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See Daisuke Suzuki *et al.*, pp. 3418–3424.

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See Mood Mohan, Seema Singh *et al.*, pp. 3475–3492.

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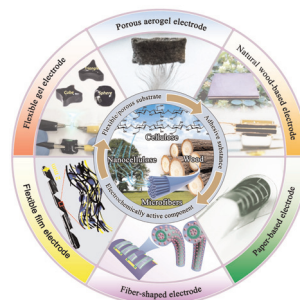
The authors acknowledge Gugulothu Nikhitha for the cover artwork.

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Recent advances in wood-based electrode materials for supercapacitors

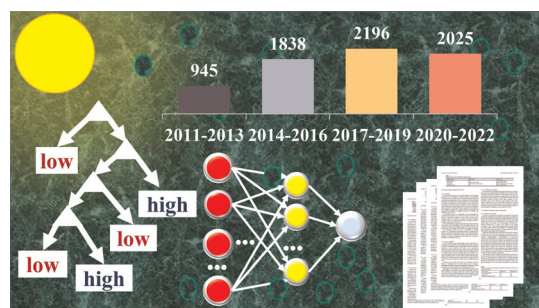
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Ahmet Coşgun, M. Erdem Günay and Ramazan Yıldırım*



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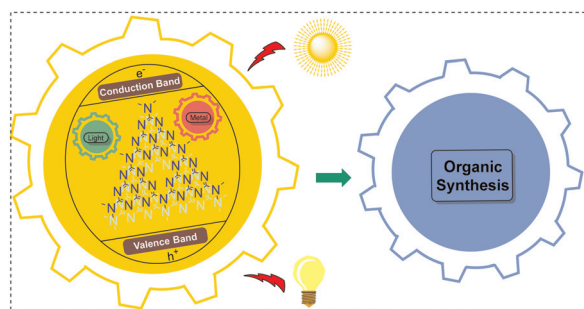


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Graphitic carbon nitride materials in dual metallo-photocatalysis: a promising concept in organic synthesis

Binoyargha Dam, Bubul Das and Bhisma K. Patel*

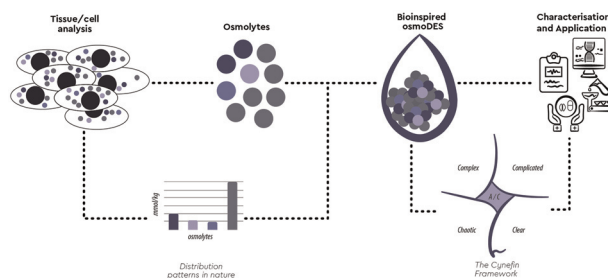


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Natural multi-osmolyte cocktails form deep eutectic systems of unprecedented complexity: discovery, affordances and perspectives

Marina Cvjetko Bubalo,* Thanos Andreou,* Manuela Panić, Mia Radović, Kristina Radošević and Ivana Radojčić Redovniković

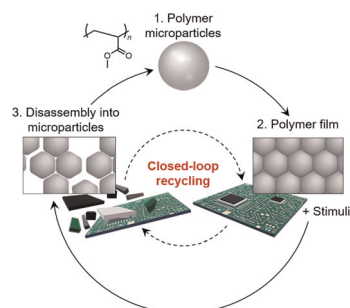


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Closed-loop recycling of microparticle-based polymers

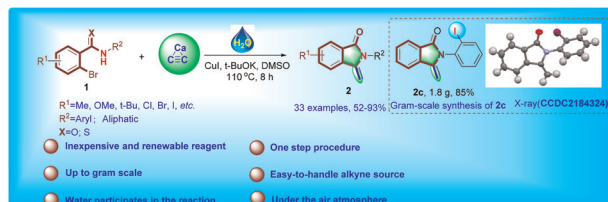
Takumi Watanabe, Haruka Minato, Yuma Sasaki, Seina Hiroshige, Hayato Suzuki, Nahomi Matsuki, Koki Sano, Takeshi Wakiya, Yuichiro Nishizawa, Takayuki Uchihashi, Takuma Kureha, Mitsuhiro Shibayama, Toshikazu Takata and Daisuke Suzuki*



