

A Fully Noble Metal-Free Photosystem Based on Cobalt-Polyoxometalates Immobilized in a Porphyrinic Metal-Organic-Framework for Water Oxidation

G. Paille, M. Gomez-Mingot, C. Roch-Marchal, B. Lassalle-Kaiser, P. Mialane, M. Fontecave, C. Mellot-Draznieks, A. Dolbecq  
*J. Am. Chem. Soc.* 2018, 140, 3613-3618

Pyranopterin Related Dithiolene Molybdenum Complexes as Homogeneous Catalysts for CO<sub>2</sub> Photoreduction

T. Fogeron, P. Retailleau, L.-M. Chamoreau, Y. Li, M. Fontecave  
*Angew. Chem. Int. Ed. Engl.* 2018, 57, 17033-17037

Low-cost high efficiency system for solar-driven conversion of CO<sub>2</sub> to hydrocarbons

Huan Ngoc Tran, D. Alves Dalla Corte, S. Lamaison, L. Lutz, N. Menguy, M. Foldyna, S.-H. Turren-Cruz, A. Hagfeldt, F. Bella, M. Fontecave, V. Mougél.  
*Proc. Natl. Acad. Sci.* 2019, 116, 9735-9740

Bio-inspired hydrophobicity promotes CO<sub>2</sub> reduction on a Cu surface

D. Wakerley, S. Lamaison, F. Ozanam, N. Menguy, D. Mercier, P. Marcus, M. Fontecave, V. Mougél  
*Nature Materials* 2019, 18, 1222-1227

Structural evidence for a [4Fe-5S] intermediate in the non-redox desulfuration of thiouracil

J. Zhou, L. Pecqueur, A. Aučynaitė, J. Fuchs, R. Rutkienė, J. Vaitekūnas, R. Meškys, M. Boll, M. Fontecave, J. Urbonavičius, B. Golinelli-Pimpaneau  
*Angew. Chem.* 2021, 60, 424-431

An enzymatic activation of formaldehyde for nucleotide methylation

C. Bou-Nader, F. W. Stull, L. Pecqueur, P. Simon, V. Guérineau, A. Royant, M. Fontecave, M. Lombard, B. A. Palfey, D. Hamdane  
*Nature Commun.* 2021, 12, 4542

Molecular Inhibition for Selective CO<sub>2</sub> Conversion

C. E. Creissen, J. G. Rivera de la Cruz, D. Karapinar, D. Taverna, M.W. Schreiber, M. Fontecave  
*Angew Chem Int Ed Engl* 2022, 61, e202206279.

Keeping Sight of Copper in Single-Atom Catalysts for Electrochemical CO<sub>2</sub> Reduction

C. E. Creissen, M. Fontecave  
*Nature Commun.* 2022, 13, 2280

Electrocatalytic metal hydride generation using CPET mediators

S. Dey, F. Masero, E. Brack, M. Fontecave, V. Mougél  
*Nature* 2022, 607, 499-506.

Light-Driven Hydrogen Evolution Reaction Catalyzed by a Molybdenum-Copper Artificial Hydrogenase.

R.J. Labidi, B. Faivre, P. Carpentier, G. Veronesi, A. Solé-Daura, R. Bjornsson, C. Léger, P. Gotico, Y. Li, M. Atta, M. Fontecave.  
*J Am Chem Soc.* 2023, 145, 13640-13649

Silver and Copper Nitride Cooperate for CO Electroreduction to Propanol.  
H. Phong Duong, J.G. Rivera de la Cruz, N.H. Tran, J. Louis, S. Zanna, D.  
Portehault, A. Zitolo, M. Walls, D.V. Peron, M.W. Schreiber, N. Menguy, M.  
Fontecave.

*Angew Chem Int Ed Engl.* 2023 Oct 9:e202310788