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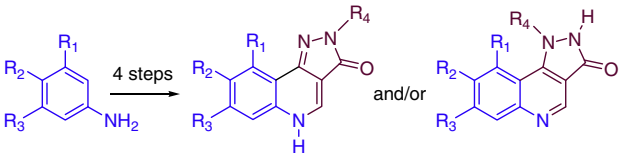
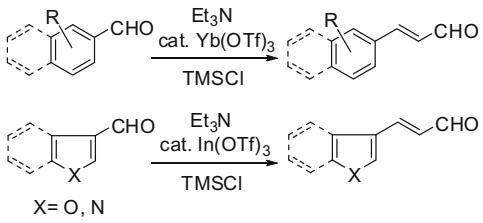
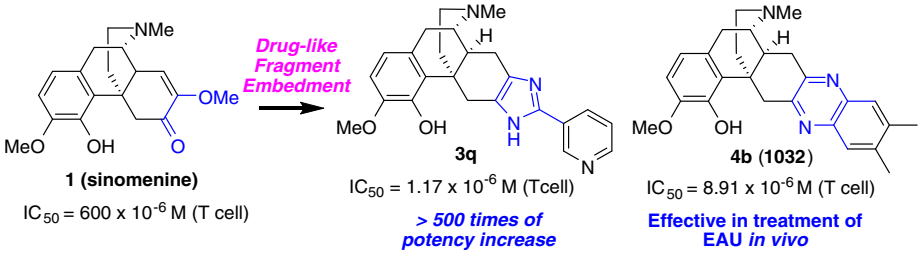
Contents

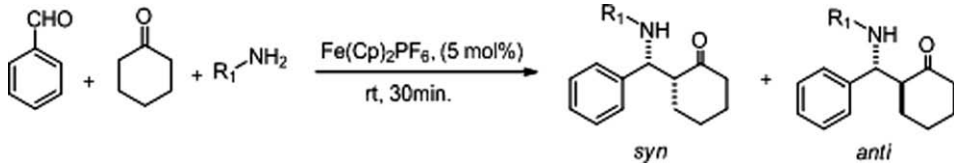
COMMUNICATIONS



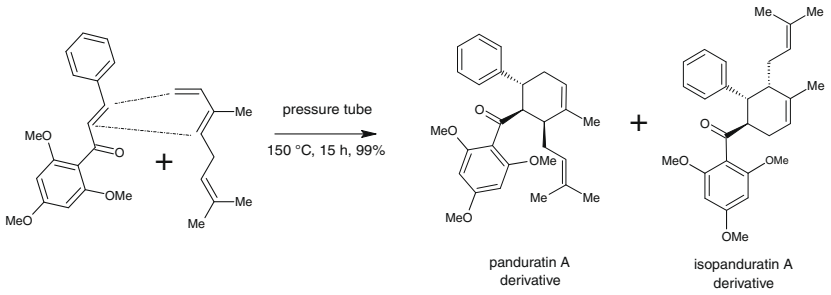
An effective and multistep protocol to synthesize pyrazolo[4,3-*c*]quinolin-3-ones from simple anilines has been described.

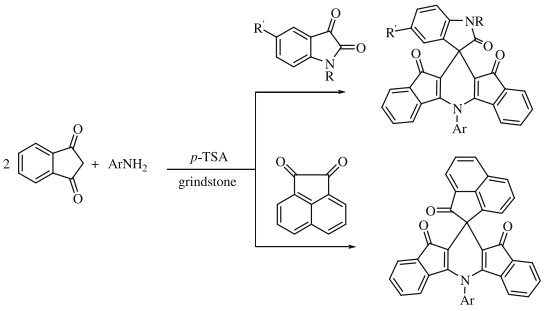


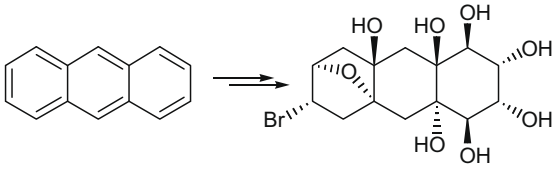


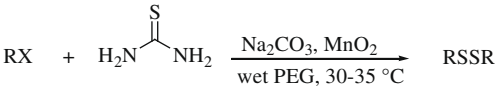


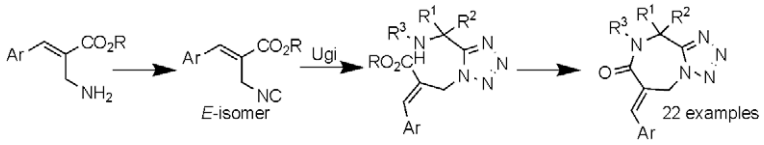
$Fe(Cp)_2PF_6$ catalyzed Mannich reaction of aldehydes, anilines, and ketones under solvent-free condition to give β-amino-ketones in high yield (up to 94%) within 30 min with *anti*-isomer in excess.

