

Catalysis Science & Technology

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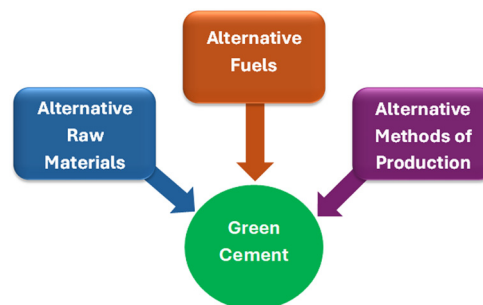
See Patrick Lott *et al.*, pp. 4142–4153.
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Electrochemical catalysis for the production of green cement: towards decarbonizing the cement industry

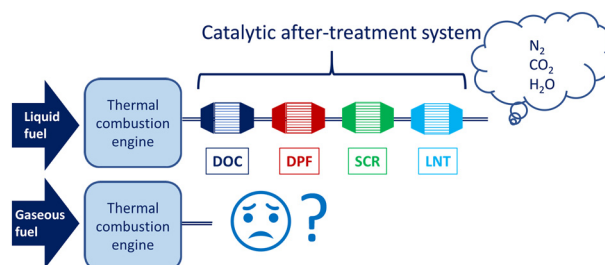
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What about the development of catalytic after-treatment processes as part of the transition from vehicles powered by liquid fuels to gaseous fuels

Yuanshuang Zheng, Amaury Decoster, Vasile Parvulescu and Pascal Granger*



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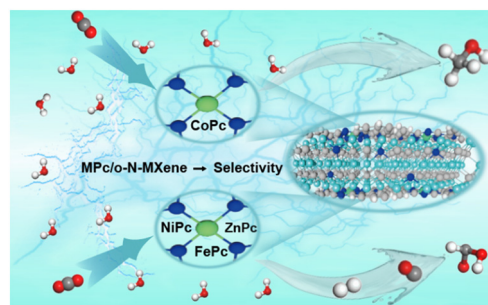


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Electronic regulation & improved conductivity of molecular catalysts as electrocatalysts

Hu Bihua, Cao Hailin, Lei Zhiwei, Cui Shuyu, Wang Peizhi, Tang Jun,* Wang Xingzhu* and Xu Baomin*



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Iron-cobalt nanoparticles dispersed in indium-based MIL-68-derived carbon nanosticks for water oxidation

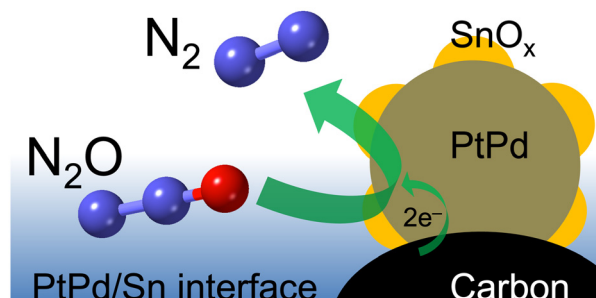
Haoran Wang, Nan Li, Yuting Fu, Junliang Chen, Jie Liu, Yuandong Yang, Shaojie Xu and Jinjie Qian*



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Selective electrocatalysis of the nitrous oxide reduction reaction to nitrogen on carbon-supported Pt-Pd-Sn nanoparticles

Abinash Chandro Sarker, Masaru Kato,* Mitsuki Kawamura, Takeshi Watanabe and Ichizo Yagi*

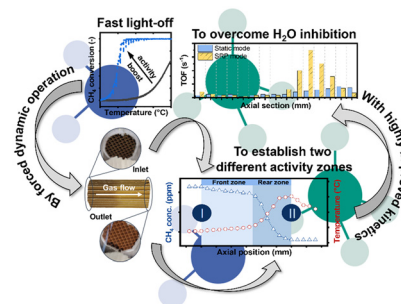


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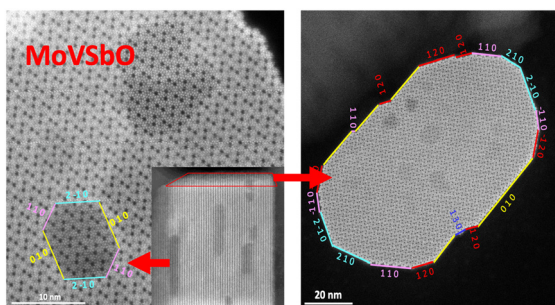
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Spatiotemporal insights into forced dynamic reactor operation for fast light-off of Pd-based methane oxidation catalysts

