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Cover

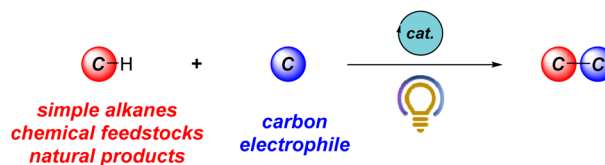
See Manuel Ferrer *et al.*, pp. 9469-9472. Image reproduced by permission of Manuel Ferrer and Design Cells from *Chem. Commun.*, 2023, 59, 9469.

HIGHLIGHT

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C-C bond formation *via* photocatalytic direct functionalization of simple alkanes

Álvaro Velasco-Rubio, Pol Martínez-Balart, Andrés M. Álvarez-Constantino and Martín Fañanás-Mastral*

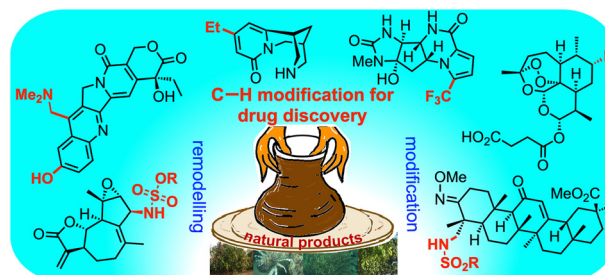


FEATURE ARTICLES

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C-H modification of natural products: a minimalist enabling tactic for drug discovery, API processing and bioconjugation

Saumitra Sengupta,* Srihari Pabbaraja* and Goverdhan Mehta*



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Overcoming the challenges of infrared photosensitizers in photodynamic therapy: the making of redaporfin

Luis G. Arnaut* and Mariette M. Pereira*

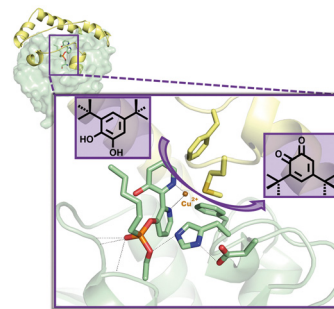


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Transforming an esterase into an enantioselective catecholase through bioconjugation of a versatile metal-chelating inhibitor

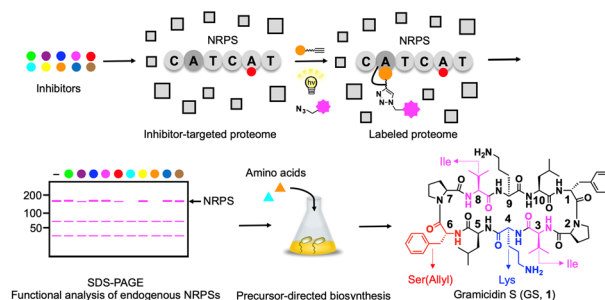
Laura Fernandez-Lopez, Isabel Cea-Rama, Julia Alvarez-Malmagro, Anna K. Ressmann, Jose L. Gonzalez-Alfonso, Cristina Coscolin, Patrick Shahgaldian, Francisco J. Plou, Jan Modregger, Marcos Pita, Julia Sanz-Aparicio and Manuel Ferrer*



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Biosynthetic diversification of non-ribosomal peptides through activity-based protein profiling of adenylation domains

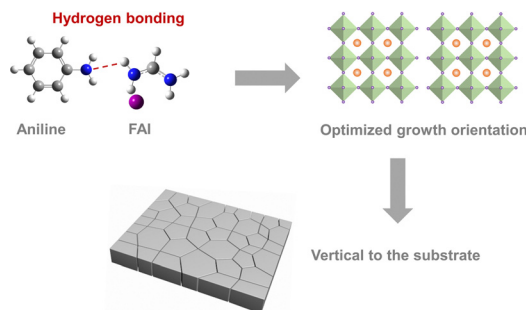
Fumihiro Ishikawa,* Natsumi Tsukumo, Erika Morishita, Shumpei Asamizu, Saaya Kusuhara, Shinsuke Marumoto, Katsuki Takashima, Hiroyasu Onaka and Genzoh Tanabe*



