

Sustainable Energy & Fuels

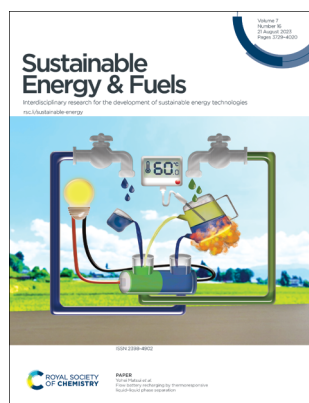
Interdisciplinary research for the development of sustainable energy technologies

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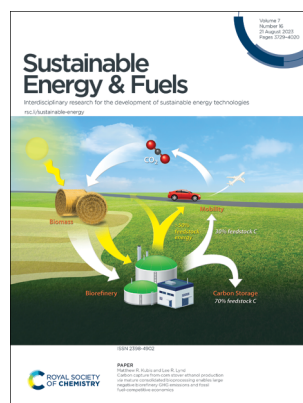
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IN THIS ISSUE

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EDITORIAL

3738

Harnessing the power of biorefining: paving the way for sustainable fuels and chemicals

George W. Huber, Muxina Konarova, Jason Y. C. Lim and Karen Wilson*

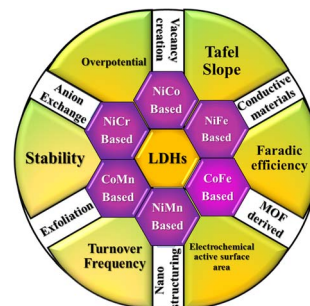


REVIEWS

3741

A review on consequences of flexible layered double hydroxide-based electrodes: fabrication and water splitting application

Sreenivasan Nagappan, Seungmin Yang, Arindam Adhikari, Rajkumar Patel* and Subrata Kundu*



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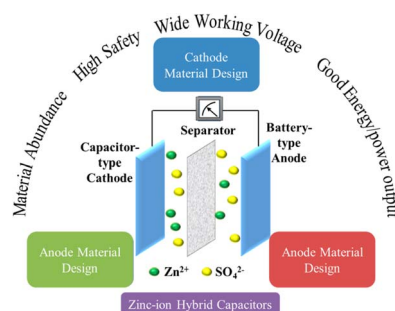


REVIEWS

3776

Recent developments in zinc metal anodes, cathodes, and electrolytes for zinc-ion hybrid capacitors

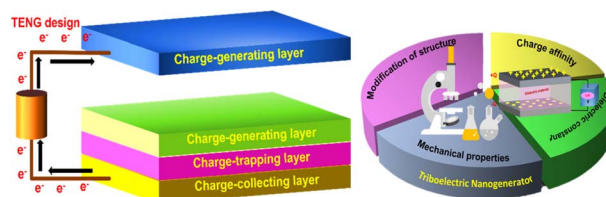
Meghali Devi, Brindha Moorthy and Ranjith Thangavel*



3796

Applications of multifunctional triboelectric nanogenerator (TENG) devices: materials and prospects

