

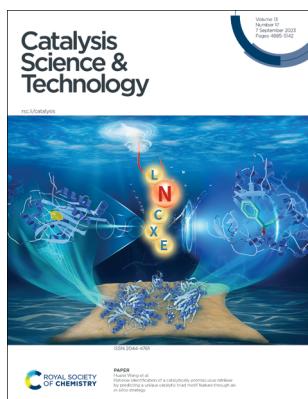
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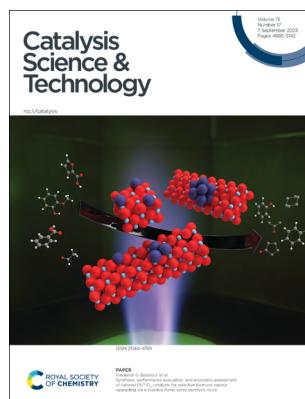
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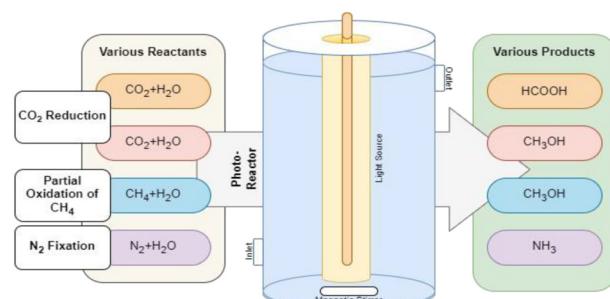
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REVIEW

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Photocatalytic conversion of carbon dioxide, methane, and air for green fuels synthesis

Amira Chebbi, Alessandro Sinopoli, Ahmed Abotaleb and Yusuf Bicer*

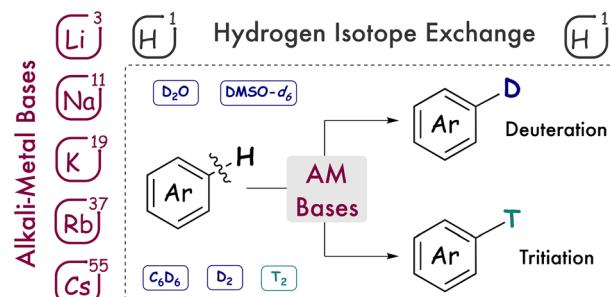


MINI REVIEW

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Alkali-metal bases in catalytic hydrogen isotope exchange processes

Andreu Tortajada* and Eva Hevia*



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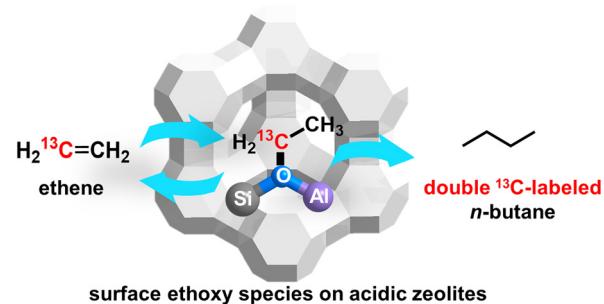
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COMMUNICATION

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Observation of reactive intermediates in the initial stage during ethene conversion over acidic zeolites

Jing Niu, Yu-Ting Miao, Wei David Wang, Meng-Tong Ruan, Zhi-Peng Wang, Hua-Dong Xue, Si-Min Yu,* Chong Liu,* Jian-Feng Wu* and Wei Wang*

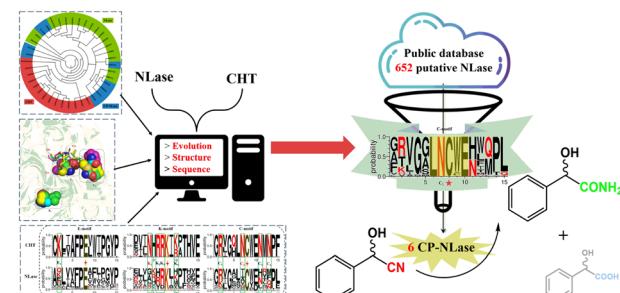


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Rational identification of a catalytically promiscuous nitrilase by predicting a unique catalytic triad motif feature through an *in silico* strategy

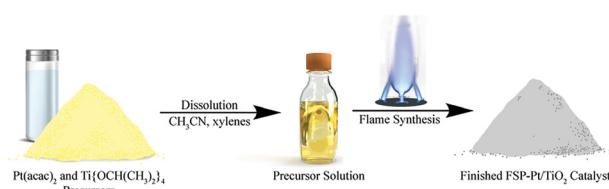
Ke Zhang, Tingze Pan, Yangyang Sun, Zhuzhu Tang, Yuhong Ren, Hualei Wang* and Dongzhi Wei