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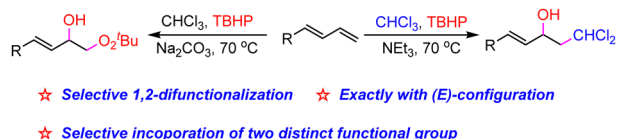
Regulating the crystallization dynamics through hydrogen bonding for high efficiency tin halide perovskite solar cells

Zhiyue Tang, Cheng Wu, Shurong Wang, Yu Xiao, Liming Ding and Feng Hao*



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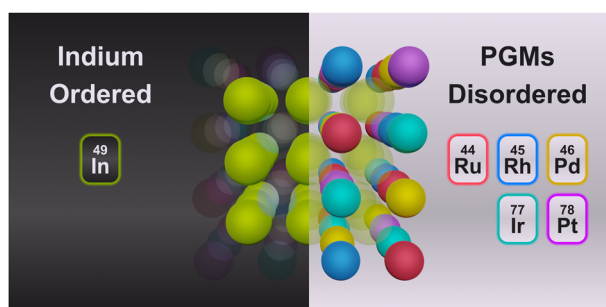
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Base-tuned selective 1,2-dichloromethyl-hydroxylation and 1,2-peroxyhydroxylation of 1,3-dienes via a tandem radical process

Jiantao Zhang, Weiming Zhu, Peng Zhou,* Cui Chen and Weibing Liu*

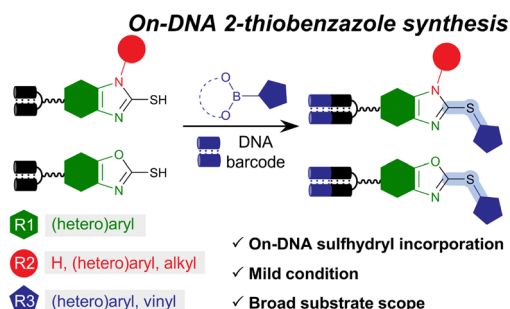
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B2-structured indium–platinum group metal high-entropy intermetallic nanoparticles

Masashi Nakamura, Dongshuang Wu,* Megumi Mukoyoshi, Kohei Kusada, Takaaki Toriyama, Tomokazu Yamamoto, Syo Matsumura, Yasukazu Murakami, Shogo Kawaguchi, Yoshiki Kubota and Hiroshi Kitagawa*

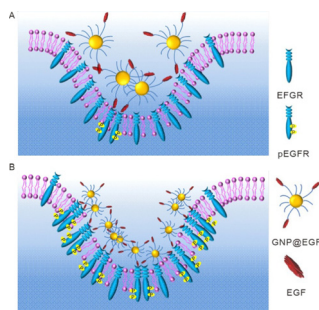
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DNA-compatible combinatorial synthesis of functionalized 2-thiobenzazole scaffolds

Xianfeng Li, Changyang Liu, Yuting Gao, Gong Zhang,* Yangfeng Li* and Yizhou Li*

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In situ decrypting plasmonic nanoparticle size-controlled phosphorylation of epidermal growth factor receptor in living cells

Hongyan Wang, Yan Ding, Yu Zhang, Xiaoqi Shi and Honglin Liu*

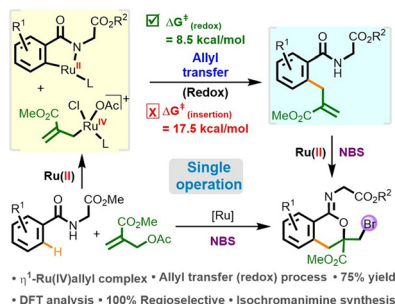


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Ru(II)/Ru(IV)-catalyzed C(sp²)-H allylation with alkene difunctionalization to access isochroman-1-imines

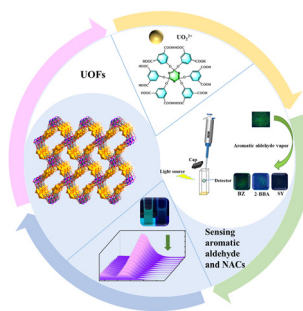
Ashish Joshi, Shruti Moorthy, Lilesh Rambhai Chavada, Saurabh Kumar Singh* and Ashok Kumar Pandey*



