Electronic Supporting Information

A highly selective AIE fluorogen for lipid droplet imaging in live cells and green algae

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Fig. S9 (A) Bright-field and (B) fluorescent images of liver LO2 cells stained with TPE-AmAl (10 μM) in a large view after incubation in the presence of 50 μM oleic acid for 6 h. Staining time: 15 min; excitation wavelength: 330–385 nm.

Fig. S10 Fluorescent images of (A) HeLa and (B) liver LO2 cells stained with 10 μM TPE-AmAl for 15 min. Excitation wavelength: 330−385 nm; scale bar: 20 μm.

Fig. S11 Fluorescent images of liver LO2 cells stained with (A) Nile red (0.314 μM) for 5 min and (B) TPE-AmAl (10 μM) for 15 min after incubation in the presence of oleic acid (50 μM) for 6 h. (C) Merged image of panels (A) and (B). Excitation wavelength: 460–490 nm for Nile red and 330–385 nm for TPE-AmAl.

Fig. S12 Fluorescent images of liver LO2 cells stained with Nile Red (100 ng/mL, 0.314 μM) after incubation in the presence of (A) 0, (B) 12.5, (C) 25 and (D) 50 μM oleic acid for 6 h. Staining time: 5 min; excitation wavelength: 460–490 nm.

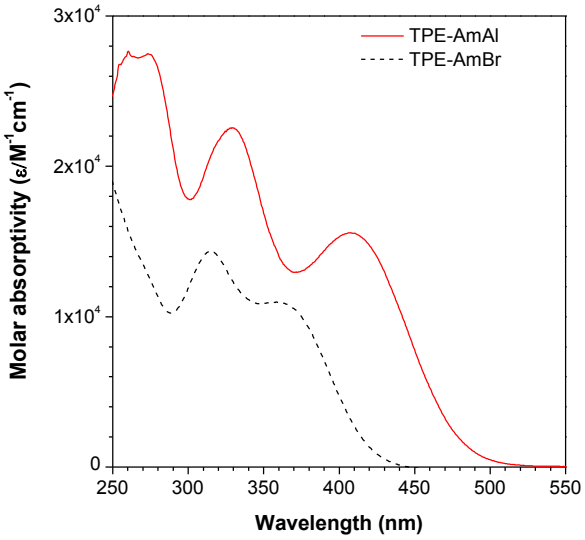


Fig. S1 Absorption spectra of TPE-AmBr and TPE-AmAl in pure THF solutions. Concentration: 10 μM.

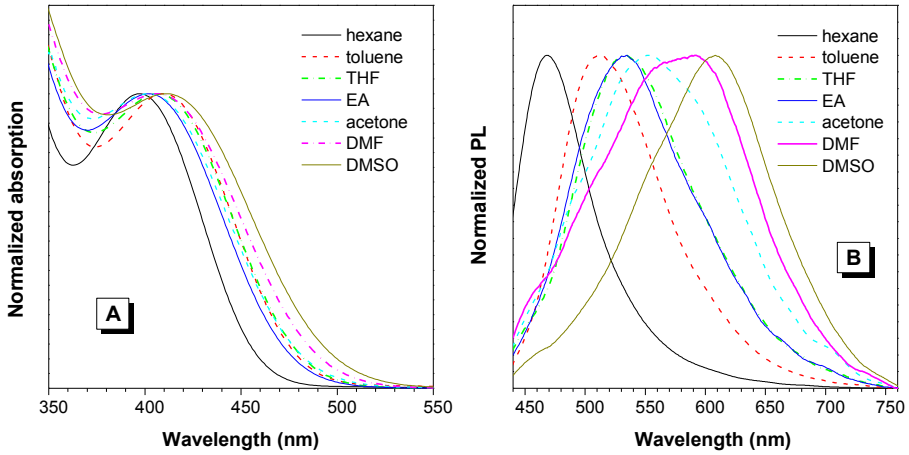


Fig. S2 (A) Absorption and (B) emission spectra of TPE-AmAl in different solvents. Excitation wavelength: 405 nm.

