

ELECTRONIC SUPPLEMENTARY DATA

for

**Facile synthesis of non-ionic dimeric molecular resonance imaging contrast agent: Its relaxation and luminescence studies**

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Spectroscopic Data :

1. Figure S1 : **<sup>1</sup>H NMR** spectrum of **t-Bu-DO3A**.
2. Figure S2: **<sup>13</sup>C NMR** spectrum of **t-Bu-DO3A**.
3. Figure S3: **ESI-MS** spectrum of **t-Bu-DO3A**.
4. Figure S4: **<sup>1</sup>H NMR** spectrum of **2**.
5. Figure S5: **<sup>13</sup>C NMR** spectrum of **2**.
6. Figure S6: **ESI-MS** spectrum of **2**.
7. Figure S7: **<sup>1</sup>H NMR** spectrum of **DO3A-AME-DO3A**.
8. Figure S8: **<sup>13</sup>C NMR** spectrum of **DO3A-AME-DO3A**.
9. Figure S9: **ESI-MS** spectrum of **DO3A-AME-DO3A**.
10. Figure S10: **ESI-MS** spectrum of **Gd<sub>2</sub>-DO3A-AME-DO3A**.
11. Figure S11: **ESI-MS** spectrum of **Eu<sub>2</sub>-DO3A-AME-DO3A**.

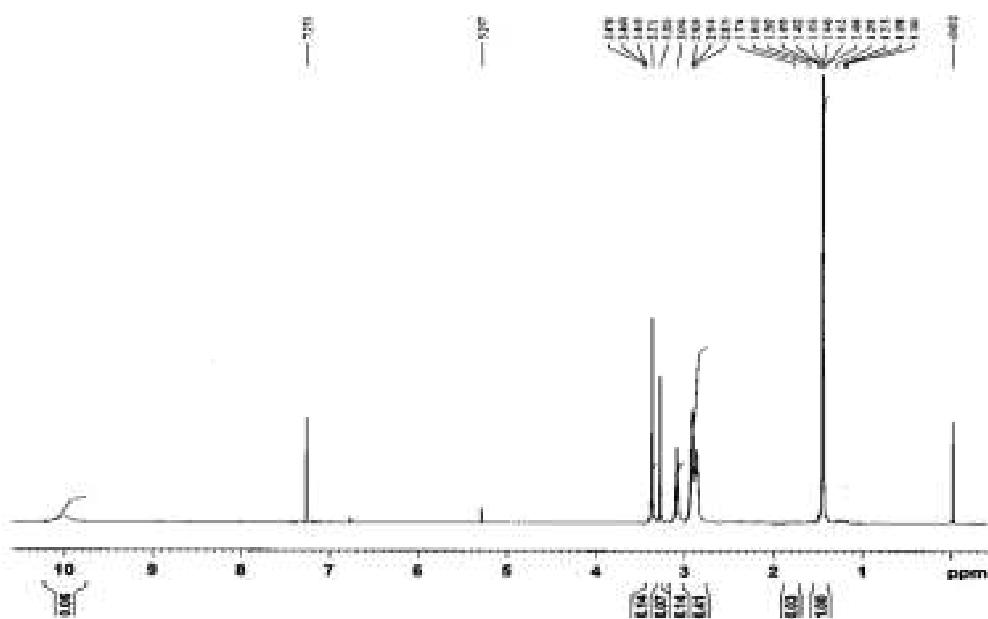


Fig. S1. <sup>1</sup>H NMR spectrum of t-Bu-DO3A.

