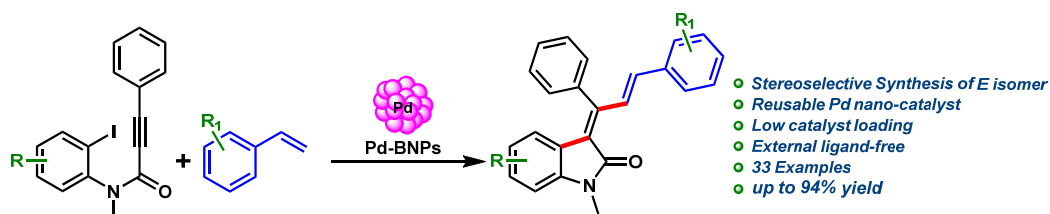


# STABLE AND REUSABLE Pd-BNPs CATALYSED STEREOSELECTIVE SYNTHESIS OF (*E*)-3-ALKYLIDENE OXINDOLES

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The aesthetic simplicity of multicomponent processes,<sup>1</sup> and domino reactions<sup>2</sup> have enabled the synthetic scientific community to build pharmaceutically and industrially important complex architecture in a single step without isolating intermediates. Among these, 3-Alkylidene oxindoles reserves a particular interest due to their broad biological spectrum, serve as key intermediates for the synthesis of biologically important alkaloids<sup>3</sup> and drug molecules.<sup>4</sup> Herein we present, an efficient, binaphthyl-backbone stabilized Pd nanoparticles (Pd-BNP)<sup>5</sup> catalyzed single step, stereoselective synthesis of (*E*)-3-Alkylidene oxindoles (Scheme 1).<sup>6</sup> The scope of the reaction has been studied with regard to various substituted and sterically hindered substrates, results in good to excellent yield. The catalyst (Pd-BNPs) has been recovered and reused up to five cycles without any loss in particle size, distribution, and reactivity.



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