

RSC Mechanochemistry

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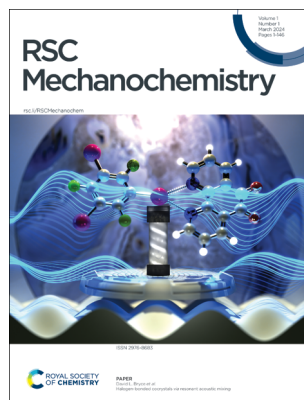
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ISSN 2976-8683 CODEN RMSED4 1(1) 1–146 (2024)



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See Franziska Emmerling, Adam A. L. Michalchuk *et al.*, pp. 43–49. Image reproduced by permission of Bastian Ruehle from *RSC Mechanochem.*, 2024, **1**, 43.



Inside cover
See David L. Bryce *et al.*, pp. 50–62. Image reproduced by permission of Alireza Nari and David L. Bryce from *RSC Mechanochem.*, 2024, **1**, 50.

EDITORIAL

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Introducing *RSC Mechanochemistry*

James D. Batteas* and Tomislav Friščić*

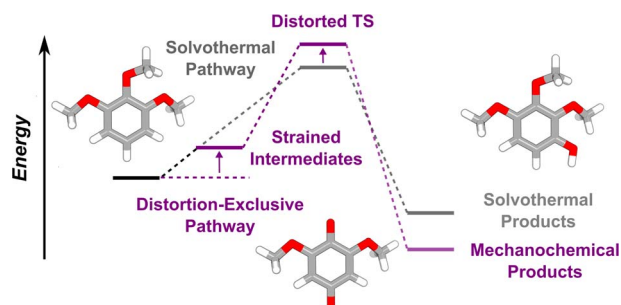


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Kinetics of primary mechanochemical covalent-bond-forming reactions

Yerzhan S. Zholdassov, Ryan W. Kwok, Milan A. Shlain, Monil Patel, Mateusz Marianski and Adam B. Braunschweig*



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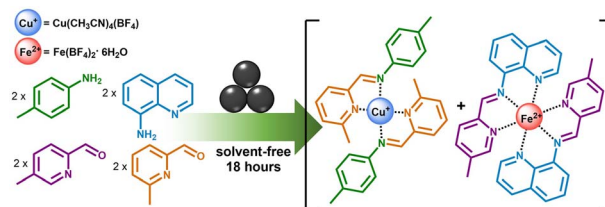
Fundamental questions
Elemental answers

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Dynamic mechanochemistry: accelerated self-sorting of two imine-based metal complexes under solvent-free mechanochemical conditions

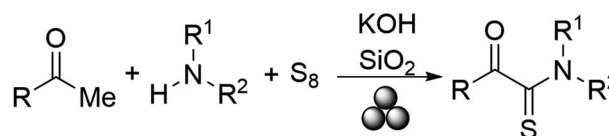
Thomas E. Shaw, Justin Arami, Jean-François Ayme, Jean-Marie Lehn and Titel Jurca*



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Synthesis of α -ketothioamides with elemental sulfur under solvent-free conditions in a mixer mill

Chandan Chittapriya Sahu, Sourav Biswas, Renè Hommelsheim and Carsten Bolm*



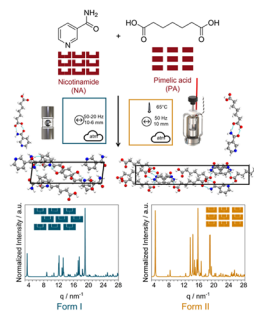
- solvent-free
- short reaction time
- metal-free

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In situ investigation of controlled polymorphism in mechanochemistry at elevated temperature

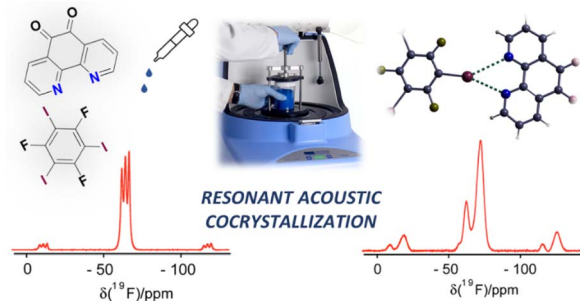
Kevin Linberg, Philipp C. Sander, Franziska Emmerling* and Adam A. L. Michalchuk*



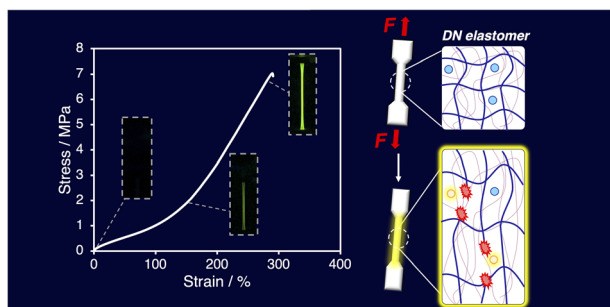
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Halogen-bonded cocrystals *via* resonant acoustic mixing

Alireza Nari, Jeffrey S. Ovens and David L. Bryce*



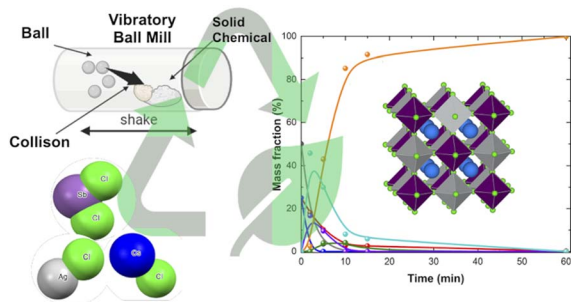
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Visualization of mechanochemical polymer-chain scission in double-network elastomers using a radical-transfer-type fluorescent molecular probe