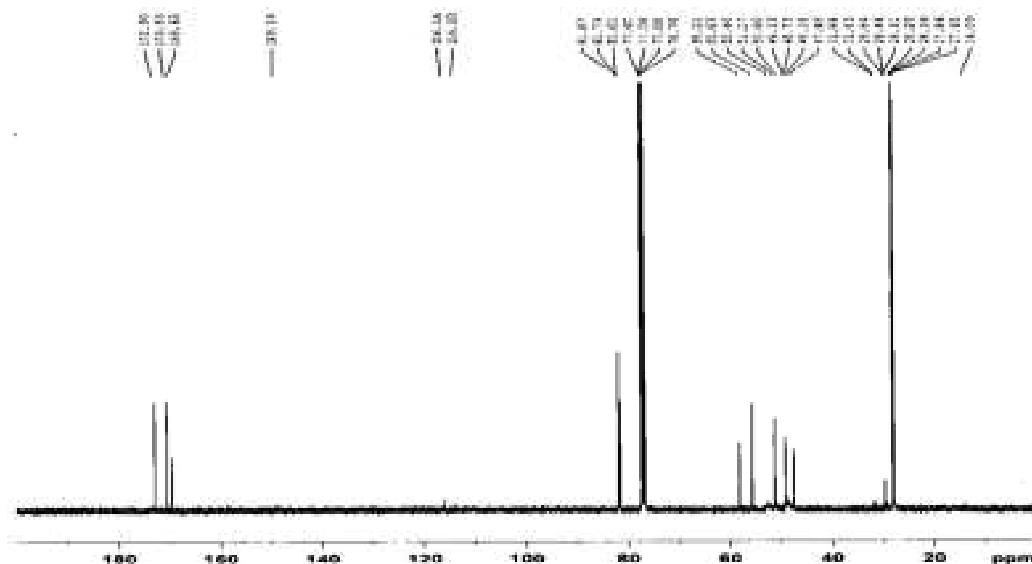


Fig. S2. <sup>13</sup>C NMR spectrum of t-Bu-DO3A.

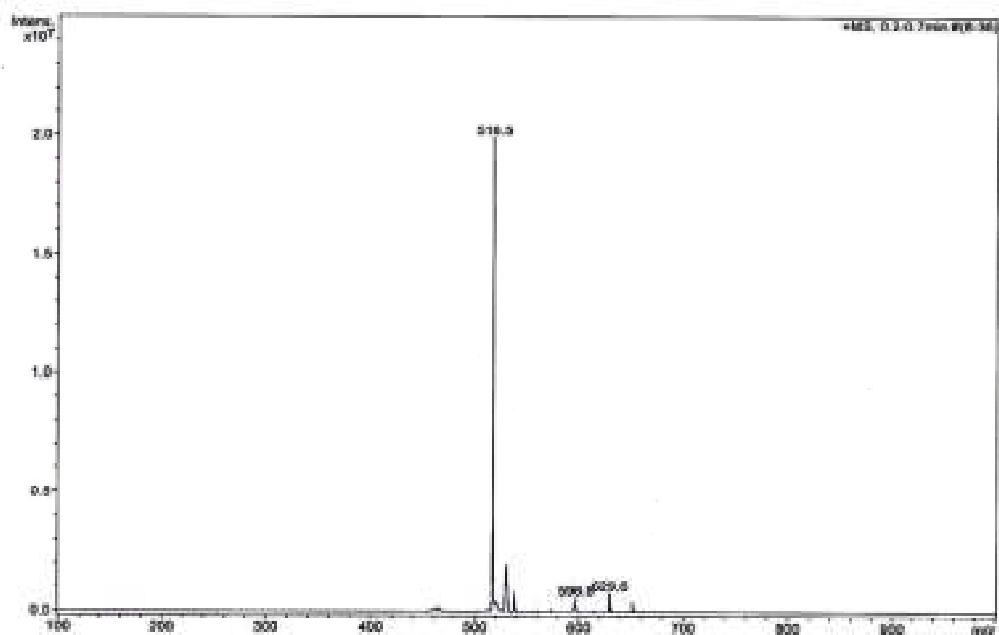


Fig. S3. ESI-MS spectrum of t-Bu-DO3A.

