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See Akihiko Kudo *et al.*, pp. 7911–7914.
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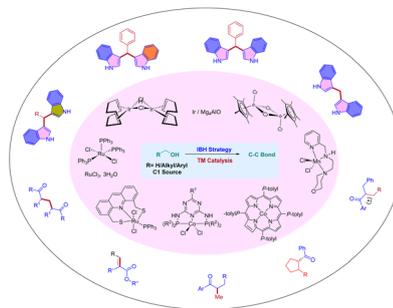
See Uttam Manna *et al.*, pp. 7915–7918.
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Transition metal-catalysis in interrupted borrowing hydrogen strategy

Madhu Nallagangula, Murugan Subaramanian, Rohit Kumar and Ekambaram Balaraman*

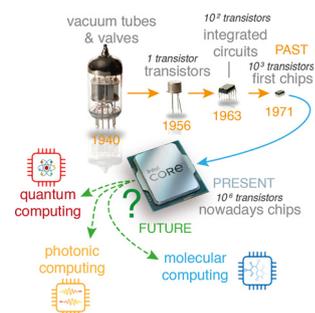


FEATURE ARTICLES

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Lanthanide-based logic: a venture for the future of molecular computing

Sofia Zanella, Miguel A. Hernández-Rodríguez, Rute A. S. Ferreira and Carlos D. S. Brites*



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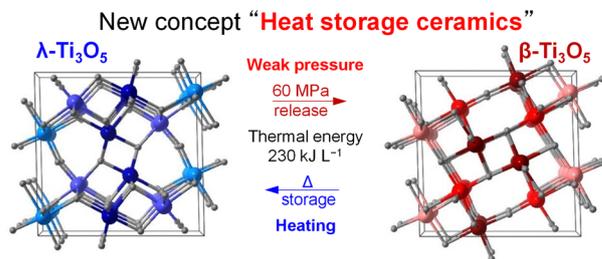
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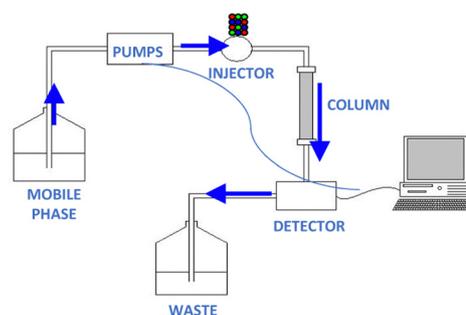
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Long-term heat-storage materials based on λ - Ti_3O_5 for green transformation (GX)Shin-ichi Ohkoshi,* Marie Yoshikiyo,*
Jessica MacDougall, Yusuke Ikeda and Hiroko Tokoro*

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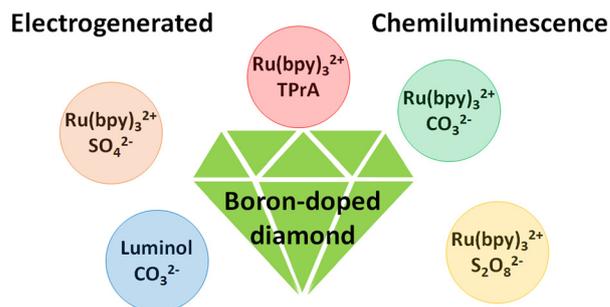
Understanding and managing peak shape for basic solutes in reversed-phase high performance liquid chromatography

David Victor McCalley



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Electrogenerated chemiluminescence at boron-doped diamond electrodes

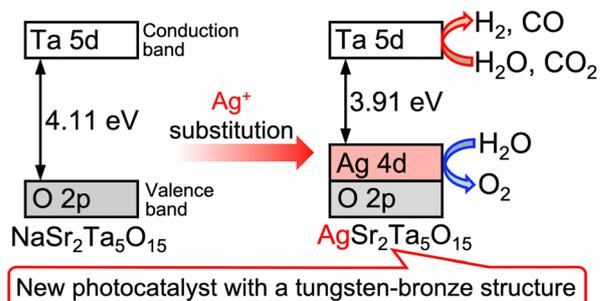
Andrea Fiorani,* Giovanni Valenti, Francesco Paolucci
and Yasuaki Einaga

