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Electronic Supporting Information

One-pot synthesis of gadolinium (III) doped carbon dots for fluorescence/magnetic resonance bimodal imaging

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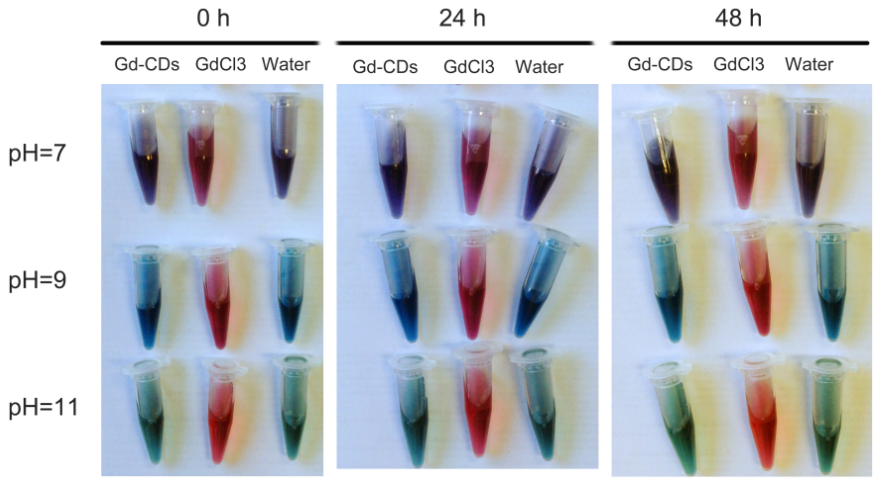

Figure S1. Eriochrome black T test of Gd-CDs at different pH values at 0, 24 and 48 h, respectively. Gd-CDs (10 mg/ml); $GdCl_3$ (2 mM).

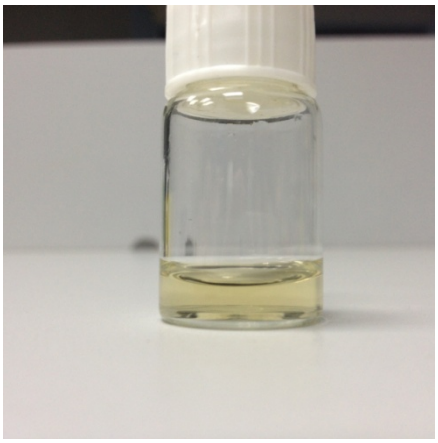

Figure S2. Photograph of the concentrated Gd-CDs solution (50 mg/mL) after stored in 4 ^{o}C for a week.

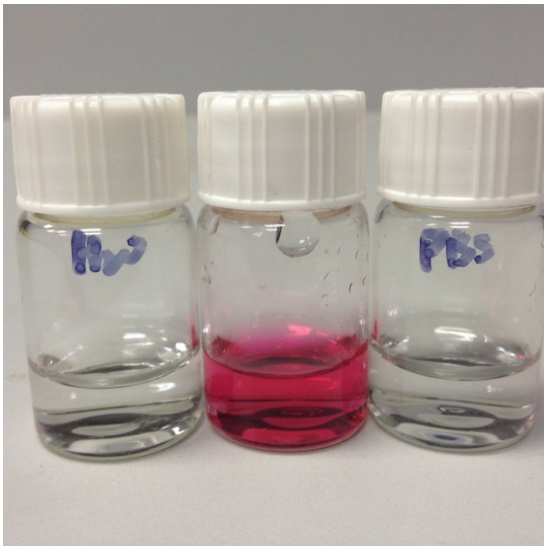

Figure S3. Photograph of the Gd-CDs solutions (5 mg/mL) in water (left), DMEM (middle) and PBS (right) after stored at room temperature for 48 h.