Prabhakar Yadav, Kuldeep Sahay,* Arpit Verma, D. K. Maurya and B. C. Yadav*

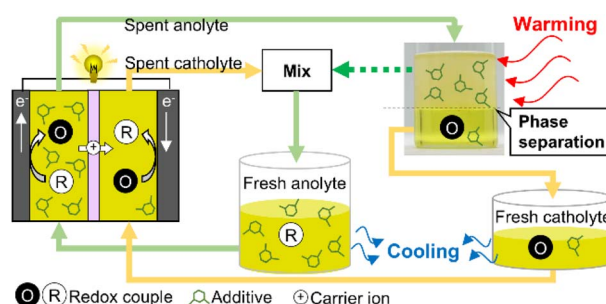


PAPERS

3832

Flow battery recharging by thermoresponsive liquid–liquid phase separation

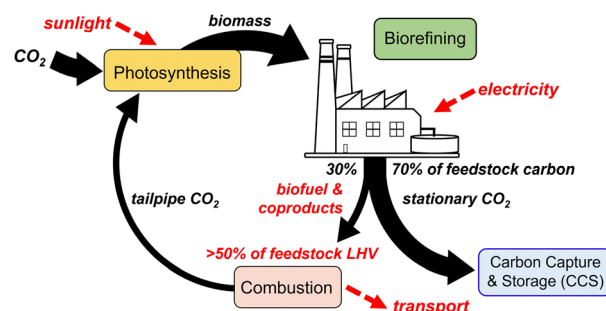
Yohei Matsui,* Yuki Maeda, Makoto Kawase, Takahiro Suzuki and Shohji Tushima



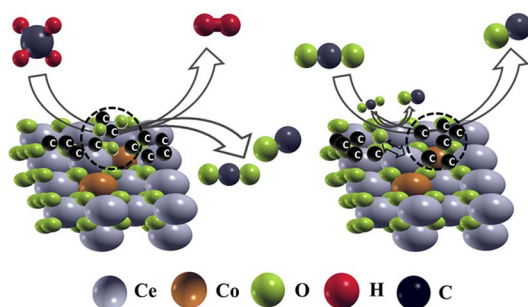
3842

Carbon capture from corn stover ethanol production via mature consolidated bioprocessing enables large negative biorefinery GHG emissions and fossil fuel-competitive economics

Matthew R. Kubis and Lee R. Lynd*



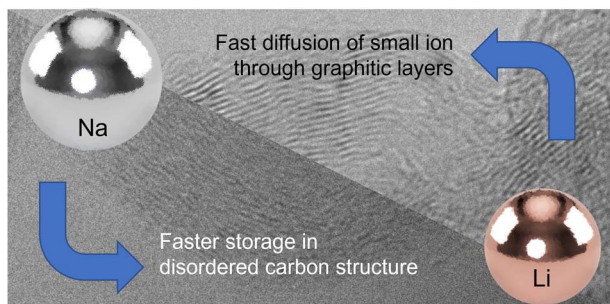
3853



Ni/Co in and on CeO₂: a comparative study on the dry reforming reaction

Pradeep Kumar Yadav, Kalyani Patrikar, Anirban Mondal and Sudhanshu Sharma*

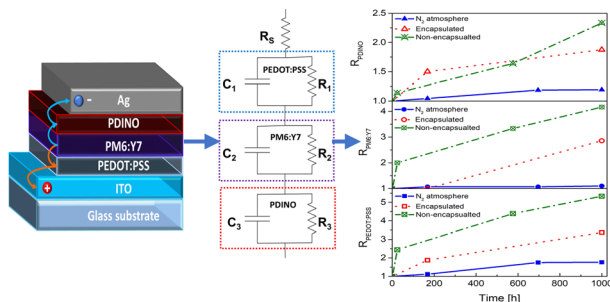
3871



Influence of structural modifications on the alkali ion storage properties of carbon black in hybrid ion capacitor negative electrodes

Johannes Schenk, Desirée Leistenschneider, Stephanie Hoepfner, Ulrich S. Schubert, Konstantin Schutjajew* and Martin Oschatz*

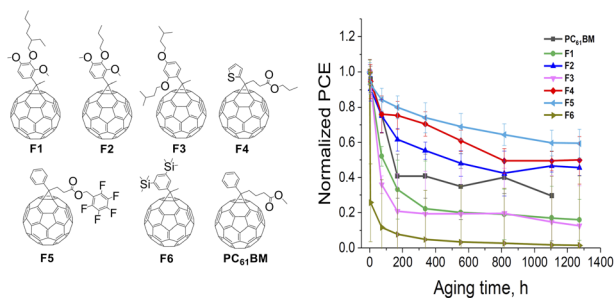
3883



Understanding the role of interfacial layers in the photostability of PM6:Y7-based organic solar cells under different degradation conditions

Magaly Ramírez-Como, Enas Moustafa, Mohamed Samir, Alfonsina Abat Amelenan Torimtubeun, José G. Sánchez, Josep Pallarès* and Lluís F. Marsal*

3893



What defines the perovskite solar cell efficiency and stability: fullerene-based ETL structure or film morphology?

