

Accepted Manuscript

Title: Selective conversion of chitosan to levulinic acid catalysed by acidic ionic liquid: intriguing NH₂ effect in comparison with cellulose

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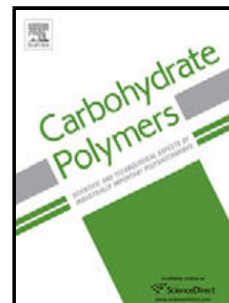
PII: S0144-8617(18)30493-4
DOI: <https://doi.org/10.1016/j.carbpol.2018.04.099>
Reference: CARP 13553

To appear in:

Received date: 9-2-2018
Revised date: 4-4-2018
Accepted date: 25-4-2018

Please cite this article as: Hou, Wuxin., Liu, Li., & Shen, Haiyan., Selective conversion of chitosan to levulinic acid catalysed by acidic ionic liquid: intriguing NH₂ effect in comparison with cellulose. *Carbohydrate Polymers* <https://doi.org/10.1016/j.carbpol.2018.04.099>

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Selective conversion of chitosan to levulinic acid catalysed by acidic ionic liquid: intriguing NH_2 effect in comparison with cellulose

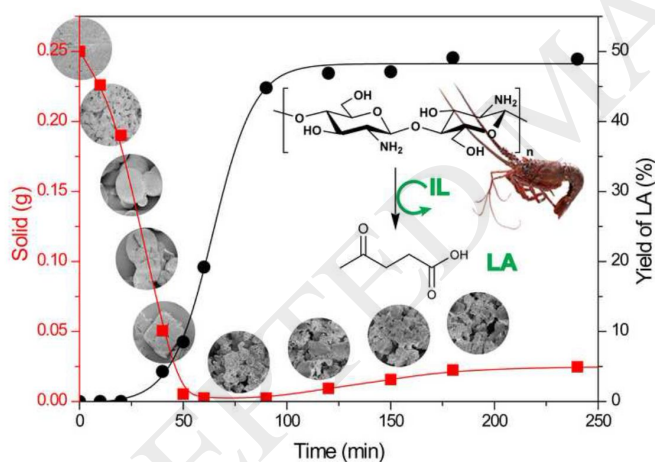
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Graphical abstract



Highlights

- The first report of chitosan conversion to LA selectively in ionic liquids.
- The LA yield was dramatically improved to 64%.
- Acidity of IL dictates the conversion efficiency of chitosan to LA exclusively.
- Unequivocal evidence for NH_3 elimination during chitosan conversion.
- The solid residues change from sphere to square, then humic morphology.

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