

RSC Mechanochemistry

rsc.li/RSCMechanochem

The Royal Society of Chemistry is the world's leading chemistry community. Through our high impact journals and publications we connect the world with the chemical sciences and invest the profits back into the chemistry community.

IN THIS ISSUE

ISSN 2976-8683 CODEN RMSED4 1(4) 311–424 (2024)



Cover

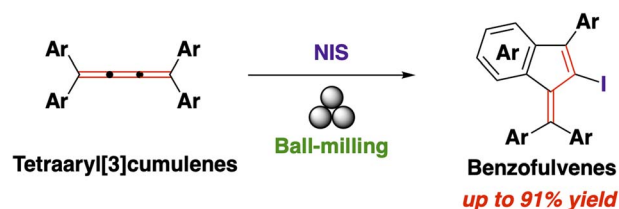
See Seong H. Kim *et al.*, pp. 328–341. Image reproduced by permission of Yu-Sheng Li and Seong H. Kim from *RSC Mechanochem.*, 2024, 1, 328.

COMMUNICATIONS

318

Mechanochemical transformation of tetraaryl[3]cumulenes to benzofulvenes *via* electrophilic iodocyclization

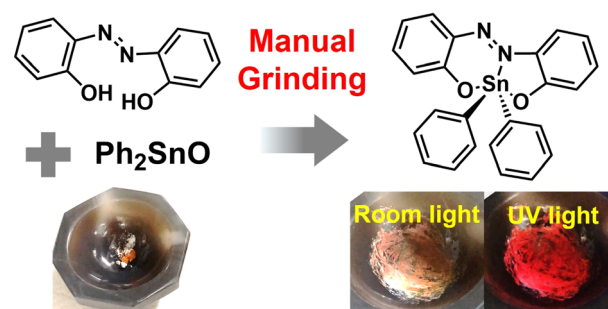
Fumitoshi Yagishita,* Shoma Mukai, Sota Abe, Shoko Ueta, Yasushi Yoshida, Yukihiro Arakawa, Keiji Minagawa and Yasushi Imada



322

Facile mechanochemical synthesis of hypervalent tin(IV)-fused azo/azomethine compounds showing solid-state emission

Masayuki Gon, Taichi Kato, Kazuya Tanimura, Chiaki Hotta and Kazuo Tanaka*



ChemComm

Uncover new possibilities
with outstanding
preliminary research

Original discoveries, fuelling
every step of scientific progress

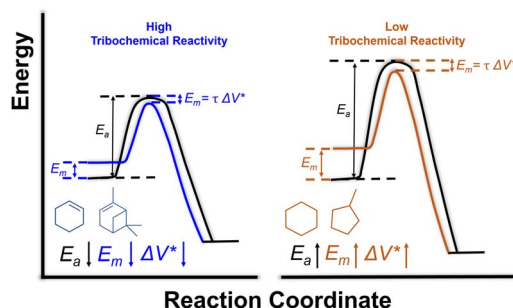
rsc.li/chemcomm

Fundamental questions
Elemental answers

328

Elucidating tribochemical reaction mechanisms: insights into tribofilm formation from hydrocarbon adsorbates coupled with tribochemical substrate wear

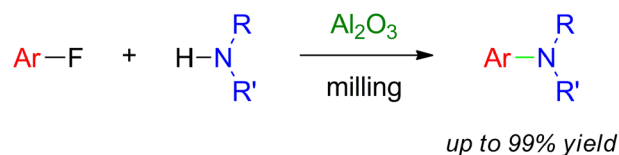
Yu-Sheng Li, Fakhrol H. Bhuiyan, Jongcheol Lee, Ashlie Martini and Seong H. Kim*



342

Al₂O₃ promoted mechanochemical nucleophilic aromatic substitution

Luca Vaghi,* Eva Palomba and Antonio Papagni



- No base
- Solventless crude recovery
- Solvent-free
- Easy and fast purification

349

Revealing the mechanism of reductive, mechanochemical Li recycling from LiFePO₄

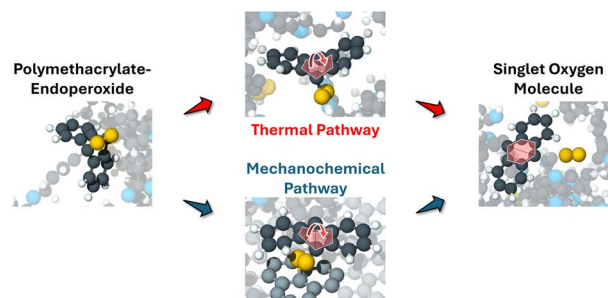
David Geiß, Oleksandr Dolotko, Sylvio Indris, Christian Neemann, Andrei Bologa, Thomas Bergfeldt, Michael Knapp and Helmut Ehrenberg



