J. B. GIANINO, B. L. ASHFELD* (UNIVERSITY OF NOTRE DAME, USA)
Titanocene-Catalyzed Multicomponent Coupling Approach to Diarylethynyl Methanes
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Category

Metal-Mediated Synthesis

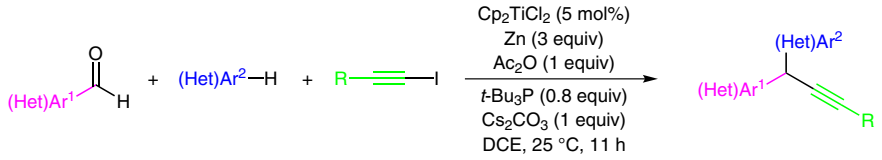
Key words

diarylethynyl arenes

multicomponent coupling

titanocene

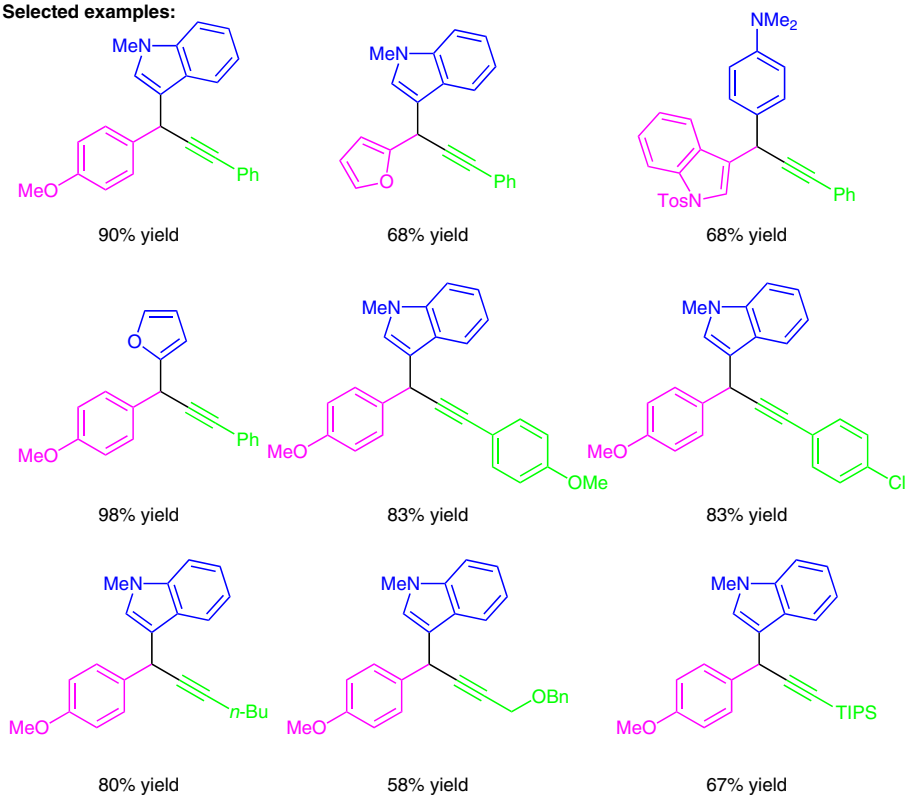
Synthesis of Diarylethynyl Methanes via a Multicomponent Coupling



(1 equiv) (2 equiv) (3 equiv) up to 98% yield

R = Ar, *n*-Bu, $BnOCH_2$, TIPS

Selected examples:



Significance: A straightforward synthesis of diarylethynyl methanes via a titanocene-catalyzed multicomponent coupling has been disclosed. This rapid and divergent reaction furnishes the corresponding products in good to almost quantitative yield.

Comment: The reported reaction shows a high degree of modularity and convergency in the rapid assembly of complex target molecules. Furthermore, the authors could apply the new protocol to the synthesis of a natural product.

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