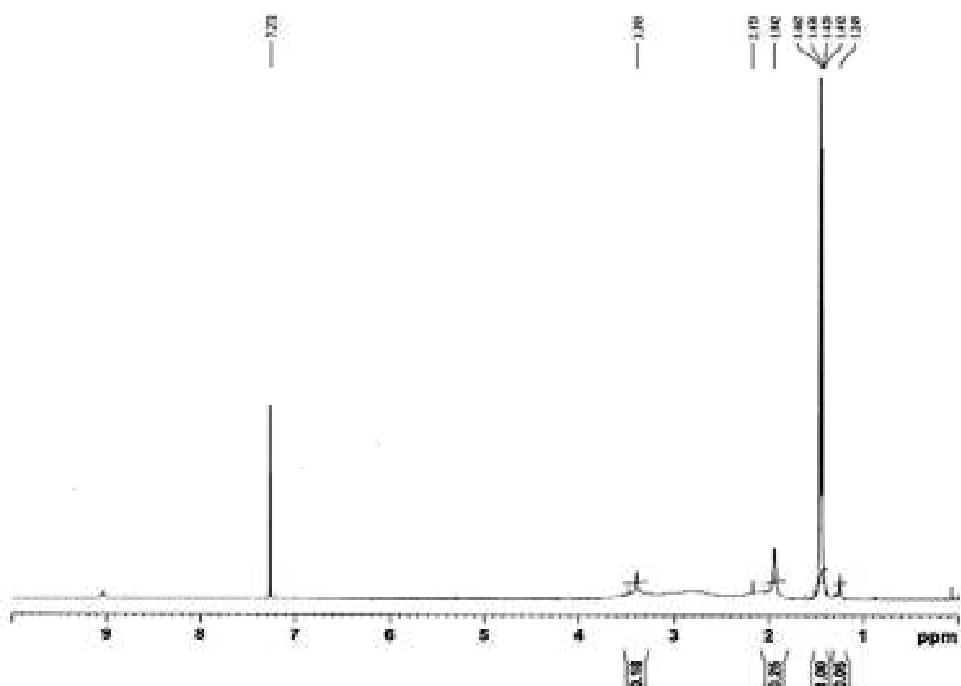


Fig. S4.  ${}^1\text{H}$  NMR spectrum of compound 2.

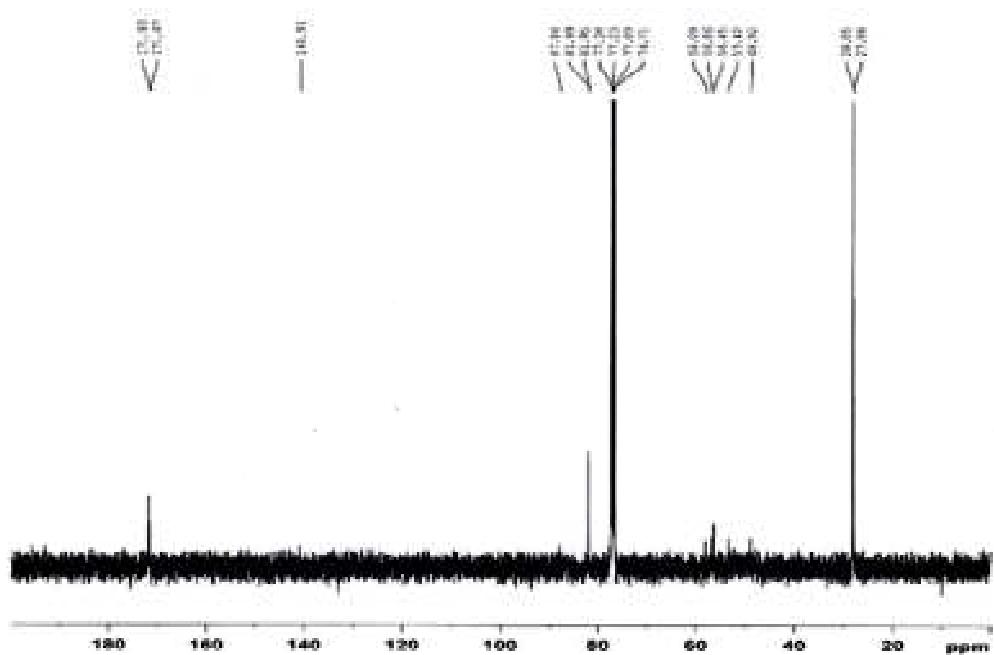


Fig. S5. <sup>13</sup>C NMR spectrum of compound 2.

