Energy Advances

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ISSN 2753–1457 CODEN EANDBJ 3(7) 1461–1756 (2024)

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EDITORIAL

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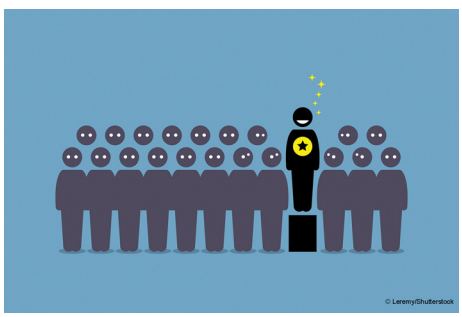
Outstanding Reviewers for *Energy Advances* in 2023



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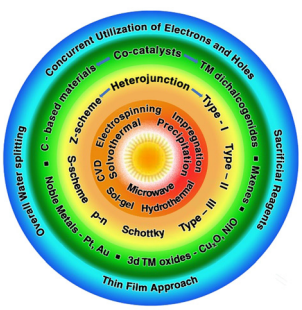
A review on the recent advances in the design and structure–activity relationship of TiO_2-based photocatalysts for solar hydrogen production

Sunesh S. Mani, Sivaraj Rajendran, Thomas Mathew* and Chinnakonda S. Gopinath*



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REVIEWS

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Dynamic synergy of tin in the electron-transfer layer and absorber layer for advancing perovskite solar cells: a comprehensive review

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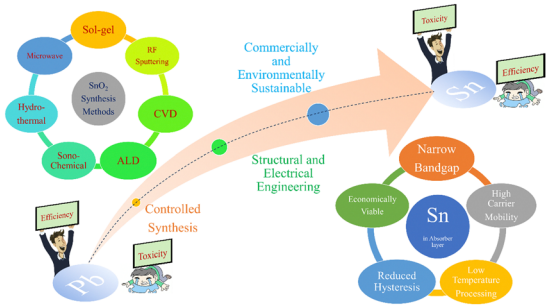

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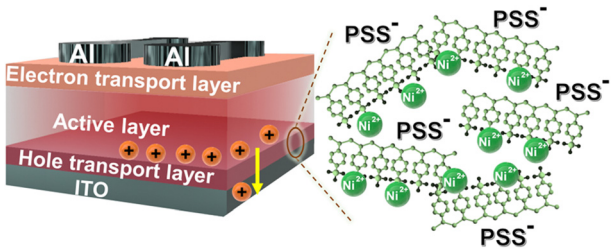
Nickel polyelectrolytes as hole transporting materials for organic and perovskite solar cell applications

Jin Hee Lee, Kausar Ali Khawaja, Faiza Shoukat, Yeasin Khan, Do Hui Kim, Shinuk Cho,* Bright Walker* and Jung Hwa Seo*



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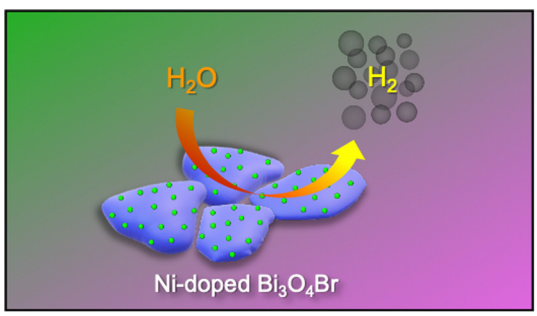
Strategic Ni-doping improved electrocatalytic H_2 production by Bi_3O_4Br in alkaline water

Manodip Pal, Rathindranath Biswas, Sanmitra Barman* and Arnab Dutta*



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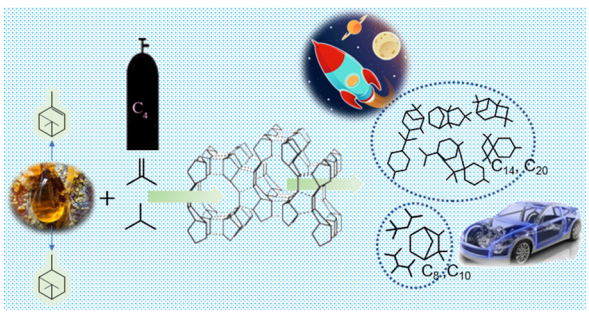
Alkylation of α-pinene with isobutene/isobutane over Hβ zeolite

