

RSC Mechanochemistry

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IN THIS ISSUE

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Cover
See Koji Kubota, Hajime Ito *et al.*, pp. 389–393. Image reproduced by permission of Hajime Ito from *RSC Mechanochem.*, 2025, 2, 389.



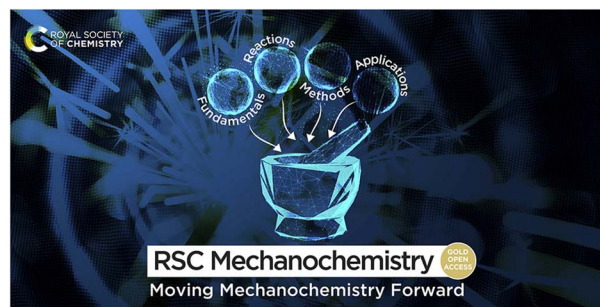
Inside cover
See Xuhai Pan, Madeleine J. Bussemaker *et al.*, pp. 399–418. Image reproduced by permission of Yucheng Zhu *et al.* and Yanqing Zhu (co-creators of the image) from *RSC Mechanochem.*, 2025, 2, 399.

EDITORIAL

333

Moving Mechanochemistry Forward: Mechanochemistry and the non-covalent bond

Adam A. L. Michalchuk and Tomislav Friščić



REVIEWS

336

Access to enzyme@porous organic framework biocomposites based on mechanochemical synthesis

Qing Chen, Zhi-Wei Li,* Siming Huang, Guosheng Chen* and Gangfeng Ouyang



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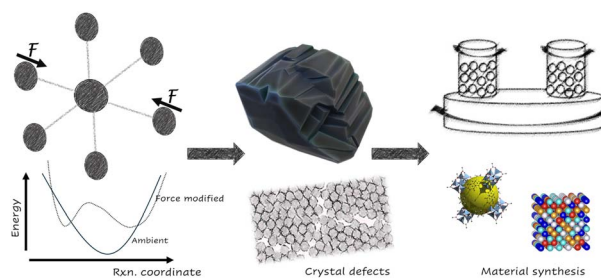
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REVIEWS

351

Reassessing mechanochemical processes in polyatomic systems for smart fabrication of nanocomposites

Mamoru Senna* and Adam A. L. Michalchuk



PERSPECTIVE

370

Conquering the impossible: mechanochemistry as a tool for tackling coordination chemistry challenges

Huanxin Zhang, Nathan Davison* and Erli Lu*

Mechanochemistry



Coordination Chemistry Challenges

-  Solvent-induced decomposition
-  Insoluble reactant
-  Unfavourable solvent coordination
- And more.....

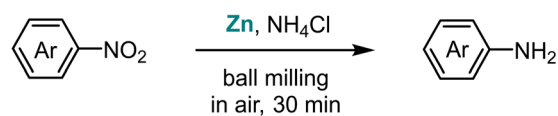
COMMUNICATIONS

389

Solvent-free zinc-mediated Béchamp reduction using mechanochemistry

Koji Kubota,* Asahi Nagao and Hajime Ito*

First mechanochemical protocol for Béchamp reduction

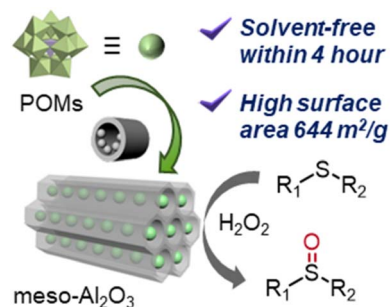


typically <30 min
solvent-free and air-tolerant

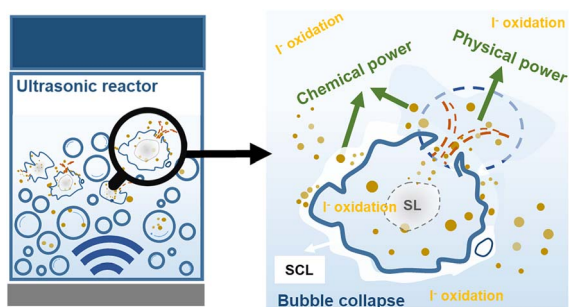
394

Mechanochemical templated synthesis of mesoporous alumina-supported polyoxometalate catalysts toward selective oxidation of sulfides

Kang Xia, Shengtai Hou, Qiang Niu, Kosuke Suzuki and Pengfei Zhang*



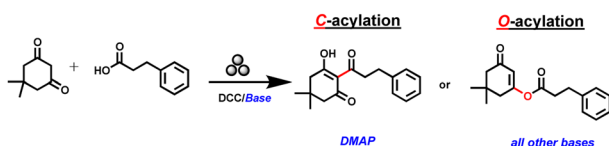
399



Correlation of sonochemical activities measured via dosimetry and an area-selective analysis of sono(chemi)luminescence

Yucheng Zhu, Xueliang Zhu, Xuhai Pan,* Lian X. Liu and Madeleine J. Bussemaker*

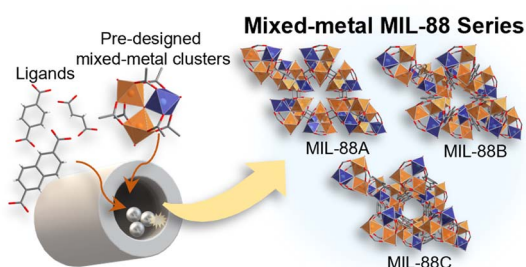
419



Chemoselectivity switch by mechanochemistry in the base-catalysed dione-acylation

Sally Nijem, Alexander Kaushansky, Svetlana Pucovski, Elisa Ivry, Evelina Colacino, Ivan Halasz and Charles E. Diesendruck*

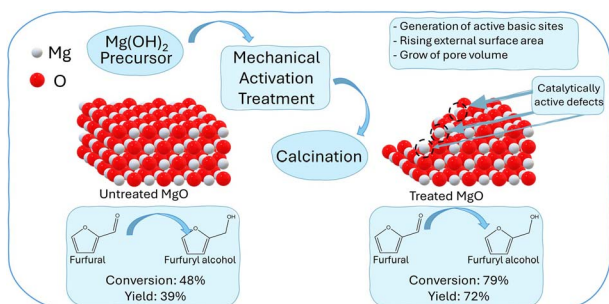
426



A mechanochemical synthetic strategy of isostructural flexible metal–organic frameworks with pre-designed mixed metal clusters

Hong Kyu Lee and Hoi Ri Moon*

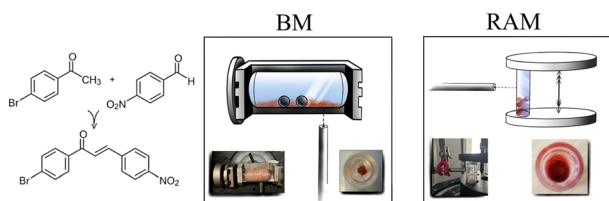
432



Catalytic transfer hydrogenation of furfural using mechanically activated MgO as catalyst

Antonio Manuel Pérez-Merchán, Benjamín Torres-Olea, Marcella Scala, Nikolaos Dimitratos, Irene Malpartida, Cristina García-Sancho, Josefa M. Mérida-Robles, Pedro Maireles-Torres, Ramón Moreno-Tost and Juan Antonio Cecilia*





In situ Raman spectroscopy for comparing ball milling and resonant acoustic mixing in organic mechanochemistry

Leonarda Vugrin, Christos Chatzigiannis, Evelina Colacino* and Ivan Halasz*

