

Sustainable Energy & Fuels

Interdisciplinary research for the development of sustainable energy technologies

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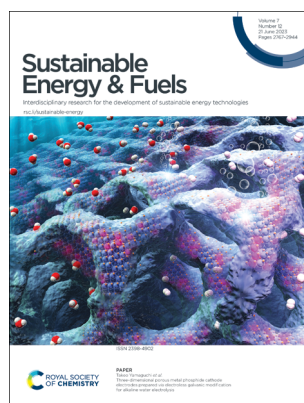
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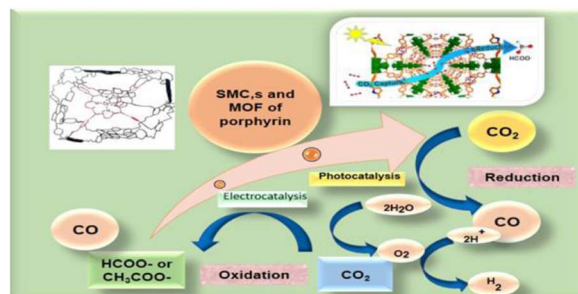
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Supramolecular cages and metal organic frameworks of porphyrins for a sustainable tomorrow: challenges and applications

Kharu Nisa,^{*} Megha Saxena, Ishfaq Ahmad Lone and Ravi Kumar^{*}



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Organic materials as charge hosts for pseudocapacitive energy storage

Suman Yadav, Dhiraj Siddhartha Ingle, Kotagiri Venkata Rao^{*} and Narendra Kurra^{*}



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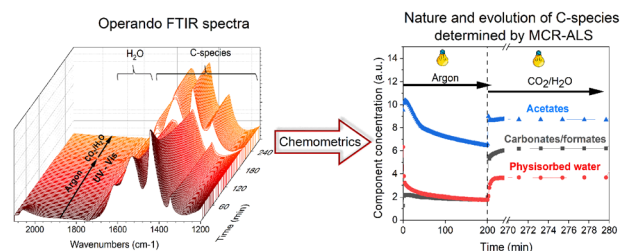


COMMUNICATIONS

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Operando FTIR study of the photocatalytic reduction of CO₂ in the presence of water vapor over Pt/TiO₂: on the role of surface residual C-species

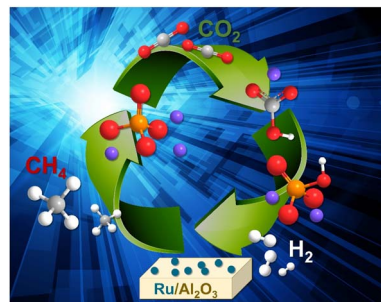
Joudy Dankar,^{*} Céline Pagis, Mickael Rivallan and Mohamad El-Roz^{*}



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Phosphate assisted integrated carbon dioxide capture and conversion to methane

Christopher J. Koch, Anushan Alagaratnam, Alain Goeppert and G. K. Surya Prakash^{*}

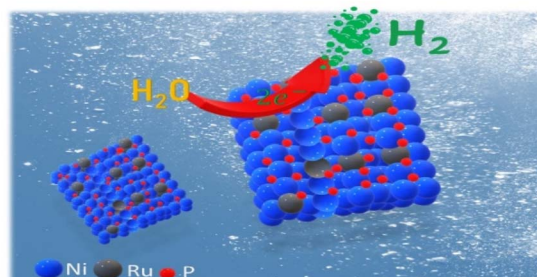


PAPERS

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Three-dimensional porous metal phosphide cathode electrodes prepared via electroless galvanic modification for alkaline water electrolysis

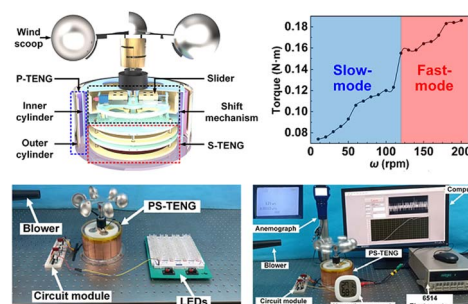
Sankar Sasidharan, Rajith Illathvalappil, S. Assa Aravindh, Hidenori Kuroki, Gopinathan M. Anilkumar and Takeo Yamaguchi^{*}



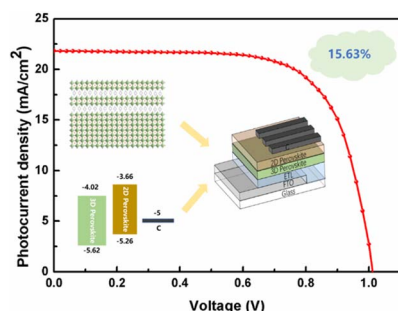
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A primary–secondary triboelectric nanogenerator with charge excitation shift in a wind-driven alternating operating mode

Zhibo Xu, Jianwei Ge, Qianwang Wang, Xin Yu, Yili Hu, Jianming Wen,^{*} Wei Han^{*} and Tinghai Cheng^{*}



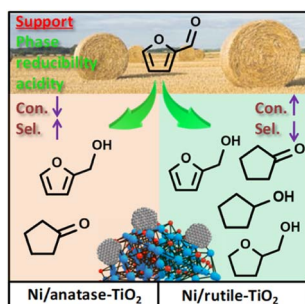
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A 2D/3D heterojunction engineered for carbon-based hole-transport-layer-free perovskite solar cells

