

Supplementary Information Figure Caption

Fig. S1 SEM and energy dispersive X-ray spectroscopy (EDS) spectra of the precipitate separated from the interface of irradiated [C₄mim][NTf₂] and aqueous solution of Sr²⁺. The contacting time of the two phases is less than 2 weeks (left) and more than 2 months (right), respectively.

Fig. S2 ¹H NMR spectra of unirradiated [C₄mim][NTf₂] and irradiated [C₄mim][NTf₂] at 400 kGy after contacting with aqueous solution of Sr²⁺ for 1 month. Deuterated DMSO was used as solvent in the measurements.

Fig. S3 FTIR spectra of unirradiated [C₄mim][NTf₂] and irradiated [C₄mim][NTf₂] at 400 kGy after contacting with aqueous solution of Sr²⁺ for 1 month. The spectra were recorded as liquid films between KBr plates.

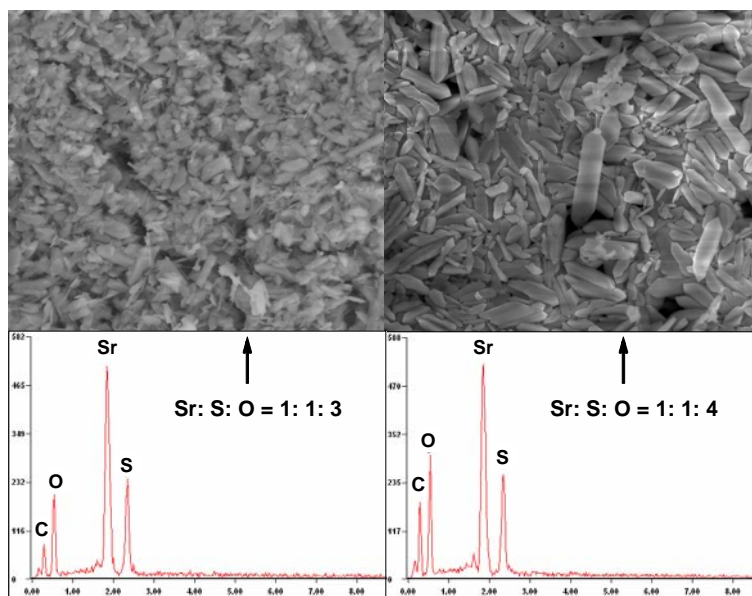


Fig. S1 SEM and energy dispersive X-ray spectroscopy (EDS) spectra of the precipitate separated from the interface of irradiated $[C_4mim][NTf_2]$ and aqueous solution of Sr^{2+} . The contact time of the two phases is less than 2 weeks (left) and more than 2 months (right), respectively. C element in EDS is attributed to adventitious hydrocarbons due to exposure to air.

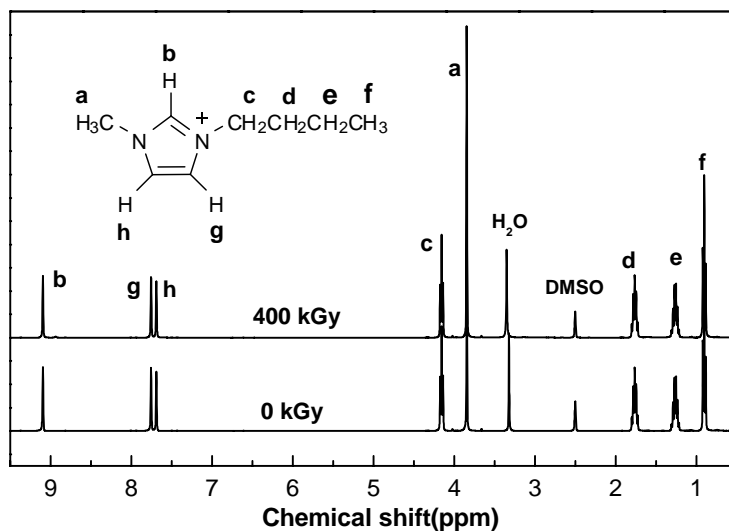


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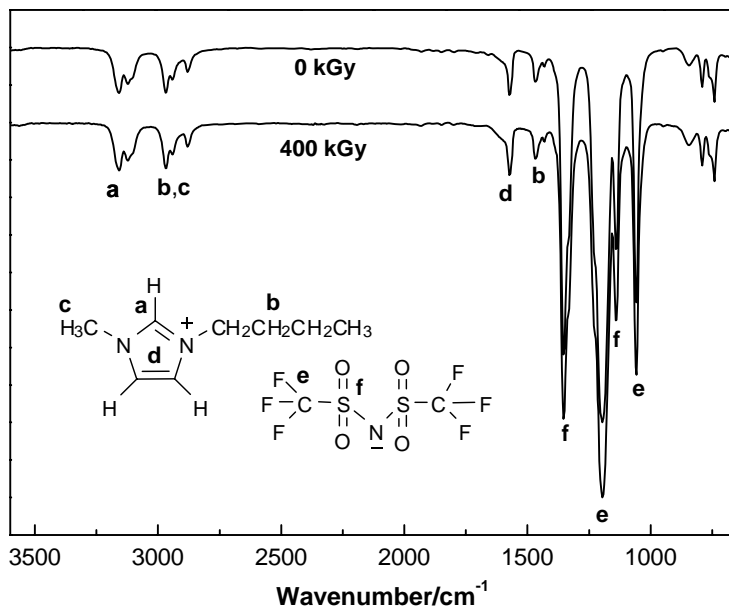


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