

Supporting Information

The Adaptive Structure of Carbon Nanohybrids toward High-Relaxivity for the New MRI Contrast Agent

Juan Li‡, Rongli Cui‡, Yanan Chang, Xihong Guo, Weihong Gu, Huan Huang, Kui Chen,

Guoming Lin, Jinquan Dong, Gengmei Xing*, Baoyun Sun*

CAS Key Laboratory for Biomedical Effects of Nanomaterial & Nanosafety, Institute of High

Energy Physics, Chinese Academy of Science (CAS), Beijing 100049, China

E-mail: sunby@ihep.ac.cn, xinggm@ihep.ac.cn

‡ These authors contributed equally to this work

Raman spectra of GO-Gd@C₈₂ nanohybrids

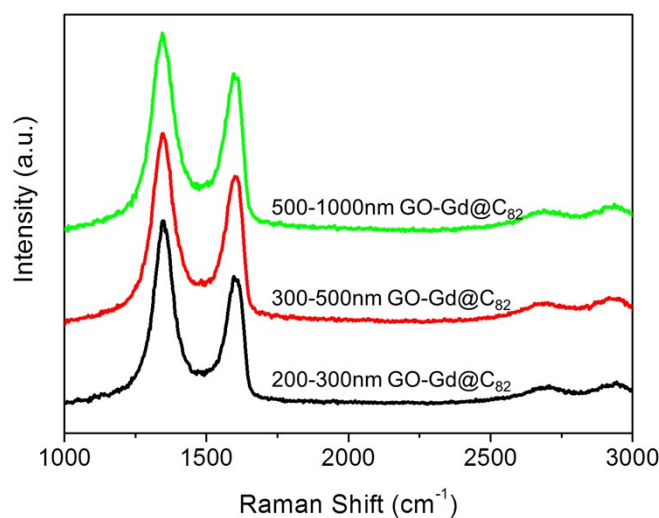


Fig. S1 Raman spectra of as-prepared GO-Gd@C₈₂ nanohybrids with different size of GO.

AFM and SEM images of GO film on glass

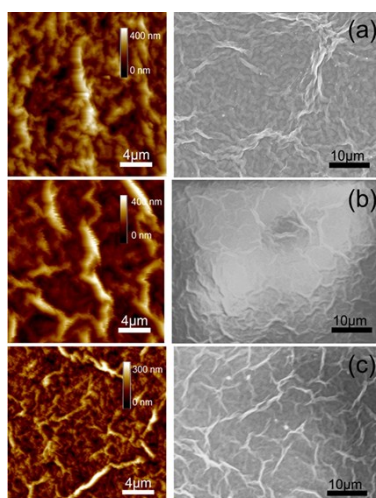


Fig. S2 AFM and SEM images of GO film on glass with different size GO. (a) 200-300nm, (b) 300-500nm, (c) 500-1000nm

Table S1. Reduction potential and oxidation potential for Gd@C₈₂ and Gd@C₈₂PCBM

E vs Fc/Fc ⁺	E _{ox1} (V)	E _{red1} (V)
Gd@C ₈₂	0.1835	-0.4385
Gd@C ₈₂ PCBM	0.127	-0.473

The potentials were measured in a mixed solvent of o-DCB/MeCN (4:1 v/v) with 0.1 M TBAClO₄ as supporting electrolyte at a scan rate of 100 mV s⁻¹ versus Ag/Ag⁺ quasi-reference electrode and standardized to Fc/Fc⁺ couple