

RSC Mechanochemistry

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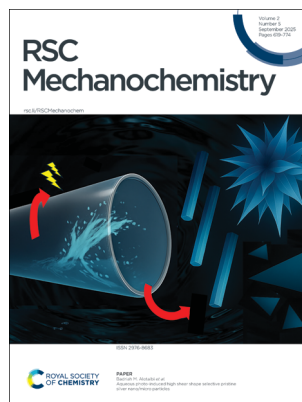
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Cover
See Takashi Shirai *et al.*, pp. 641–652. Image reproduced by permission of Takashi Shirai from *RSC Mechanochem.*, 2025, 2, 641.



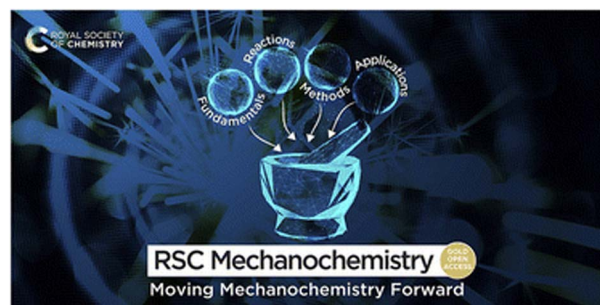
Inside cover
See Badriah M. Alotaibi *et al.*, pp. 653–661. Image reproduced by permission of Badriah M. Alotaibi and Colin L. Raston from *RSC Mechanochem.*, 2025, 2, 653.

EDITORIAL

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Moving mechanochemistry forward: programming force-induced responses into macromolecular systems

Kerstin G. Blank* and Robert Göstl*

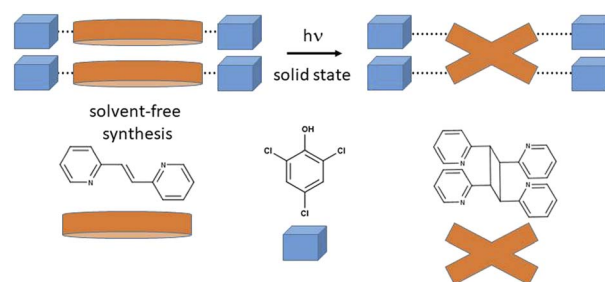


COMMUNICATIONS

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Dry-vortex grinding facilitates a [2 + 2] cycloaddition reaction that triggers a cascade-like reaction that improves the yield under substoichiometric conditions

Angela A. Colmanet, Daniel K. Unruh and Ryan H. Groeneman*



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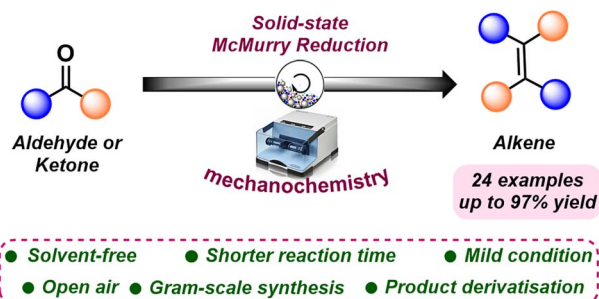
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COMMUNICATIONS

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Mechanochemical McMurry reaction

Sayan K. Jana, Sakshi Ajay Shirsath,
Debjyoti Bhattacharjee, Pramod Kumar and Biplab Maji*

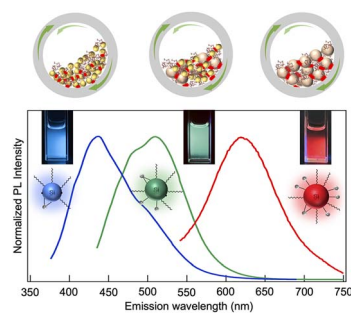


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Photoluminescence evolution of functional silicon quantum dots assembled via a sustainable mechanochemical process

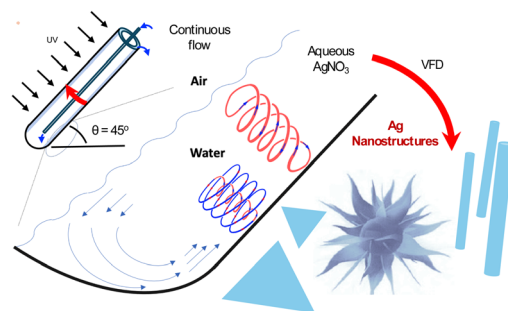
Yuping Xu, Yunzi Xin and Takashi Shirai*