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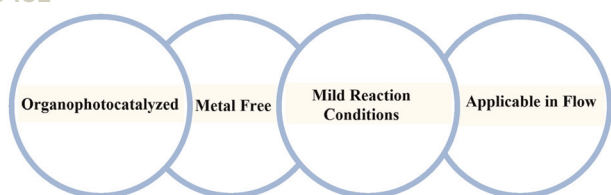
Copper-catalyzed direct synthesis of 3-methylene-2-arylisindolin-1-ones with calcium carbide as a surrogate of gaseous acetylene

Jianglong Wu, Yinfeng Ma, Yan Wang, Chenyu Wang, Hui Luo, Dianjun Li* and Jinhui Yang*



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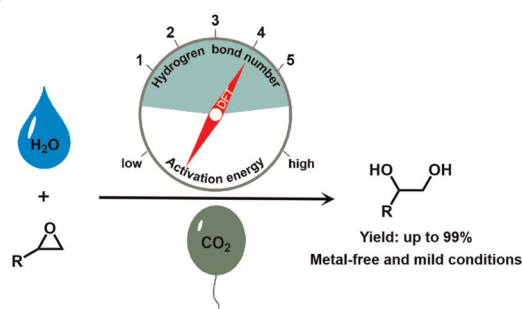
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Metal-free photoinduced hydrogen atom transfer assisted C(sp³)-H thioarylation

Jagrit Grover, Gaurav Prakash, Chitralla Teja, Goutam Kumar Lahiri* and Debabrata Maiti*

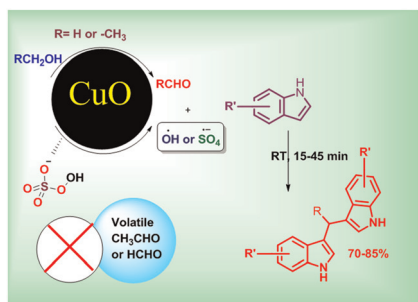
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Computer-assisted design of metal-free catalysts for highly efficient hydration of epoxides at mild temperatures and atmospheric pressure via multiple hydrogen bonding interactions

Zhenyu Zhao, Weidong Zhang, Lili Jiang, Han Tao, Shenyao Wang, Kaili Wang, Wenjun Lin, Guiling Shi,* Haoran Li and Congmin Wang*

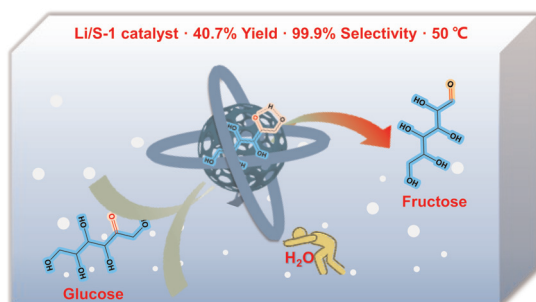
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Utilization of methanol and ethanol for 3,3'-bis(indolyl)methane synthesis through activation of peroxymonosulfate over a copper catalyst

Arpita Devi, Mrinmoy Manash Bharali, Subir Biswas, Tonmoy J. Bora, Jayanta K. Nath, Seonghwan Lee, Young-Bin Park, Lakshi Saikia, Manash J. Baruah and Kusum K. Bania*

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Water-induced efficient isomerization of glucose into fructose over the lithium loaded silicalite-1 catalyst at 50 °C

Yanfei Zhang, Wang Liu, Xinpeng Zhao, Gai Miao, Mengya Sun, Xinqing Chen,* Hu Luo,* Shenggang Li and Lingzhao Kong*

