

Electronic Supplementary Information to:

Recent advances in Gd–chelate based bimodal optical/MRI contrast agents

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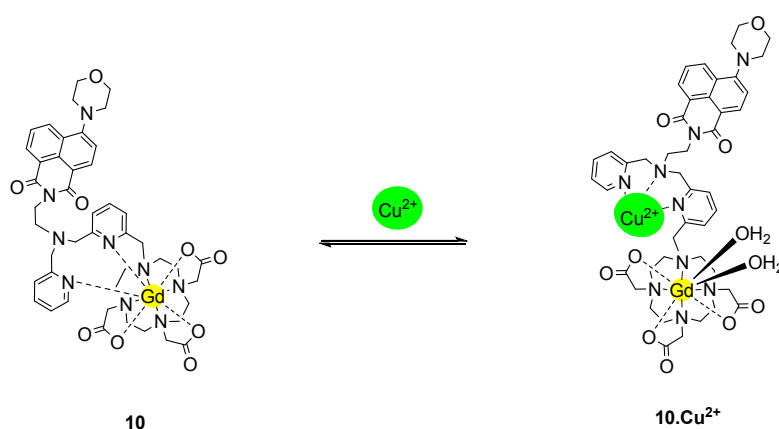


Fig. S1 Contrast agent **10** exhibits q -modulation and quenched fluorescence upon binding Cu^{2+} . Ref. 14.