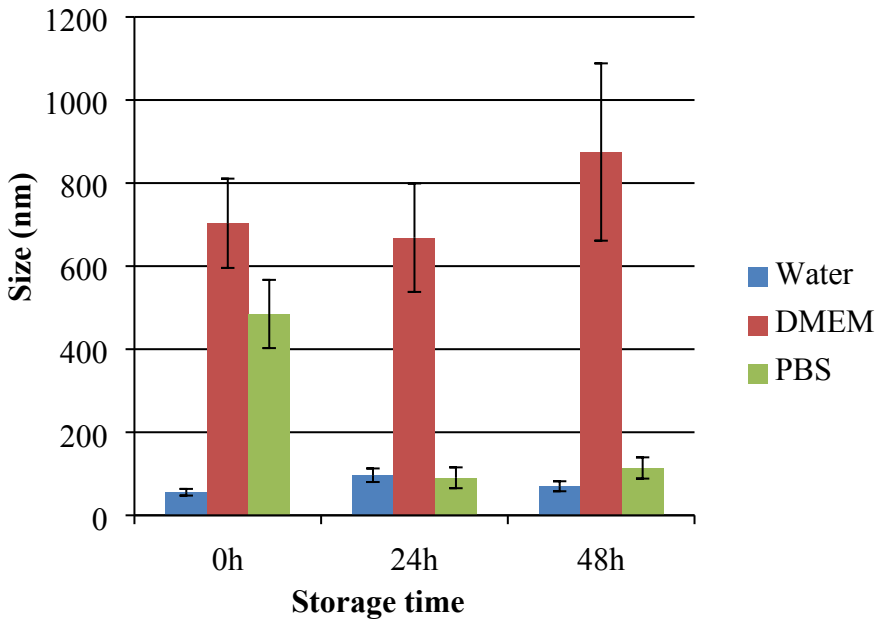

Figure S4. The hydrodynamic sizes of Gd-CDs in water, Dulbecco‘s modified Eagle Medium (DMEM) and PBS buffer (5 mg/mL) stored at room temperature for 0, 24 and 48 h, respectively.

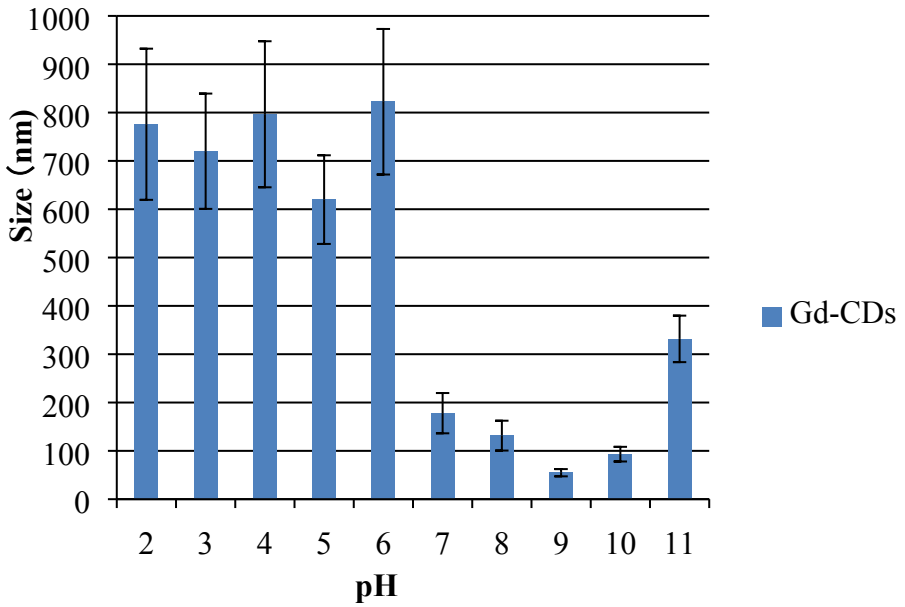

Figure S5. The effect of pH on the hydrodynamic size of Gd-CDs at the concentration of 5 mg/mL in a Britton–Robinson buffer.

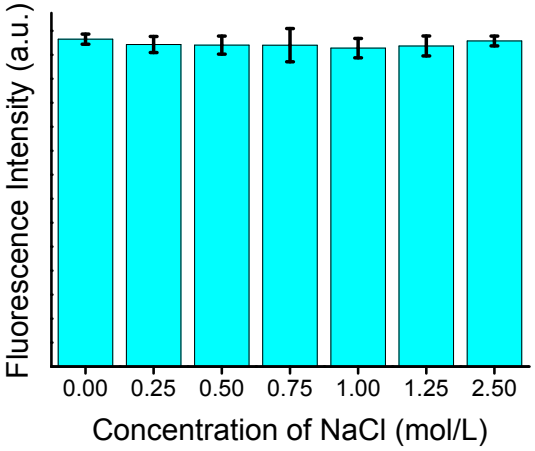

Figure S6. Effects of ionic strength on photoluminescence intensity of the Gd-CDs. Data are mean ± SD (n = 3).

