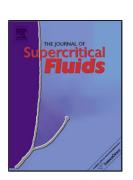
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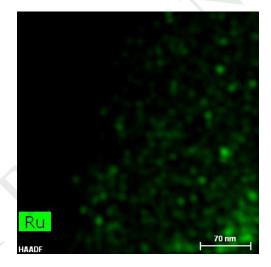
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Graphical Abstract



Ru particles on Ru/charcoal catalyst (HAADF image after catalyst heat treatment).

Highlights

- Supported Ru showed high activity for supercritical gasification of microalgae.
- Ru/charcoal gasified 87 % C of *C. vulgaris* at 385 °C and 26 MPa within 30 min.
- Its rate depended on Ru particle size, while support influenced on gas composition.

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