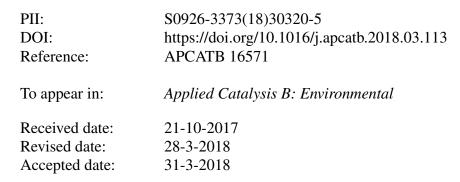
Accepted Manuscript

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Please cite this article as: Lin Z, Wan W, Yao S, Chen JG, Cobalt-modified molybdenum carbide as a selective catalyst for hydrodeoxygenation of furfural, *Applied Catalysis B: Environmental* (2010), https://doi.org/10.1016/j.apcatb.2018.03.113

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ACCEPTED MANUSCRIPT

Cobalt-modified molybdenum carbide as a selective catalyst for hydrodeoxygenation of furfural

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Graphical abstract



Highlights

- Co/Mo₂C is highly selective and stable for furfural hydrodeoxygenation reaction.
- Co modifier tunes the oxygen and furfural binding energies to enhance stability.
- Reactor studies on powder catalysts are consistent with model surface results.
- Surface science approaches can be applied to identify promising catalyst candidates.

Abstract

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