

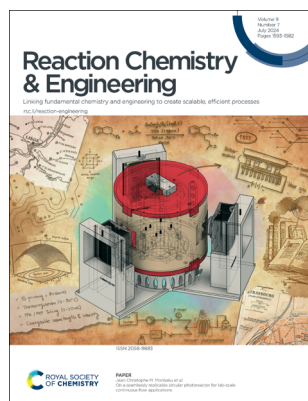
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Cover

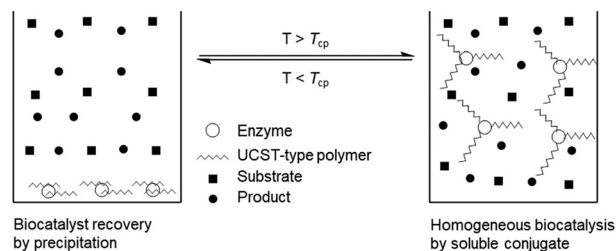
See Jean-Christophe M. Monbaliu *et al.*, pp. 1646–1655.
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REVIEW

1605

Immobilization of enzymes on polymers with upper critical solution temperature: promising engineering of enzymes for biocatalysis

Lin Huang,* Xirui Li and Zhi Li

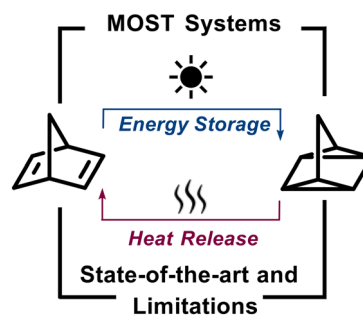


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State-of-the-art and challenges towards a Molecular Solar Thermal (MOST) energy storage device

Alberto Giménez-Gómez, Lucien Magson, Cecilia Merino-Robledillo, Sara Hernández-Troya, Nil Sanosa, Diego Sampedro* and Ignacio Funes-Ardoiz*





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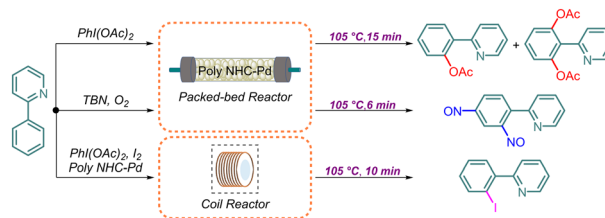


COMMUNICATION

1641

Selective C–H functionalizations of arenes catalyzed by poly NHC–Pd in flow

Shiqi Huang, Runqi Hao, Qiao Li, Li Wan* and Fener Chen*

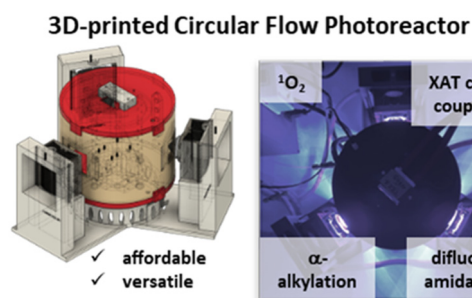


PAPERS

1646

On a seamlessly replicable circular photoreactor for lab-scale continuous flow applications

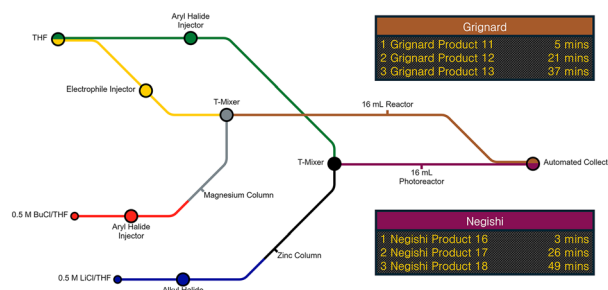
Yi-Hsuan Tsai, Martin Cattoen, Guillaume Masson, Gabrielle Christen, Lisa Traber, Morgan Donnard, Frédéric R. Leroux, Guillaume Bentzinger, Sylvain Guizzetti* and Jean-Christophe M. Monbaliu*



1656

Enabling organometallic libraries by flow: a tale of two metals

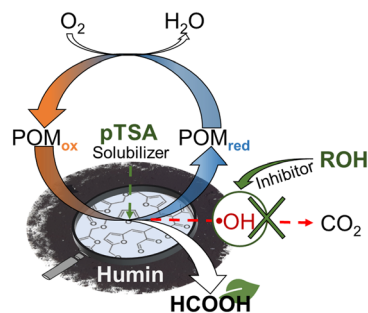
Daniel Maddox,* Lucie Guetzoyan and Lee Walmsley*



