

Near Infrared Fluorescent NanoGUMBOS for Biomedical Imaging

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Table S1. Yields, melting points and aqueous solubility of HMT-based GUMBOS and size of corresponding particles.

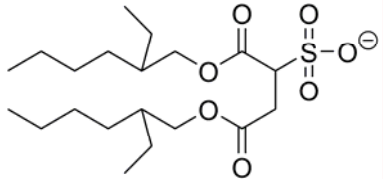
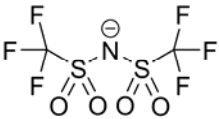

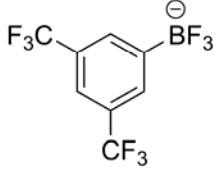
NIR GUMBOS	Yields (%)	Anion structure	MW of anion (g/mol)	mp (°C)	Particle size (nm)	Solubility in water
[HMT][AOT]	93		421	58	71 ± 16	N
[HMT][NTf ₂]	94		283	220	60 ± 11	N
[HMT][BF ₄]	84		86	175	N/A	Y
[HMT][3,5CF ₃ PheB]	91		281	95	130 ± 41	N

Table S2. Elemental analysis of HMT-based GUMBOS.

	C		H		N	
	Theory (%)	Found (%)	Theory (%)	Found (%)	Theory (%)	Found (%)
[HMT][AOT]	70.82	69.38	8.49	8.63	3.37	3.35
[HMT][NTf ₂]	53.98	53.99	4.82	4.79	6.09	6.19
[HMT][3,5 CF ₃ PheB]	64.31	61.97	5.21	4.92	4.05	3.61
[HMT][BF ₄]	70.10	64.03	6.64	6.35	5.64	5.09

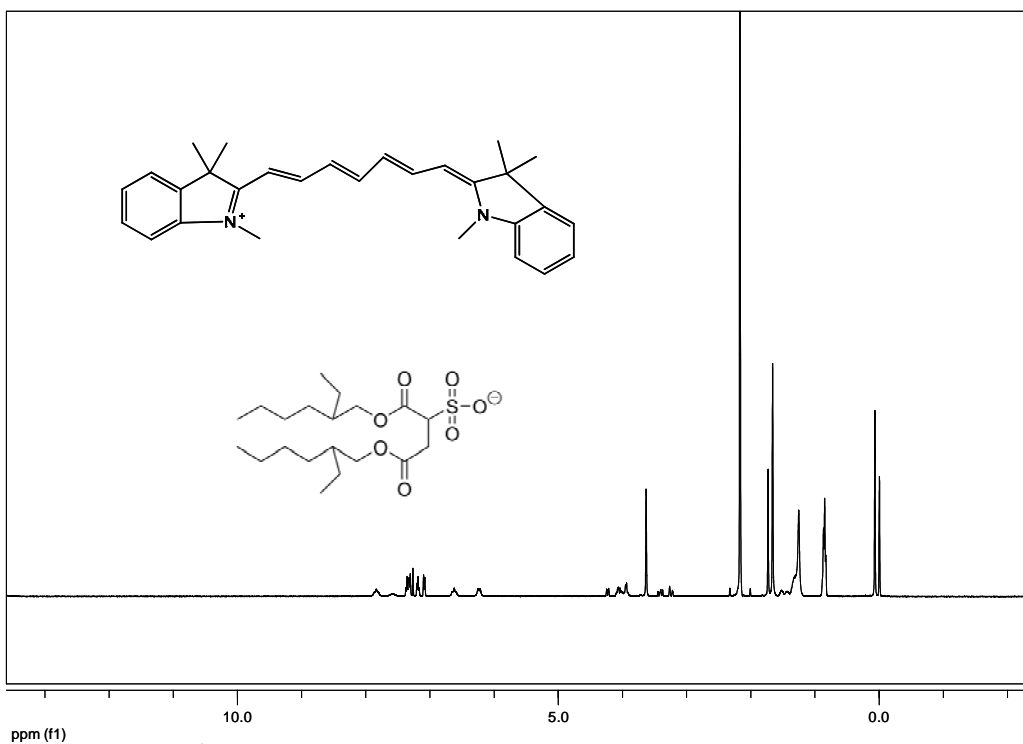


Figure S1-1. ^1H NMR (CDCl_3 , 400MHz) of [HMT][AOT].

