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Modern Applications of Transition Metal Catalysis in Heterocycle Synthesis

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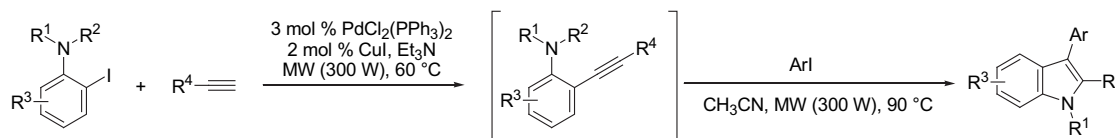
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ARTICLES

An efficient, microwave-assisted, one-pot synthesis of indoles under Sonogashira conditions

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Yu Chen, Nataliya A. Markina, Richard C. Larock*

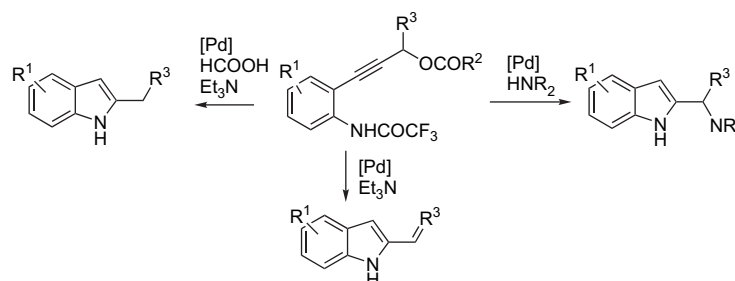


A microwave-assisted, one-pot, three-component coupling reaction for the synthesis of indoles has been developed. The reaction is carried out in two steps under standard Sonogashira coupling conditions from an *N*-substituted/*N,N*-disubstituted 2-iodoaniline and a terminal alkyne, followed by the addition of acetonitrile and an aryl iodide. A variety of polysubstituted indoles have been prepared in moderate to excellent yields using the present method.

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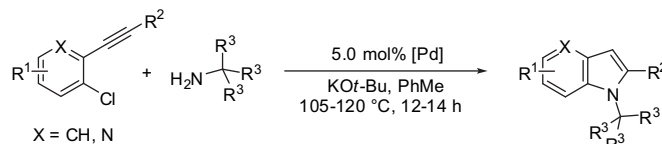
Ilaria Ambrogio, Sandro Cacchi*, Giancarlo Fabrizi, Alessandro Prastaro