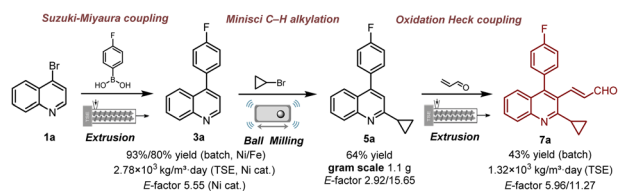
361

Atomistic simulations of mechanically activated reactions for oxygen release from polymers

José Cobeña-Reyes, Fakhrol H. Bhuiyan and Ashlie Martini*



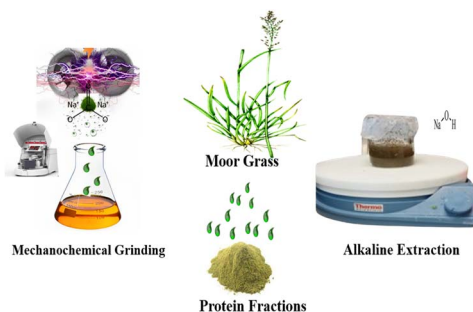
367



Total mechano-synthesis of 2-cyclopropyl-4-(4-fluorophenyl)quinoline-3-acrylaldehyde—a pivotal intermediate of pitavastatin

Jingbo Yu,^{*} Yanhua Zhang, Zehao Zheng and Weike Su^{*}

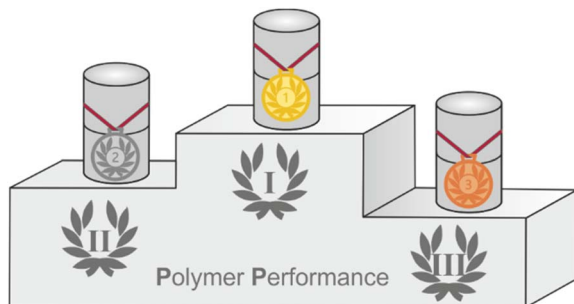
375



Mechanochemical extraction of edible proteins from moor grass

Olusegun Abayomi Olalere, Fatma Guler, Christopher J. Chuck, Hannah S. Leese and Bernardo Castro-Dominguez^{*}

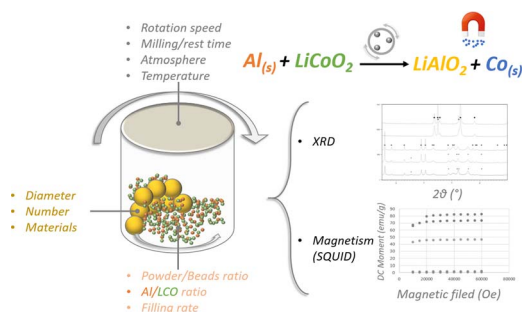
386



Polymer vessels in mechanochemical syntheses: assessing material performance

Marisol Fabienne Rappen, Lars Beissel, Jonathan Geisler, Simeon Theodor Tietmeyer, Sven Grätz and Lars Borchardt^{*}

393



Advancing sustainable practices in Li-ion battery cathode material recycling: mechanochemical optimisation for magnetic cobalt recovery

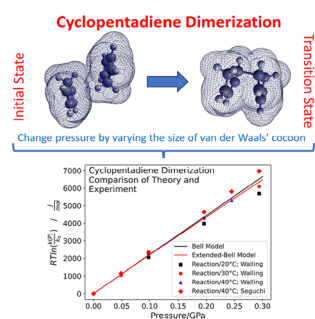
Joshua Vuloup, Cécile Bouilhac, Nicolas Coppey, Patrick Lacroix-Desmazes, Bernard Fraisse, Lorenzo Stievano, Laure Monconduit^{*} and Moulay Tahar Sougrati^{*}



402

Modeling mechanochemistry: pressure dependence of Diels–Alder cycloaddition reaction kinetics

Nicholas Hopper, François Sidoroff, Juliette Cayer-Barrioz, Denis Mazuyer, Bo Chen and Wilfred T. Tysoe*



413

A hybrid density functional study on the mechanochemistry of silicon carbide nanotubes

Aabiskar Bhusal,* Kapil Adhikari and Qian Sun