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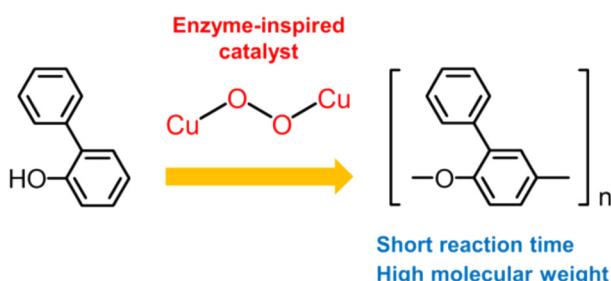
FTIR microscopy for direct observation of conformational changes on immobilized ω -transaminase: effect of water activity and organic solvent on biocatalyst performance

Iulia-Ioana Rădoi, Diana Eva Bedolla, Lisa Vaccari, Anamaria Todea, Federico Zappaterra, Alexey Volkov and Lucia Gardossi*



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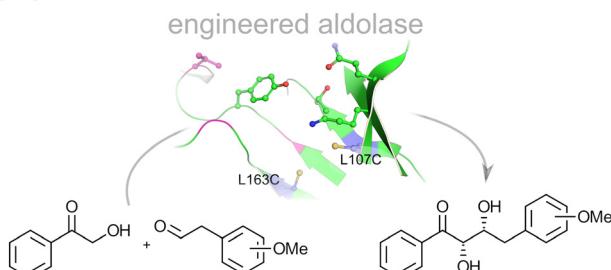
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Enzyme-inspired catalysts with high activity and selectivity for oxidative polymerization of 2-phenylphenol

Akiyuki Nakano, Vivek S. Raut, Naoki Asao,* Akane Ando, Kiyoshi Fujisawa* and Hideyuki Higashimura*

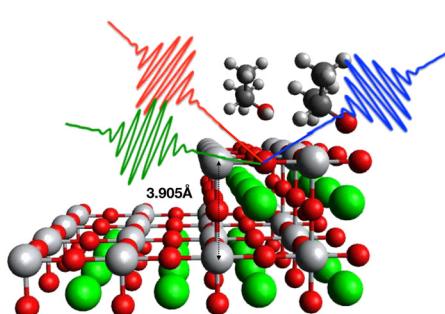
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Eugenia Chukwu Cornelius, Michael Bartl, Louise J. Persson, Ruiheng Xiong, Daniela Cederfelt, Farshid Mashayekhy Rad, Thomas Norberg, Sarah Engel, Erik G. Marklund, Doreen Dobritzsch and Mikael Widersten*

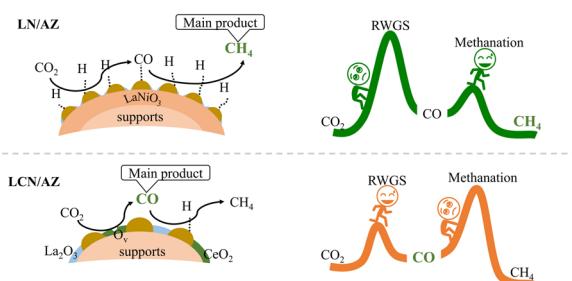
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Anupam Bera, Denise Bullert, Matthias Linke, Steffen Franzka, Ulrich Hagemann, Nils Hartmann and Eckart Hasselbrink*

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Effect of catalyst properties on selectivity in CO_2 methanation with coupling pathway of RWGS and CO methanation

Hongwei Wang, Huicong Feng, Yali Bao, Junxia Wu, Xiaotong Qu, Xianjun Zhang, Jinrong Liu* and Hong Wang*

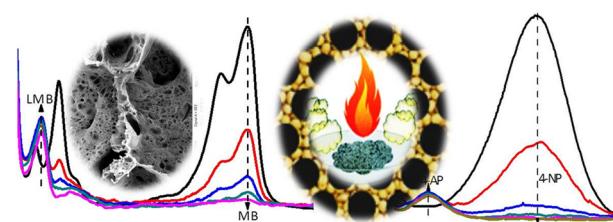


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Chemistry of iron and copper co-doped zinc oxide: reduction and degradation of pollutants

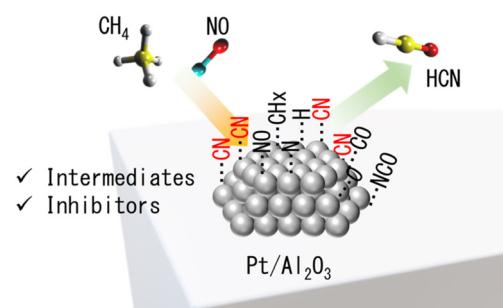
Hiwot Belay, Buzuayehu Abebe,* Dereje Tsegaye,* C. R. Ravikumar, S. Giridhar Reddy and H. C. Ananda Murthy*



