

Showcasing research from Professor Song's laboratory, Guangxi Key Laboratory of Clean Pulp & Papermaking and Pollution Control, College of Light Industry and Food Engineering, Guangxi University, China, Nanning.

The effect of lignin molecular weight on the formation and properties of carbon quantum dots

This study investigates the impact of lignin Mw on the formation and properties of lignin-based carbon quantum dots (L-CQDs). The results reveal the variations in carbon core conjugation and surface groups among the L-CQDs. L-CQDs derived from lignin with a Mw of 5042 g/mol exhibit the best properties due to their highest conjugation. By controlling the lignin Mw, it is possible to produce exceptional L-CQDs without modification.



