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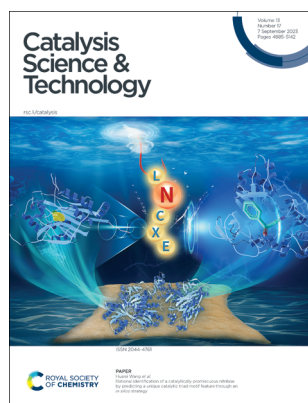
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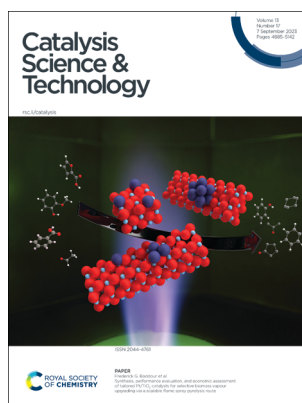
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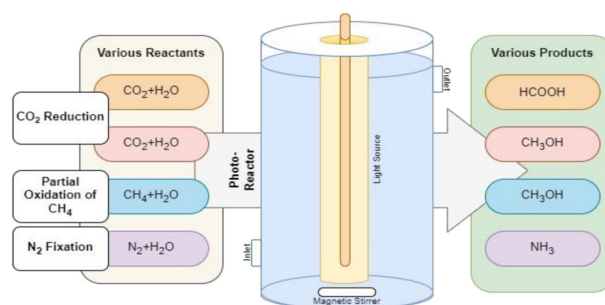
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REVIEW

4895

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

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

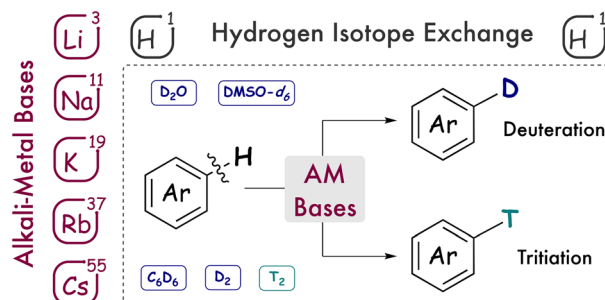


MINI REVIEW

4919

Alkali-metal bases in catalytic hydrogen isotope exchange processes

Andreu Tortajada* and Eva Hevia*



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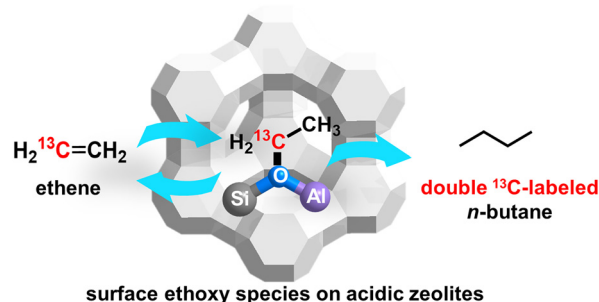


COMMUNICATION

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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*

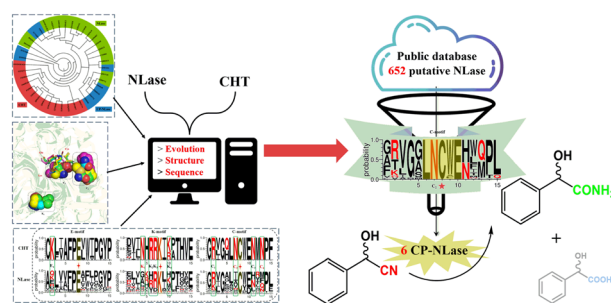


PAPERS

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

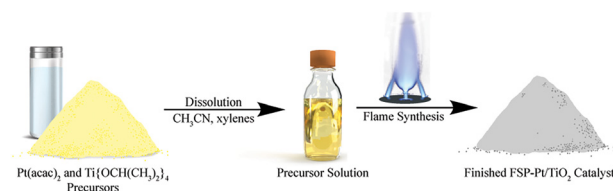
Ke Zhang, Tingze Pan, Yangyang Sun, Zhuzhu Tang, Yuhong Ren, Hualei Wang* and Dongzhi Wei