Yuanjing Wang, Tie Liu,^{*} Jiawei Zhang, He Liu, Hongfei Li,^{*} Ying Lv, Xiaoyang Guo, Xingyuan Liu, Langping Tu, Yulei Chang and Bin Li^{*}

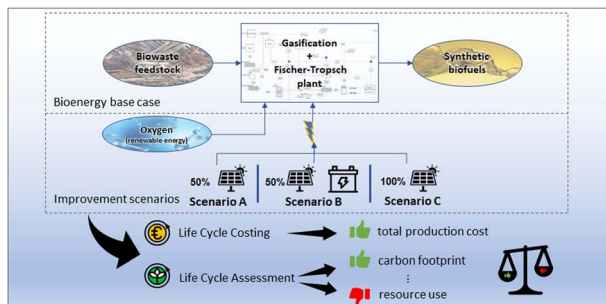
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Aqueous phase hydrogenation of furfural on Ni/TiO₂ catalysts: nature of the support phase steers the product selectivity

Anil Singh Rajpurohit, Venkata Rama Mohan Talla, Madhavan Jaccob,^{*} Krishnamurthy Konda Ramaswamy^{*} and Balasubramanian Viswanathan^{*}

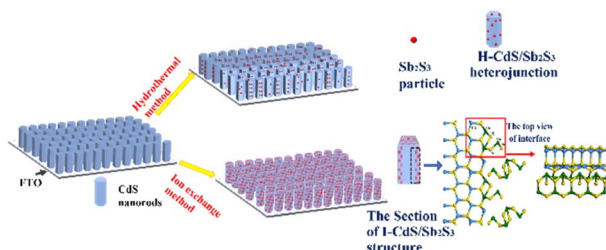
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Effect of improvement actions on the life-cycle environmental and economic performance of synthetic biofuels from date palm waste in Tunisia

Pedro L. Cruz, Mario Martín-Gamboa,^{*} Khaoula Ben Hnich, Javier Dufour and Diego Iribarren

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Interface engineering optimizes the built-in electric field and carrier migration pathways of CdS/Sb₂S₃ for an efficient pyro-photo-electric catalytic system

Xingfei Chen, Zhifeng Liu,^{*} Mengnan Ruan, Chengyi Wang and Zhengang Guo

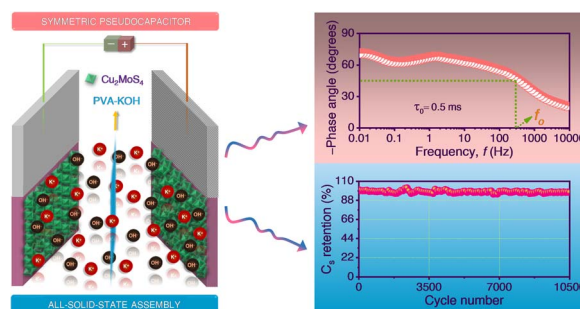


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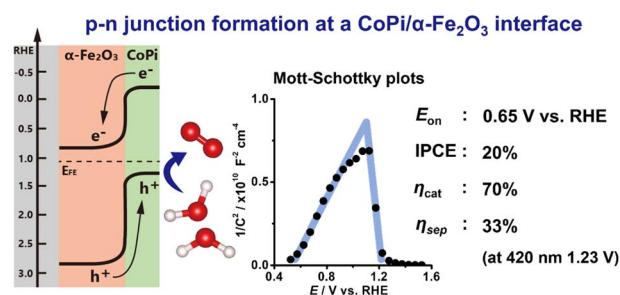
Yogesh Kumar Sonia and Sumanta Kumar Meher*



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p–n junction formation between CoPi and $\alpha\text{-Fe}_2\text{O}_3$ layers enhanced photo-charge separation and catalytic efficiencies for efficient visible-light-driven water oxidation

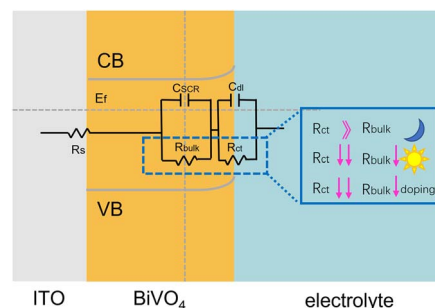
Tomohiro Katsuki, Zaki N. Zahran,* Yuta Tsubonouchi, Debraj Chandra, Norihisa Hoshino and Masayuki Yagi*



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Influence of Mo doping on interfacial charge carrier dynamics in photoelectrochemical water oxidation on BiVO_4

Xiaofeng Wu, Freddy E. Oropeza, Zheng Qi, Marcus Einert, Chuanmu Tian, Clément Maheu, Kangle Lv and Jan P. Hofmann*



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High-voltage ionic liquid-based flexible solid polymer electrolyte for high-performance Li-ion batteries

Rushikesh B. Kale, Sahebrao S. More, Nageshwar D. Khupse, Ramchandra S. Kalubarme, Milind V. Kulkarni, Sunit B. Rane and Bharat B. Kale*

