

RSC Mechanochemistry

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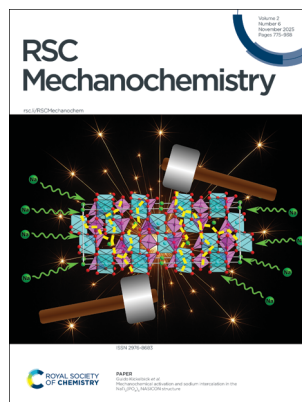
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Cover

See Hironao Sajiki, Takashi Ikawa *et al.*, pp. 809–812. Image reproduced by permission of Takashi Ikawa from *RSC Mechanochem.*, 2025, 2, 809.



Inside cover

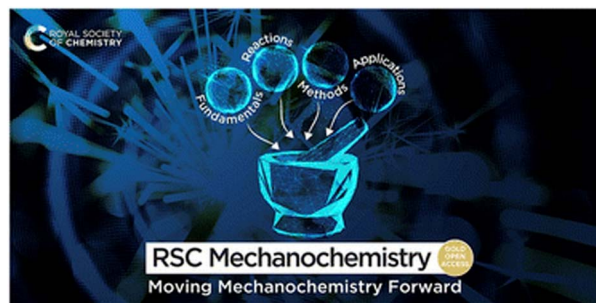
See Guido Kickelbick *et al.*, pp. 813–825. Image reproduced by permission of Guido Kickelbick from *RSC Mechanochem.*, 2025, 2, 813. Cover image partially generated with AI.

EDITORIAL

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Moving mechanochemistry forward: mechanochemical polymer synthesis and recycling

Jeung Gon Kim

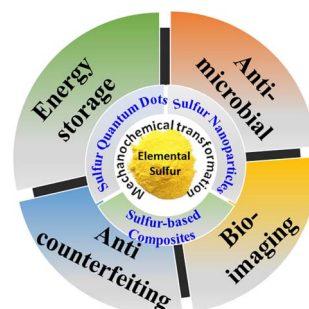


REVIEW

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Mechanochemical conversion of elemental sulfur into functional sulfur nanomaterials for promising applications

Hammad Hasan, Farwa Arshad and Md Palashuddin Sk*



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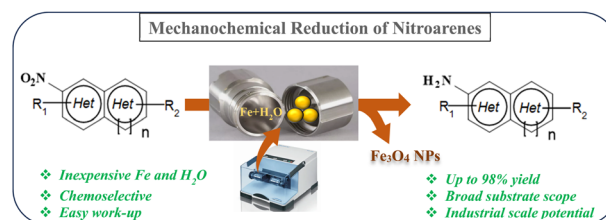


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Iron–water mediated chemoselective reduction of nitroarenes in a ball mill: a highly efficient and sustainable approach

Vir Bahadur, Amol S. Dehade, Dharmendra Das, Prashantha Kamath, Sitaram Pal, Bhanu Manjunath and Partha P. Mukhopadhyay*

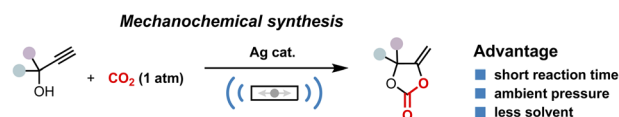


PAPERS

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Synthesis of cyclic carbonates *via* silver-catalysed fixation of CO₂ to propargyl alcohols under mechanochemical conditions

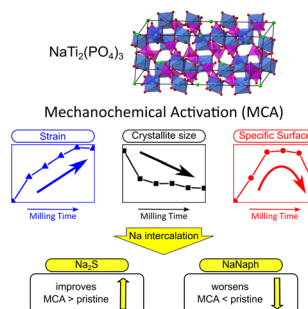
Naohito Tomita, Hironao Sajiki* and Takashi Ikawa*



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Mechanochemical activation and sodium intercalation in the NaTi₂(PO₄)₃ NASICON structure

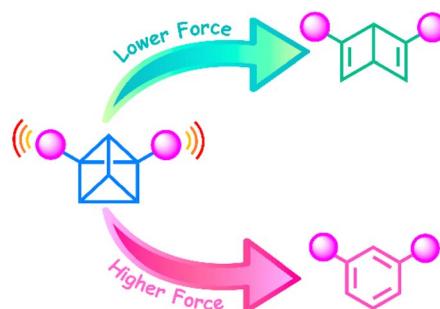
Tobias Benjamin Straub, Elias C. J. Gießelmann and Guido Kickelbick*



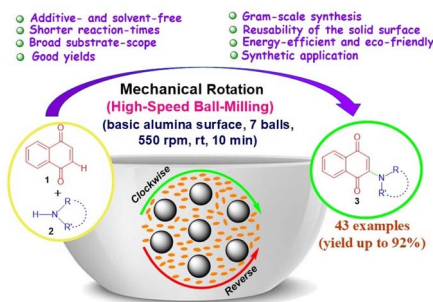
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Force governs product diversity in the mechanochemical reactivity of triprismane

Ankita Das, Chandralekha Hajra and Ayan Datta*



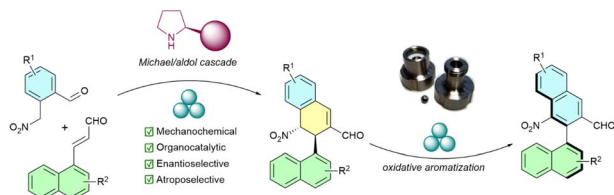
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Mechanochemistry-driven solvent-free synthesis of biologically relevant diversely substituted 2-amino-1,4-naphthoquinones

