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Cover

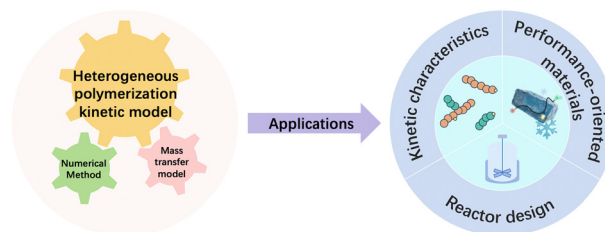
See Pedro Castaño et al., pp. 975–998.
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REVIEW

942

State-of-the-art heterogeneous polymerization kinetic modelling processes and their applications

Shu-Cen Lai, Jie Jin* and Zheng-Hong Luo*

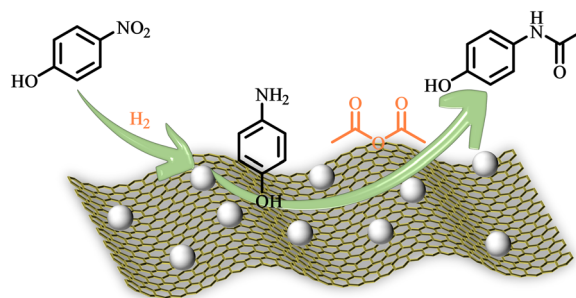


COMMUNICATIONS

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Efficient one-pot hydrogenation and acetylation of 4-nitrophenol for selective synthesis of 4-aminophenol and paracetamol with a reusable Ni catalyst

Ziliang Yuan,* Xi Wang, Yuxin Liu, Peng Zhou, Renjie Huang, Jie Lv, Yimeng Yang, Yanrong Ren,* Zehui Zhang and Bing Liu*





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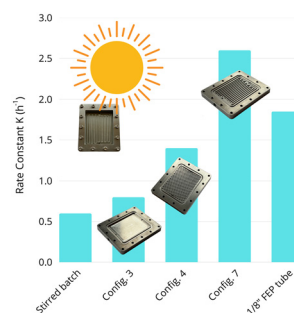


COMMUNICATIONS

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Reconfigurable photoflow reactor for enhanced optimization of the aerobic oxidative coupling of 2-phenylbenzoic acid

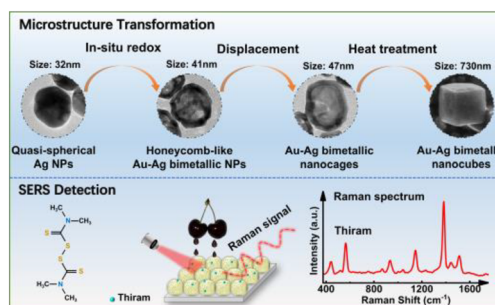
Florian Ehrlich-Sommer, Tobias Friedl, Christian Koller and Malek Y. S. Ibrahim*



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Continuous-flow synthesis of special Au-Ag bimetallic nanoparticles and their application for SERS detection of thiram in cherry juice

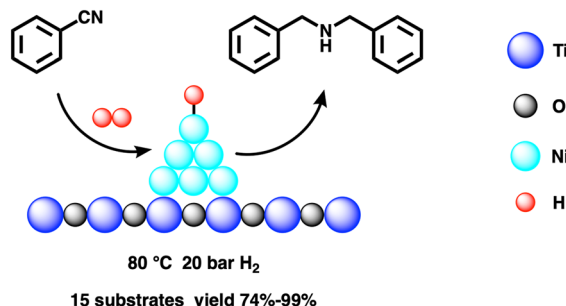
Li Sun,* Mingjian Jiang, Yuan Zhi,* Hua Zhang, Binlin Dou, Yuejin Shan, Jian Chen and Xiangyang Xu



970

Efficient selective hydrogenation of benzonitrile over TiO₂-supported nickel catalysts

Yinkun Li, Dongxue Wang, Xixi Liu, Guoqiang She, Peng Zhou, Yanxi Zhao,* Zehui Zhang and Bing Liu*