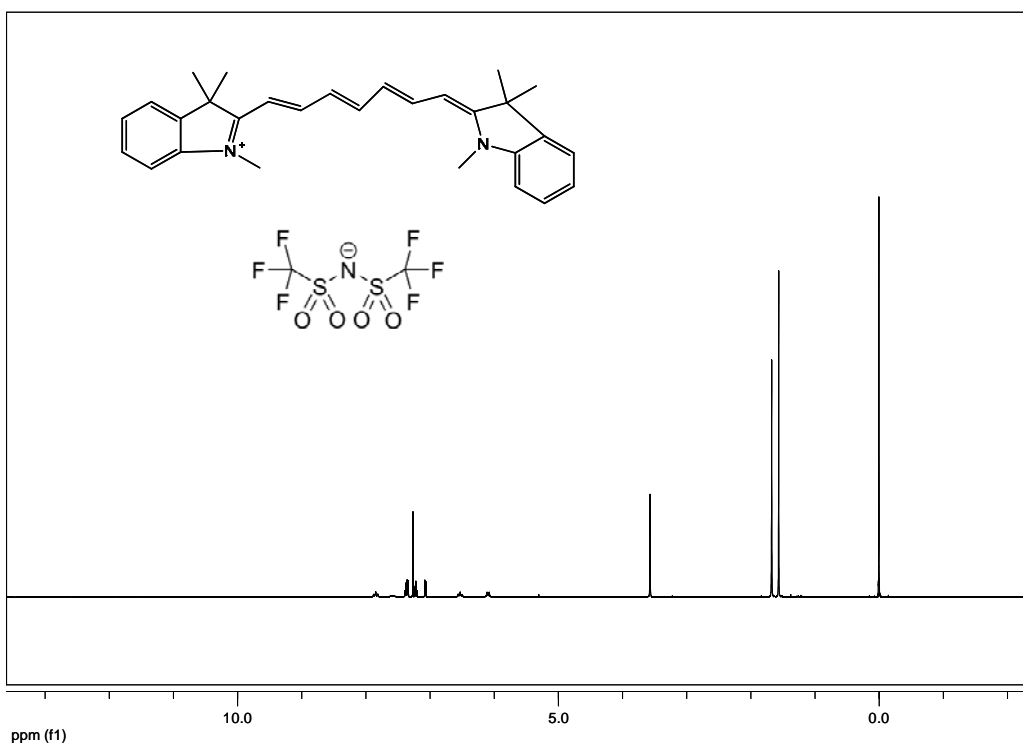


Figure S1-2a. ^1H NMR (CDCl_3 , 400MHz) of [HMT][NTf₂].

