Fig. S1 (a) Optimized geometries of chloroaluminates ionic liquids at the B3LYP/aug-cc-pvdz level; (b) electrostatic potential at the 0.001 au contour of the electron density and its maximum $V_{s,max}$ on the ILs; (c) electrostatic potential at the 0.001 au contour of the electron density and its minimum $V_{s,min}$ on the ILs; (d) average local ionization energy at the 0.001 au contour of the electron density and its minimum $I_{s,min}$ on the ILs. Color ranges for electrostatic potential, in kcal/mol: blue $< -30.0 <$ green $< -4 <$ yellow $< 20 <$ red. Color ranges for average local ionization energy, in eV: blue $< 10 <$ green $< 12 <$ yellow $< 14 <$ red. The positions of $V_{s,m}$ and $I_{s,min}$ are marked by the red arrow on the surface.
Fig. S2 The proposed mechanism for the degradation of PET catalyzed by [amim][ZnCl$_3$].