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Synthesis, performance evaluation, and economic assessment of tailored Pt/TiO₂ catalysts for selective biomass vapour upgrading via a scalable flame spray pyrolysis route

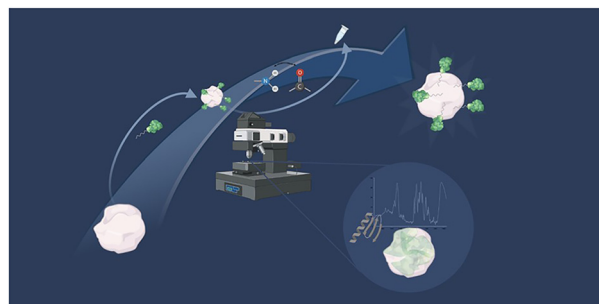
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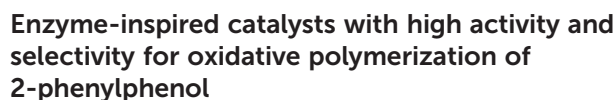


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FTIR microscopy for direct observation of conformational changes on immobilized ω -transaminase: effect of water activity and organic solvent on biocatalyst performance

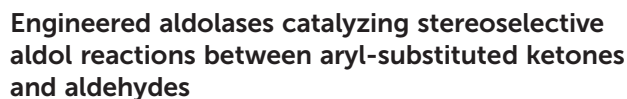
Iulia-Ioana Rădoi, Diana Eva Bedolla, Lisa Vaccari, Anamaria Todea, Federico Zappaterra, Alexey Volkov and Lucia Gardossi*





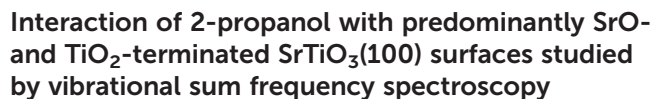
Akiyuki Nakano, Vivek S. Raut, Naoki Asao,* Akane Ando,
Kiyoshi Fujisawa* and Hideyuki Higashimura*

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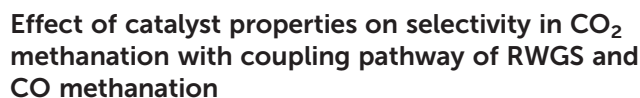
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Farshid Mashayekhy Rad, Thomas Norberg, Sarah Engel,
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Anupam Bera, Denise Bullert, Matthias Linke,
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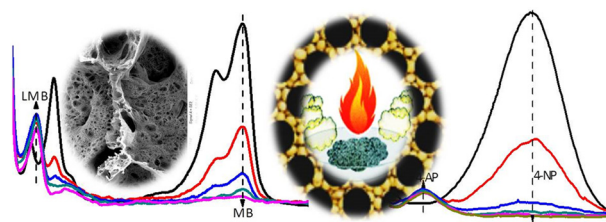


Hongwei Wang, Huicong Feng, Yali Bao, Junxia Wu,
Xiaotong Qu, Xianjun Zhang, Jinrong Liu*
and Hong Wang*

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

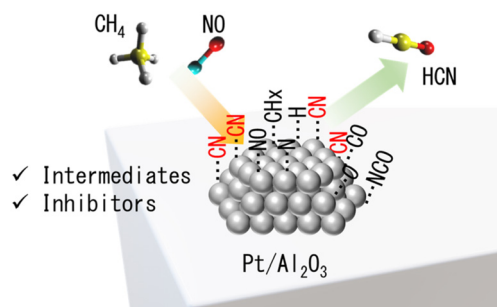
Hiwot Belay, Buzuayehu Abebe,* Dereje Tsegaye,*
C. R. Ravikumar, S. Giridhar Reddy
and H. C. Ananda Murthy*