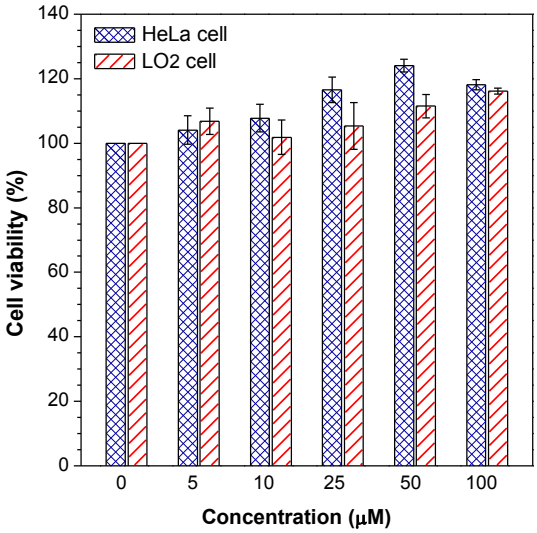


Fig. S3 Cytotoxicity of TPE-AmAl at different concentrations on HeLa and liver LO2 cells determined by MTT assay.

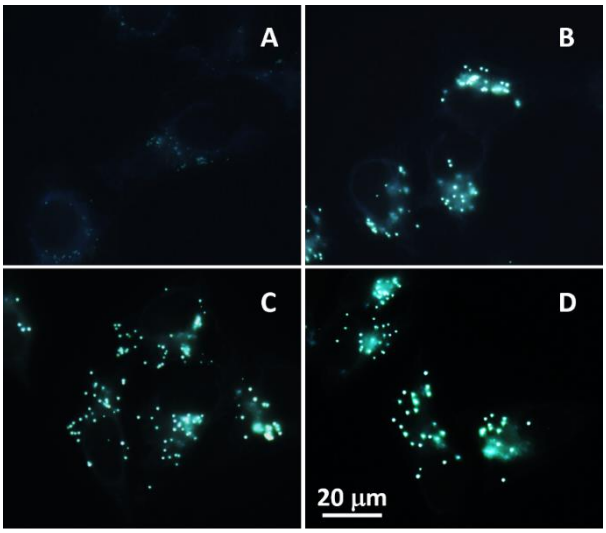


Fig. S4 Fluorescent images of HeLa cells stained with (A) 2, (B) 10, (C) 20 and (D) 50 μM TPE-AmAl for 15 min. Excitation wavelength: 330−385 nm.

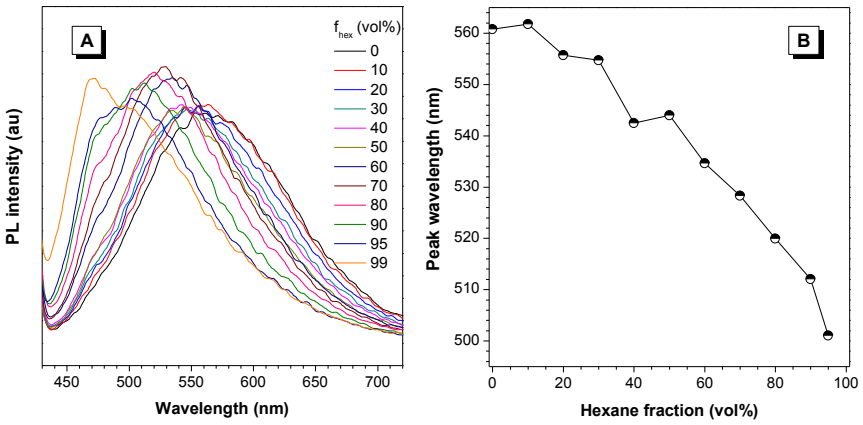


Fig. S5 (A) Emission spectra of TPE-AmAl (100 μM) in dichloromethane/*n*-hexane with different *n*-hexane fractions. (B) Plot of the peak wavelength versus the hexane fraction.