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A UOF based on a cyclotriphosphazene skeleton: fluorescence sensing of different substituted aldehydes and NACs

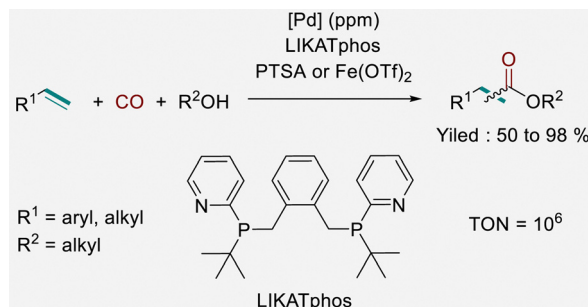
Yao Xiao, Zi-Xin You, Qing-lin Guan, Li-Xian Sun, Yong-Heng Xing* and Feng-Ying Bai*



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Towards “homeopathic” palladium-catalysed alkoxy carbonylation of aliphatic and aromatic olefins

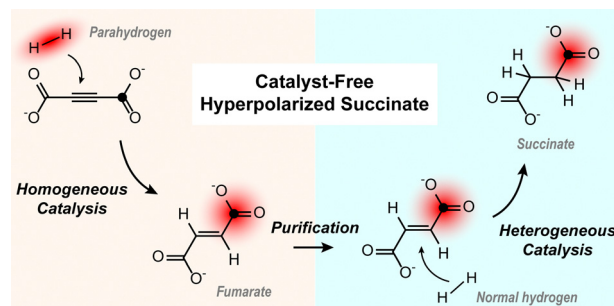
Weiheng Huang, Ralf Jackstell,* Robert Franke* and Matthias Beller*



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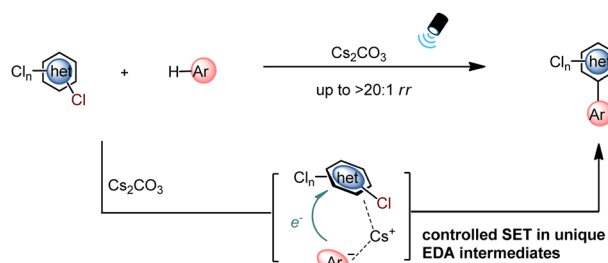
Combined homogeneous and heterogeneous hydrogenation to yield catalyst-free solutions of parahydrogen-hyperpolarized [1-¹³C]succinate

James Eills,* Román Picazo-Frutos, Dudari B. Burueva, Larisa M. Kovtunova, Marc Azagra, Irene Marco-Rius, Dmitry Budker and Igor V. Koptiyug*



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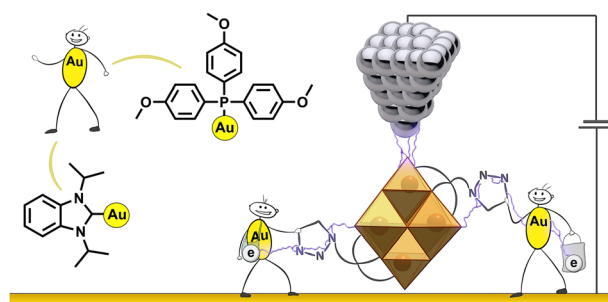
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A transition metal- and photosensitizer-free approach for site-selective (hetero)arylation of polychlorinated heteroarenes

Xiuliang Cheng, Yuhang He, Silin Song, Yu-Mei Lin* and Lei Gong*

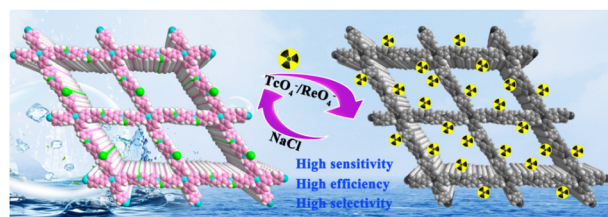
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Increasing the redox switching capacity of Lindqvist-type hexavanadates by organogold post-functionalisation

Stanislav K. Petrovskii, Marco Moors, Sebastian Schmitz, Elena V. Grachova* and Kirill Yu. Monakhov*