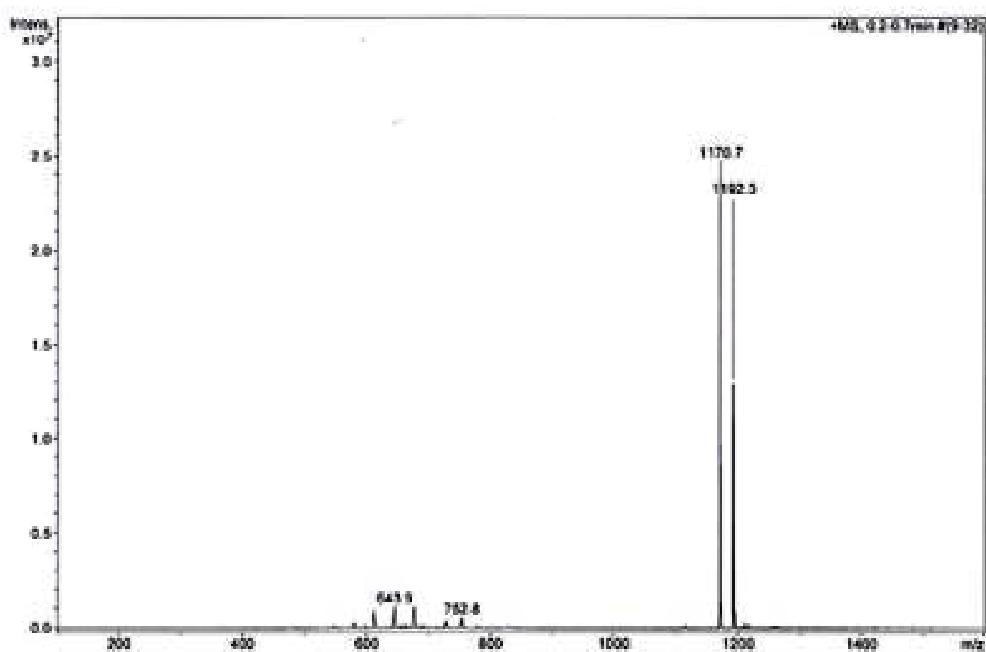


Fig. S6. Mass spectrum of compound 2.

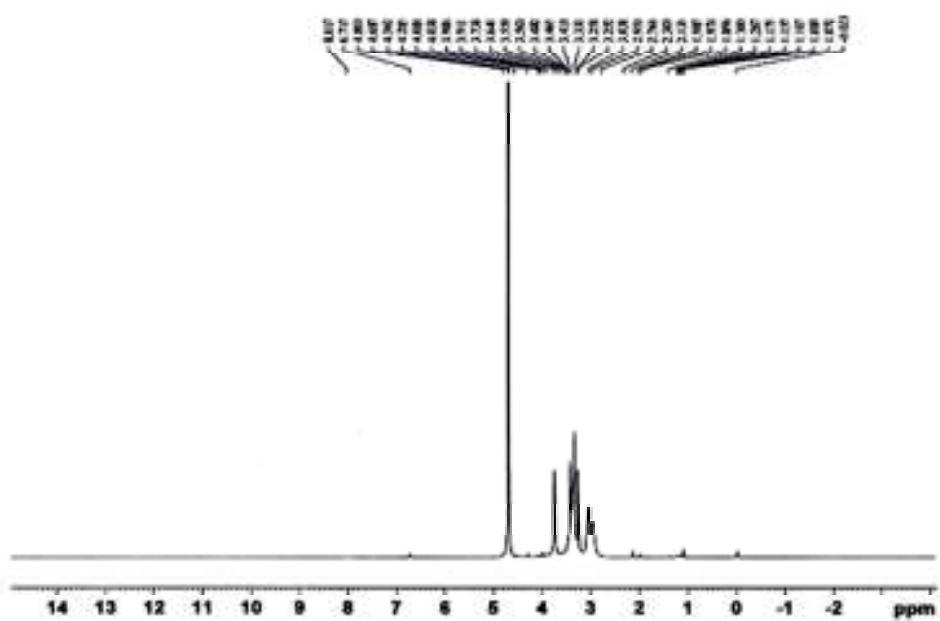


Fig. S7. <sup>1</sup>H spectrum of DO3A-AME-DO3A.

