

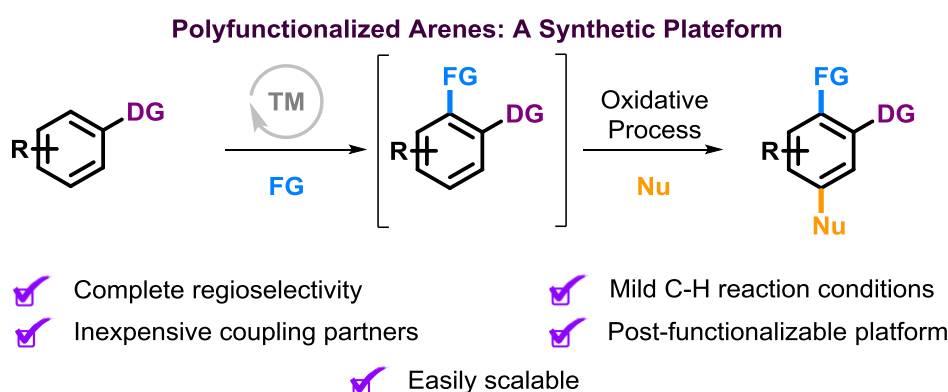
Synthesis of Polyfunctionalized Arenes via a Sequential *Ortho*/*Meta*-C–H Functionalizations of Carboxylic Acid Derivatives



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Poly-substituted arenes are key features in numerous natural products, materials, agrochemicals, and pharmaceuticals.¹ Therefore, the development of simple and efficient methodologies for the synthesis of complex highly functionalized arenes is highly desirable.² Nonetheless, the selective polyfunctionalization of arenes in a single operation remains a synthetic challenge that we aim to address using a one-pot cascade strategy. To achieve this goal, our approach relies on a directed transition metal-catalyzed C–H bond functionalization³ followed by an oxidative C–Nu bond formation, offering a straightforward formal access to *meta* substituted arenes with respect to the directing group under mild reaction conditions.⁴ Thanks to this twofold C–H bond functionalization, the synthesized poly-substituted arenes can thereafter serve as a platform for post-functionalization reactions to access compounds of interest.



References

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⁴ Unpublished results.