

Supplementary Information

Effect of chemical structure on the sonochemical degradation of perfluoroalkyl and polyfluoroalkyl substances (PFASs)

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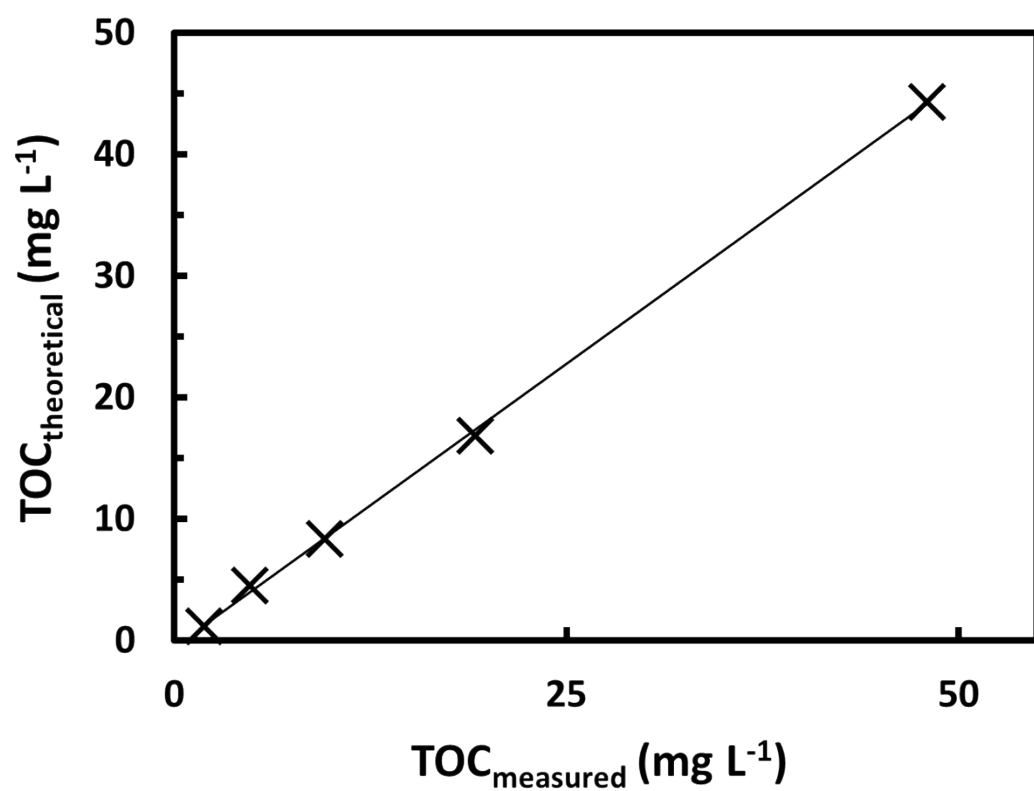


Fig. S1. Validation of the TOC recovery from PFOS solutions.

$$[\text{TOC}]_{\text{theoretical}} = 0.9299 \times [\text{TOC}]_{\text{measured}} - 0.5238; \text{ with R-squared} = 0.9995.$$

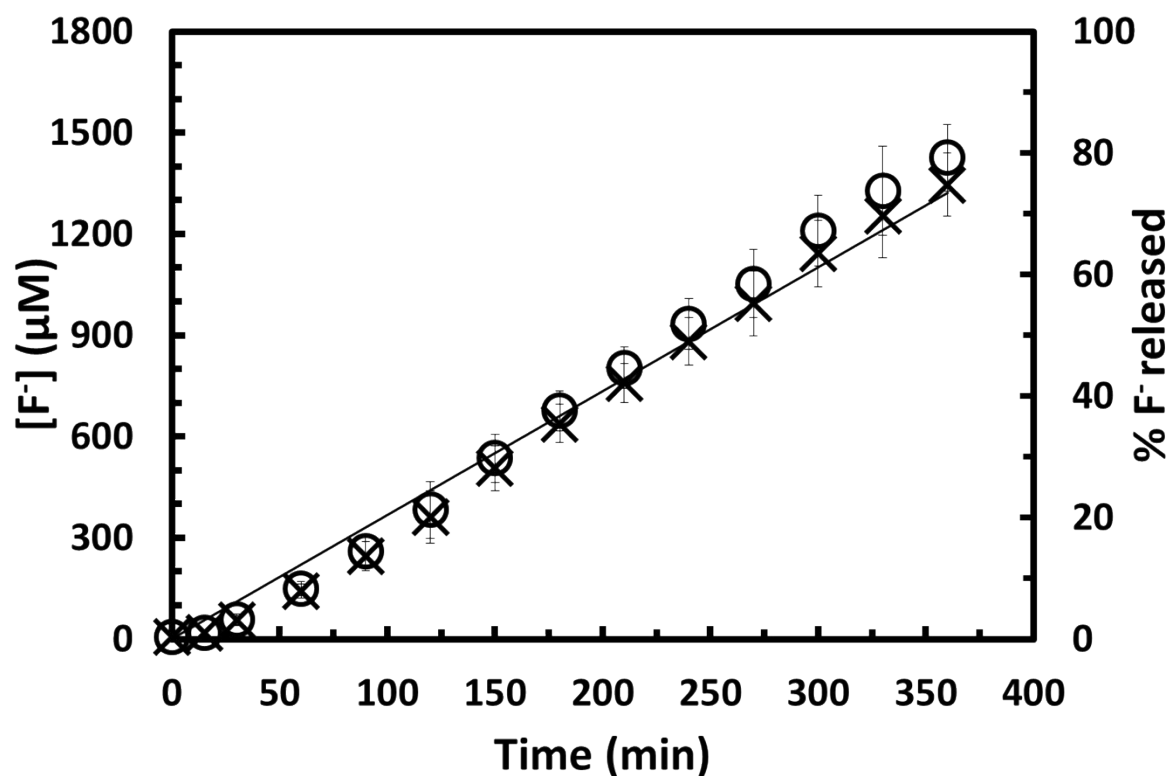


Figure S2. Extended degradation of 100 μM PFOS under 500 kHz sound frequency over 360 min. Release of fluoride (x) and percentage fluoride released (o). The release of F^- followed a zero-order reaction rate with the equation (fitted line shown in the figure): $[\text{F}^-]_t = [\text{F}^-]_0 + k \cdot t$, where $[\text{F}^-]_0 = 0 \mu\text{M}$ is the F^- concentration at time zero, $k = 3.6691 \mu\text{M min}^{-1}$ is the reaction rate constant, with R-square = 0.9895.