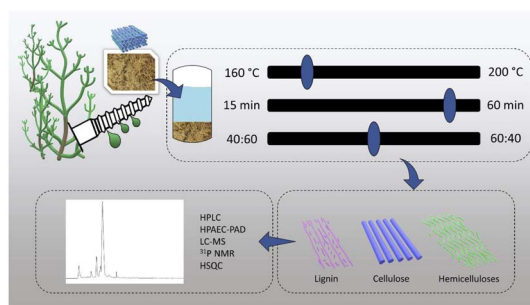
Mohamed M. Elnaggar, Alexander V. Mumyatov, Nikita A. Emelianov, Lavrenty G. Gutsev, Victoria V. Ozerova, Ivan V. Fedyanin, Yulia V. Nelyubina, Sergey I. Troyanov, Bala R. Ramachandran and Pavel A. Troshin*



3902

A novel biorefinery concept based on marginally used halophyte biomass

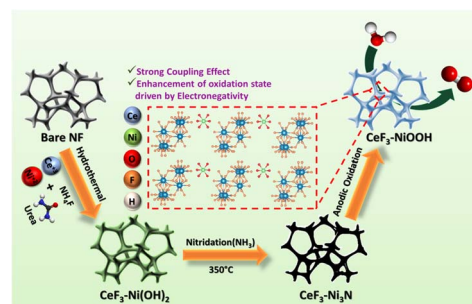
Maxwel Monção, Petter Paulsen Thoresen, Tobias Wretborn, Heiko Lange, Ulrika Rova, Paul Christakopoulos and Leonidas Matsakas*



3919

Strong coupling effect induced surface reconstruction of $\text{CeF}_3\text{-Ni}_3\text{N}$ to form $\text{CeF}_3\text{-NiOOH}$ for the oxygen evolution reaction

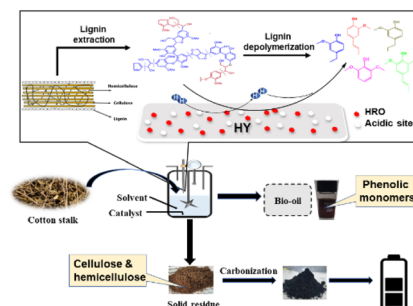
Rajdeep Kaur, Ashish Gaur, Jatin Sharma, Vikas Pundir, Aashi and Vivek Bagchi*



3926

Lignin-first biorefinery approach for the valorization of cotton stalks to phenolic monomers

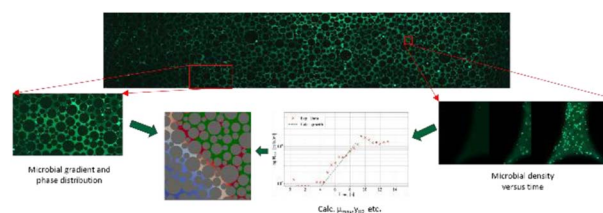
Meenu Jindal, Adarsh Kumar, Shivam Rawat and Bhaskar Thallada*



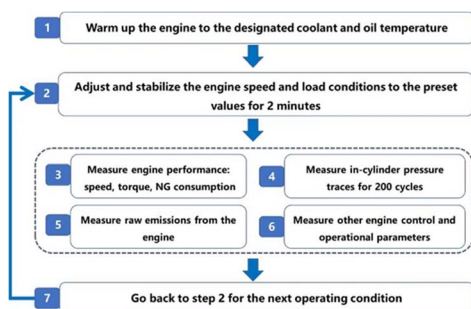
3939

Experimental and numerical investigation of microbial growth in two-phase saturated porous media at the pore-scale