Zhaocai Jiao, Mingzu Liu, Ningbo Yang, Fengli Yu, Congxia Xie, Shitao Yu and Bing Yuan*



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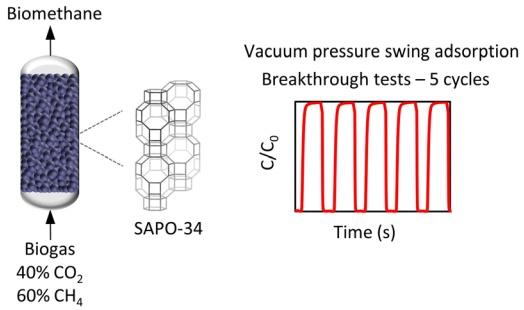

Evaluation of binderless LTA and SAPO-34 beads as CO_2 adsorbents for biogas upgrading in a vacuum pressure swing adsorption setup

Dina G. Boer, Henk H. van de Bovenkamp, Jort Langerak, Benny Bakker and Paolo P. Pescarmona*

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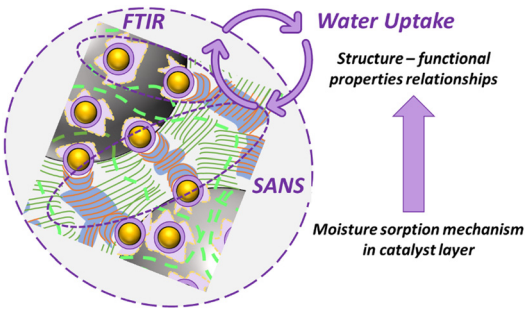

***In situ* investigation of moisture sorption mechanism in fuel cell catalyst layers**

Emilie Planes,* Joseph Peet, Jean-Blaise Brubach, Lionel Porcar, Gilles De Moor, Cristina Iojoiu* and Sandrine Lyonnard*

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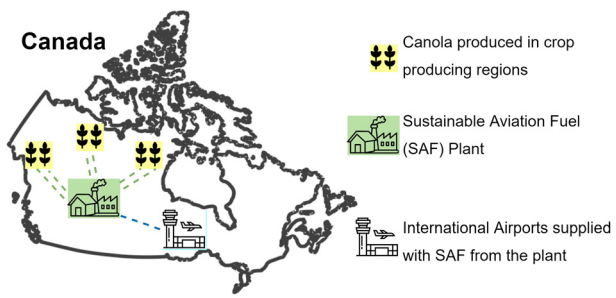

A framework to estimate national biofuel potential by siting production facilities: a case study for canola sustainable aviation fuel in Canada

Praveen Siluvai Antony,* Caroline Vanderghem, Heather L. MacLean, Bradley A. Saville and I. Daniel Posen

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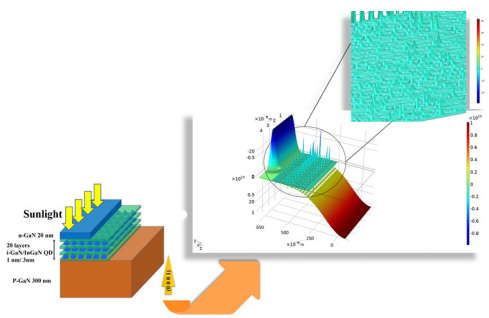

Structural optimization and engineering of $In_xGa_{1-x}N$ quantum dot intermediate band solar cells with intrinsic GaN interlayers

Deborah Eric,* Jianliang Jiang,* Ali Imran and Abbas Ahmad Khan

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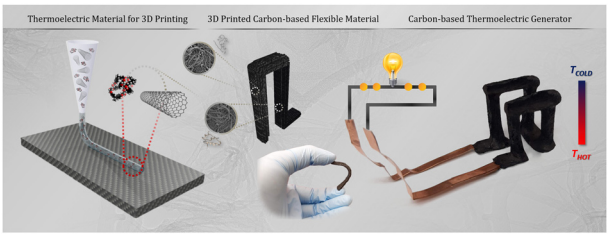
Additive manufacturing of highly conductive carbon nanotube architectures towards carbon-based flexible thermoelectric generators

Christos K. Mytafides,* William J. Wright, Raden Gustinvil, Lazaros Tzounis, George Karalis, Alkiviadis S. Paipetis and Emrah Celik*