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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

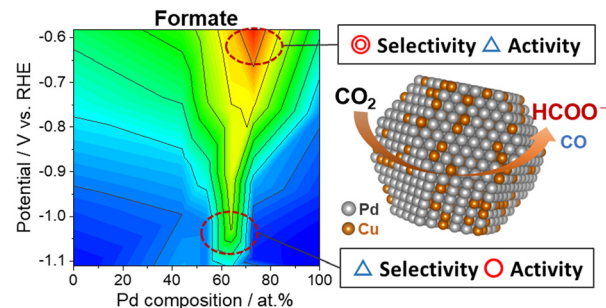
Atsushi Takagaki,* Kyoko K. Bando,* Tatsuya Yamasaki,
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and Tetsuya Shishido*



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

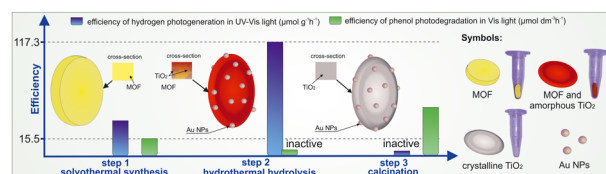
Naoto Todoroki,* Masanao Ishijima,*
Jhon L. Cuya Huaman, Yuto Tanaka
and Jeyadevan Balachandran



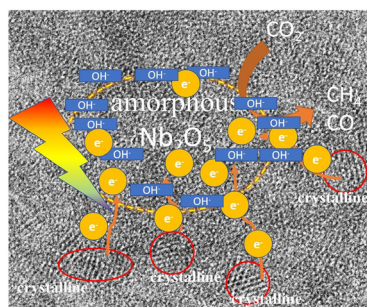
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MOF/TiO₂ erythrocyte-like heterostructures decorated by noble metals for use in hydrogen photogeneration and pollutant photodegradation

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



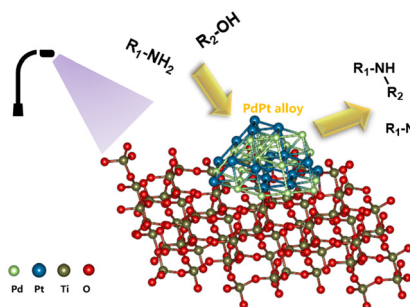
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Constructing a crystalline–amorphous hydrated niobium pentoxide homojunction for superior photocatalytic CO₂ reduction into CH₄ with high selectivity

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

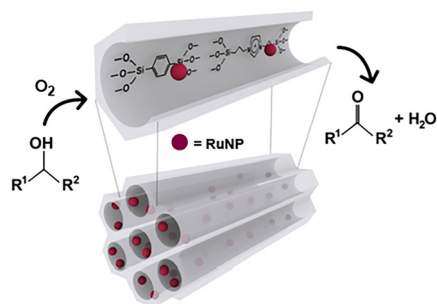
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Bimetallic Pt–Pd catalysts supported on TiO₂ for enhanced photocatalytic *N*-alkylation of amines with alcohols: the synergistic effect

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

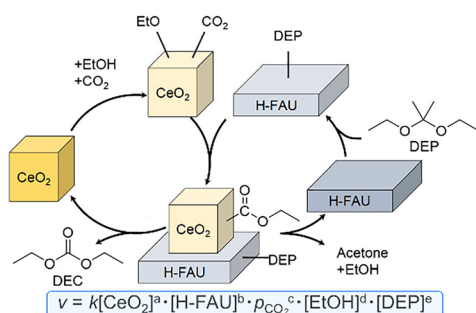
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Improved catalytic performance by changing surface and textural properties of Ru supported bifunctional periodic mesoporous organosilicas in aerobic oxidation of alcohols

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

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Mechanistic insights into CeO₂-catalyzed direct synthesis of diethyl carbonate from CO₂ and ethanol assisted by zeolite and 2,2-diethoxypropane