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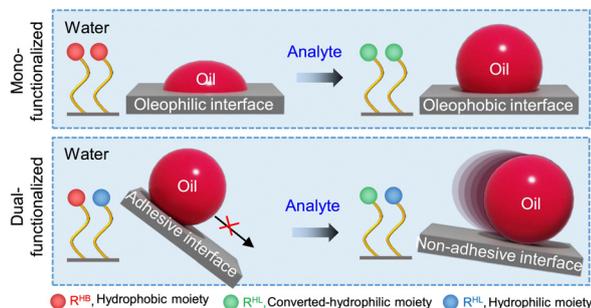
Water splitting and CO_2 reduction over an $\text{AgSr}_2\text{Ta}_5\text{O}_{15}$ photocatalyst developed by a valence band control strategy

Tomoaki Takayama, Akihito Iwase and Akihiko Kudo*



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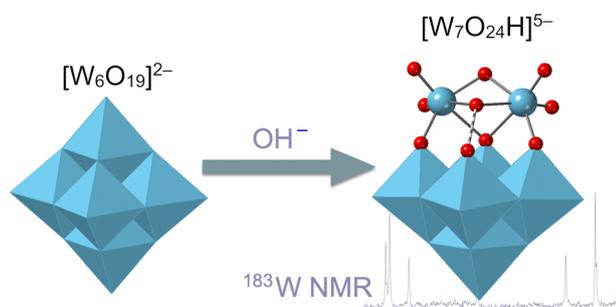
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Chemically selective raising and rolling of oil-droplets underwater: an equipment-free chemical sensing method

Angana Borbora, Jaysri Das and Uttam Manna*

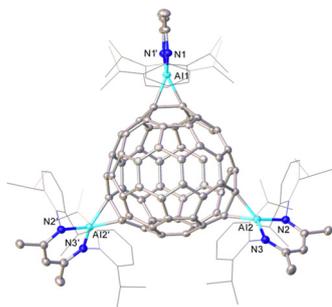
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A thirty-year old mystery solved: identification of a new heptatungstate from non-aqueous solutions

Dominic Shiels, Magda Pascual-Borràs, Paul G. Waddell, Corinne Wills, Josep-Maria Poblet and R. John Errington*

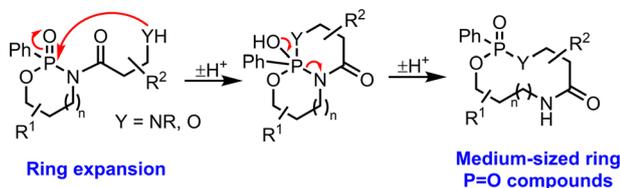
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A molecular aluminium fulleride

Samuel Ray Lawrence, Tobias Rüffer, Andreas Stasch* and Robert Kretschmer*

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Ring expansion reactions of P=O-containing molecules

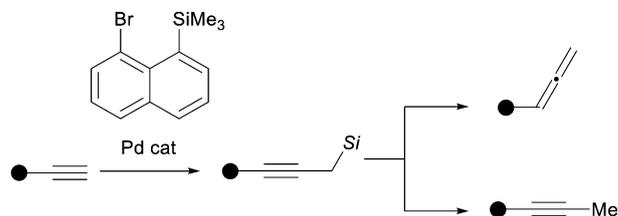
Zhongzhen Yang, Jerry K. F. Tam, Jack M. Wootton, Jason M. Lynam* and William P. Unsworth*



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Synthesis of propargyl silanes from terminal alkynes via a migratory Sonogashira reaction

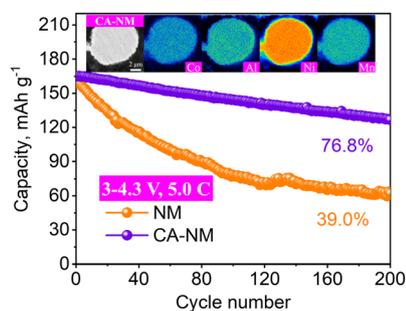
Mikus Puriņš, Lucas Eichenberger and Jérôme Waser*



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Cobalt/aluminum co-substitution in a $\text{LiNi}_{0.9}\text{Mn}_{0.1}\text{O}_2$ layered cathode for improving kinetics

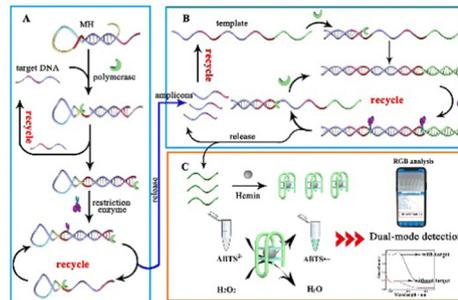
Zhiming Xiao, Bao Zhang, Xinyou He and Xing Ou*



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Target-switched artificial biochemical circuit for a versatile and sensitive colorimetric detection platform