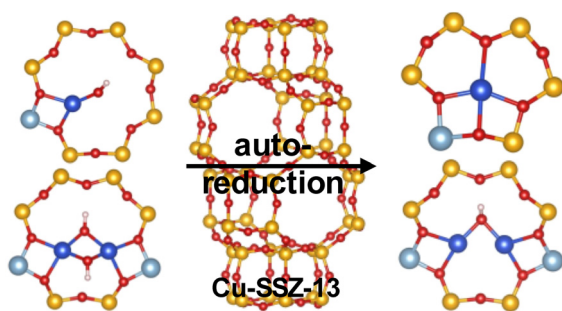
1666

Selective catalytic oxidation of humins to carboxylic acids using the H₄[PVMo₁₁O₄₀] Keggin-type polyoxometalate enhanced by alcohol doping and solubilizer

Tobias Esser, André Wassenberg, Dorothea Voß and Jakob Albert*



1685

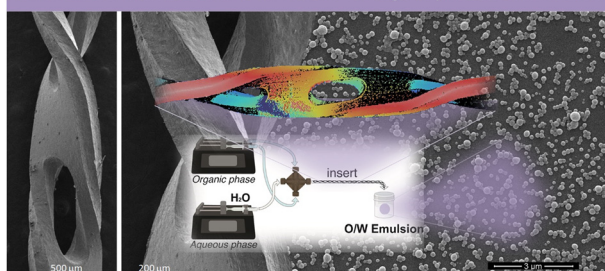


Thermodynamic driving forces for autoreduction of Cu sites in the zeolite SSZ-13

Daniel J. Hutton, David H. Lopez and Florian Göttl*

1696

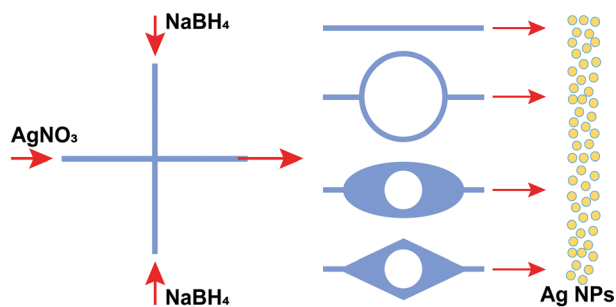
Helical inserts assembled in microfluidic tubings as passive micromixers



Performance of a helical insert in a commercial tubing as a passive micromixer to produce nanoparticles using an emulsification approach

Lucia Abengochea, Santiago Pina-Artal, Víctor Gonzalez and Víctor Sebastian*

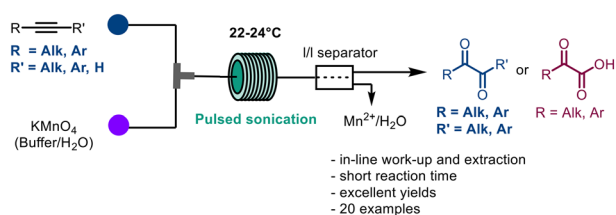
1707



Intensification of silver nanoparticle synthesis through continuous flow split and recombine microreactors

Amritendu Bhuson Ghosh, Rakesh Kumar and Arnab Atta*

1721



Continuous flow oxidation of alkynes with KMnO_4 for the synthesis of 1,2-diketone derivatives

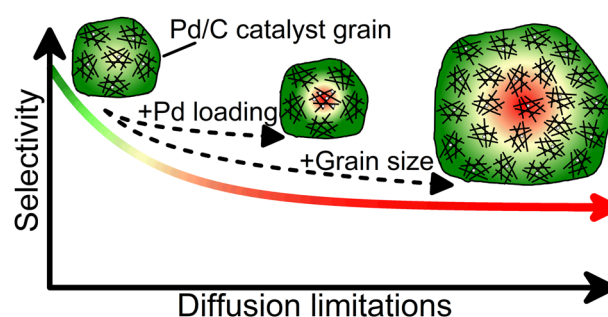
Viktoria Velichko, Dario Cambie* and Francesco Secci*



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Mass transport effects in gas-phase selective hydrogenation of 1,3-butadiene over supported Pd

