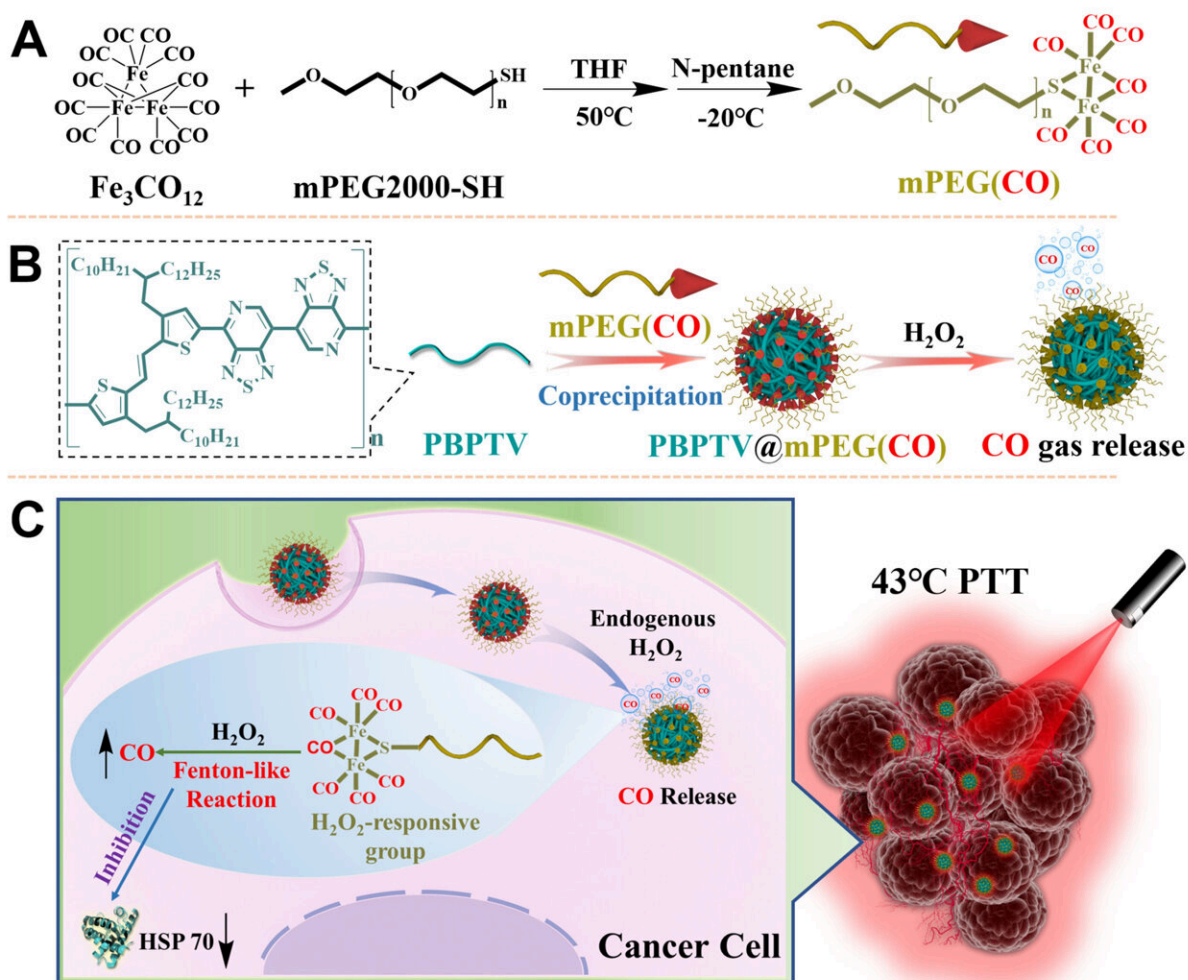


Carbon oxide gas boosts photothermal therapy under mild temperature

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 ($>50\text{ }^{\circ}\text{C}$) 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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