

Recent advances in organonickel chemistry

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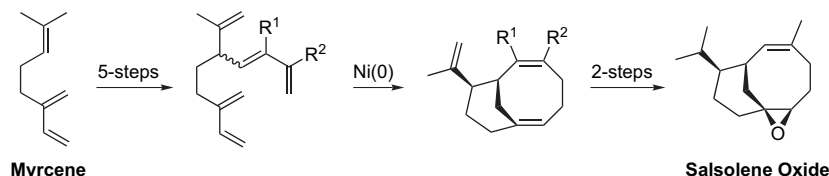
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New reactions and step economy: the total synthesis of (±)-salsolene oxide based on the type II transition metal-catalyzed intramolecular [4+4] cycloaddition

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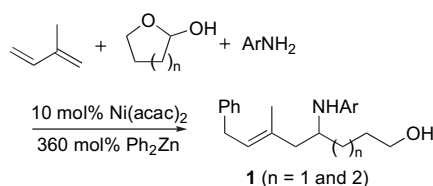
Paul A. Wender,* Mitchell P. Croatt and Bernhard Witulski



Nickel-catalyzed multi-component connection reaction of isoprene, aldimines (lactamines), and diphenylzinc

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Keisuke Kojima, Masanari Kimura, Satoshi Ueda and Yoshinao Tamaru*

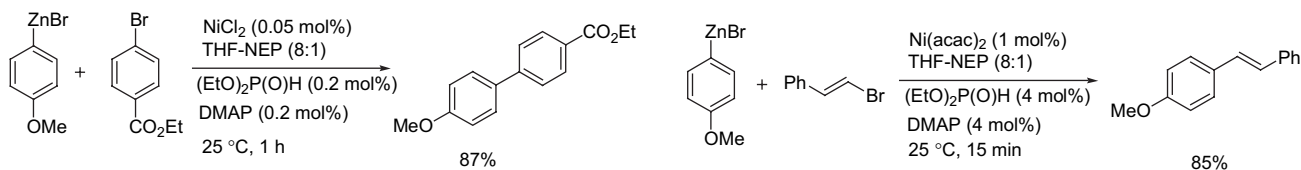


Ni(acac)₂ catalyzes the three-component connection reaction of Ph₂Zn, isoprene, and lactamines, prepared in situ from lactols and aromatic amines, and furnishes homoallylamino alcohols **1** (n=1 and 2) in good yields with excellent *E*-stereoselectivity.

An efficient Negishi cross-coupling reaction catalyzed by nickel(II) and diethyl phosphite

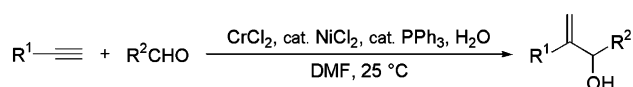
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Andrei Gavryushin, Christiane Kofink, Georg Manolikakes and Paul Knochel*

**Formal hydrochromination of alkynes under nickel catalysis. Regioselective reductive coupling of alkynes and aldehydes leading to allylic alcohols**

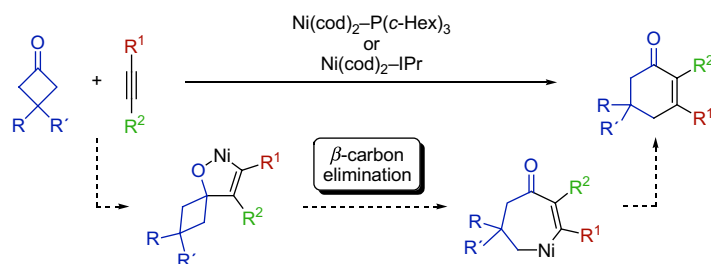
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Kazuhiko Takai,* Shuji Sakamoto, Takahiko Isshiki and Tatsuya Kokumai

**Two-carbon ring expansion of cyclobutanone skeletons by nickel-catalyzed intermolecular alkyne insertion**

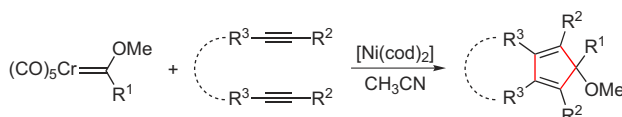
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Masahiro Murakami,* Shinji Ashida and Takanori Matsuda

**Nickel(0)-mediated [2 + 2 + 1] cyclization reaction of chromium carbene complexes and internal alkynes**

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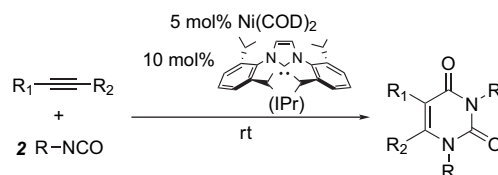
José Barluenga,* Pablo Barrio, Lorena Riesgo, Luis A. López and Miguel Tomás



A nickel(0) catalyzed cycloaddition of alkynes and isocyanates that affords pyrimidine-diones

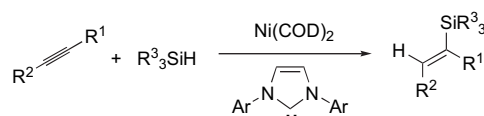
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Hung A. Duong and Janis Louie*

**Alkyne hydrosilylation catalyzed by nickel complexes of *N*-heterocyclic carbenes**

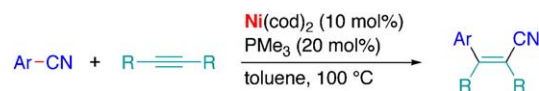
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Mani Raj Chaulagain, Gireesh M. Mahandru and John Montgomery*

**Arylcyanation of alkynes catalyzed by nickel**

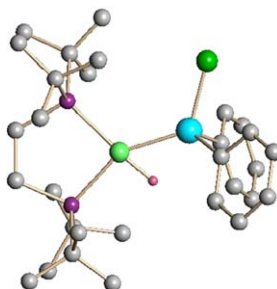
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Yoshiaki Nakao,* Shinichi Oda, Akira Yada and Tamejiro Hiyama*

**Snapshots of the oxidative-addition process of silanes to nickel(0)**


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Vlad M. Iluc and Gregory L. Hillhouse*



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*Corresponding author

 Supplementary data available via ScienceDirect**COVER**

The cover graphic depicts one molecule from each of the thirteen articles this issue, in the order of appearance (top left to bottom right). The red bonds indicate those that were constructed in a nickel-mediated transformation.

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