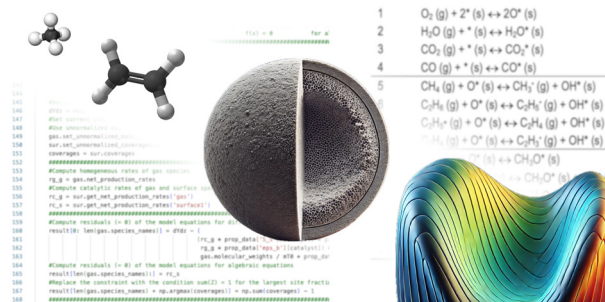


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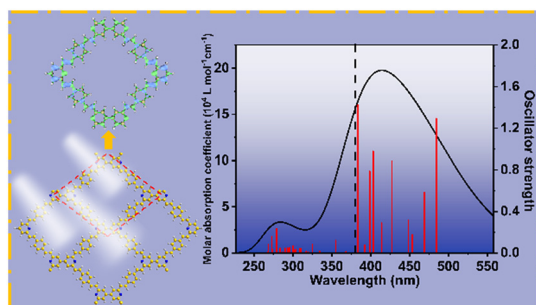
975

Intrinsic microkinetic effects of spray-drying and SiC co-support on Mn-Na₂WO₄/SiO₂ catalysts used in oxidative coupling of methane

Gontzal Lezcano, Shekhar R. Kulkarni, Vijay K. Velisoju, Natalia Realpe and Pedro Castaño*



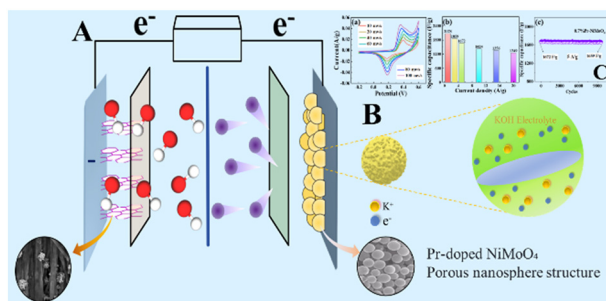
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Revelation of the photoexcitation mechanism of COF-DFB materials based on first principles

Huanjun Su,* Yumeng Zhang, Weili Shi, Haoyang Shi, Yani Liu and Ying Lin

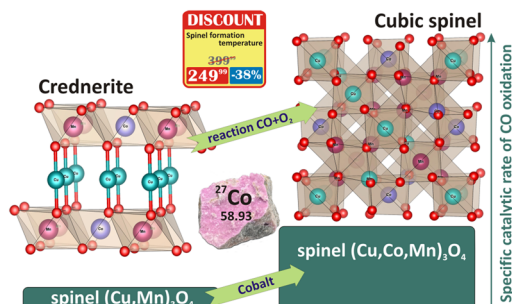
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Pr-doped oxygen-vacancy-induced porous NiMoO₄ cathode and MoS₂-modified CNT anode for constructing ultra-high-performance supercapacitors

Haoran Li, Tenghao Ma, Tingting Hao, Jian Hao, Jing Wang,* Yabin Wang, Zheng Zhao and Chenyu Lei

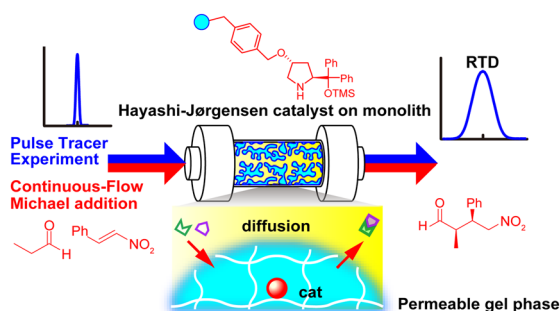
1021



Highly efficient cobalt-modified hopcalite catalysts prepared through crednerite–spinel transformation

D. A. Svintsitskiy,* E. S. Kvasova, T. Yu. Kardash, N. A. Sokovikov, O. A. Stonkus and A. I. Boronin

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Residence time distribution effects on continuous-flow reaction in a polymer gel-based porous monolith: investigation of an asymmetric reaction with supported Hayashi–Jørgensen catalysts

