

# RSC Mechanochemistry

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## IN THIS ISSUE

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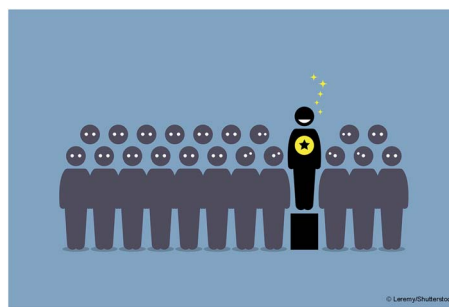
### Cover

See Riina Aav *et al.*, pp. 507–515. Image reproduced by permission of Tatsiana Jarg, Natalja Jekimova and Riina Aav from *RSC Mechanochem.*, 2025, 2, 507.

## EDITORIALS

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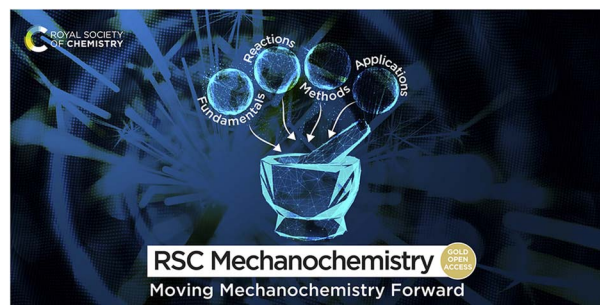
### Outstanding Reviewers for *RSC Mechanochemistry* in 2024



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### Moving mechanochemistry forward: reimagining inorganic chemistry through mechanochemistry

Felipe García, Mamoru Senna and Vladimir Šepelák



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## COMMUNICATION

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**Mechanochemically micronised Na/NaCl; a superfine reductant**

Laura E. English, Ross A. Jackson, Nicholas J. Evans, Dawid J. Babula, Harvey J. Draper, Sarah R. Brown, Joseph Fletcher, David J. Liptrot and Kyle G. Pearce\*

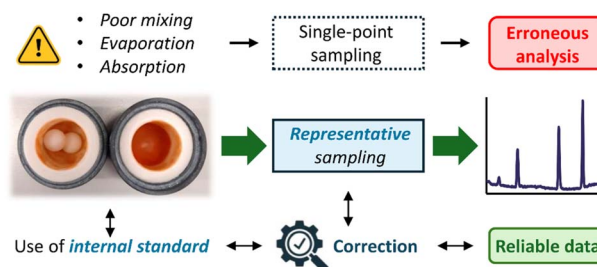


## PAPERS

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**How reliable is internal standard method in monitoring mechanochemical synthesis? A case study of triphenylmethane in HPLC-UV-MS analysis of hemicucurbit[*n*]urils**

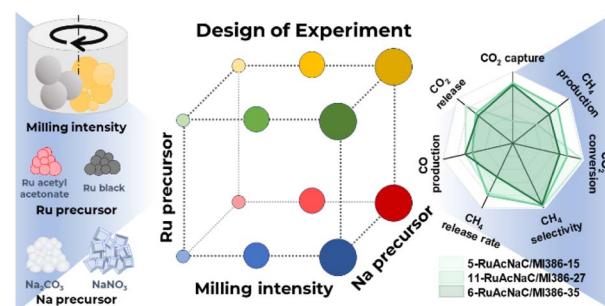
Tatsiana Jarg, Jevgenija Tamm, Elina Suut-Tuule, Ketren-Marlein Lootus, Dzmitry Kananovich and Riina Aav\*



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**Rational screening of milling parameters for Ru–Na/Al<sub>2</sub>O<sub>3</sub> dual-function materials for integrated CO<sub>2</sub> capture and methanation**

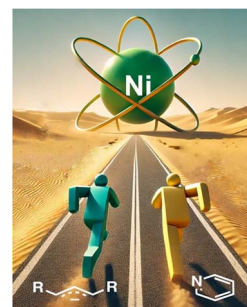
Andrea Braga, Maila Danielis,\* Sara Colussi and Alessandro Trovarelli



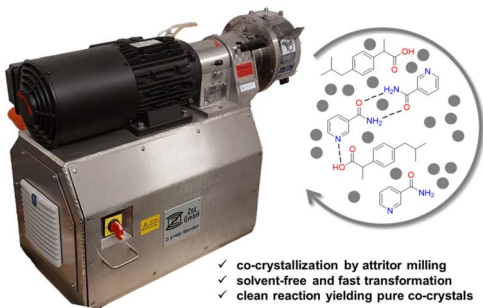
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**Solvent influence on the mechanism of a mechanochemical metal-halide metathesis reaction**

