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Ultrasound processing of *Chlorella vulgaris* and a novel functional classification of power ultrasound test systems

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orders of magnitude higher than the energy requirement reported for the disruption of

a single algae cell with an atomic force microscope. However, the specific energy requirement, estimated as 430 MJ per kg of dry algae cell disrupted, was within the range of values reported in the literature. This difference may be due to power transfer efficiencies inherent in existing algal pretreatment methods.

Keywords: Power ultrasound calorimetry horn erosion non-linear acoustics cell rupture

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Disclosure statement

No potential conflict of interest was reported by the authors.

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