Gion Strobel,* Jan Zawallich,* Birger Hagemann, Leonhard Ganzer and Olaf Ippisch



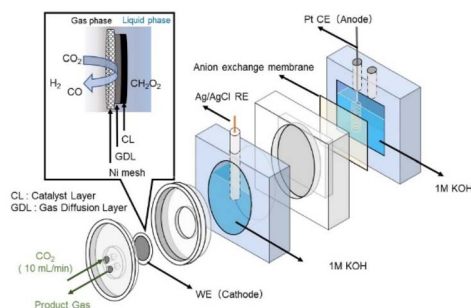
3949



Effects of piston shapes and swirl ratios on combustion and emissions of a micro diesel pilot-ignition natural gas engine

Jianqin Fu, Chao Li, Feng Zhou,* Jun Shu* and Jingping Liu

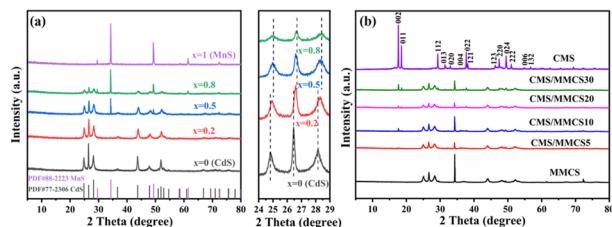
3964



Enhancement of formic acid formation by nitrogen-doped graphene oxide nanosheets decorated with Sn nanoparticles in electrochemical CO₂ reduction

Yuma Tano, Muhammad Sohail Ahmad,* Yuya Watase, Tatsuki Tsugawa, Satoko Takase, Yusuke Inomata, Kazuto Hatakeyama, Shintaro Ida, Quitain Armando, Youichi Shimizu and Tetsuya Kida*

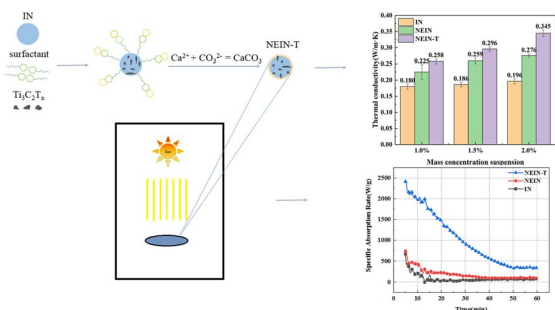
3972



MnS/Mn_{0.5}Cd_{0.5}S nanorods modified with Cu₂MoS₄ nanoplates for efficient photocatalytic hydrogen evolution

Jingjing Jiang, Chao Liu, Xiaolong Fang* and Fengjun Zhang

3981



Enhanced thermal conductivity and photothermal conversion efficiency of MXene-doped sugar alcohol nanocapsules for medium-temperature solar utilization

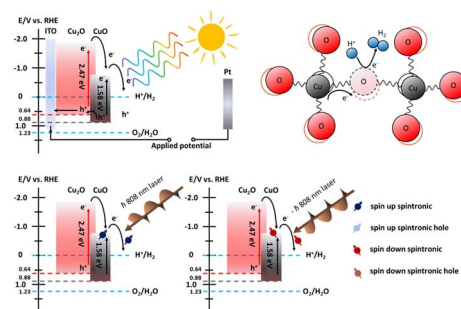
Yuanhong Li, Songping Mo,* Junhao Chen, Bo Xiao, Lisi Jia and Ying Chen



3993

Spintronic filter via p-typed polaron state in photoelectron conversion integrating devices

Yi-Sheng Lai,* Dao-Jing Huang, Xiu-Xuan Zhang and Yen-Hsun Su



4002

Gradient boosting machine for performance and emission investigation of diesel engine fueled with pyrolytic oil–biodiesel and 2-EHN additive

Fatih Okumuş,* Halil İbrahim Sönmez, Aykut Safa, Cenk Kaya and Görkem Kökkülünk