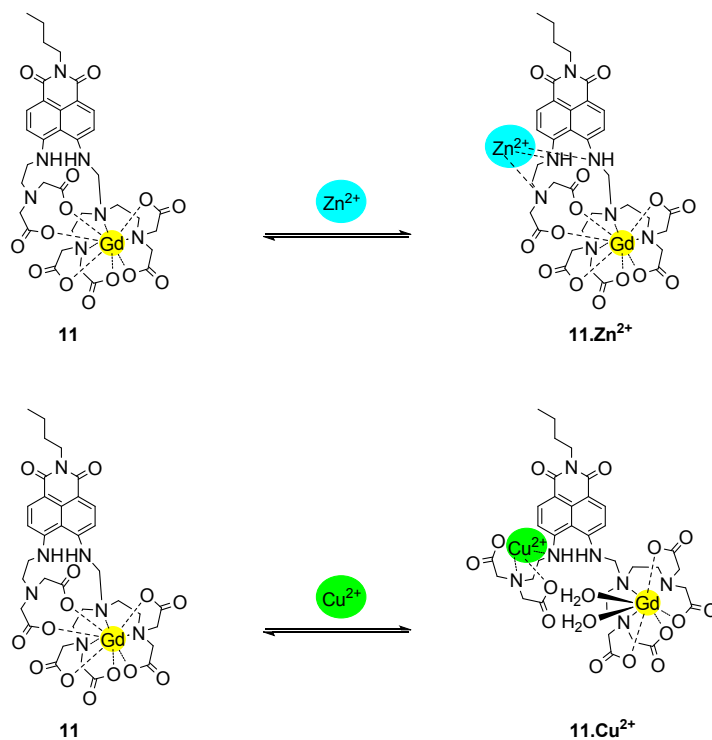
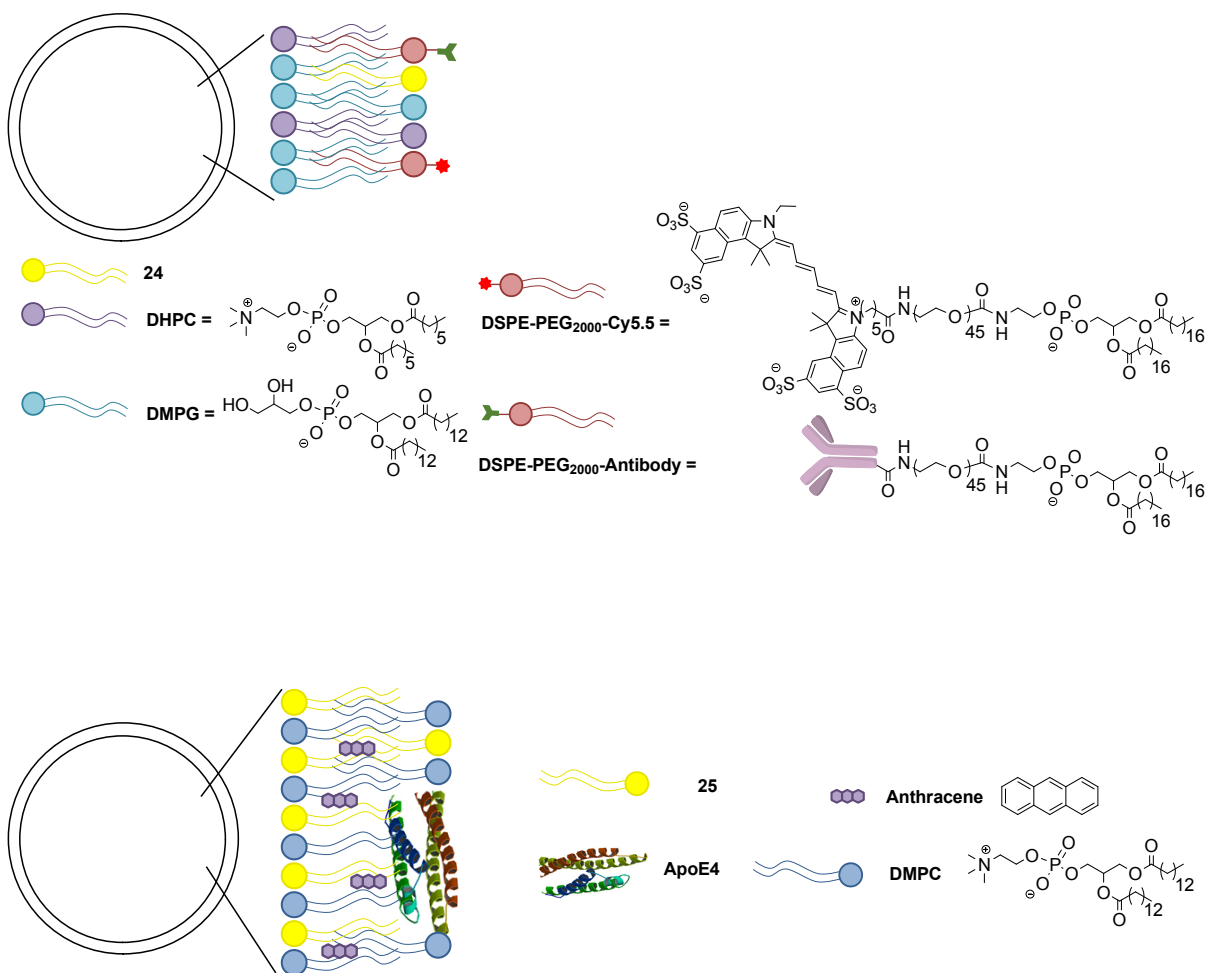


Fig. S2 Proposed binding models of **11** with Zn^{2+} and Cu^{2+} . Ref. 15.



A diagram illustrating a lipid bilayer. On the left, a circular cross-section of the bilayer is shown. On the right, a detailed view of the bilayer is shown, consisting of two layers of phospholipids. The hydrophilic heads are represented by yellow and blue spheres, and the hydrophobic tails are represented by wavy lines. A protein channel, composed of blue and green subunits, is embedded in the bilayer, allowing for the passage of small molecules (purple spheres) from one side to the other.

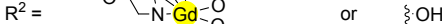
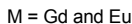


Fig. S4 Chemical structure of the polysaccharide based nano-objects **33** (Ref. 38), **34** (Ref. 39), **35** (Ref. 40) and **36** (Ref. 41).

