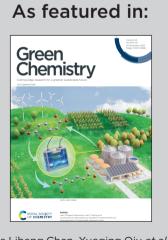


Showcasing research from Associate Professor Liheng Chen and Professor Xueqing Qiu's laboratory, Chemical Engineering and Light Industry, Guangdong University of Technology, Guangzhou, China.

Synergizing mitigated spatial confinement and chemical stabilization of lignin facilitates full utilization of lignocellulose

A novel and suitable theory in which takes mitigated spatial-confinement into account during the biomass composition fractionation based on the molecular simulation and experimental results was developed. In this work, 1,4-butanediol serves as a solvent and protective agent for the active functional groups of lignin, while citric acid functions as a wedge to expand the spatial structure of lignin, thereby inhibiting lignin aggregation.



See Liheng Chen, Xueqing Qiu *et al., Green Chem.*, 2023, **25**, 10415.



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