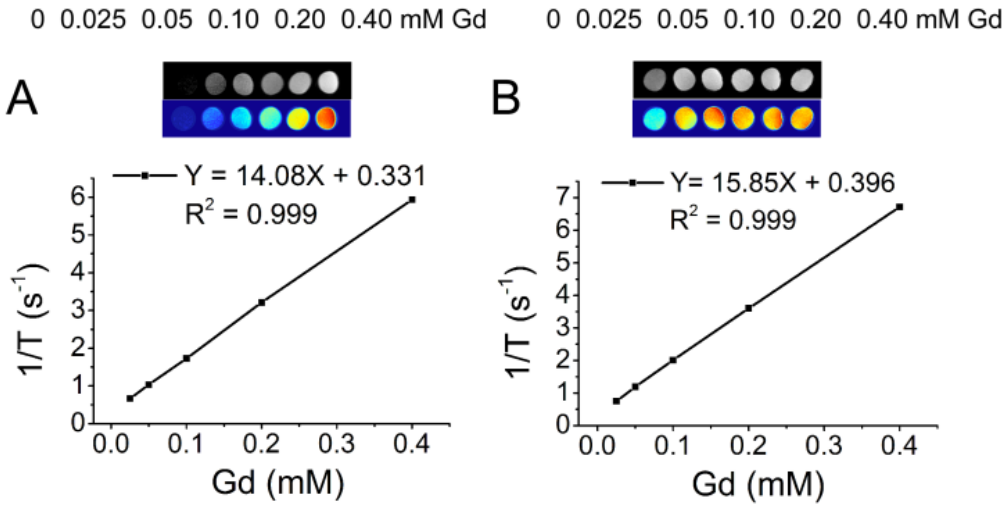

Figure S7. In vitro T_1-weighted (A) and T_2-weighted (B) MR images of the Gd-CDs solutions with various concentration and liner relationship between relaxation time and gadolinium concentration.

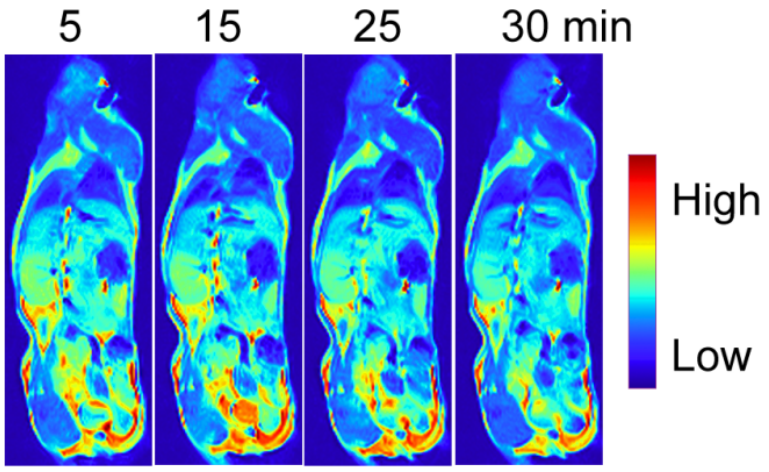

Figure S8. *In vivo* T1-weighted MR images of mice at 5, 15, 25 and 30 min after intravenous injection of Gd-CDs

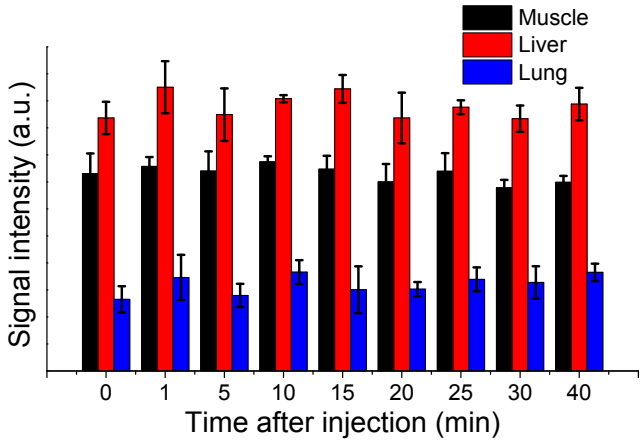

Figure S9. Quantification of magnetic resonance signal intensity in muscle, liver and lung of the mice before and after intravenous injection of Gd-CDs (n=3)

Table S1. Medium for Eriochrome black T test

	pH = 7	pH = 9	pH = 11
Acid	10 mM MES	10 mM $NaHCO_3$	10 mM $NaHCO_3$
Base	pH of the media was adjusted by 1.0 M NaOH		