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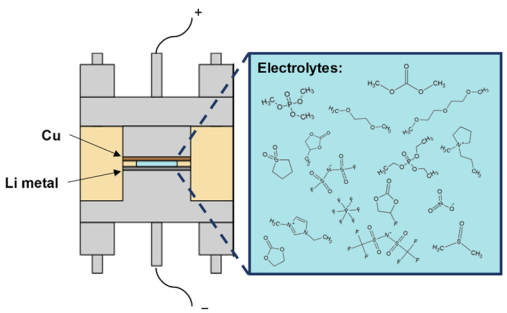
Intrinsic effects of electrolytes on lithium metal deposition and dissolution investigated through a separator-free cell

Tomoki Takahashi, Di Wang, Jinkwang Hwang* and Kazuhiko Matsumoto*



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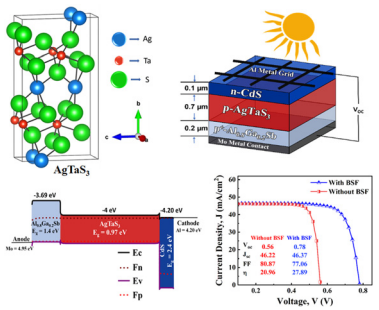
Design and performance evaluation of all-inorganic $AgTaS_3$ perovskite solar cells

Tanvir Ahmed, Md. Choyon Islam, Md. Alamin Hossain Pappu, Md. Islahur Rahman Ebon, Sheikh Noman Shiddique, Mainul Hossain and Jaker Hossain*



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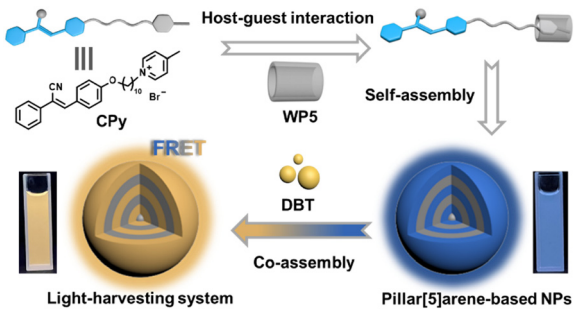
Construction of a supramolecular light-harvesting system based on pillar[5]arene-mediated nanoparticles in water

Xiuxiu Li, Qiaona Zhang, Xiaoman Dang, Fengyao Cui, Zheng-Yi Li, Xiao-Qiang Sun and Tangxin Xiao*



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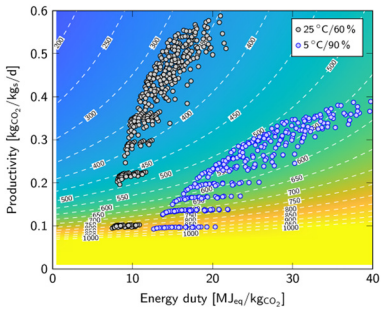

Optimizing direct air capture under varying weather conditions

H. M. Schellevis, J. D. de la Combé and D. W. F. Brilman*

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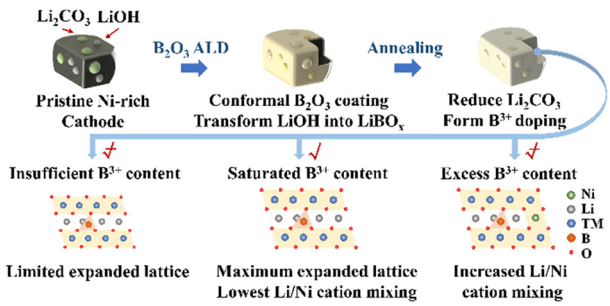

Stabilization of the surface and lattice structure for $LiNi_{0.83}Co_{0.12}Mn_{0.05}O_2$ *via* B_2O_3 atomic layer deposition and post-annealing

Jiawei Li, Junren Xiang, Ge Yi, Zhijia Hu, Xiao Liu* and Rong Chen*

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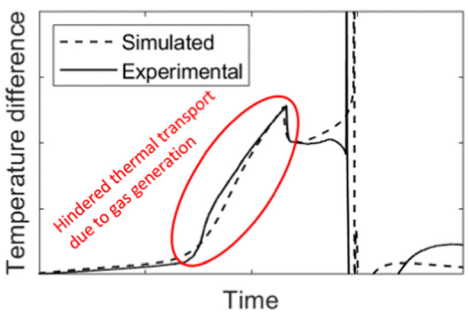

