A General and Convenient Method for the Rhodium-Catalyzed Decarbonylation of Aldehydes - DTU Orbit (09/12/2018)

A General and Convenient Method for the Rhodium-Catalyzed Decarbonylation of Aldehydes

A practical protocol for the decarbonylation of a wide range of aldehydes has been developed by using commercially available RhCl₃.x₃H₂O and dppp in a diglyme solution. This method gives rise to decarbonylated products in good to high yield and is particularly useful because of its experimental simplicity, high generality and excellent level of functional group tolerance. The reaction has been applied in a tandem Oppenauer oxidation-decarbonylation sequence, which removes a hydroxymethyl group in one operation.

General information
State: Published
Organisations: Department of Chemistry, Centre for Catalysis and Sustainable Chemistry
Contributors: Kreis, M., Palmelund, A., Bunch, L., Madsen, R.
Pages: 2148-2154
Publication date: 2006
Peer-reviewed: Yes

Publication information
Journal: Advanced Synthesis & Catalysis
Volume: 348
Issue number: 15
ISSN (Print): 1615-4150
Ratings:
BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 1
Scopus rating (2017): CiteScore 5.01 SJR 2.079 SNIP 0.935
Web of Science (2017): Impact factor 5.123
Web of Science (2017): Indexed yes
BFI (2016): BFI-level 1
Scopus rating (2016): CiteScore 5.36 SJR 2.416 SNIP 0.948
Web of Science (2016): Impact factor 5.646
BFI (2015): BFI-level 1
Scopus rating (2015): CiteScore 6.07 SJR 2.59 SNIP 1.102
BFI (2014): BFI-level 1
Scopus rating (2014): CiteScore 5.4 SJR 2.339 SNIP 1.106
Web of Science (2014): Impact factor 5.663
BFI (2013): BFI-level 1
Scopus rating (2013): CiteScore 5.56 SJR 2.659 SNIP 1.106
Web of Science (2013): Impact factor 5.542
ISI indexed (2013): ISI indexed yes
BFI (2012): BFI-level 1
Scopus rating (2012): CiteScore 5.33 SJR 2.796 SNIP 1.146
Web of Science (2012): Impact factor 5.535
ISI indexed (2012): ISI indexed yes
BFI (2011): BFI-level 1
Scopus rating (2011): CiteScore 5.77 SJR 2.983 SNIP 1.148
Web of Science (2011): Impact factor 6.048
ISI indexed (2011): ISI indexed yes
BFI (2010): BFI-level 1
Scopus rating (2010): SJR 2.703 SNIP 1.12
Web of Science (2010): Impact factor 5.25
BFI (2009): BFI-level 1
Scopus rating (2009): SJR 2.952 SNIP 1.202
BFI (2008): BFI-level 2
Scopus rating (2008): SJR 3.211 SNIP 1.253