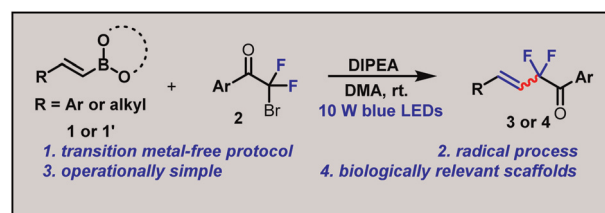


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Visible light-mediated metal-free alkyl Suzuki–Miyaura coupling of alkyl halides and alkenylboronic acids/esters: a green method for the synthesis of allyl difluoride derivatives

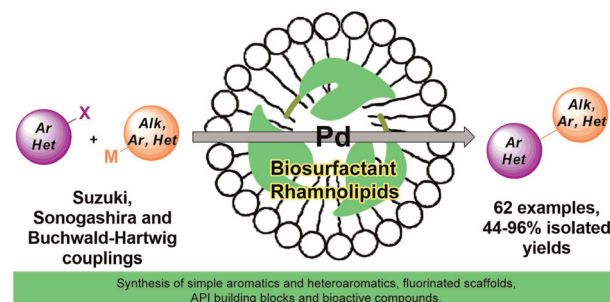
Chuan-Hua Qu, Xiao Yan, Shu-Ting Li, Jian-Bo Liu, Zhi-Gang Xu, Zhong-Zhu Chen, Dian-Yong Tang,* Huan-Xiang Liu* and Gui-Ting Song*



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Gate to a parallel universe: utilization of biosurfactants in micellar catalysis

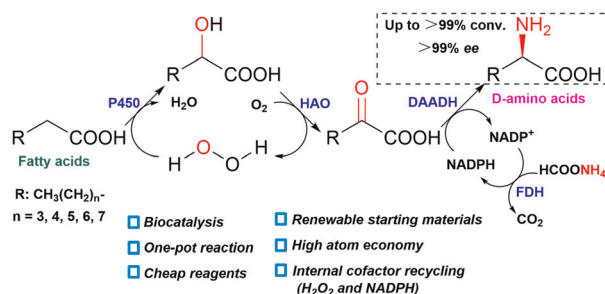
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Regio- and stereo-selective amination of fatty acids to D-amino acids by a three-step one-pot cascade

Xing Yu, Xin-Yi Chen, Hui-Lei Yu, Jian-He Xu and Zhi-Jun Zhang*

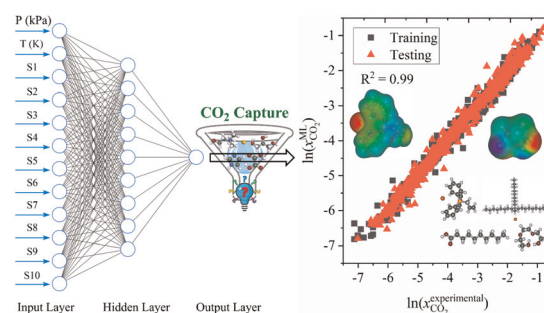


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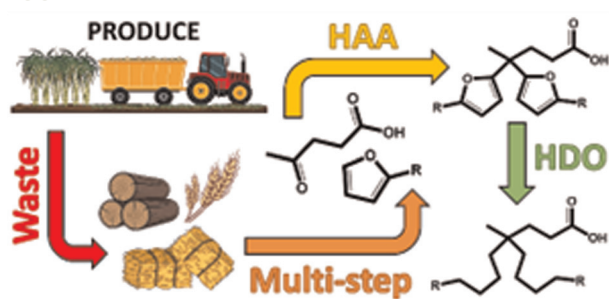
Accurate prediction of carbon dioxide capture by deep eutectic solvents using quantum chemistry and a neural network

Mood Mohan,* Omar Demerdash, Blake A. Simmons, Jeremy C. Smith, Michelle K. Kidder and Seema Singh*



