

# RSC Mechatnochemistry

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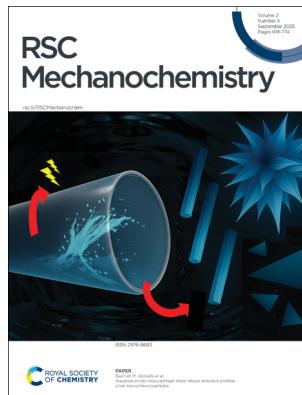
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See Takashi Shirai *et al.*, pp. 641–652. Image reproduced by permission of Takashi Shirai from *RSC Mechatnochem.*, 2025, 2, 641.



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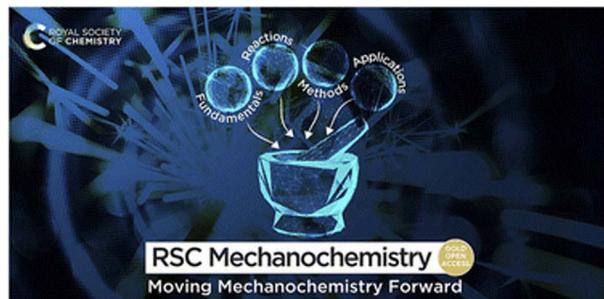
See Badriah M. Alotaibi *et al.*, pp. 653–661. Image reproduced by permission of Badriah M. Alotaibi and Colin L. Raston from *RSC Mechatnochem.*, 2025, 2, 653.

## EDITORIAL

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### Moving mechatnochemistry forward: programming force-induced responses into macromolecular systems

Kerstin G. Blank\* and Robert Göstl\*

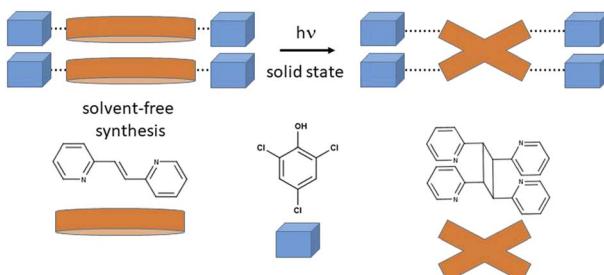


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### Dry-vortex grinding facilitates a [2 + 2] cycloaddition reaction that triggers a cascade-like reaction that improves the yield under substoichiometric conditions

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



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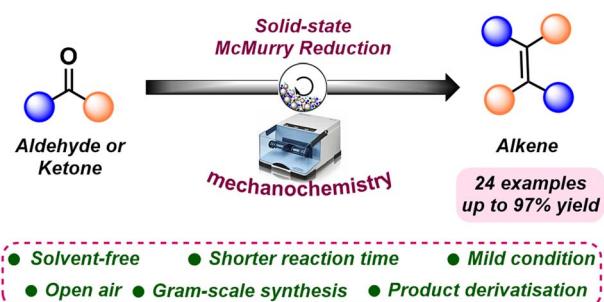


## COMMUNICATIONS

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## Mechanochemical McMurry reaction

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

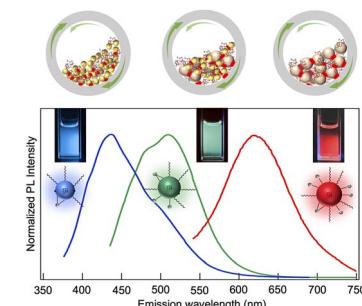


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## Photoluminescence evolution of functional silicon quantum dots assembled via a sustainable mechanochemical process

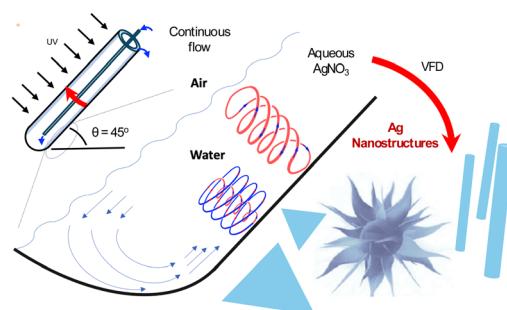
Yuping Xu, Yunzi Xin and Takashi Shirai\*



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

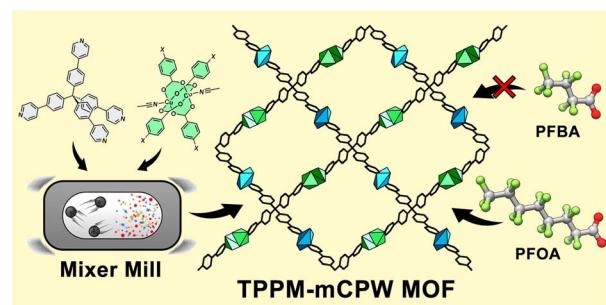
Badriah M. Alotaibi, Chengyi Liu, Xianjue Chen  
and Colin L. Raston\*