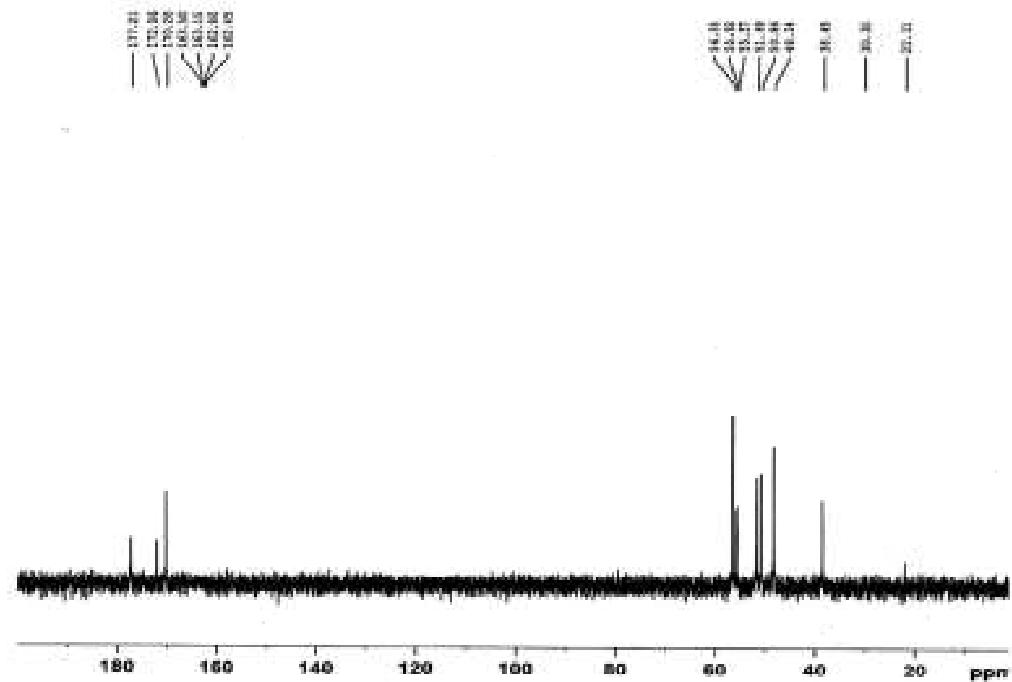


Fig. S8. <sup>13</sup>C spectrum of DO3A-AME-DO3A.

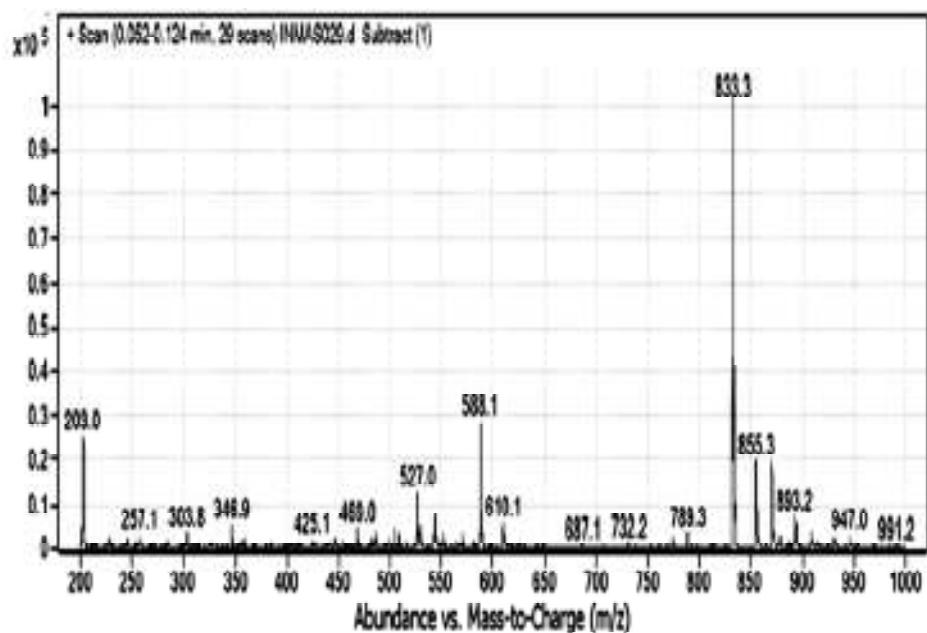


Fig. S9. Mass spectrum of DO3A-AME-DO3A.