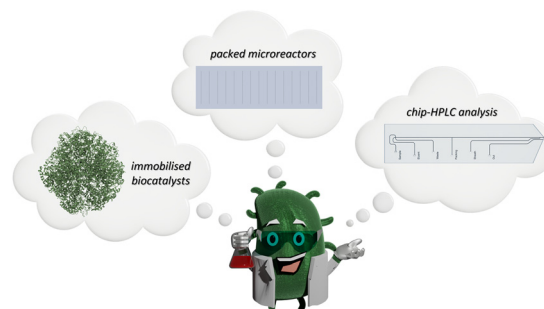
Oscar E. Brandt Corstius, M. Kikkert, S. T. Roberts, E. J. Duskocil, J. E. S. van der Hoeven and P. E. de Jongh*



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Development of an automated platform for monitoring microfluidic reactors through multi-reactor integration and online (chip-)LC/MS-detection

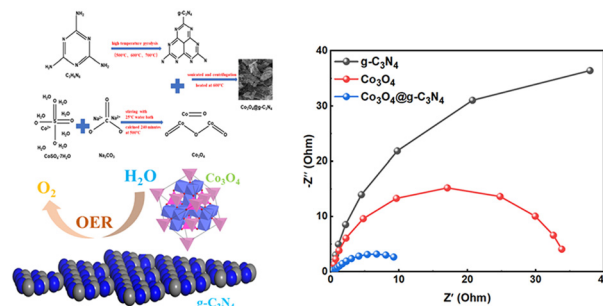
Hannes Westphal, Simon Schmidt, Sanjay Lama, Matthias Polack, Chris Weise, Toni Oestereich, Rico Warias, Tanja Gulder* and Detlev Belder*



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Co₃O₄ supported by ultrathin-layered graphitic carbon nitride for efficient electrocatalytic evolution of oxygen

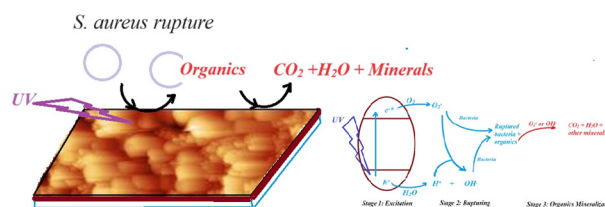
Ruixue Luo, Xi Li, Youping Guo and Renchun Fu*



1762

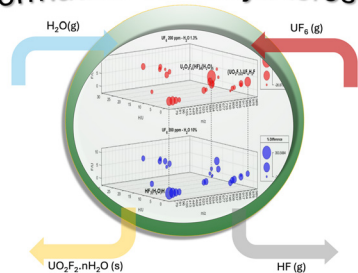
TiO₂ nanopowder and nanofilm catalysts in the disinfection and mineralization of *S. aureus* with solar-simulated radiation

Raed Shqier, Ahd Zyoud, Muath H. S. Helal,* Heba Nassar, Raed Alkowni, Mohyeddin Assali, Shafer Zyoud, Naser Qamhieh, Abdul Razack Hajamohideen, Shadi Sawalha, Samer H. Zyoud and Hikmat S. Hilal



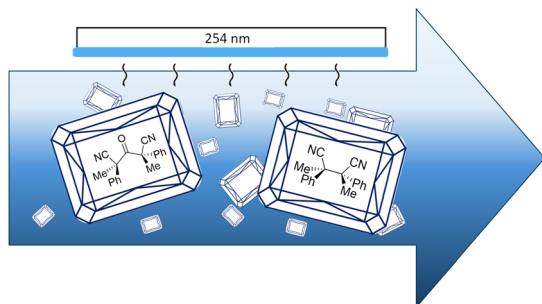
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Formation of Uranyl Aerosol

Determination of intermediates and products of the uranyl aerosol formation in UF_6 hydrolysis in the gas phase

Christian Mark Salvador,* Jason M. Richards, Shannon M. Mahurin, Meng-Dawn Cheng* and Joshua A. Hubbard

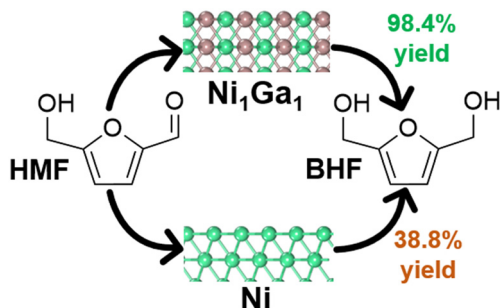
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Merging inline crystallization and pulsed flow operation to enable enantiospecific solid state photodecarbonylation

