Supporting Information

Table S1. The encapsulation efficiency of Lipo-IONs.

Sampel	C_{total}(μg/mL)	$C_{without\ free\ SPIONs}$(μg/mL)	Encapsulation rate
1	26.4753	22.5294	85.10%
2	26.5734	22.5411	84.83%
3	26.4731	22.5258	85.09%

Table S1. The encapsulation efficiency of IONs in Lipo-IONs. The encapsulation efficiency (EE) was determined as follows: The Lipo-IONs suspension was transferred into a 300 kDa molecular weight cut-off ultrafiltration tube and centrifuged at 3000 × g for 20 minutes to separate the free SPIONs. The iron content in both the original suspension and the upper suspension was quantified using inductively coupled plasma optical emission spectrometry (ICP-OES, 5110, Agilent, USA).

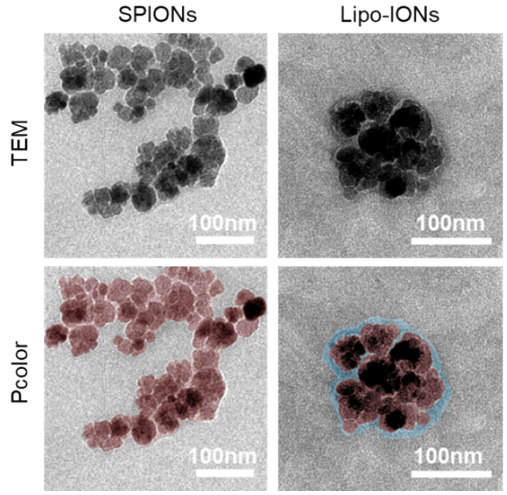

Figure S1. TEM images of SPIONs and Lipo-IONs, suggesting that SPIONs was effectively encapsulated in liposomes. To more clearly demonstrate that SPIONs are encapsulated in liposomes, we carried out pseudo-color processing (Pcolor).

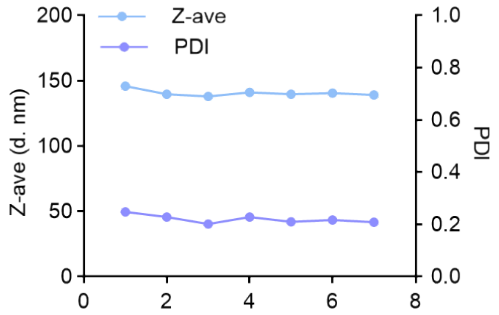

Figure S2. The stability evaluation of Lipo-IONs: the data was obtained from dynamic light scattering (DLS) over 7 days, demonstrating the negligible variation (<10%) in hydrodynamic diameter (140±5 nm).

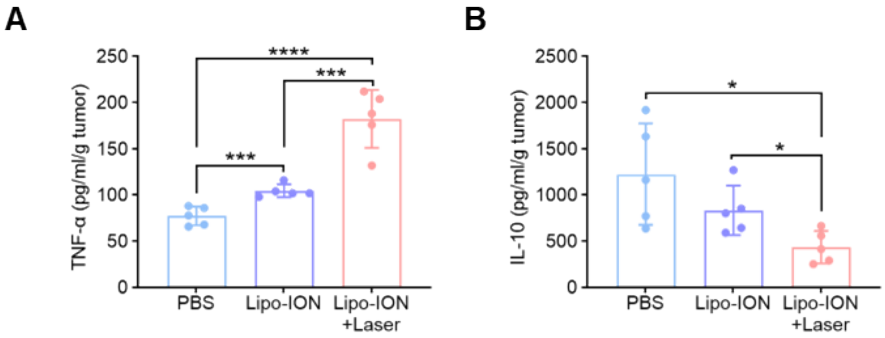

Figure S3. ELISA analysis of inflammatory cytokines in tumor tissues. (A) The level of IL-10 (an anti-inflammatory cytokine) in tumor tissues, indicating the significant decrease in the Lipo-ION+Laser group (P***<0.001). (B) The TNF-α (a pro-inflammatory cytokine) level in tumor tissues, showing a great increase in the Lipo-ION+Laser group compared to other groups (P*<0.05).