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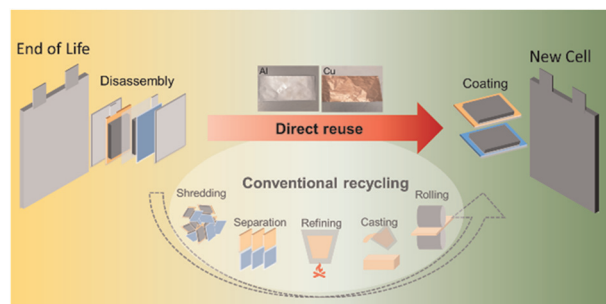
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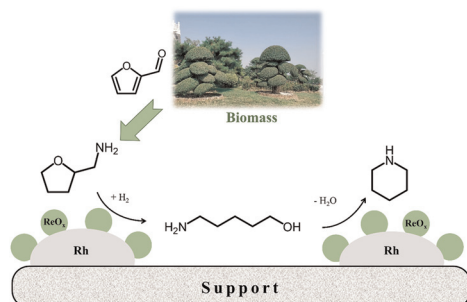
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Direct reuse of aluminium and copper current collectors from spent lithium-ion batteries

Pengcheng Zhu,* Elizabeth H. Driscoll, Bo Dong, Roberto Sommerville, Anton Zorin, Peter R. Slater* and Emma Kendrick*

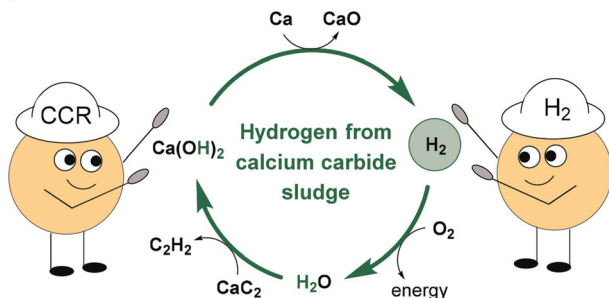
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Selective hydrogenolysis of bio-renewable tetrahydrofurfurylamine to piperidine on ReO_x -modified Rh catalysts

Cheng-Bin Hong, Guoliang Li and Haichao Liu*

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Calcium carbide residue – a promising hidden source of hydrogen

Kristina A. Lotsman and Konstantin S. Rodygin*

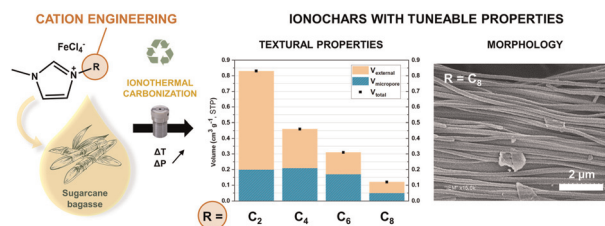


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Ionothermal carbonization of sugarcane bagasse in imidazolium tetrachloroferrate ionic liquids: effect of the cation on textural and morphological properties

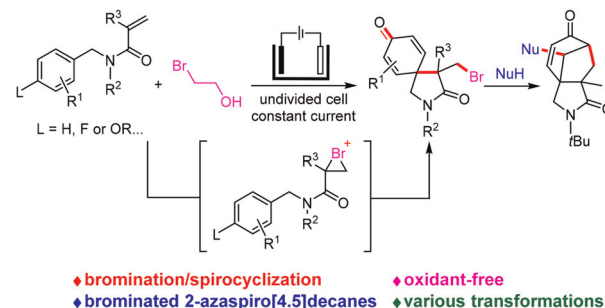
Soha Aldroubi, Mohamed El-Sakhawy, Samir Kamel, Peter Hesemann, Ahmad Mehdi* and Nicolas Brun*