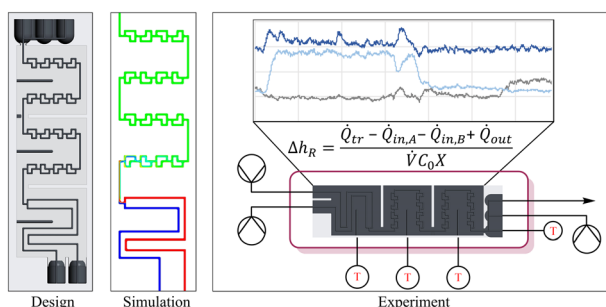
Bavo Vandekerckhove, Bart Ruttens, Bert Metten, Christian V. Stevens and Thomas S. A. Heugebaert*

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Selective hydrogenation of 5-hydroxymethylfurfural to 2,5-bis(hydroxymethyl)furan over Ni-Ga intermetallic catalysts and its kinetic studies

Weixiao Sun, Fuzeyu Zhong, Xiaohu Ge,* Wenyao Chen, Gang Qian, Yueqiang Cao, Xuezhi Duan, Xingguo Zhou and Jing Zhang*

1805



Thermokinetic analyses of metal-sensitive reactions in a ceramic flow calorimeter

Soritz S.,* Sommitsch A., Irndorfer S., Brouczek D., Schwentenwein M., Priestley I. J. G., Iosub A. V., Krieger J. P. and Gruber-Woelfler H.*

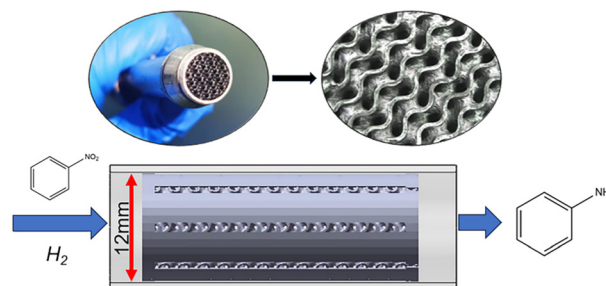


PAPERS

1816

Novel TPMS carbon-based monolithic catalysts by three-dimensional printing for enhancement of nitrobenzene hydrogenation reaction

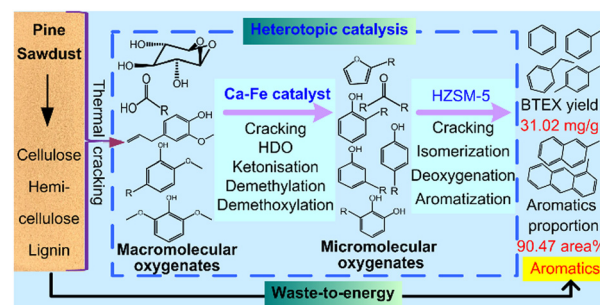
Haoyang Wang, Haoran Tian, Qi Zhang and Li Zhang*



1824

Catalytic degradation of pine sawdust over heterotopic Ca-Fe and HZSM-5 to produce aromatic hydrocarbons

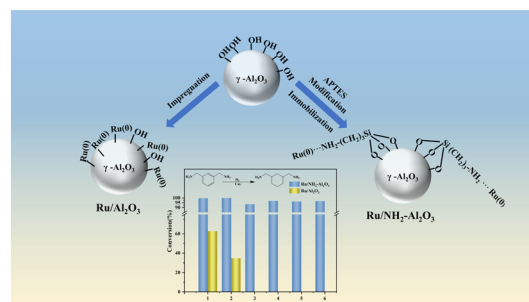
Huifen Kang, Xintong Guo, Mei An, Conghua Ma, Guozhang Chang,* Qingjie Guo* and Jingjing Ma*



1836

Efficient aqueous-phase hydrogenation of *m*-xylenediamine to 1,3-cyclohexandimethylamine over a highly active and stable ruthenium catalyst

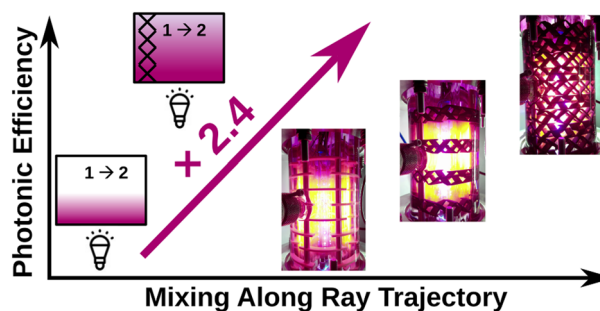
Jing Guo, Heng Shao, Le Gao, Wancheng Ma, Wei Zhang,* Long Huang* and Haibin Chu*