Koushik Pal, Pintu Karmakar and Goutam Brahmachari*

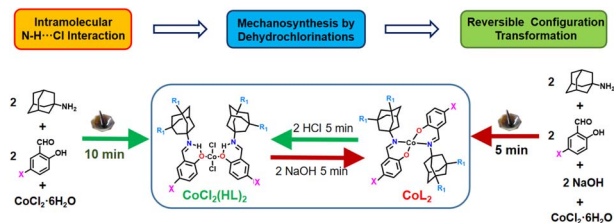
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Atroposelective organocatalytic synthesis of 1,2'-binaphthalene-3'-carbaldehydes under mechanochemical conditions

Henrich Szabados and Radovan Šebesta*

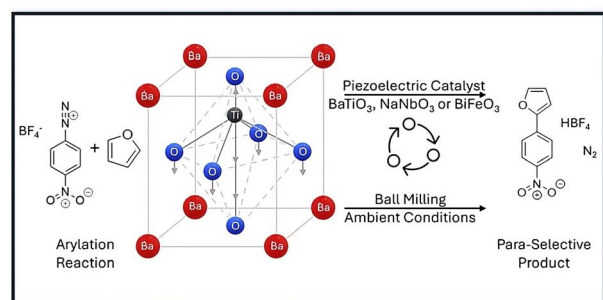
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Mechanochemical one-pot synthesis and solid-state transformation of cobalt(II) Schiff base complexes: a green route to tailored coordination architecture

Hongguang Chen, Zhenwei Guo, Daming Feng,* Xudong Jin* and Fang Guo*

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Structure–performance relationships of mechanochemically synthesized piezoelectric catalysts BaTiO₃, NaNbO₃ and BiFeO₃

Erin V. Phillips, Van Son Nguyen, Marta Hatzell and Carsten Sievers*

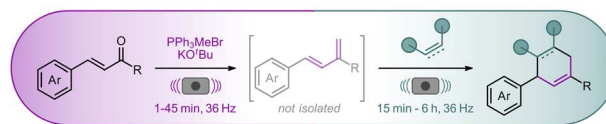


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Mechanically induced sequential one-pot Wittig olefination–Diels–Alder reaction: a solvent-free approach to complex bicyclic scaffolds

Nina Biedermann and Michael Schnürch*

Mechanically Induced One-Pot Wittig Olefination–Diels–Alder Reaction

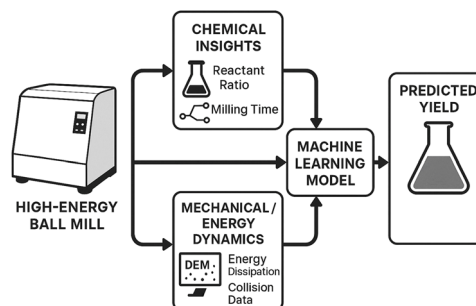


● solvent-free ● ambient conditions ● no intermediate isolation ● endo selective

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Linking mechanics and chemistry: machine learning for yield prediction in NaBH₄ mechanochemical regeneration

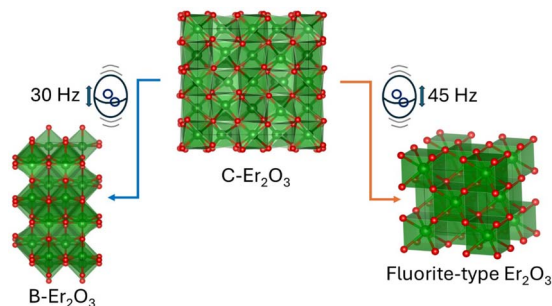
Santiago Garrido Nuñez,* Dingena L. Schott and Johan T. Padding



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X-ray diffraction study of the polymorphism in Er₂O₃ driven by ball milling

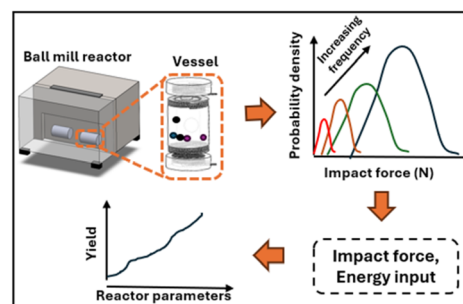
Ana Maria Constantin, Francesco Mele, Daniele Alessandro Cauzzi, Raimondo Maggi, Elena Villa, Alessandro Cerveri and Lara Righi*

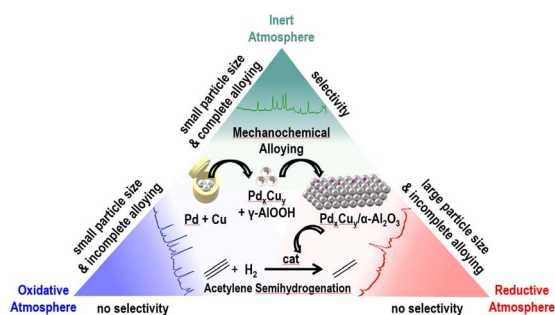


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Experimental quantification of impact force and energy for mechanical activation in vibratory ball mills

Emmanuel Nwoye, Kathleen Floyd, James Batteas* and Jonathan Felts*





Exploring milling atmosphere effects in mechanochemical synthesis of Pd–Cu supported catalysts for the semihydrogenation of acetylene in equimolar ethylene mixtures

Rohini Khobragade, Jonathan M. Mauß, Nguyen Khang Tran and Ferdi Schüth*

