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RESEARCH INTERESTS

Synthetic chemistry

Design and Synthesis of biomimetic metal complexes
CO_2 reduction catalyzed by metal complexes
Dithiolenes and tungsten/Molybdenum complexes
Thiols and sulfur enriched compounds
Persistent triarylmethyl (TAM) radicals as EPR probes

SELECTED PUBLICATIONS

○ "A Bioinspired Nickel(bis-dithiolene) Complex as a Homogeneous Catalyst for Carbon Dioxide Electroreduction", T. Fogeron, T. Todorova, J-P Porcher, M. Gomez-Mingot, L-M Chamoreau, C. Mellot-Draznieks, Y. Li, M. Fontecave, *ACS Catal*., **2018**, 8, 2030-2038.

○ The unusual ring scission of a quinoxaline-pyran-fused dithiolene system related to molybdopterin, T. Fogeron, P. Retailleau, L.-M. Chamoreau, M. Fontecave and **Y. Li**, *Dalton Trans*. **2017**, 46, 4161 – 4164.

○ A Cobalt Complex with a bioinspired molybdopterin-like ligand: a Catalyst for Hydrogen Evolution, T. Fogeron, J.-P. Porcher, M. Gomez-Mingot, T. K. Todorova, L.-M. Chamoreau, C. Mellot-Draznieks, **Y. Li**, and M. Fontecave, *Dalton Trans*. **2016**, 45, 14754 – 14763.

○ Synthesis and Reactivity of a Bio-inspired Dithiolene ligand and its Mo-oxo complex, J.-P. Porcher, T. Fogeron, M. Gomez-Mingot, L.-M. Chamoreau, **Y. Li**, and M. Fontecave, *Chem. Eur. J.*, **2016**, 22, 1–8.

○ A Bioinspired Molybdenum Complex as a Catalyst for the Photo- and Electroreduction of Protons, J.-P. Porcher, T. Fogeron, M. Gomez-Mingot, E. Derat, L.-M. Chamoreau, **Y. Li**, and M. Fontecave, *Angew. Chem. Int. Ed.*, **2015**, 54, 14090 –14093.

○ Bioinspired Tungsten Dithiolene Catalysts for Hydrogen Evolution: A Combined Electrochemical, Photochemical, and Computational Study, M. Gomez-Mingot, J.-P. Porcher, T. K. Todorova, T. Fogeron, C. Mellot-Draznieks, **Y. Li**, and M. Fontecave, *J. Phys. Chem. B,* **2015**, 119, 13524−13533.

○ Reactions of Amino Acids, Peptides, and Proteins with Oxidized Metabolites of Tris(p-carboxyltetrathiaaryl)methyl Radical EPR Probes, C. Decroos, J-L. Boucher, D. Mansuy, **Y. Xu-Li**, *Chem. Res. Toxicol.,* **2014**, 27, 627-636.

○ Toward Stable Electron Paramagnetic Resonance Oximetry Probes: Synthesis, Characterization, and Metabolic Evaluation of New Ester Derivatives of a Tris-(para-carboxyltetrathiaaryl)methyl (TAM) Radical, C. Decroos, V. Balland, J.-L. Boucher, G. Bertho, **Y. Xu-Li**, and D. Mansuy, *Chem. Res. Toxicol.* **2013,** 26, 1561–1569.

○ Rational design of a fluorescent NADPH derivative imaging constitutive nitric-oxide synthases upon two-photon excitation, **Y. Li**, H. Wang, B. Tarus, M. R. Perez, L. Morellato, E. Henry, V. Berka, A. Tsai, B. Ramassamy, H. Dhimane, C. Dessy, P. Tauc, J.-L. Boucher, E. Deprez, and A. Slama-Schwok, *PNAS*, **2012**, 109, 12526-12531.