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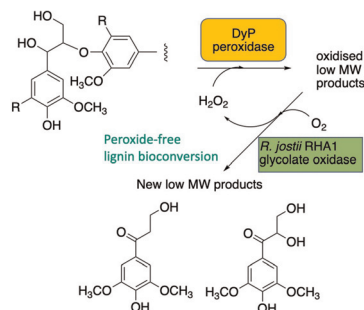
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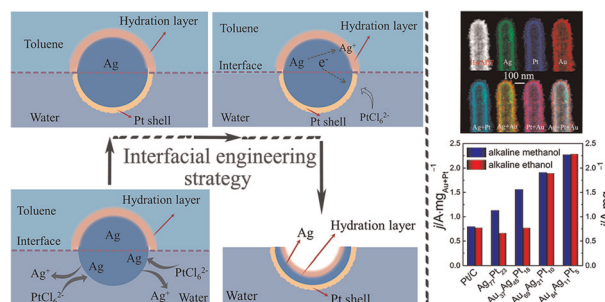
Awatif Alruwaili, Goran M. M. Rashid and Timothy D. H. Bugg*



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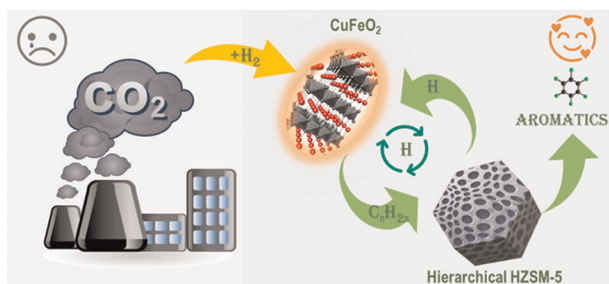
Surface-Pt-rich AgPtAu trimetallic nanotrough arrays for boosting alcohol electrooxidation

Jing-Jing Li, Wen-Chao Geng, Ling Jiang and Yong-Jun Li*



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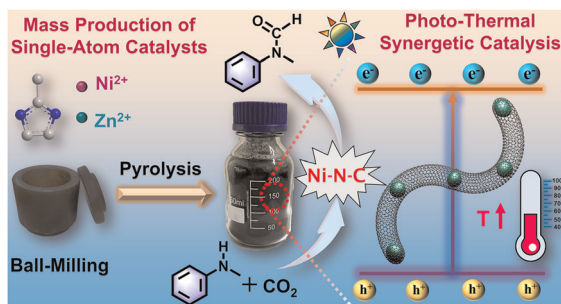
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High-yield production of aromatics over CuFeO₂/hierarchical HZSM-5 via CO₂ Fischer–Tropsch synthesis

Yang Cheng, Yong Chen, Shuxian Zhang, Xiaoting Wu, Chide Chen, Xin Shi, Ming Qing, Jifan Li,* Chun-Ling Liu and Wen-Sheng Dong*

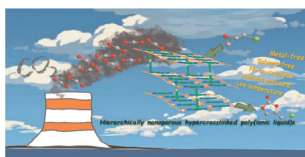
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Large-scale and solvent-free synthesis of magnetic bamboo-like nitrogen-doped carbon nanotubes with nickel active sites for photothermally driven CO₂ fixation

Yingchun Guo, Xinxin Wang, Lei Feng, Feng Liu, Jinsheng Liang,* Xiaomei Wang* and Xu Zhang*

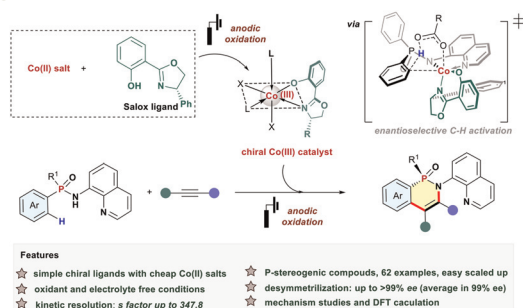
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Maximizing the ionic liquid content and specific surface area in hierarchically nanoporous hypercrosslinked poly(ionic liquid)s towards the efficient conversion of CO₂ into cyclic carbonates

Hongbing Lyu, Xiaochen Wang,* Wanting Sun, Ergang Xu, Yaping She, Anqiu Liu,* Daming Gao, Miao Hu, Jianhua Guo, Kunhong Hu, Jihai Cheng, Zhouyang Long, Yangqing Liu and Pengjie Zhang

