MINIREVIEW

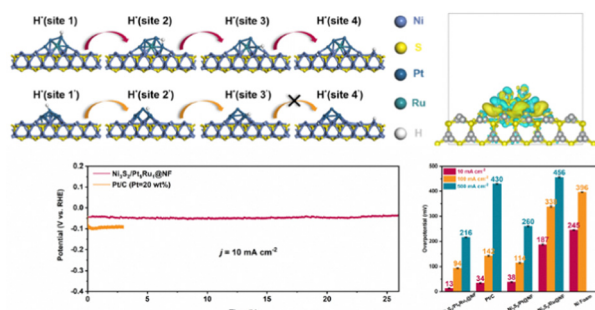
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A review of II–VI semiconductor nanoclusters for photocatalytic CO_2 conversion: synthesis, characterization, and mechanisms

Kai Li, Junjun Ge, Enhao Li, Zhe Li, Hua Wang, Yuanyuan Wang,* Yang Zhou* and Jun-Jie Zhu*



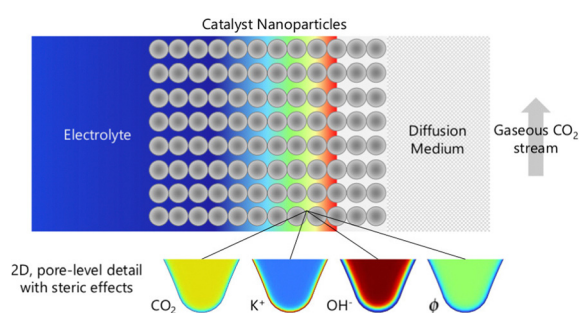
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Hydrogen spillover in Pt₅Ru₁ nanoalloy decorated Ni₃S₂ enabling pH-universal electrocatalytic hydrogen evolution

Zuxi Yu, Xianhong Rui and Yan Yu*

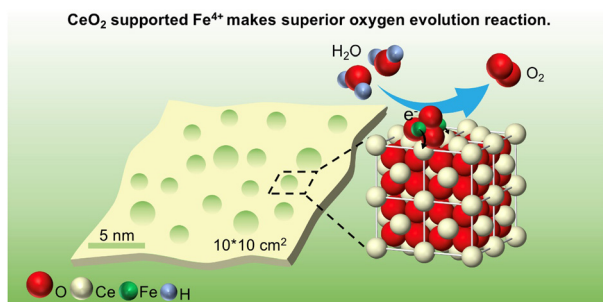
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Pathways to enhance electrochemical CO₂ reduction identified through direct pore-level modeling

Evan F. Johnson, Etienne Boutin, Shuo Liu and Sophia Haussener*

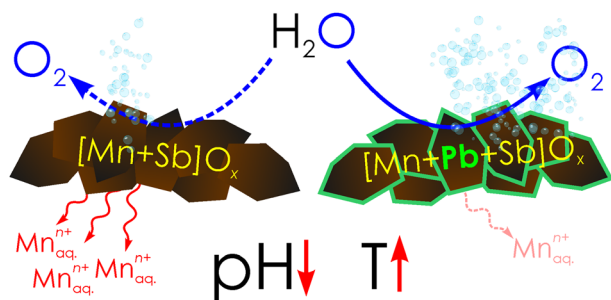
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CeO₂ supported high-valence Fe oxide for highly active and stable water oxidation

Hongzhi Liu, Jun Yu,* Jinghuang Lin, Bin Feng, Mingzi Sun, Chen Qiu, Kun Qian, Zhichun Si, Bolong Huang,* Jean-Jacques Delaunay, Yuichi Ikuhara and Shihe Yang*

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High performance acidic water electrooxidation catalysed by manganese-antimony oxides promoted by secondary metals

Sibimol Luke, Manjunath Chatti, Darcy Simondson, Khang N. Dinh, Brittany V. Kerr, Tam D. Nguyen, Gamze Yilmaz, Bernt Johannessen, Douglas R. MacFarlane, Aswani Yella,* Rosalie K. Hocking* and Alexandr N. Simonov*

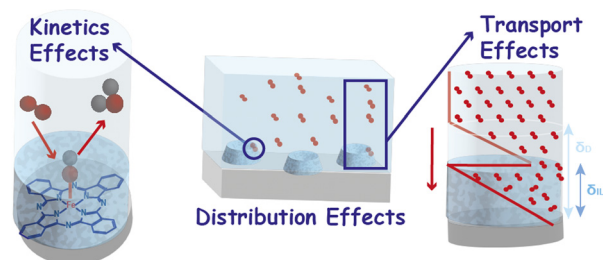


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Deconvoluting kinetics and transport effects of ionic liquid layers on FeN₄-based oxygen reduction catalysts

Silvia Favero, Ifan E. L. Stephens* and Maria-Magdalena Titirici*

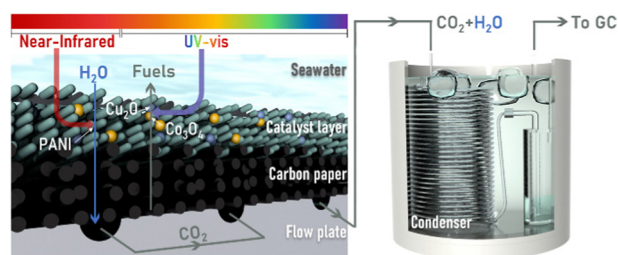
Ionic Liquid Layers for Oxygen Reduction



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Full-spectrum utilization of solar energy for simultaneous CO₂ reduction and seawater desalination

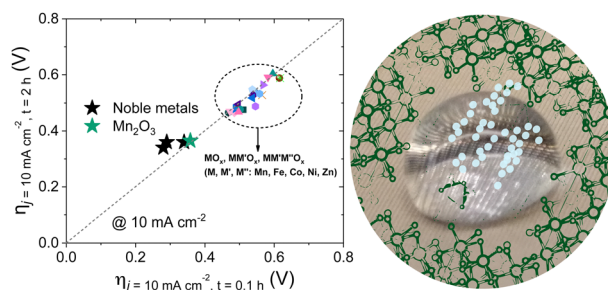
Yuting Yin, Wenhao Jing, Haoran Qiu, Feng Wang, Ya Liu* and Liejin Guo*



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A survey of Earth-abundant metal oxides as oxygen evolution electrocatalysts in acidic media (pH < 1)

Jiahao Yu, Stefano Giancola, Bahareh Khezri, David Nieto-Castro, Jesús Redondo, Frederik Schiller, Sara Barja, Maria Chiara Spadaro, Jordi Arbiol, Felipe A. Garcés-Pineda* and José Ramón Galán-Mascarós*



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Identification of non-metal single atomic phosphorus active sites for the CO₂ reduction reaction

Hong Bin Yang, Cong-Qiao Xu, Sambath Baskaran, Ying-Rui Lu, Chengding Gu, Wei Liu, Jie Ding, Jincheng Zhang, Qilun Wang, Wei Chen, Jun Li,* Yanqiang Huang, Tao Zhang and Bin Liu*