Harutaka Shigeeda, Hikaru Matsumoto, Masanori Nagao and Yoshiko Miura*

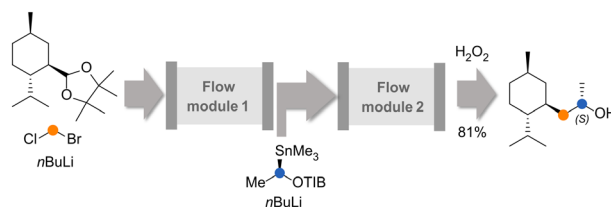


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The “factory in a lab”: telescoping the Matteson and Matteson–Hoppe–Aggarwal boronate chemistry under flow conditions

Florian Fricke, Gerald Dräger and Andreas Kirschning*



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Hydrogenation of CO₂ to synthetic natural gas (SNG) with 100% selectivity over a Ni–ZnO–MgO catalyst

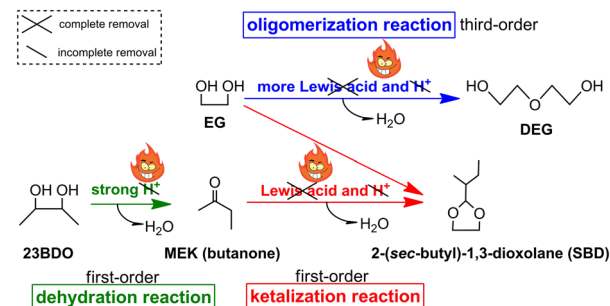
Mahendra Kumar Meena, Shalini Biswas and Prakash Biswas*



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Modification of acidic groups over zeolites via calcination for the selective catalytic transformation of 2,3-butanediol in ethylene glycol

Shuo Ai, Kaili Gao, Zhenhua Huang, Linghui Liu* and Wanguo Yu

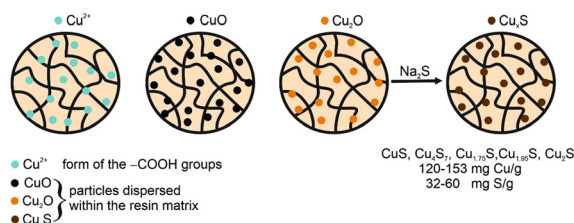


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Sulphidation of Cu²⁺, CuO and Cu₂O within the matrix of carboxylic cation exchangers – compositional, morphological and thermal properties of Cu_xS containing composites

Elżbieta Kociotek-Balawejder, Irena Jacukowicz-Sobala, Juliusz Winiarski, Igor Mucha and Katarzyna Winiarska*

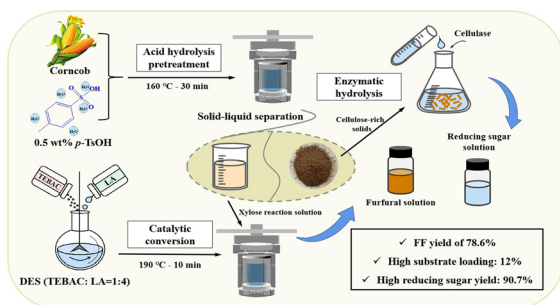
Sulphidation of copper doped carboxylic cation exchangers with Na₂S solution



Methods of characterization:
ICP-OES, XRD, XPS, SEM EDXS, TG/DTG



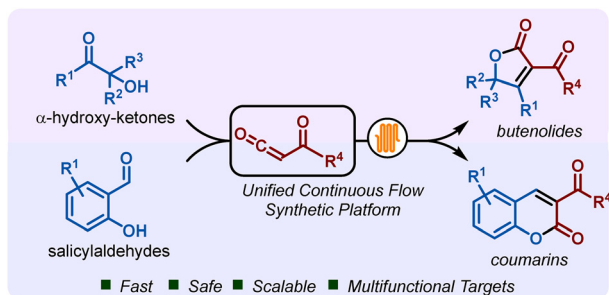
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An integrated strategy for corn cob pretreatment and coproduction of furfural and monosaccharides based on *p*-toluenesulfonic acid and a deep eutectic solvent system