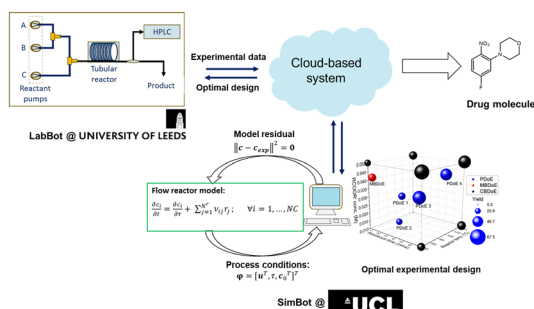
1845

Enhancing mass transport to accelerate photoreactions and enable scale-up

Florian Gaulhofer, Markus Metzger, Alexander Peschl and Dirk Ziegenbalg*



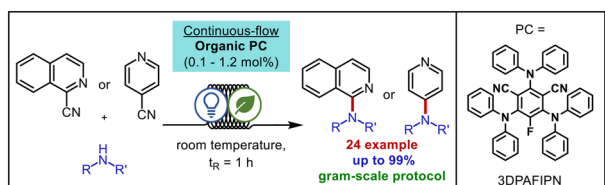
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Automated kinetic model identification via cloud services using model-based design of experiments

Emmanuel Agunloye, Panagiotis Petsagkourakis, Muhammad Yusuf, Ricardo Labes, Thomas Chamberlain, Frans L. Muller, Richard A. Bourne and Federico Galvanin*

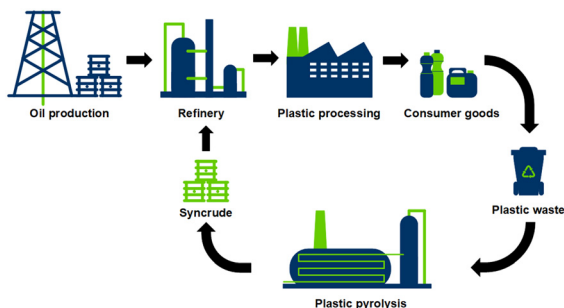
1877



Photochemical organocatalytic heteroarylation of anilines and secondary alicyclic amines in continuous-flow

Egor N. Boronin, Milena M. Svetlakova, Ilya I. Vorobyov, Yulia B. Malysheva, Yuri V. Polushtaytsev, Sergey N. Mensov, Andrey V. Vorotyntsev, Alexey Yu. Fedorov, Timothy Noël and Alexander V. Nyuchev*

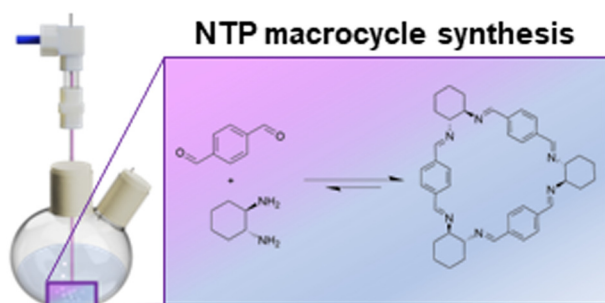
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A sequential lumped kinetic modelling approach for the co-pyrolysis of plastic mixtures with a heavy refinery intermediate product in a tubular reactor

Sebastian-Mark Lorbach,* Andreas E. Lechleitner, Teresa Schubert and Markus Lehner

1896



High-efficiency non-thermal plasma synthesis of imine macrocycles

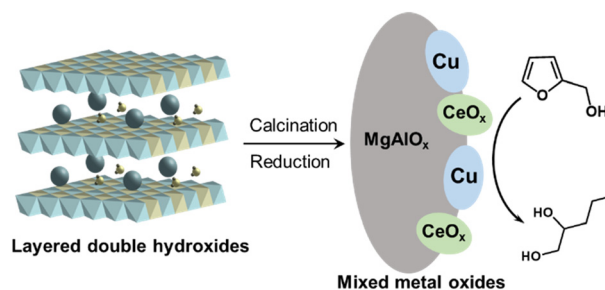
Patrycja Roszkowska, Abbie M. Scholes, James L. Walsh,* Timothy L. Easun* and Anna G. Slater*