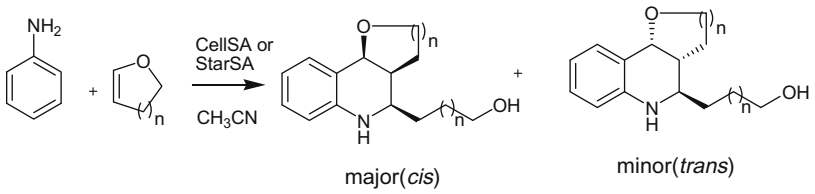


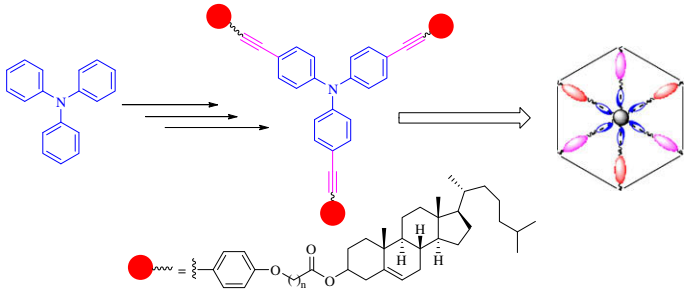


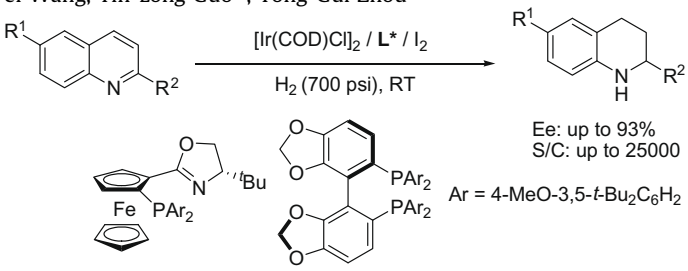




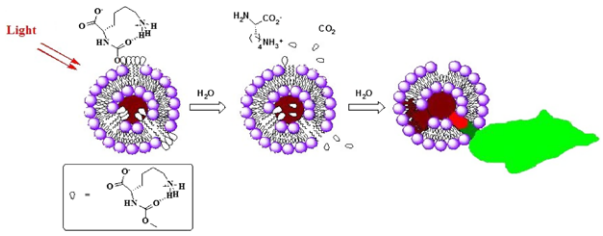


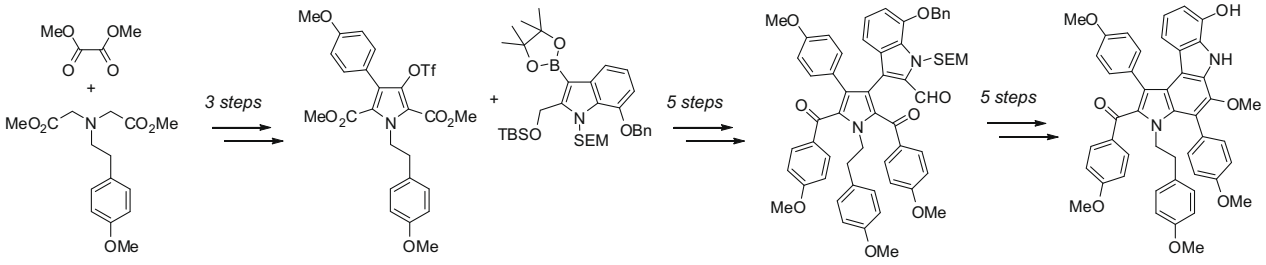


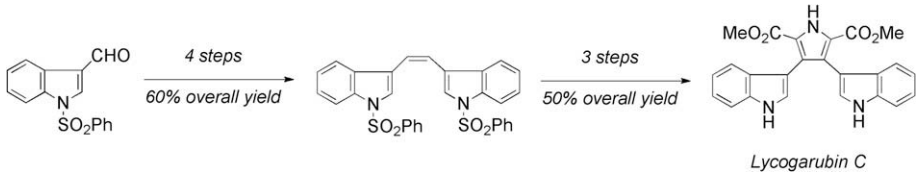


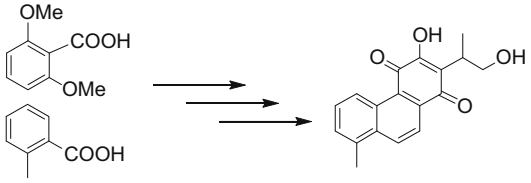


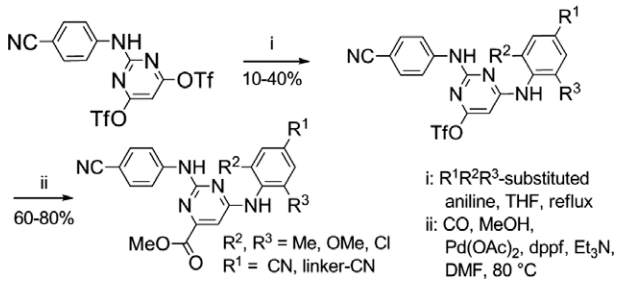
Introducing bulky groups on the coordination phosphorus atoms can effectively block the formation of inactive species and improve the activity of the iridium catalysts. Results of ESI-MS analysis gave strong evidence. This strategy was successfully applied to the asymmetric hydrogenation of quinolines with up to 93% ee on S/C ratio of 25,000.



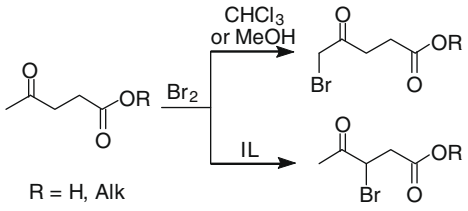


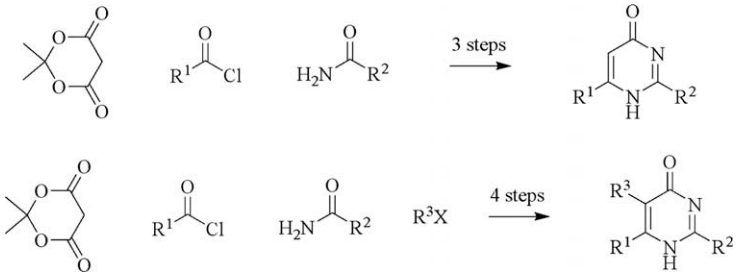




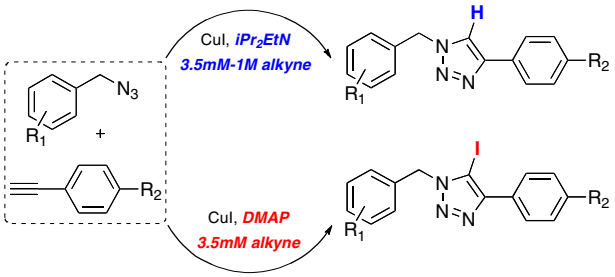


A method is described to couple sterically-hindered electron-poor anilines to the 4-position of the pyrimidine core using a pyrimidine-2,4-bis(trifluoromethanesulfonate).

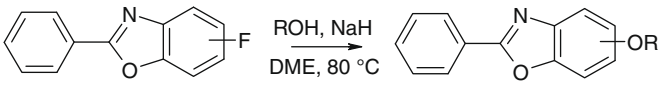




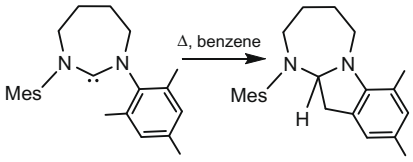
2,6-Disubstituted pyrimidin-4-ones and 2,5,6-trisubstituted pyrimidin-4-ones were synthesized from commercially available materials in good yields with the aid of microwaves in key steps.



Formation of 5-iodo-triazoles in CuI-promoted cycloadditions between alkynes and azides is controlled by DMAP and low alkyne concentrations.



The synthesis of alkoxybenzoxazoles is in general quite challenging. During our investigation, we discovered that C-4 and C-7 fluoro precursors undergo S_NAr with alkoxides affording moderate to excellent yields of substituted product.



OTHER CONTENT

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Supplementary data available via ScienceDirect

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