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Insights into Pt–CN species on an alumina-supported platinum catalyst as active intermediates or inhibitors for low-temperature hydrogen cyanide synthesis from methane and nitric oxide

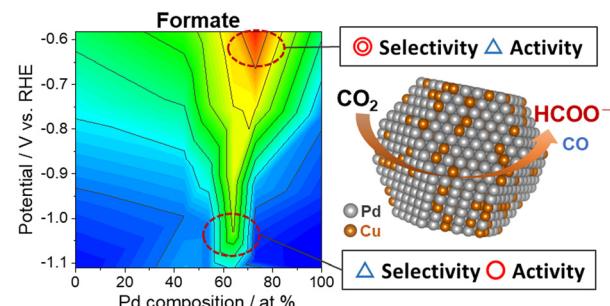
Atsushi Takagaki,* Kyoko K. Bando,* Tatsuya Yamasaki, Junichi Murakami, Nobuya Suganuma, I. Tyrone Ghompson, Tetsuya Kodaira, Tatsumi Ishihara and Tetsuya Shishido*



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Composition sensitive selectivity and activity of electrochemical carbon dioxide reduction on Pd–Cu solid-solution alloy nanoparticles

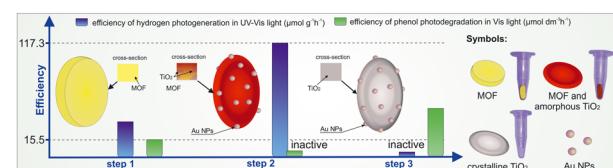
Naoto Todoroki,* Masanao Ishijima,* Jhon L. Cuya Huaman, Yuto Tanaka and Jeyadevan Balachandran

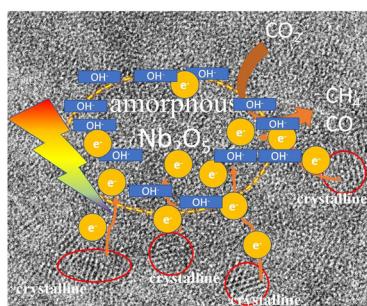


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MOF/TiO₂ erythrocyte-like heterostructures decorated by noble metals for use in hydrogen photogeneration and pollutant photodegradation

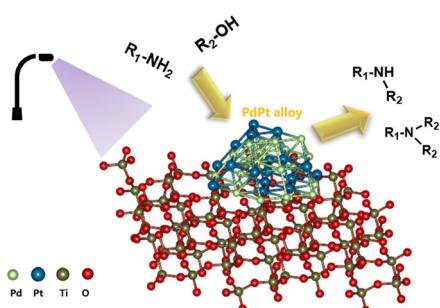
Mateusz A. Baluk,* Paweł Mazierski, Aleksandra Pieczyńska, Kostiantyn Nikiforow, Grzegorz Trykowski, Tomasz Klimczuk and Adriana Zaleska-Medynska*





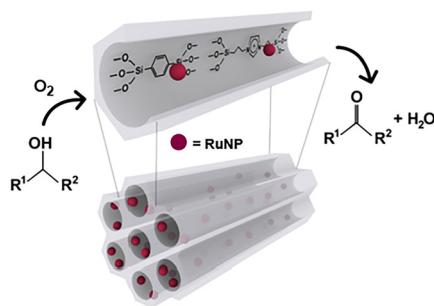
Constructing a crystalline–amorphous hydrated niobium pentoxide homojunction for superior photocatalytic CO_2 reduction into CH_4 with high selectivity

Fengyun Su,* Zhishuai Wang, Mengzhen Tian, Kecheng Liu, Haiquan Xie, Wenguang Tu,* Yezhen Zhang, Xiang Li, Xiaoli Jin and Xin Ying Kong*



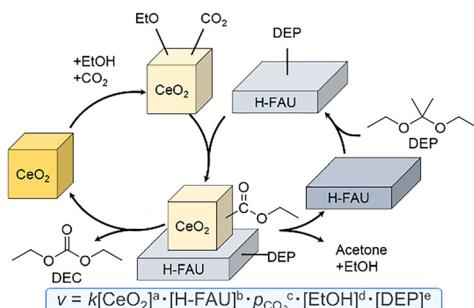
Bimetallic Pt–Pd catalysts supported on TiO_2 for enhanced photocatalytic N -alkylation of amines with alcohols: the synergistic effect

