

木質素再利用程序分析：嚴格模擬、經濟分析、生命週期評估
Technological Assessment of Lignin Valorization Processes: Rigorous
Modeling, Techno-Economic Analysis, and Life Cycle Assessment.

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摘要

Lignin constitutes 15% to 40% of lignocellulosic biomass and represents a major waste byproduct of the pulping industry and biorefineries. Owing to its complex and rigid architecture, lignin is difficult to chemically convert and is predominantly utilized as a fuel for heat and power in the current industry. To valorize lignin, hydrothermal carbonization (HTC) and hydrothermal liquefaction (HTL) have been proposed as