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Synthesis of P-stereogenic cyclicphosphinic amides via electrochemically enabled cobalt-catalyzed enantioselective C–H annulation

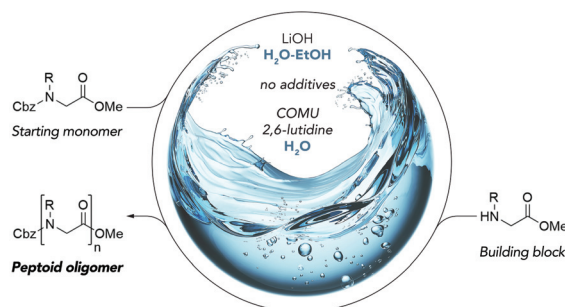
Tao Liu, Wangqin Zhang, Chao Xu, Zhenhui Xu, Dingguo Song, Wei Qian, Gang Lu, Chang-Jun Zhang, Weihui Zhong and Fei Ling*



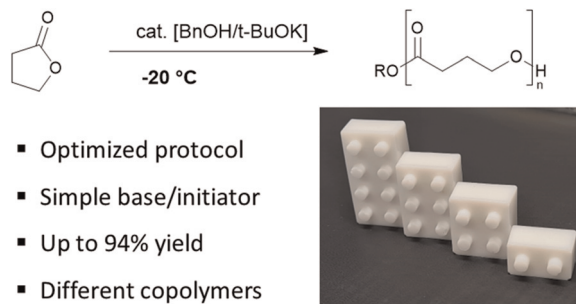
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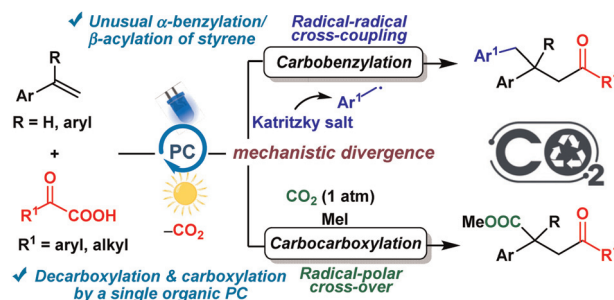
Greener peptoid synthesis in additive-free water-based media

Nassirine Soumanou, Dorthe Lybye,
Thomas Hjelmgaard* and Sophie Faure*

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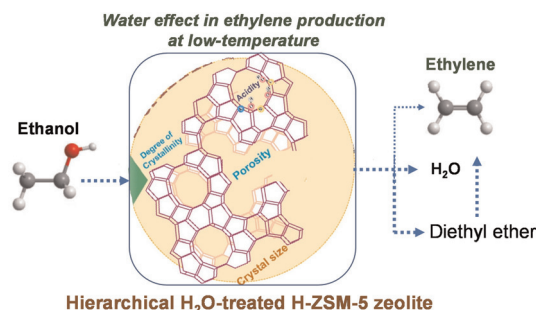
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Rupert Konradi, Bernd Bruchmann, Dieter Rodewald,
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Shuvam Mondal and Ranjan Jana*

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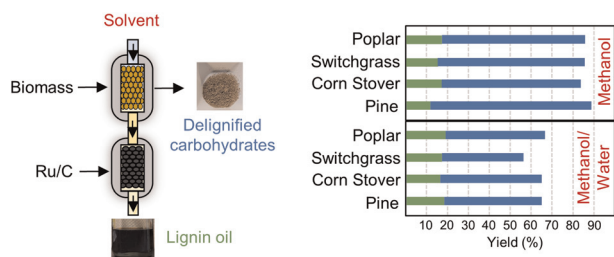
New mechanistic insights into the role of water in the dehydration of ethanol into ethylene over ZSM-5 catalysts at low temperature

