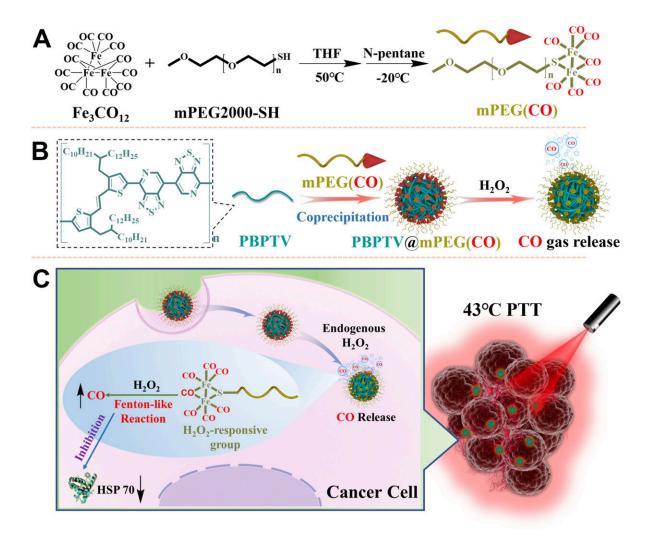


Carbon oxide gas boosts photothermal therapy under mild temperature

August 1 2022, by ZHANG Nannan



Schematic illustration of (A) synthesis route of mPEG(CO) and (B) the nanobomb consist of mPEG(CO) and PBPTV. (C) Schematic illustration of low-temperature therapy process of nanobomb. Credit: SIAT



Photothermal therapy (PTT) is a safe cancer hyperthermia strategy that utilizes photothermal conversion agents to convert light energy into heat to ablate cancer cells.

On one hand, high-temperature (>50 °C) PTT causes an unavoidable threat to surrounding healthy tissues and could induce inflammatory disease because of the difficulty in blocking heat diffusion. On the other hand, the ablation effect at relative low-temperature (

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