Zihan Lv, Zeng Hong,* Chao Qian and Shaodong Zhou*



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Ormid Pourshiani, Babak Karimi,* Hesamodin Moradi, Werner R. Thiel,* Hojatollah Vali, Pietro Mastrorilli and Stefano Todisco



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Tao Chang, Mizuho Yabushita, Yoshinao Nakagawa, Norihisa Fukaya, Jun-Chul Choi, Takayoshi Mishima, Seiji Matsumoto, Satoshi Hamura and Keiichi Tomishige*

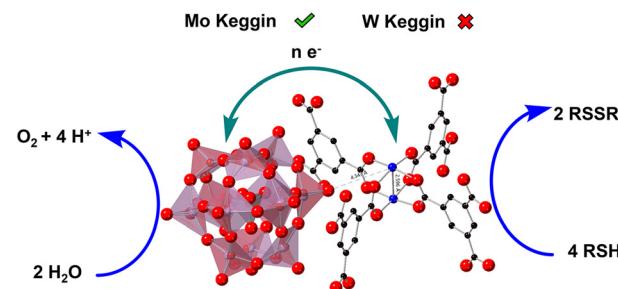


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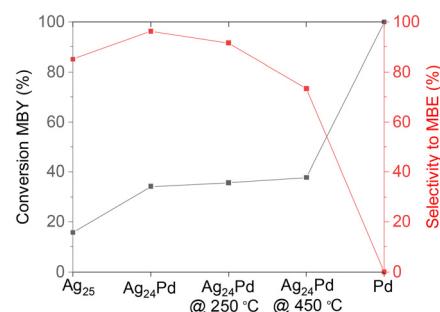
Xinlin Lu, Ting Cheng, Yurii V. Geletii,* John Bacsa and Craig L. Hill*



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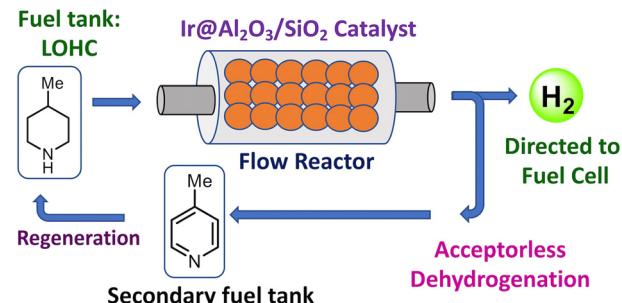
Kazeem O. Sulaiman and Robert W. J. Scott*



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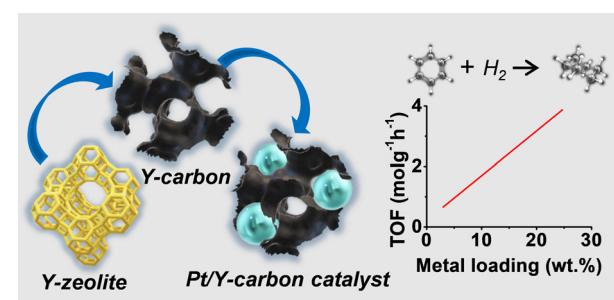
Kaushik Chakrabarti, Alice Spangenberg, Vasudevan Subramaniyan, Andreas Hederstedt, Omar Y. Abdelaziz, Alexey V. Polukeev, Reine Wallenberg, Christian P. Hulteberg and Ola F. Wendt*



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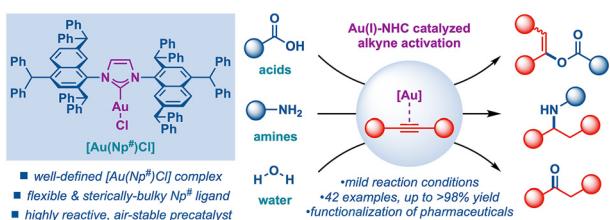
Platinum nanoparticles on 3D graphene-like zeolite-templated carbon for benzene hydrogenation

Somayeh F. Rastegar, Radim Pilar, Jaroslava Moravkova, Galina Sadovska, Vasile I. Parvulescu, Jana Pastvova, Jan Plsek, Dalibor Kaucky, Nikola Kostkova and Petr Sazama*



PAPERS

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$[\text{Au}(\text{Np}^\#)\text{Cl}]$: highly reactive and broadly applicable $\text{Au}(\text{i})\text{-NHC}$ catalysts for alkyne π -activation reactions

Md. Mahbubur Rahman, Pengcheng Gao, Qun Zhao, Roger Lalancette, Roman Szostak and Michal Szostak*

