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## RESEARCH INTERESTS

### Synthetic chemistry

- Design and Synthesis of biomimetic metal complexes
- Thiols and sulfur enriched compounds
- Dithiolenes and tungsten/Molybdenum complexes
- CO<sub>2</sub> reduction catalyzed by metal complexes

## SELECTED PUBLICATIONS

- ✓ “Carbon Dioxide Reduction: A Bioinspired Catalysis Approach”, Yun Li, Maria Gomez-Mingot, Thibault Fogeron, and Marc Fontecave, *Acc. Chem. Res.*, **2021**, 54, 4250–4261, (Published as part of the Accounts of Chemical Research special issue “CO<sub>2</sub> Reductions via Photo and Electrochemical Processes”).
- ✓ “Functionalization of Carbon Nanotubes with Nickel Cyclam for Electrochemical Reduction of CO<sub>2</sub>”, S. Pugliese, N. T. Huan, J. Forte, D. Grammatico, S. Zanna, B. L. Su, Y. Li, M. Fontecave, *ChemSusChem*, **2020**, 13, 6449-6456.
- ✓ “Immobilization of a molecular Re complex on MOF-derived hierarchical porous carbon for CO<sub>2</sub> electroreduction in water/ionic liquid electrolyte”, D. Grammatico, H. N. Tran, Y. Li, S. Pugliese, B. L. Su, M. Fontecave, *ChemSusChem*, **2020**, 13, 6418-6425.
- ✓ “Imidazolium and Pyrrolidinium Based Ionic Liquids as Co-catalysts for CO<sub>2</sub> Electroreduction in Model Molecular Electrocatalysis”, E. Vichou, Y. Li, M. Gomez-Mingot, M. Fontecave, C. Sanchez-Sanchez, *J. Phys. Chem. C*, **2020**, 124, 23764-23772..
- ✓ “Nickel Complexes Based on Molybdopterin-like Dithiolenes : Catalysts for CO<sub>2</sub> Electroreduction”, T. Fogeron, P. Retailleau, M. Gomez-Mingot, Y. Li, M. Fontecave, *Organometallics*, **2019**, 38, 1344-1350.

- ✓ “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.*, **2018**, 57, 17033-17037.
- ✓ "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.