L. Ouayloul, M. El Doukkali,* M. Jiao, F. Dumeignil and
I. Agirrezabal-Telleria*

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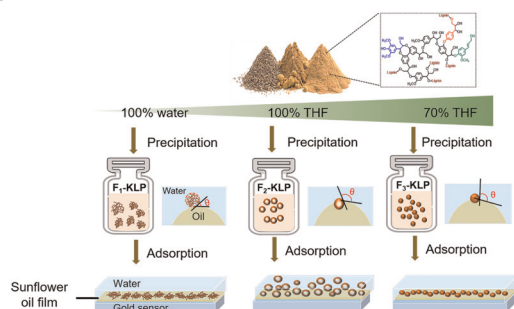
Reductive Catalytic Fractionation



Feedstock-agnostic reductive catalytic fractionation in alcohol and alcohol–water mixtures

Jun Hee Jang, Ana Rita C. Morais, Megan Browning, David G. Brandner, Jacob K. Kenny, Lisa M. Stanley, Renee M. Happs, Anjaneya S. Kovvali, Joshua I. Cutler, Yuriy Román-Leshkov,* James R. Bielenberg* and Gregg T. Beckham*

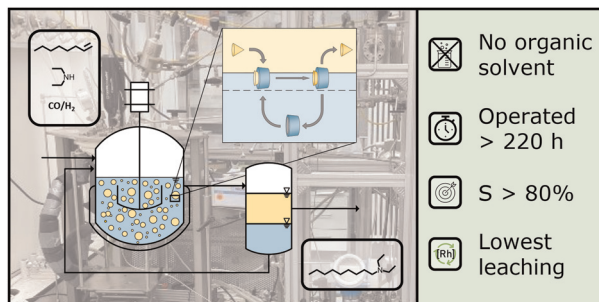
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Interfacial activity and Pickering stabilization of kraft lignin particles obtained by solvent fractionation

Jing Tian, Jingqian Chen, Peipei Wang, Jiaqi Guo, Wenyuan Zhu, Mohammad Rizwan Khan, Yongcan Jin, Junlong Song* and Orlando J. Rojas*

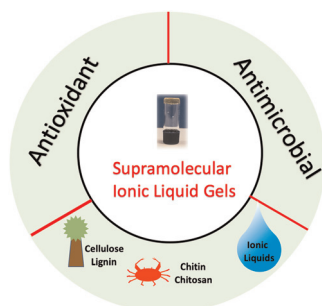
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Continuous production of amines directly from alkenes via cyclodextrin-mediated hydroaminomethylation using only water as the solvent

Thomas Roth, Rebecca Evertz, Niklas Kopplin, Sébastien Tilloy, Eric Monflier, Dieter Vogt and Thomas Seidensticker*

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Antimicrobial and antioxidant supramolecular ionic liquid gels from biopolymer mixtures

Salvatore Marullo, Giuseppe Gallo, Giulia Infurna, Nadka Tz. Dintcheva and Francesca D'Anna*

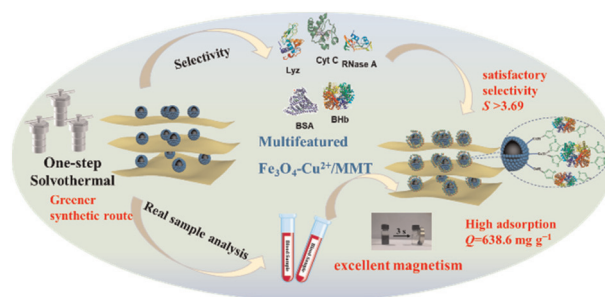


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Facile and green preparation of multifeatured montmorillonite-supported $\text{Fe}_3\text{O}_4\text{-Cu}^{2+}$ hybrid magnetic nanomaterials for the selective adsorption of a high-abundance protein from complex biological matrices

Yue Wang, Wenchang Zhao, Ruixia Gao,*
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Organocatalytic hydroboration of olefins in pyrrolidinium ionic liquids

Paweł Huninik, Jakub Szyling, Agnieszka Czapik and
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