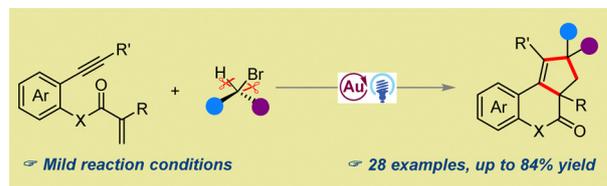
Xianzhu Meng, Huiwen Gu, Xiaoli Yin, Hongchao Yi and Ying Chen*



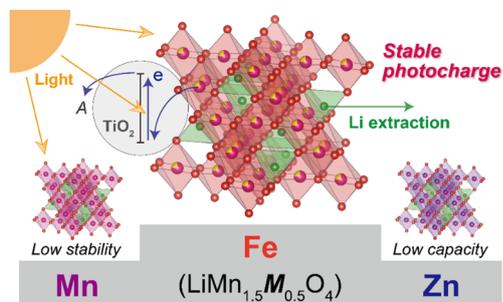
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Dinuclear-gold-catalyzed cyclization of 1,7-enynes with alkyl bromides

Jiajun Li, Xinyi Zhai, Cheng-Long Ji, Weipeng Li and Jin Xie*



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Optimizing $\text{LiMn}_{1.5}\text{M}_{0.5}\text{O}_4$ cathode materials for aqueous photo-rechargeable batteries

Kohei Shimokawa,* Shogo Matsubara, Tomoya Kawaguchi, Akihiro Okamoto and Tetsu Ichitsubo*

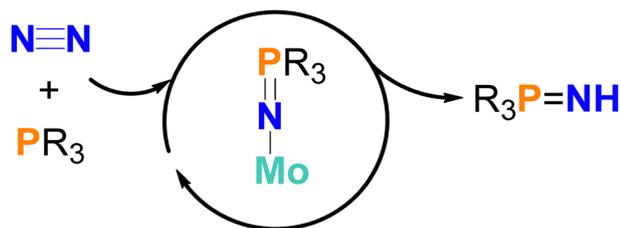
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$\text{B}(\text{C}_6\text{F}_5)_3$ -catalyzed regio- and stereoselective thiosulfonylation of terminal alkynes with thiosulfonates

Wenjie Qin, Qian Ni, Wenjun Jiao and Yuanhong Ma*

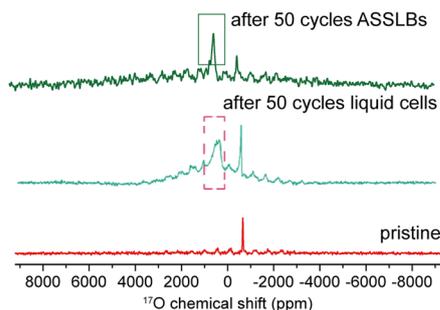
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A synthetic cycle for iminophosphorane synthesis involving direct intermolecular $\text{N}=\text{P}$ bond formation on N_2 -derived molybdenum nitride

Li Jin, Guoqiang Zhang, Xiaoqin Yang, Jinyi Song, Jin Wang* and Qian Liao*

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Probing the degradation of LiCoO_2 in batteries subjected to high-voltage cycling with ^{17}O solid-state NMR spectroscopy

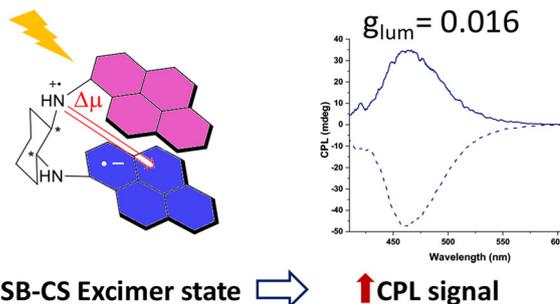
Guozhong Lu, Fushan Geng, Nianrui Guo, Shouquan Yao, Ming Shen* and Bingwen Hu*



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Strong circularly polarized luminescence via intramolecular excited-state symmetry-breaking charge separation

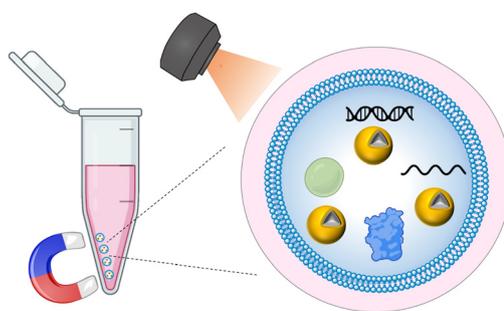
Maria João Álvaro-Martins, Chloé Billiaux, Pascale Godard, Reiko Oda, Guillaume Raffy and Dario M. Bassani*



