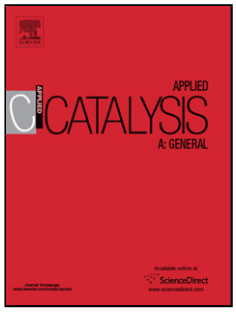

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Authors: Gai Miao, Yifan Zan, Yuanyuan Sun, Hao Wang, Shenglin Li, Chang Liu, Shenggang Li, Lingzhao Kong, Yuhan Sun

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Mn-Promoted Hydrogenation of Microalgae (*Chlorococcum sp.)* to 1,2-Propanediol and Ethylene Glycol over Ni-ZnO Catalysts

Gai Miao[a,b], Yifan Zan[a,c], Yuanyuan Sun[a,b], Hao Wang [a,b], Shenglin Li[a,b], Chang Liu[a,c], Shenggang Li [a,*], Lingzhao Kong [a,*], Yuhan Sun [a,*]

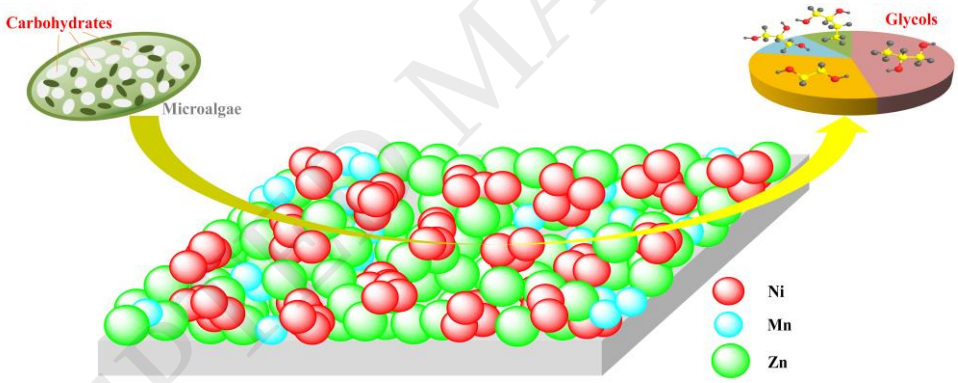
[a] *Laboratory of Low-Carbon Conversion Science and Engineering, Shanghai Advanced Research Institute, CAS. No. 100 Haike Road, Shanghai, China.*

[b] *University of Chinese Academy of Sciences, Beijing 100049, PR China.*

[c] *College of Sciences, Shanghai University, Shanghai 200444, China.*

Corresponding author: Prof/Dr. Lingzhao Kong, E-mail: konglz@sari.ac.cn; Prof/Dr. Shenggang Li, E-mail: lisg@sari.ac.cn; Prof/Dr. Yuhan Sun, E-mail: sunyh@sari.ac.cn

Graphical Abstract



Highlights

- Microalgae converts to polyols by Mn-promoted Ni-ZnO catalysts reduced at 350 ºC.
- Yield of polyols reaches 53.6% with the total yield of 1, 2-PDO and EG of 41.7%.
- Mn favours the dispersion of Ni catalysts and prohibits Ni particles from aggregation.
- Mn doped Ni-based catalysts promote hydrogenolysis, besides C-C and C-O bond cleavage.