Kevin Keller, Daniel Hodonj, Lukas Zeh, Lachlan Caulfield, Eric Sauter, Christof Wöll, Olaf Deutschmann and Patrick Lott*



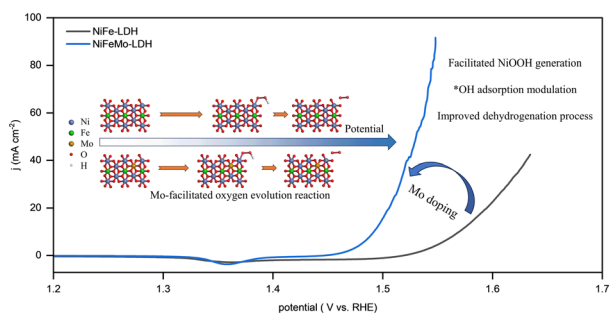
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Study of super-efficient defective MoVSbO catalysts used for ethane oxidative dehydrogenation by HAADF-STEM and of their thermal evolution by environmental electron microscopy and tomography

J. S. Valente, H. Arnedáriz-Herrera, R. Quintana-Solórzano, M. Aouine, A. Malchere, L. Roiban and J. M. M. Millet*

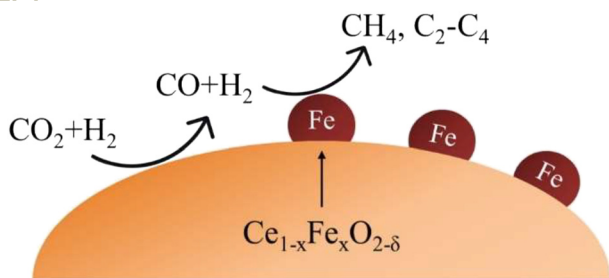
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Facilitating active NiOOH formation via Mo doping towards high-efficiency oxygen evolution

Liuqing Wang, Jinsheng Li, Qinglei Meng, Meiling Xiao,* Changpeng Liu, Wei Xing* and Jianbing Zhu*

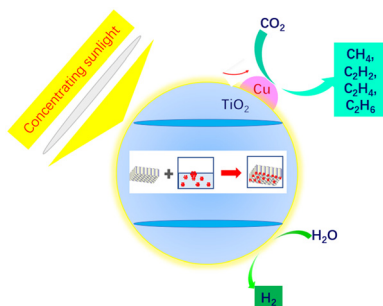
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Preparation, activity and mechanism of a metallic Cu/TiO₂ nanotube array catalyst by a fast solar drying method for photothermal CO₂ reduction under concentrating light

Zekai Zhang,* Wei Yan, Ying Wang, Guokai Cui and Hanfeng Lu*

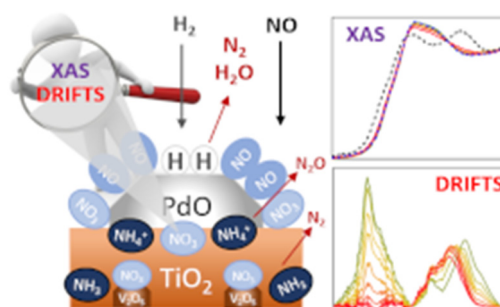


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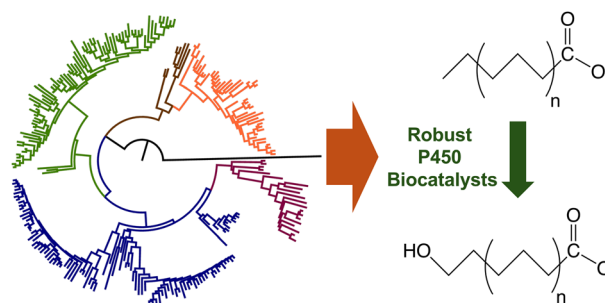
Thomas J. Eldridge,* Michael Borchers, Patrick Lott, Jan-Dierk Grunwaldt and Dmitry E. Doronkin*



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Thermostable fatty acid hydroxylases from ancestral reconstruction of cytochrome P450 family 4 enzymes

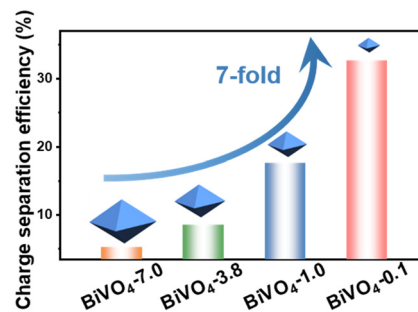
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Crystal size dependent photogenerated charge separation on an octahedral bismuth vanadate photocatalyst