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Integrated separation and detection of exosomes via a label-free magnetic SERS platform

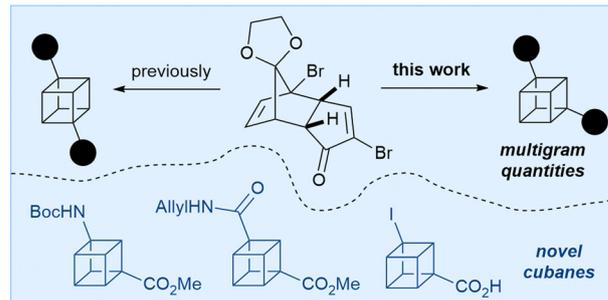
Lingfei Han, Chengcheng Zhu, Zheng Tan, Jin Wang, Xuewei Liao,* Xing-Hua Xia and Chen Wang*



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A practical synthesis of 1,3-disubstituted cubane derivatives

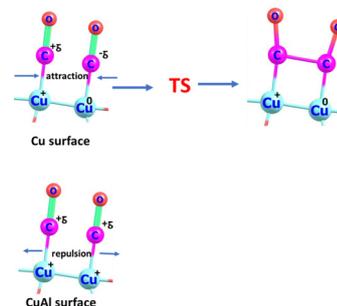
Nahin Kazi, Marine C. Aublette, Sarah L. Allinson and Susannah C. Coote*



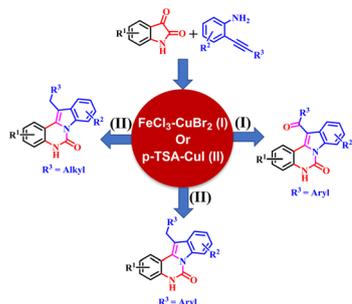
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Boosting selectivity towards formate production using CuAl alloy nanowires by altering the CO_2 reduction reaction pathway

Ibrahim M. Badawy, Ghada E. Khedr, Ahmed Hafez, Elsayed A. Ashour and Nageh K. Allam*



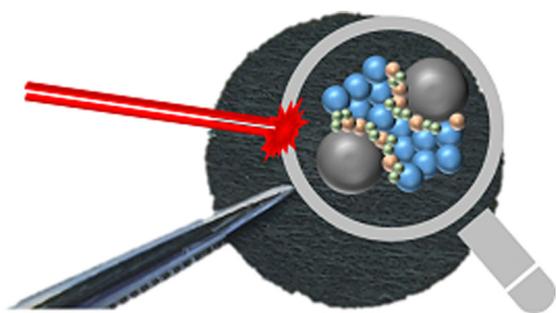
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Ring expansion and fused cyclization catalysis to construct indoloquinazolinones with functionalization

Ramlal Baidya, Prasenjit Das, Pintu Pratihar and Dilip K. Maiti*

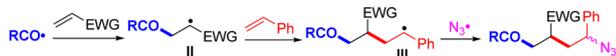
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Localised degradation within sulfide-based all-solid-state electrodes visualised by Raman mapping

Jungwoo Lim, Yundong Zhou, Rory H. Powell, Tugce Ates, Stefano Passerini and Laurence J. Hardwick*

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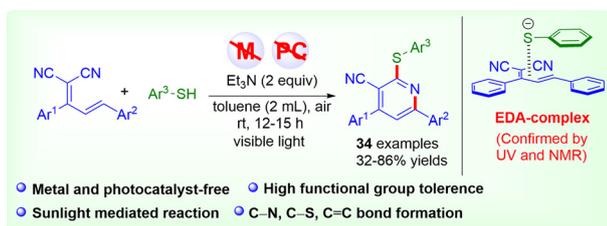


- radical dual difunctionalization of two different alkenes
- ordered-assembly by the intrinsic nucleo/electrophilicity of radicals and alkenes
- abundant aromatic/aliphatic aldehydes as acyl radical source
- readily available alkene substrates
- convenient synthesis of chain elongated β,δ -functionalized ketones
- Fe-catalyzed four-component acylative azidation at 35 °C

D–A–D–T-type four-component radical dual-difunctionalization and acylative azidation of two different alkenes

Ren-Xiang Liu, Xin Chen and Luo Yang*

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Visible-light driven electron–donor–acceptor (EDA) complex-initiated synthesis of thio-functionalized pyridines

Hirendra Nath Dhara, Amitava Rakshit, Dinabandhu Barik, Koustuv Ghosh and Bhisma K. Patel*