1904

Hydrogenolysis of furfuryl alcohol over CuCeMgAl mixed metal oxide catalysts derived from layered double hydroxides

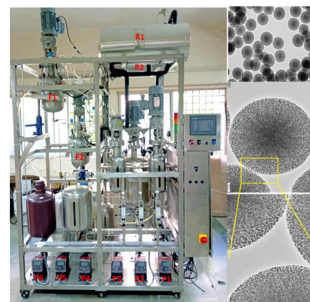
Zhihui Wang, Wenbo Li, Xinyao Fu, Chen Zhang,*
Wei Zhang, Long Huang and Cuiqing Li*



1914

Scaling-up continuous production of mesoporous silica particles at kg scale: design & operational strategies

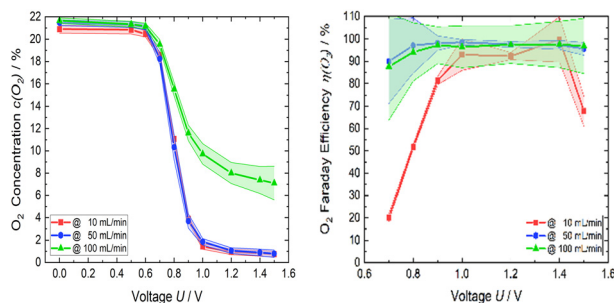
Rajashri B. Jundale, Jayesh R. Sonawane,
Anil V. Palghadmal, Hemant Kumar Jaiswal,
Hital S. Deore and Amol A. Kulkarni*



1924

Generation of nitrogen by means of electrochemical oxygen depletion

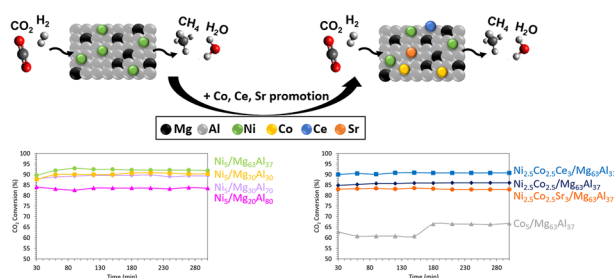
Dominik Sachse, Basil Noha Chelachottil,
Andreas Glösen,* Martin Müller, Uwe Rau and Ralf Peters



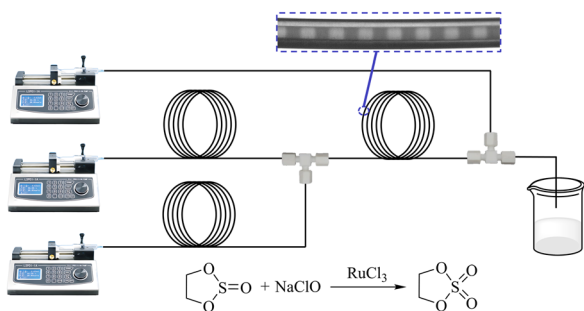
1933

Optimizing CO₂ methanation: effect of surface basicity and active phase reducibility on Ni-based catalysts

Marie-Nour Kaydouh, Nissrine El Hassan,*
Ahmed I. Osman,* Hamid Ahmed, Naif Alarifi,*
Anis H. Fakeeha, Abdulrahman Bin Jumrah
and Ahmed S. Al-Fatesh*



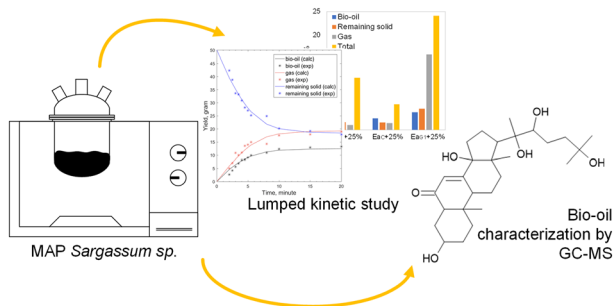
1947



Synthesis and kinetic study of 1,3,2-dioxathiolane 2,2-dioxide in microreactors

Ting Wang, Junnan Wang, Chengxiang He, Zhongdong Wang, Yating Li, Chunying Zhu, Youguang Ma and Taotao Fu*

1959



Comprehensive study of lumped kinetic models and bio-oil characterization in microwave-assisted pyrolysis of *Sargassum* sp.

Teta Fathya Widawati, Muhammad Fuad Refki, Rochmadi, Joko Wintoko and Arief Budiman*