On the effect of gas generation on heat transfer during thermal runaway of pouch cells

Niklas Weber,* Sebastian Schuhmann, Robert Löwe, Jens Tübke and Hermann Nirschl

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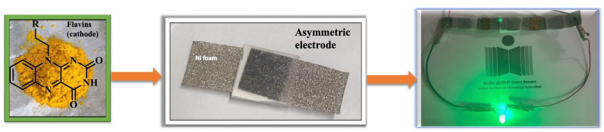

Bioinspired flavin analogues as organic electrode materials for supercapacitor applications

Dipayan Mondal, Ishita Naskar, Melepurath Deepa* and Ashutosh Kumar Mishra*

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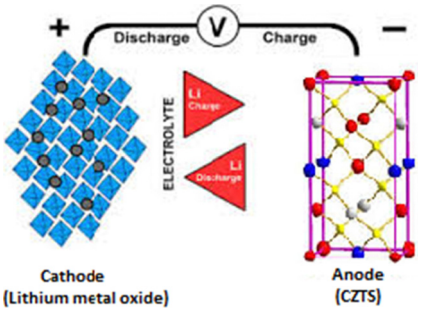
Dual-functionality of CZTS nanoflakes: as an anode material for lithium-ion batteries and as a counter electrode in DSSCs – a DFT and experimental investigation

G. Rajesh,* Jeyakiruba Palraj, Venkatraman M. R., Ramesh Sivasamy, Sreejith P. Madhusudanan, Helen Annal Therese and Marcos Flores



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Electrochemical characterization of γ-Fe_2O_3 and a reduced graphene oxide composite as a sustainable anode material for Na-ion batteries

Antunes Staffolani,* Leonardo Sbrascini, Luca Bottoni, Luca Minnetti, Hamideh Darjazi, Angela Trapananti, Francesco Paparoni, Seyed Javad Rezvani, Marco Minicucci, Messaoud Harfouche and Francesco Nobili

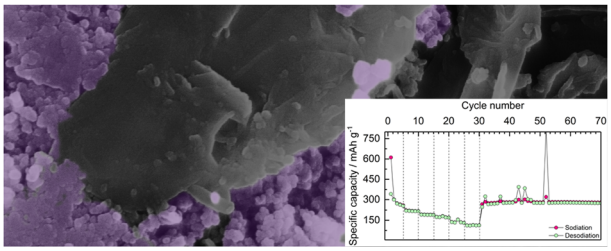

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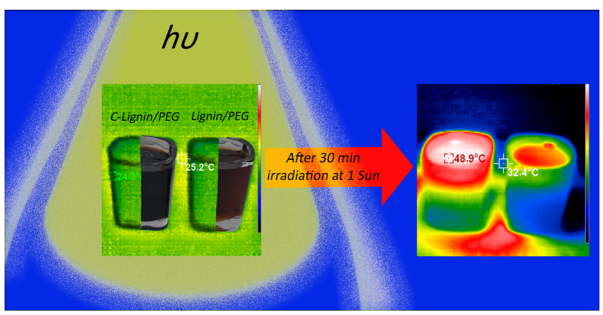
Photo-thermal conversion ability of PEG and H_2O-based microfluids of sodium lignosulfonate and its carbonized form

Fatemeh Seifikar, Saeid Azizian* and Babak Jaleh



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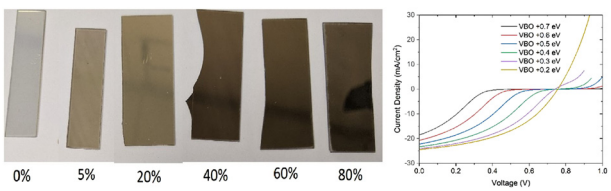
The effect of oxygen on NiO as a back buffer layer in CdTe solar cells

Nicholas Hunwick,* Xiaolei Liu, Mustafa Togay, John M. Walls, Jake Bowers and Patrick J. M. Isherwood



CORRECTION

1754

Correction: Recent trends on the application of phytochemical-based compounds as additives in the fabrication of perovskite solar cells

Naomy Chepngetich, Gloria M. Mumbi, Getnet Meheretu M., Koech K. Richard,* Geoffrey K. Yegon, Sarah C. Chepkwony, Charles Rono K., Dahiru Sanni, Abdulhakeem Bello and Esidor Ntsoenzok