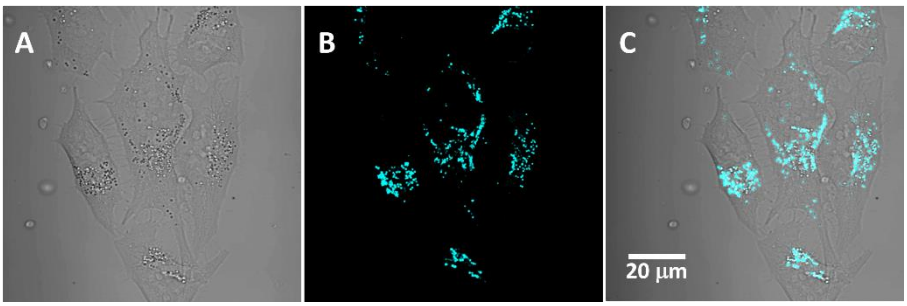


Fig. S6 Confocal images of oleic acid (50 μM)-treated HeLa cells stained with TPE-AmAl (10 μM) for 15 min. (A) Phase contrast, (B) upon excited at 405 nm, and (C) merged image of panels A and B.

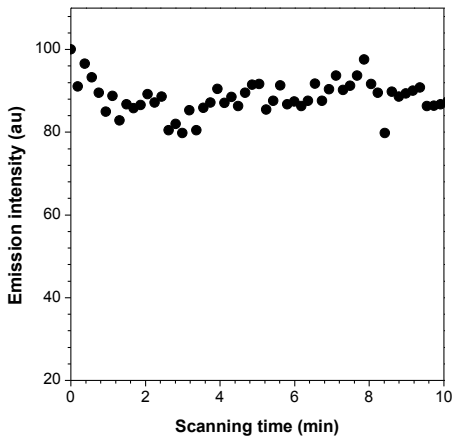


Fig. S7 Signal loss (%) of fluorescence intensity of Nile red in oleic acid-treated HeLa cells with scanning time. Staining time: 5min; scanning speed: 11.22 s/scan; excitation wavelength: 488 nm.

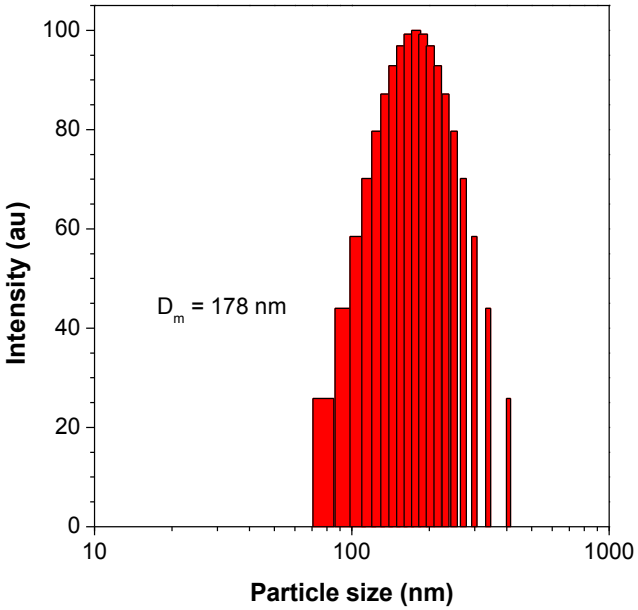
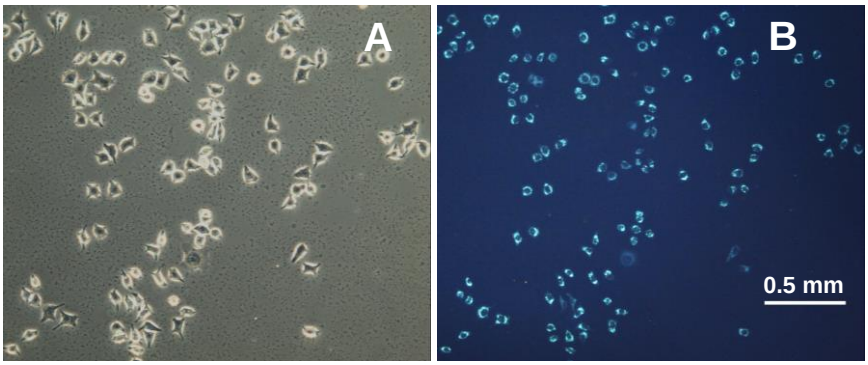