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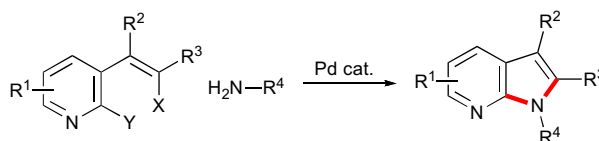
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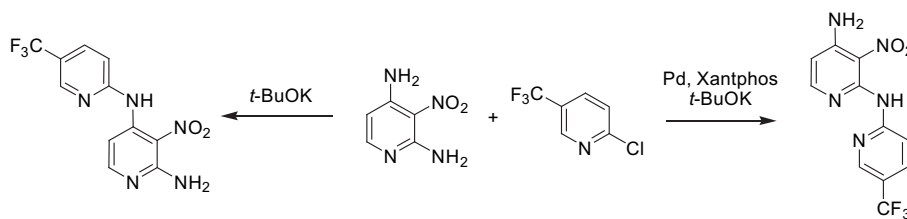
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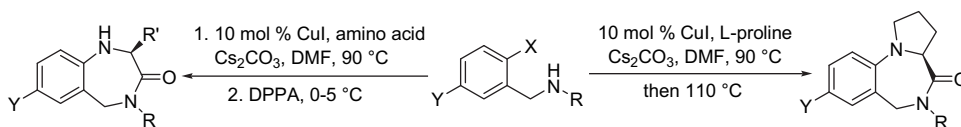
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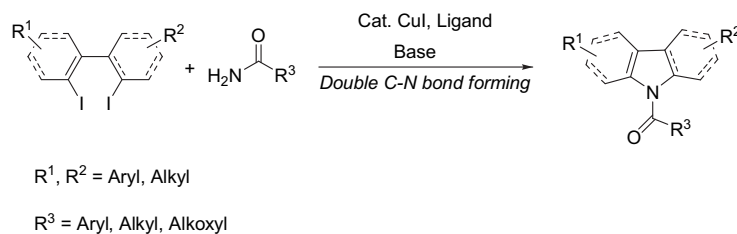
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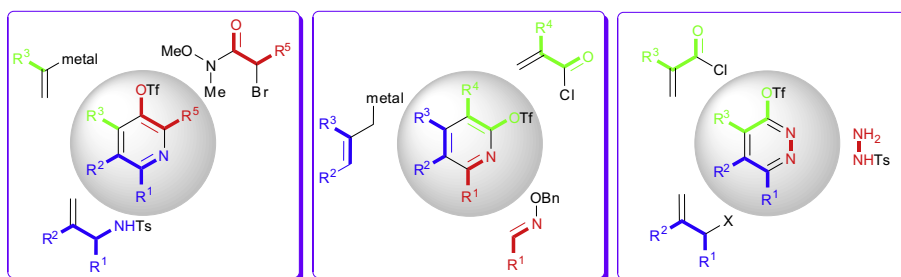
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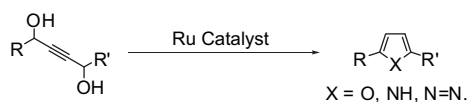
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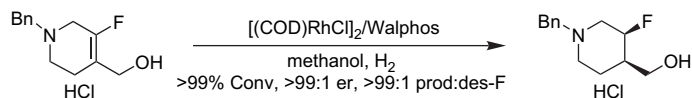
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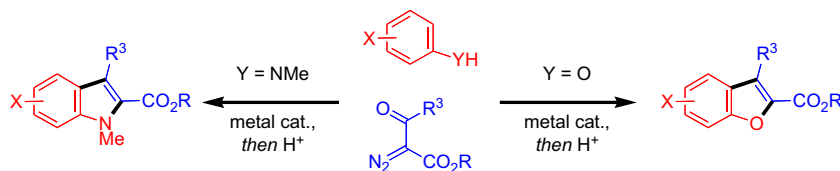
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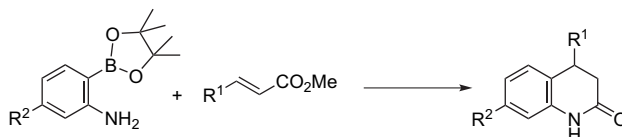
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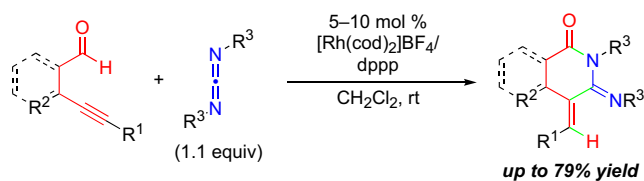
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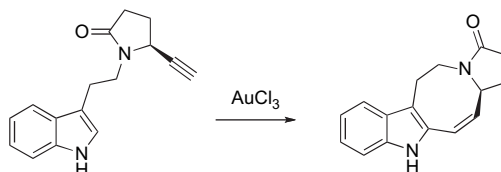
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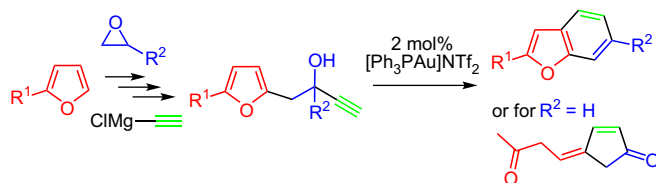
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A. Stephen K. Hashmi*, Michael Wölfle



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Supplementary data available via ScienceDirect

COVER

The cover graphic illustrates a selection of the substrates and corresponding heterocyclic products featured in this Symposium-in-Print, and highlights the diversity of the structures, and metals, involved in modern transition metal catalysis applied to heterocyclic chemistry.

Cover figure designed by Robert Snell and Michael Willis

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