Sourabh Kumar, Dillon Button-Jennings, Timothy P. Hanusa and Ashlie Martini\*



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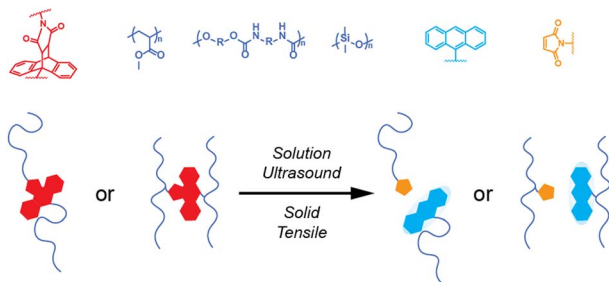


- ✓ co-crystallization by attritor milling
- ✓ solvent-free and fast transformation
- ✓ clean reaction yielding pure co-crystals

### 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\*

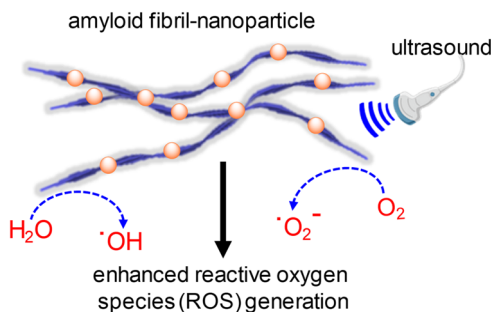
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### Solid-state mechanochemical activation of anthracene–maleimide adducts: the influence of the polymer matrix

Justus P. Wessler, James R. Hemmer, Christoph Weder and José Augusto Berrocal\*

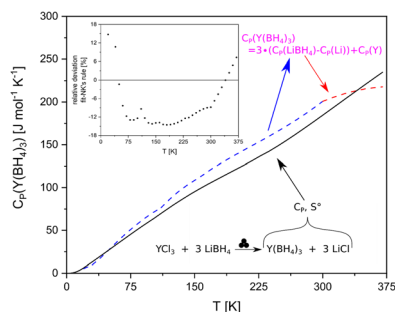
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### Ultrasound-based mechanochemical generation of reactive oxygen species from nanoparticle-conjugated amyloid fibrils

Soumi Das, Jayanta Dolai,\* Buddhadev Mukherjee, Anupam Maity\* and Nikhil R. Jana\*

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### Calorimetric determination of the heat capacity function and absolute entropy of yttrium borohydride (Y(BH<sub>4</sub>)<sub>3</sub>) mechanochemically prepared

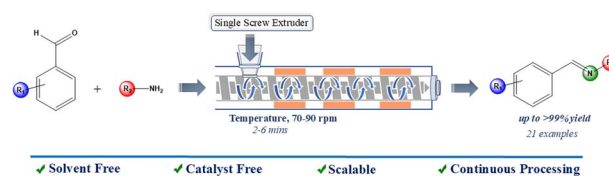
Konrad Burkmann, Franziska Habermann, Bianca Störr, Jürgen Seidel, Roman Gumeniuk, Klaus Bohmhammel and Florian Mertens\*



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### One-pot synthesis of aldimines *via* single screw extrusion: a mechanochemical approach

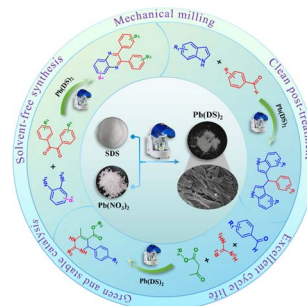
Aditya Sunil Lade, Khetal Vasant Surana,  
Sai Srinivas Ponugoti and Shreerang V. Joshi\*



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### Preparation of lead dodecyl sulfate nanorod materials mediated by mechanochemistry and green solvent-free catalytic synthesis of heterocyclic derivatives

Zhiqiang Wu,\* Yuan Min, Yongqin Li, Fang Qian,  
Lin-an Cao, Rong Tan, Enke Feng, Jiya Ding\*  
and Pengxi Jiang

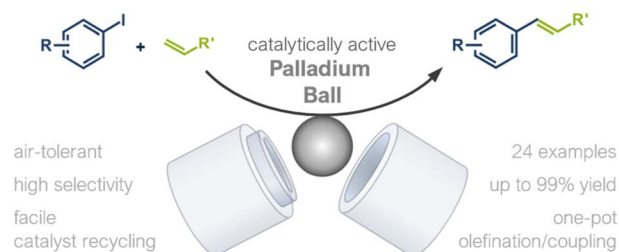


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### Thermally accelerated Heck reaction under direct mechanocatalysis using palladium milling balls

Johanna Templ,\* Suhmi Hwang, Tino Schwemin,  
Hakan Baltaci and Lars Borchardt\*

#### Direct Mechanochemical Mizoroki-Heck Reaction



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### Thermodynamic and kinetic study of the effect of LiCl and NaCl on the thermal dehydrogenation of Ca(AlH<sub>4</sub>)<sub>2</sub>

Franziska Habermann, Anneliese Wirth, Konrad Burkmann,  
Jakob Kraus, Bianca Störr, Hartmut Stöcker, Jürgen Seidel,  
Jens Kortus, Roman Gumeniuk, Klaus Bohmhammel  
and Florian Mertens\*