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Aqueous photo-induced high shear shape selective pristine silver nano/micro particles

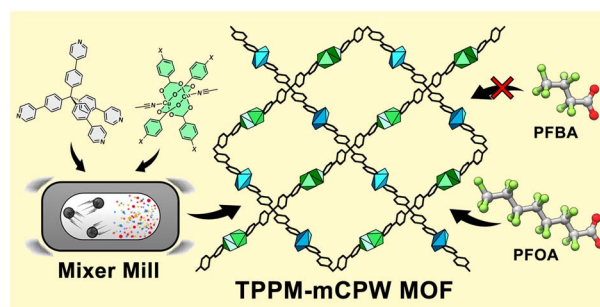
Badriah M. Alotaibi, Chengyi Liu, Xianjue Chen
and Colin L. Raston*



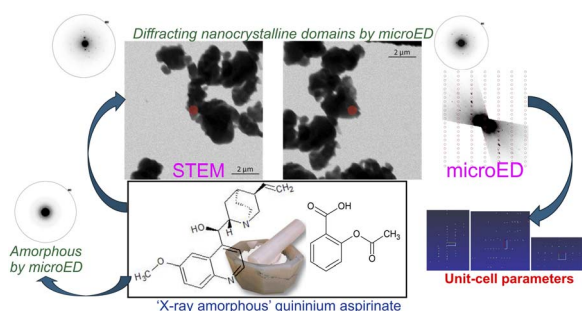
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Fluorination of mechanochemically synthesized metal-organic frameworks for PFAS adsorption in water

Danilo Marchetti, Enrico Dalcanale, Roberta Pinalli,
Mauro Gemmi, Alessandro Pedrini* and Chiara Massera*



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Amorphous quininium aspirinate from neat mechanochemistry: diffracting nanocrystalline domains and quick recrystallization upon exposure to solvent vapours

Silvina Pagola,* James Howard, Johannes Merkelbach and Danny Stam

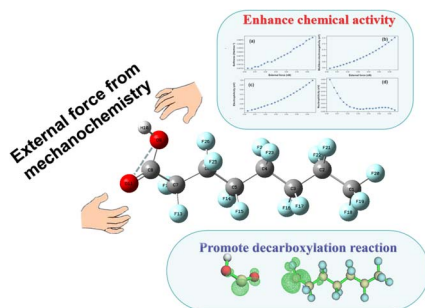
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Mechanochemistry assisted aqueous two-phase extraction: an efficient technique to extract high-purity juglone from the bark of *Juglans mandshurica*

Shuang Wei, Xinbiao Zhou and Jun Xi*

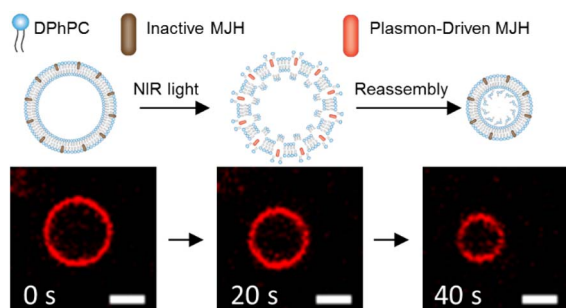
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How external forces affect the degradation properties of perfluorooctanoic acid in mechanochemical degradation: a DFT study

Chuan Wang,* Cheng Yang, Jie Wu, Ziqiu Wang and Kun Yang

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Mechanism of plasmon-driven molecular jackhammers in mechanical opening and disassembly of membranes

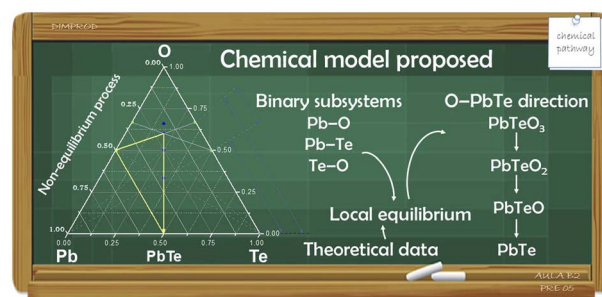
Ciceron Ayala-Orozco,* Vardan Vardanyan, Katherine Lopez-Jaime, Zicheng Wang, Jorge M. Seminario,* Anatoly B. Kolomeisky* and James M. Tour*



