

# Gold Catalysis and Light

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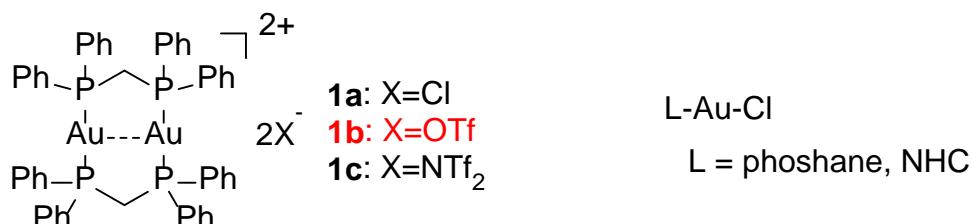
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Only after two papers from 2000 had demonstrated the full potential of gold catalysis for organic transformations by a high increase of molecular complexity,<sup>1,2</sup> homogeneous gold catalysis was developed to a versatile tool for organic synthesis.<sup>3,4</sup> For a long time the field was exclusively focusing on electrophilic and nucleophilic species, radical intermediates were not involved, but this changed in 2013.<sup>5</sup>

Apart from the synthesis of different heterocycles (Scheme 1), the use of these principles also allows a number of C-C coupling reactions, which in a formal sense can also address C,H bonds.<sup>6</sup> The use of di- and even mononuclear gold(I) complexes for photochemical reactions will be discussed.



## References

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