Takumi Yamamoto, Akira Takahashi and Hideyuki Otsuka*

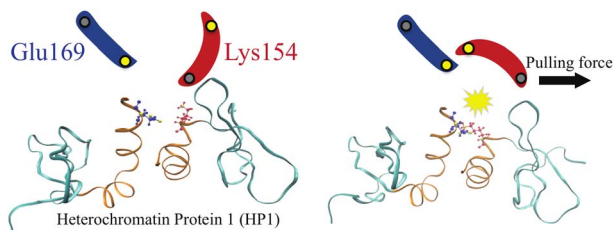
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Green-chemistry synthesis and optical properties of lead-free Cs₂AgSbCl₆ double perovskite by a mechanochemical method

Karla Kariny F. Barbosa,* Deisy Aristizábal-Giraldo, Jorge M. Osorio-Guillén, José Javier S. Acuña and Fabio F. Ferreira

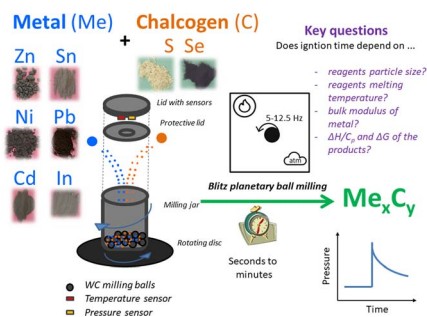
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Enhanced HP1 α homodimer interaction *via* force-induced salt bridge formation: implications for chromatin crosslinking and phase separation

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Mechanically induced self-propagating reactions (MSRs) to instantly prepare binary metal chalcogenides: assessing the influence of particle size, bulk modulus, reagents melting temperature difference and thermodynamic constants on the ignition time

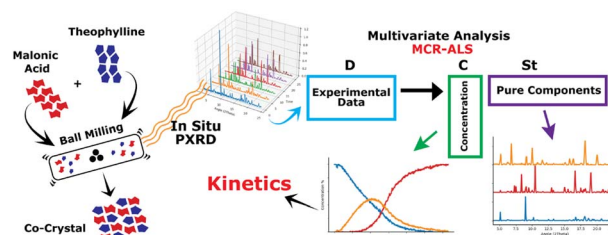
Matej Baláž,* Róbert Džunda, Radovan Bureš, Tibor Sopčák and Tamás Csanádi



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Deriving kinetic insights from mechanochemically synthesized compounds using multivariate analysis (MCR-ALS) of powder X-ray diffraction data

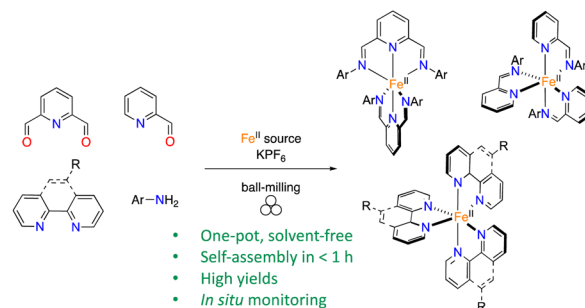
Laura Macchietti, Lucia Casali, Franziska Emmerling,*
Dario Braga and Fabrizia Grepioni*



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Ball-milling for efficient synthesis of pyridine-containing iron(II) photosensitizers

Enita Rastoder, Thierry Michel, Frédéric Lamaty*
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"What makes every work perfect is cooking and grinding": the ancient roots of mechanochemistry

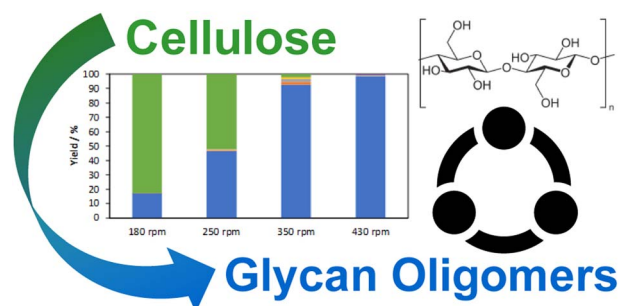
Marianna Marchini,* Giacomo Montanari, Lucia Casali,
Matteo Martelli, Lucia Raggetti, Matej Baláz, Peter Baláz
and Lucia Maini*

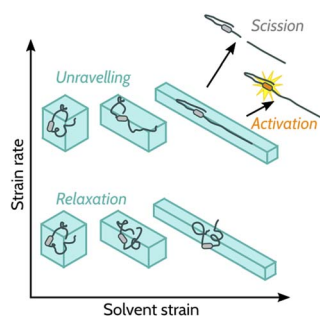


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Systematic investigation of the mechanocatalytic partial depolymerization of cellulose towards oligomeric glycans

Gregor Meyer, Dominique Lumpp, Anne-Kathrin Stulik,
Dagmar Hoffmann and Marcus Rose*





Theory of flow-induced covalent polymer mechanochemistry in dilute solutions

Etienne Rognin, Niamh Willis-Fox and Ronan Daly*