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

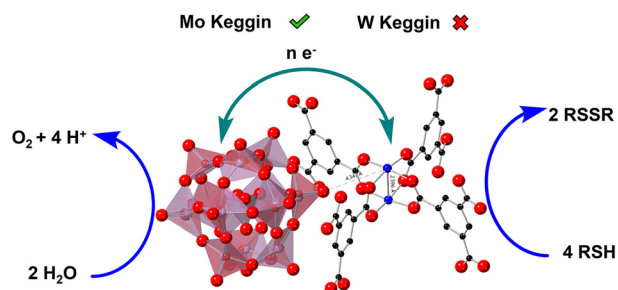


PAPERS

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Reactivity and stability synergism directed by the electron transfer between polyoxometalates and metal–organic frameworks

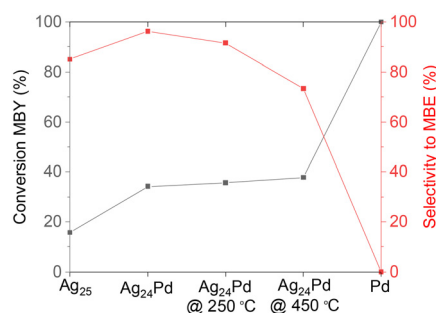
Xinlin Lu, Ting Cheng, Yurii V. Geletii,* John Bacsa and Craig L. Hill*



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Atom-precise silver–palladium bimetallic clusters on carbon supports as selective hydrogenation catalysts

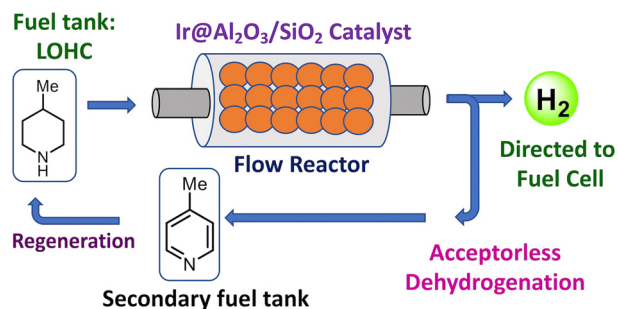
Kazeem O. Sulaiman and Robert W. J. Scott*



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Acceptorless dehydrogenation of 4-methylpiperidine by supported pincer-ligated iridium catalysts in continuous flow

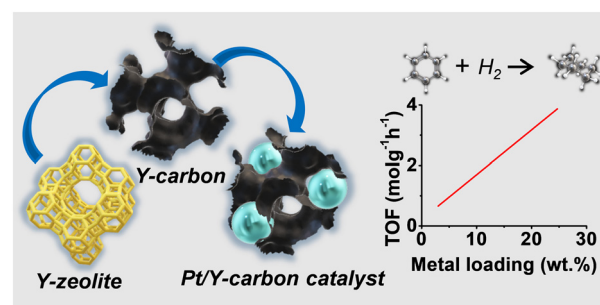
Kaushik Chakrabarti, Alice Spangenberg, Vasudevan Subramanian, Andreas Hederstedt, Omar Y. Abdelaziz, Alexey V. Polukeev, Reine Wallenberg, Christian P. Hultberg and Ola F. Wendt*

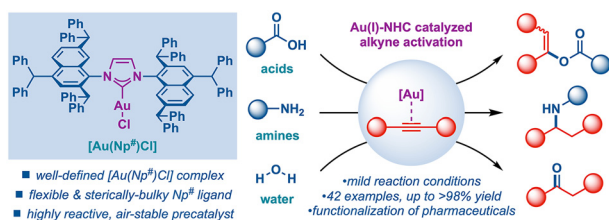


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Platinum nanoparticles on 3D graphene-like zeolite-templated carbon for benzene hydrogenation

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





[Au(Np^{*})Cl]: highly reactive and broadly applicable Au(I)-NHC catalysts for alkyne π -activation reactions

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