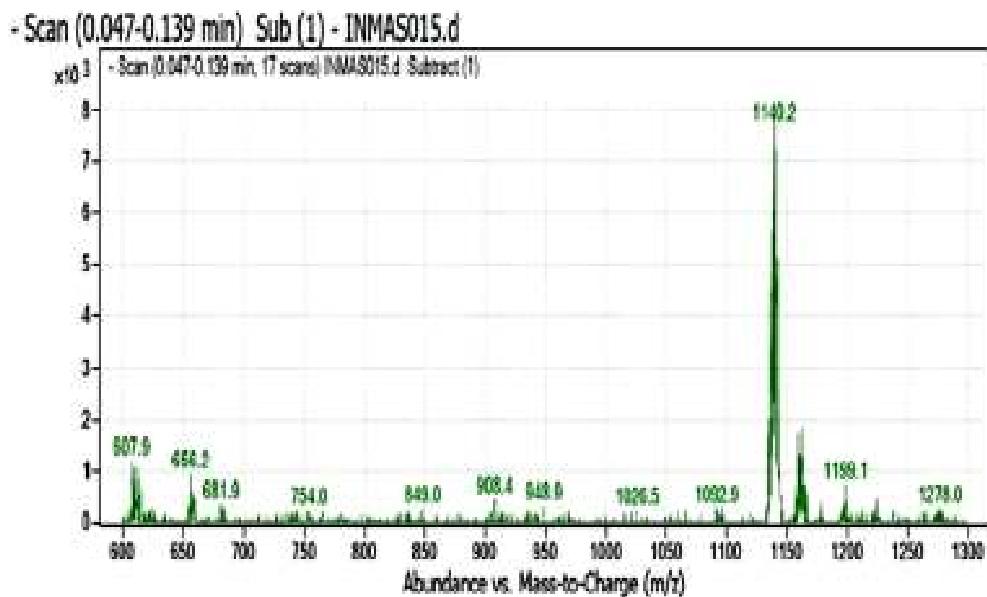
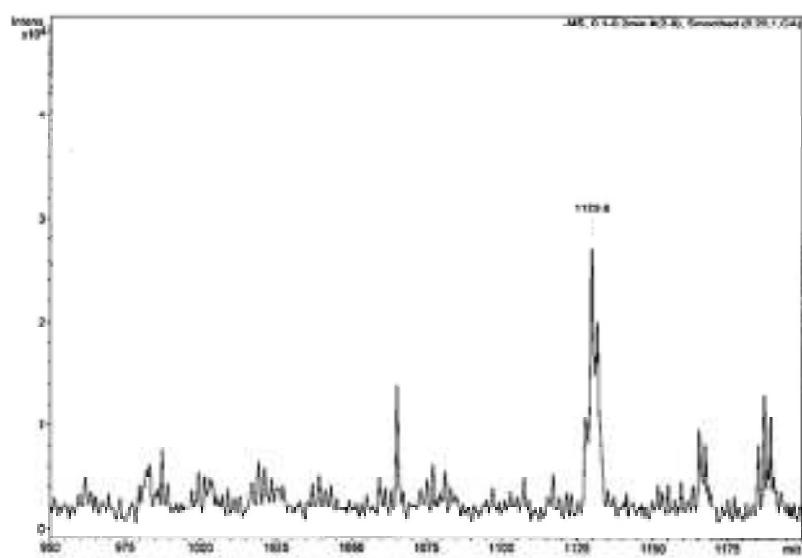


Fig. S10. ESI-MS spectrum of  $\text{Gd}_3^+$ -DO3A-AME-DO3A.



**Fig. S11.** ESI-MS spectrum of Eu<sub>2</sub>-DO3A-AME-DO3A.