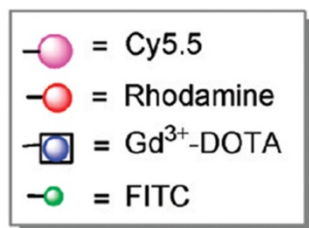
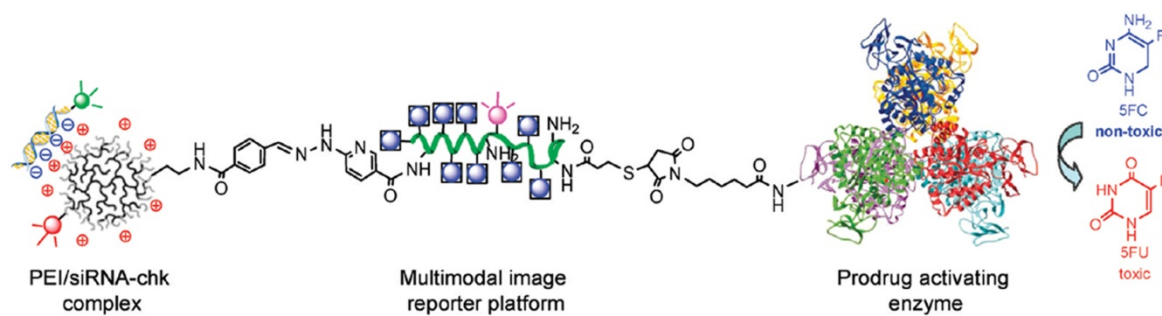


Fig. S5 Structure of theranostic nanoobject **37**. Adapted with permission from Ref. 42. Copyright 2010 American Chemical Society. (C. Li, M. F. Penet, F. Wildes, T. Takagi, Z. H. Chen, P. T. Winnard, D. Artemov and Z. M. Bhujwala, *ACS Nano* 2010, **4**, 6707.)

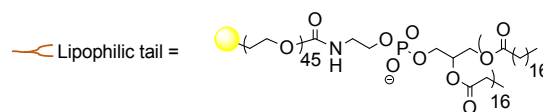
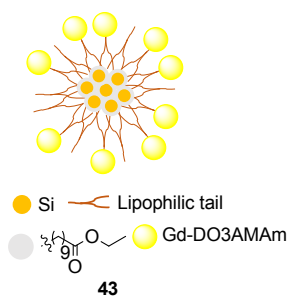
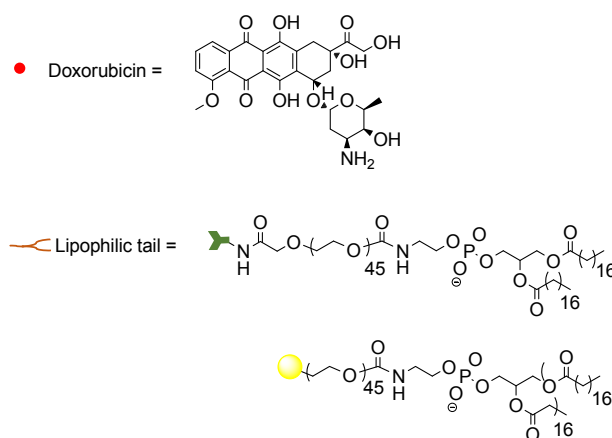
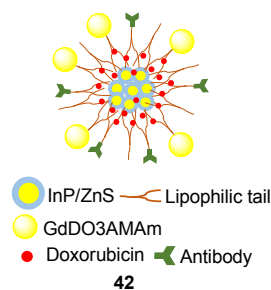
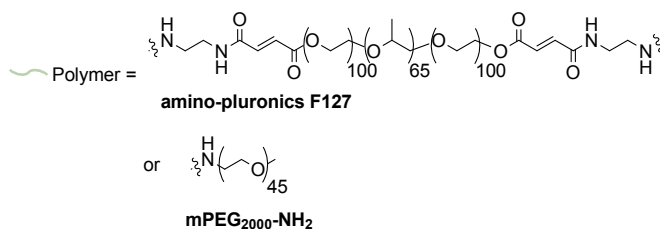
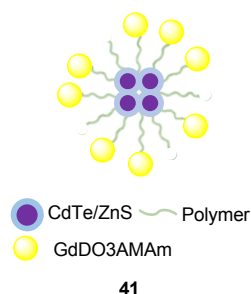


Fig. S6 Chemical structure of the polymeric/lipophilic chains of **41** (Ref. 47), **42** (Ref. 48) and **43** (Ref. 49).