Liping Luo, Wenxuan Wu, Yanan Shen, Yuheng Tao, Liqun Wang and Qing Qing*

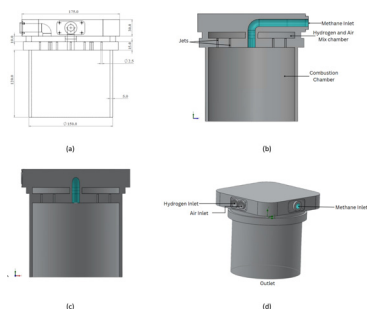
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Fast and scalable continuous flow synthesis of butenolides and coumarins

Lucas Coral Ferreira, Renan de Souza Galaverna, Tom McBride, Rodrigo Costa e Silva, Duncan L. Browne* and Julio Cezar Pastre*

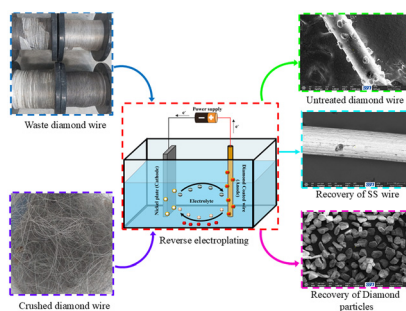
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Numerical modelling of non-premixed hydrogen blended combustion in a 3D-combustor with jet optimisation

Michael E. Okolo,* David S. Adebayo and Chike F. Oduoza

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A novel approach on reverse electroplating to remove diamond particles and recover stainless steel wire from waste diamond coated wire

Bharathwaj Murugesan, Karuppasamy Pichan* and Ramasamy Perumalsamy

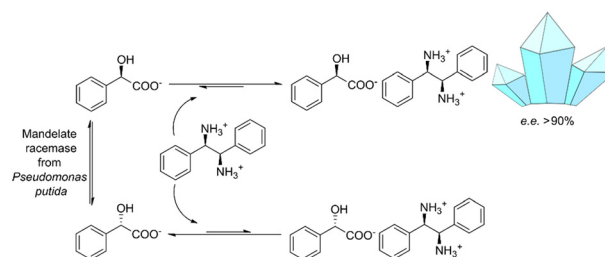


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Crystallization-integrated mandelate racemase-catalyzed dynamic kinetic resolution of racemic mandelic acid

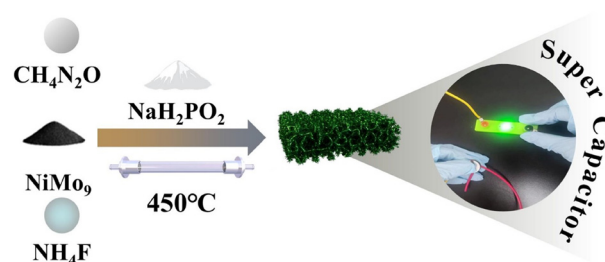
Feodor Belov, Alexandra Lieb and Jan von Langermann*



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In situ fabrication of $\text{MoO}_2\text{-Ni}_3(\text{PO}_4)_2/\text{NF}$ heterojunction composite material for application as a supercapacitor electrode

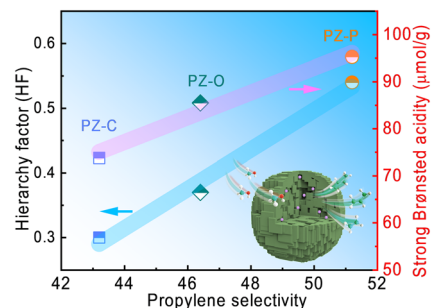
Zhongxin Jin,* Feng Lin, Caiying Li, Cheng Shao, Yang Xu, Fangze Li, Haijun Pang* and Huiyuan Ma*



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Hierarchical P-ZSM-5 zeolites *in situ* synthesized using home-made asymmetric quaternary phosphonium for the methanol-to-propylene reaction

Yonglin Ren, Yimin Zhang, Xinyu Xu, Binbin He and Yun Zu*



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Rapid and efficient removal of Sr^{2+} ions by the easy-to-operate and environmentally friendly KInSnS_4 @collagen fiber aerogel

Jiang-Hai He, Jun-Hao Tang, Ming-Dong Zhang,* Chuan Lv, Lu Yang, Zhi-Hua Chen, Yi Liu, Hai-Yan Sun, Mei-Ling Feng* and Xiao-Ying Huang