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Chemical models to map the transformation from precursors to semiconductor materials at non-equilibrium conditions

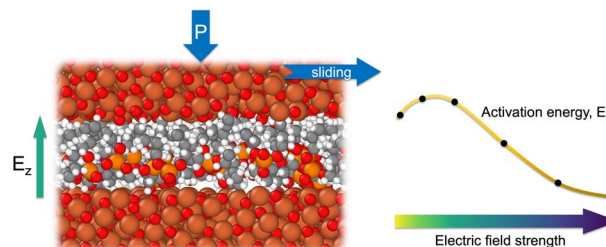
Hugo Rojas-Chávez*



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Mechanochemistry of phosphate esters with external electric fields

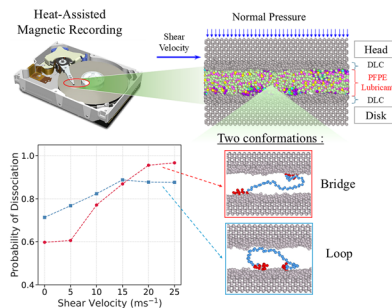
Zhaoran Zhu* and James P. Ewen*



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ReaxFF molecular dynamics study of mechanochemical degradation of PFPE lubricants on DLC in heat-assisted magnetic recording

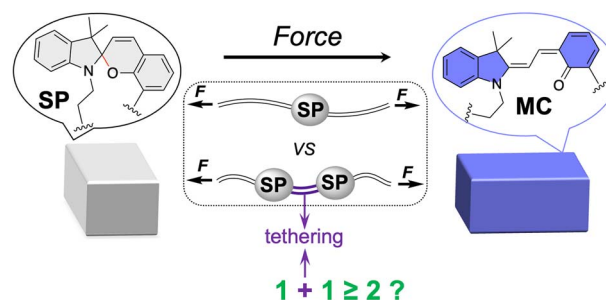
Himanshu Shekhar, Shota Uchiyama, Yuxi Song, Hedong Zhang,* Kenji Fukuzawa, Shintaro Itoh and Naoki Azuma



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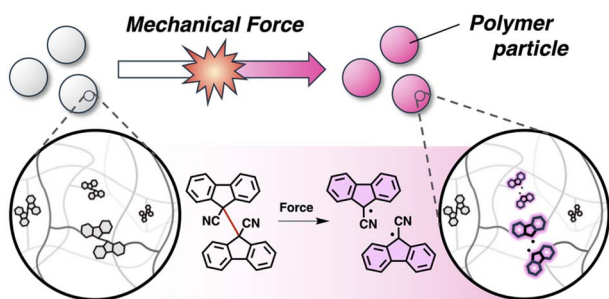
Amplification of spiropyran mechanophore activation in bulk polymers through a tethering strategy

Sanjit Narendran, Zhenghao Zhai and Yangju Lin*



PAPERS

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Mechanochromic polymer particles crosslinked by a radical-type mechanochromophore

Kengo Ogasawara, Daisuke Kuromiya, Takuma Watabe, Akira Takahashi, Daisuke Aoki and Hideyuki Otsuka*

CORRECTIONS

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Correction: Mechanochemical synthesis of eucairite CuAgSe and investigation of physicochemical and transport properties

Dáša Drenčaková, Marcela Achimovičová,* Matej Baláž, Jiří Navrátil, Erika Tóthová, Maksym Lisnichuk, Jaroslav Briančin, Viktor Puchý and Tomáš Plecháček

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Correction: Utilizing an attritor mill for solvent-free mechanochemical synthesis of *rac*-ibuprofen:nicotinamide co-crystals

Sarah Triller, Frederik Winkelmann, Jan-Hendrik Schöbel and Michael Felderhoff*

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Correction: Mechanochemical kilogram-scale synthesis of *rac*-ibuprofen:nicotinamide co-crystals using a drum mill

Jan-Hendrik Schöbel, Frederik Winkelmann, Joel Bicker and Michael Felderhoff*

