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Photocatalytic Degradation of Ibuprofen over BiOCl Nanosheets with Identification of Intermediates

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Highlights

- BiOCl photocatalytic degradation of ibuprofen was investigated by HPLC-DAD and LC-MS/MS
- Two primary products, 4-isobutylacetophenone and 1-(4-isobutyl)phenylethanol, were identified
- Secondary product formation was determined to originate from 4-isobutylacetophenone.
- Enhanced ibuprofen removal by BiOCl prevents formation of hydroxylated side products.

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