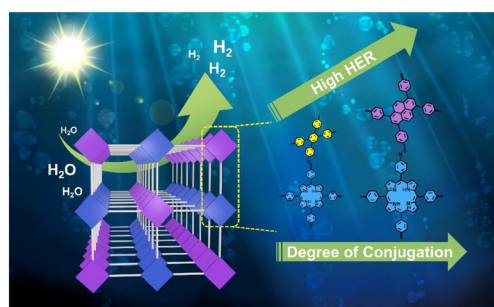
Yuting Deng, Qian Li, Pengpeng Wang, Fengke Sun, Can Li and Rengui Li*



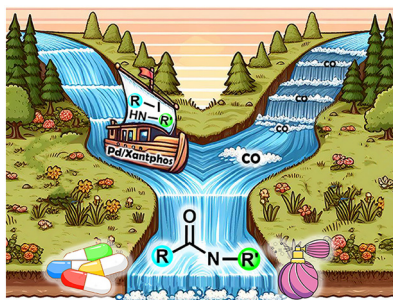
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Construction of porphyrin-based two-dimensional covalent organic frameworks for photocatalytic hydrogen production

Shaoxing Liu, Ming Wang, Shenglin Wang, Hui Hu,* Jiamin Sun,* Jianyi Wang, Xiaofang Su, Hui Lu and Yanan Gao*



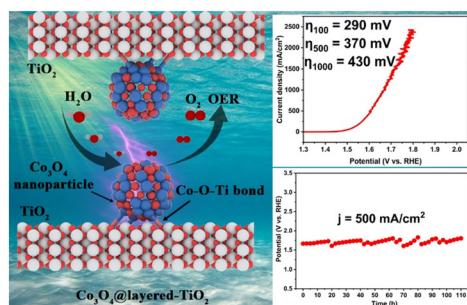
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Gas-liquid tubular continuous-flow Pd-catalysed aminocarbonylation process for scalable synthesis of carboxamides

Fábio M. S. Rodrigues, Vitaliy Masliy, Yaroslav Hryhoryev, Lucas D. Dias, Rui M. B. Carrilho,* Mário J. F. Calvete, Attila Takács, Gábor Mikle, László Kollár and Mariette M. Pereira*

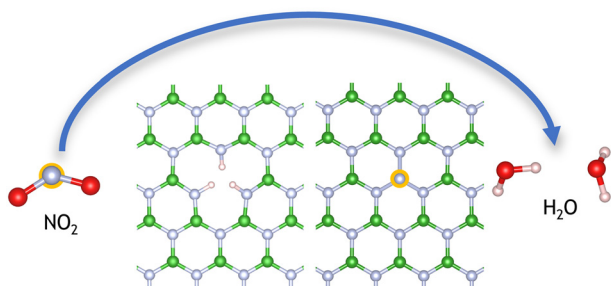
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Ampere-level oxygen evolution reaction driven by Co_3O_4 nanoparticles supported on layered TiO_2

Hong Tang, Wei Wu, Takahiro Kojima, Kenji Kazumi, Kazuhiro Fukami and Hiroshi Sakaguchi*

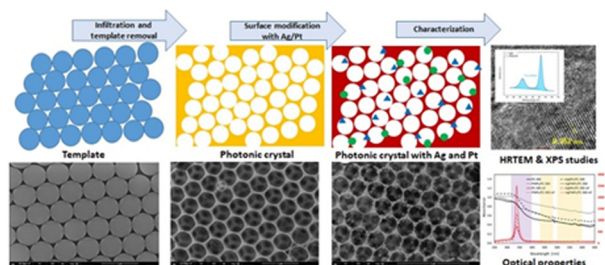
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Reduction of NO_x on metal-free hydrogenated hexagonal boron nitride

Anthony J. R. Payne,* Neubi F. Xavier Jr and Marco Sacchi*

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Preparation and photocatalytic activity of TiO_2 photonic crystals modified by bimetallic Ag-Pt nanostructures

