



Electrooxidation: a Green Access to Novel Gold(III) Complexes

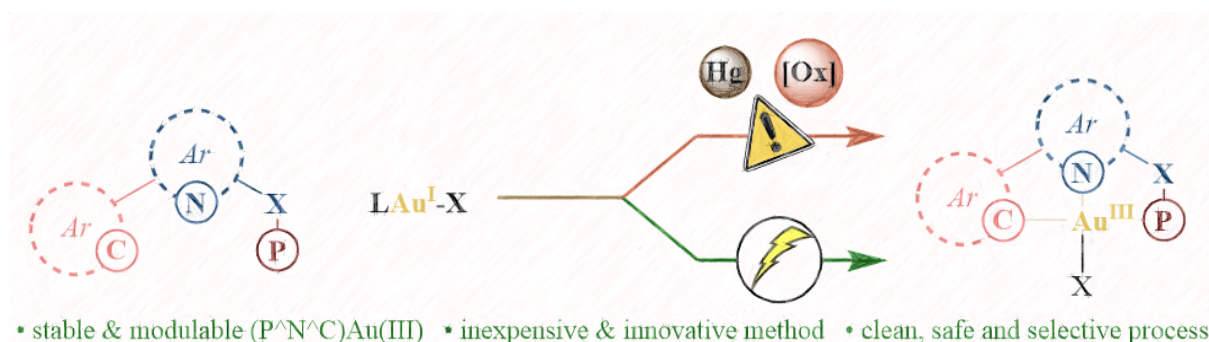
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Over the past decades, gold(III) complexes have been shown to be valuable compounds in several research areas such as homogeneous catalysis,¹ medicinal chemistry² and optical materials.³ However, the synthesis of gold(III) species often relies on harsh reaction conditions involving stoichiometric strong oxidants, elevated temperatures or notoriously toxic metals.⁴

In light of the recent reborn of electrosynthesis as a greener and safer alternative to classical oxidants,⁵ and inspired by the recent work of C. Nevado's group on (*P*[^]*N*[^]*C*)gold(III) complexes,^{6,7} we developed an efficient access to a new class of (*P*[^]*N*[^]*C*)gold(III) complexes through the electrochemical oxidation of the easily prepared gold(I) counterparts. This work constitutes an unprecedented, straightforward and original entry to a novel gold(III) platform for the preparation of further valuable gold(III) species.⁸



References

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- ⁴ Nevado, C. et Al. *Angew. Chem. Int. Ed.* **2017**, 56, 1994–2015.
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- ⁶ Nevado, C. et Al. *Inorg. Chem.* **2024**, 63, 8390–8396.
- ⁷ Nevado, C. et Al. *ACS Org. Inorg. Au* **2025**, 5, 322–327.
- ⁸ Melot, R. et Al. Unpublished Results