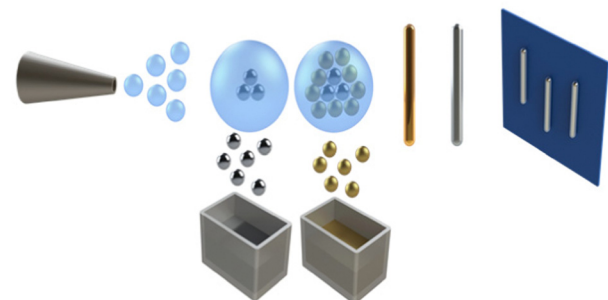
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Ionic covalent organic framework for selective detection and adsorption of $\text{TcO}_4^-/\text{ReO}_4^-$

Xiao-Rong Chen, Cheng-Rong Zhang, Xin Liu, Ru-Ping Liang* and Jian-Ding Qiu*

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Strong metal-support bonding enhanced thermal stability in Au- Al_2O_3 core-shell nanowires characterized by *in situ* transmission electron microscopy

Haotian Yang, Claron J. Ridge, Kyle Overdeep, C. Michael Lindsay, Xiao Tong and Alexander Orlov*

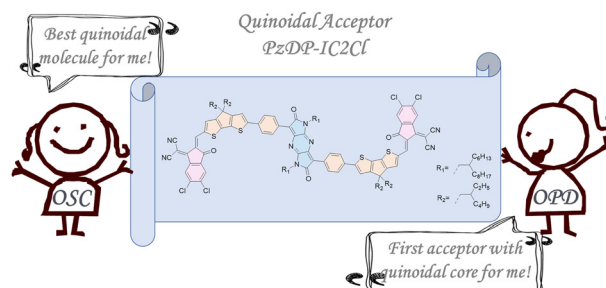


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An electron acceptor with an intrinsic quinoidal core for bulk-heterojunction organic solar cells and photodetectors

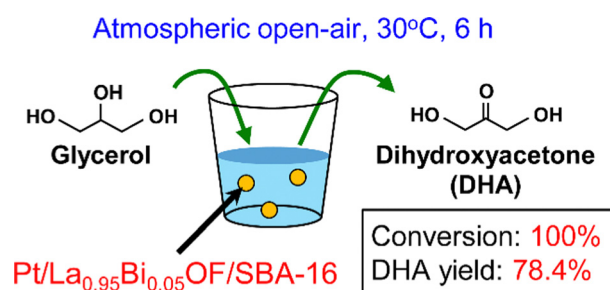
Haozhe Feng, Bingyan Yin, Langheng Pan, Xinyuan Liu, Seoyoung Kim, Yanfei Zhao,* Xuelong Huang,* Changduk Yang and Chunhui Duan*



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Dihydroxyacetone production by glycerol oxidation under moderate condition using Pt loaded on $\text{La}_{1-x}\text{Bi}_x\text{OF}$ solids

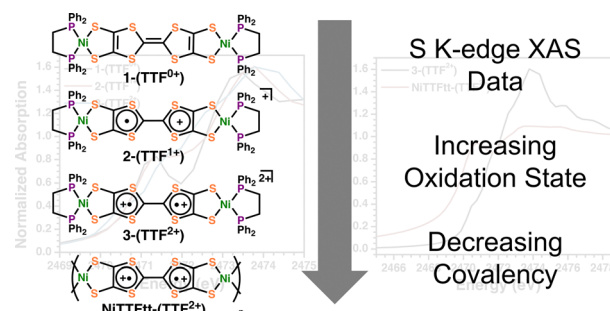
Naoyoshi Nunotani, Masanari Takashima, Yeon-Bin Choi, Yuta Uetake, Hidehiro Sakurai and Nobuhito Imanaka*



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Tetrathiafulvalene-2,3,6,7-tetrathiolate linker redox-state elucidation via S K-edge X-ray absorption spectroscopy

Ningxin Jiang, Jan-Niklas Boyn, Arun Ramanathan, Henry S. La Pierre* and John S. Anderson*



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Selective synthesis of boron-substituted enynes via a one-pot diboration/protodeboration sequence

Jakub Szyling,* Aleksandra Szymańska and Jędrzej Walkowiak*