Joanna Stępnik, Aneta Kisielewska and Ireneusz Piwoński*

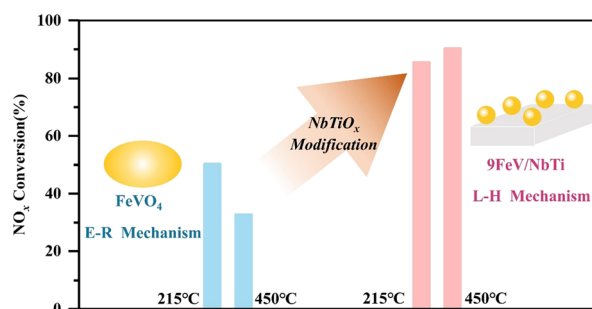


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Novel FeVO₄ catalyst modified with NbTiO_x for efficient selective catalytic reduction of NO_x with NH₃

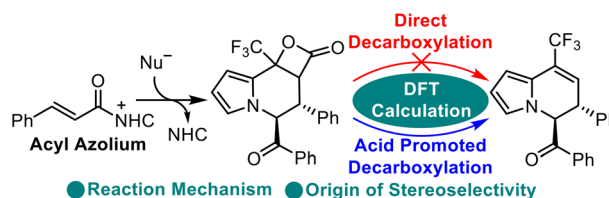
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Disclosing the mechanism and origin of stereoselectivity of the NHC-catalyzed transformation reaction of enals with acyl azolium as a key intermediate

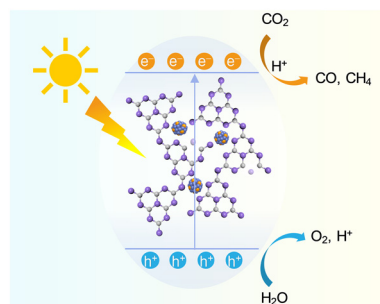
Pingxin Liang, Dongying Shi and Yang Wang*



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Anchoring of NiCo_x alloy nanoparticles on nitrogen vacancy-rich carbon nitride nanotubes toward promoting efficiently photocatalytic CO₂ conversion into solar fuel

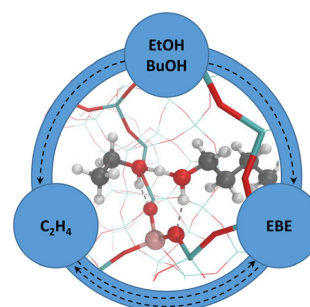
Qingqing Zhang,* Bo Tao, Chen Zhao, Zongyan Zhao,* Hui Wu, Xiaohui Zhong, Zhigang Zou and Yong Zhou*



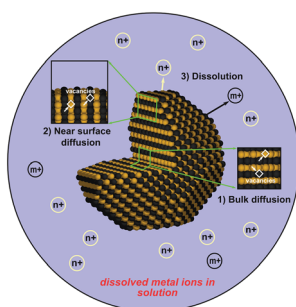
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Mechanistic origins for the enhanced ethanol dehydration kinetics in H-ZSM-5 by cofeeding *n*-butanol

Arno de Reviere, An Verberckmoes and Maarten K. Sabbe*



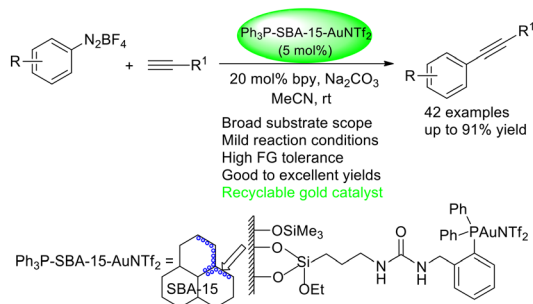
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Dynamic stability of Pt-based alloys for fuel-cell catalysts calculated from atomistics

Shubham Sharma,* Cheng Zeng
and Andrew A. Peterson*

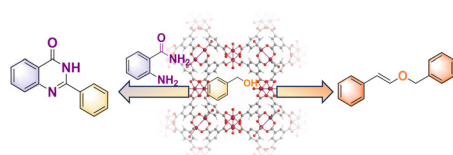
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External oxidant-free, ligand-assisted heterogeneous gold-catalyzed C(sp²)–C(sp) cross-coupling of aryldiazonium salts with terminal alkynes

Boling Song, Jiajia Li, Wenyan Hao* and Mingzhong Cai*

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- ✓ Inexpensive heterogeneous Cu-based catalyst
- ✓ No additional organic ligands and oxidants
- ✓ Mild, efficient, wide reaction range
- ✓ Catalyst sustainable recycling

Construction of C–X (X = N, O) bonds from benzyl alcohols via Cu-BTC-catalyzed oxidative coupling

Yujuan Wu, Lianji Zhang, Huimin Liu, Yongfei Wang,*
Cuiping Wang, Zhizhi Hu and Zhiqiang Zhang*