Fig. S8 Particle size analysis of TPE-AmAl (10 μM) nanoaggregates formed in MEM at 25 ^{o}C.



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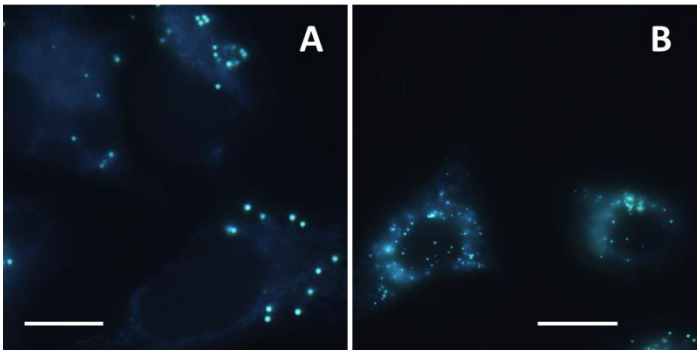

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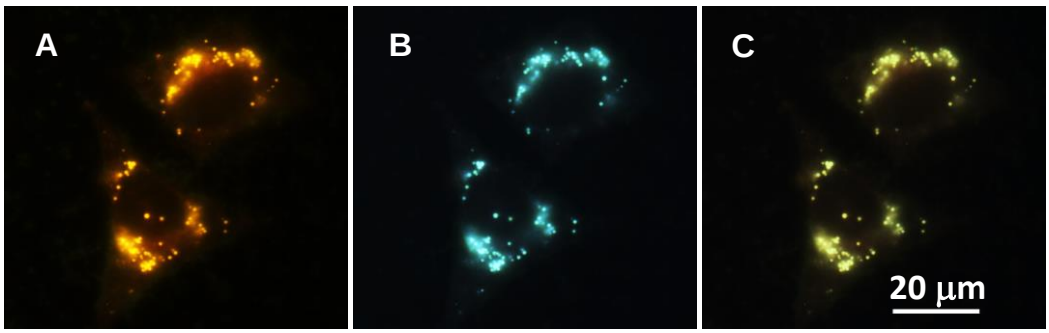

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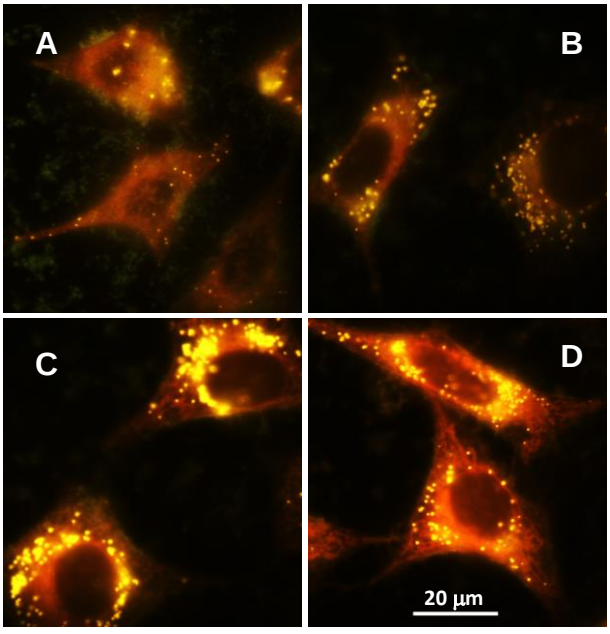

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