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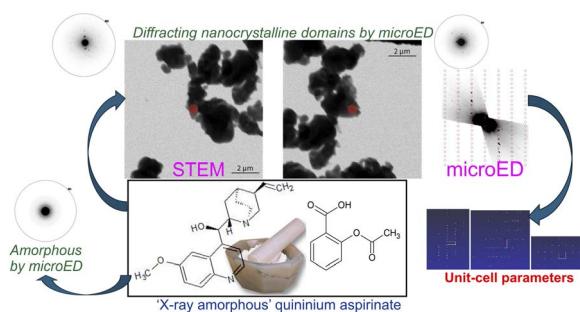
## Fluorination of mechanochemically synthesized metal–organic frameworks for PFAS adsorption in water

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

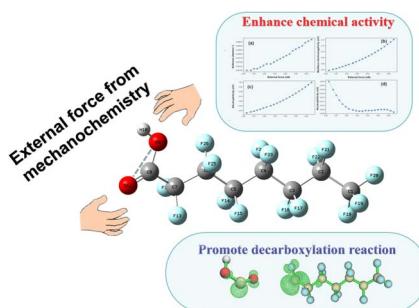
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Shuang Wei, Xinbiao Zhou and Jun Xi\*

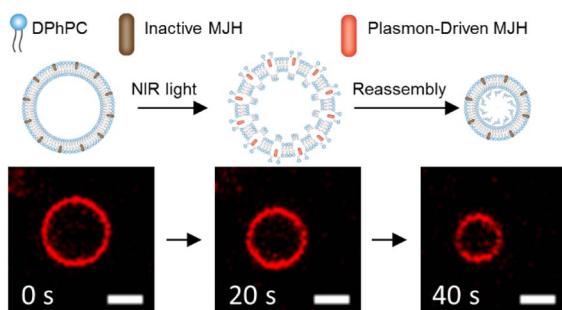
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Chuan Wang,\* Cheng Yang, Jie Wu, Ziqiu Wang and Kun Yang

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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\*

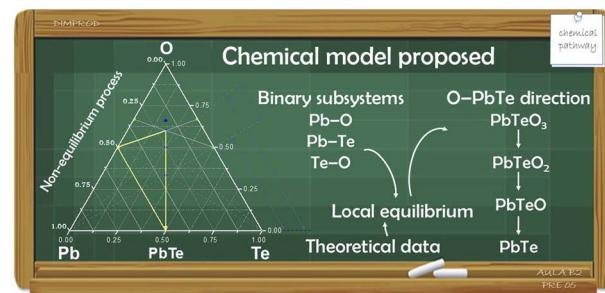


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**Chemical models to map the transformation from precursors to semiconductor materials at non-equilibrium conditions**

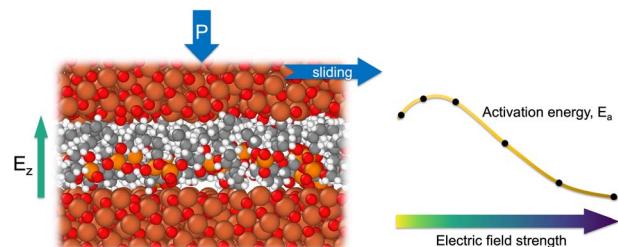
Hugo Rojas-Chávez\*



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**Mechanochemistry of phosphate esters with external electric fields**

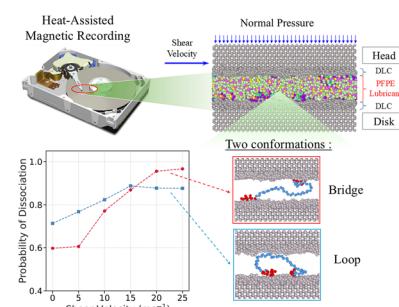
Zhaoran Zhu\* and James P. Ewen\*



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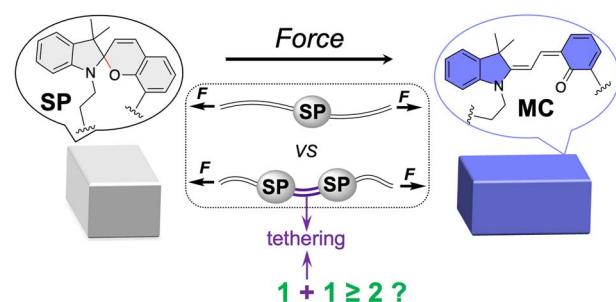
Himanshu Shekhar, Shota Uchiyama, Yuxi Song, Hedong Zhang,\* Kenji Fukuzawa, Shintaro Itoh and Naoki Azuma



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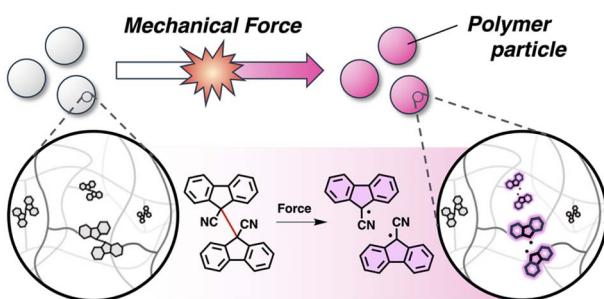
**Amplification of spiropyran mechanophore activation in bulk polymers through a tethering strategy**

Sanjit Narendran, Zhenghao Zhai and Yangju Lin\*



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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 Drenčáková, 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\*