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ACCEPTED MANUSCRIPT

Empirical determination and modeling of ozone mass transfer in a planar falling film reactor

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Highlights

- Mass transfer rate in falling film reactor is much higher than in the bubble-column
- Empirical models to predict mass transfer rate in falling film reactor are reported
- Empirical models accurately predict mass transfer rate in the falling film reactor
- In semi-batch process the gas flow rate significantly affects mass transfer rate
- In continuous process mainly the liquid flow rate determines the mass transfer rate

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