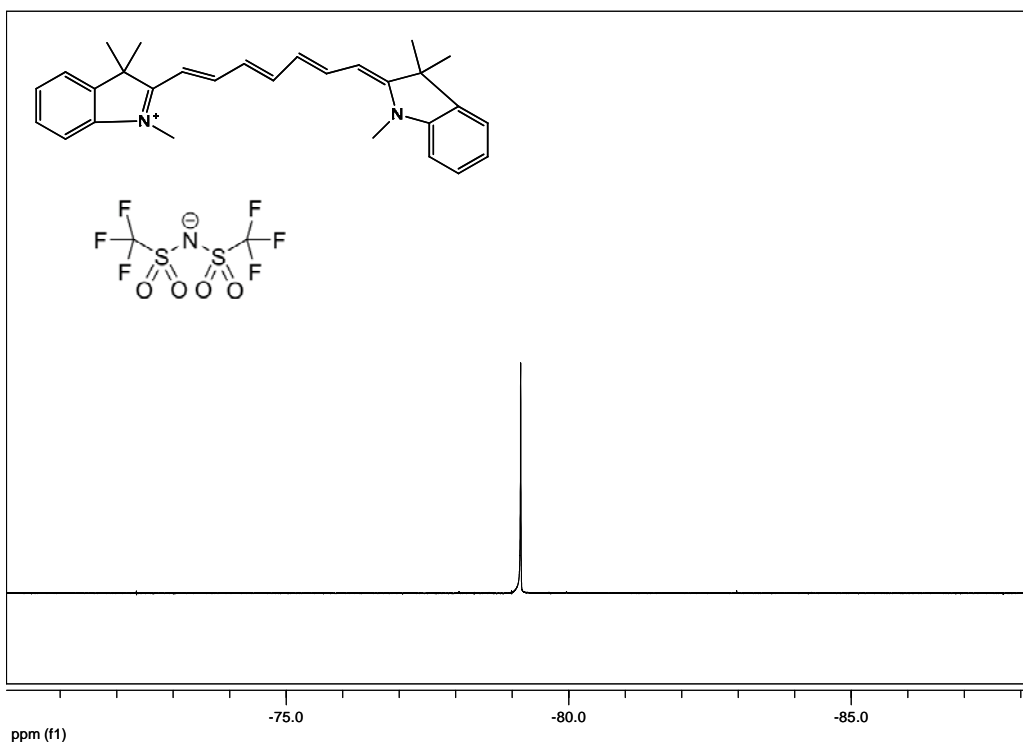


Figure S1-2b. ¹⁹F NMR (CDCl₃, 236MHz) of [HMT][NTf₂].

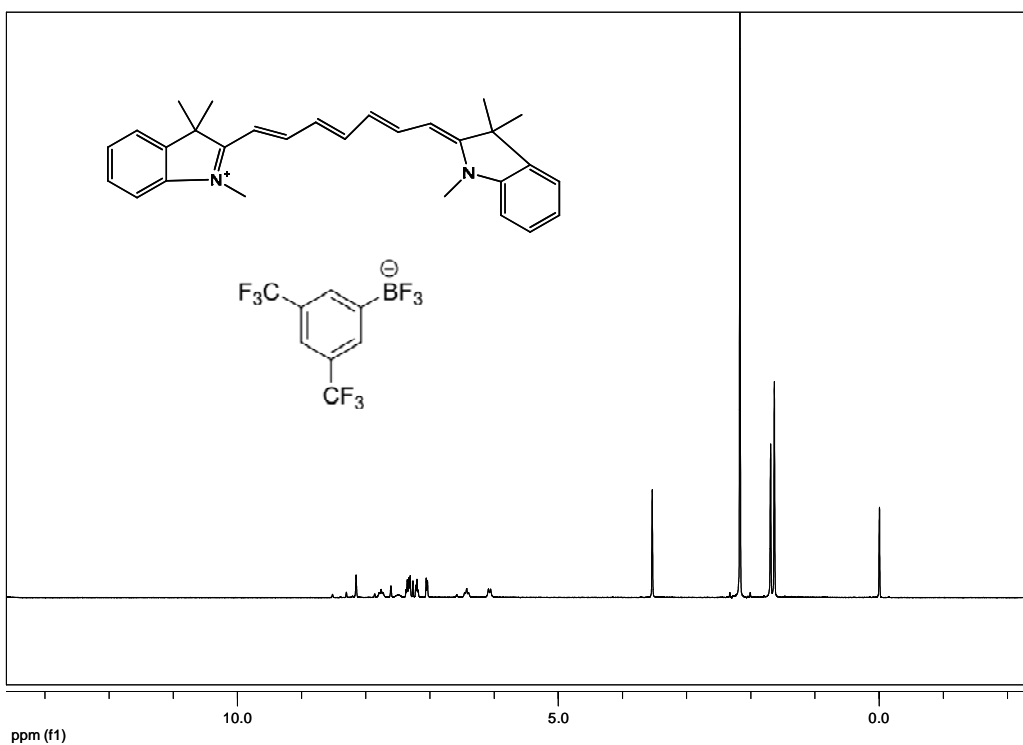


Figure S1-3a. ¹H NMR (CDCl₃, 400MHz) of [HMT][3,5-CF₃PheB].

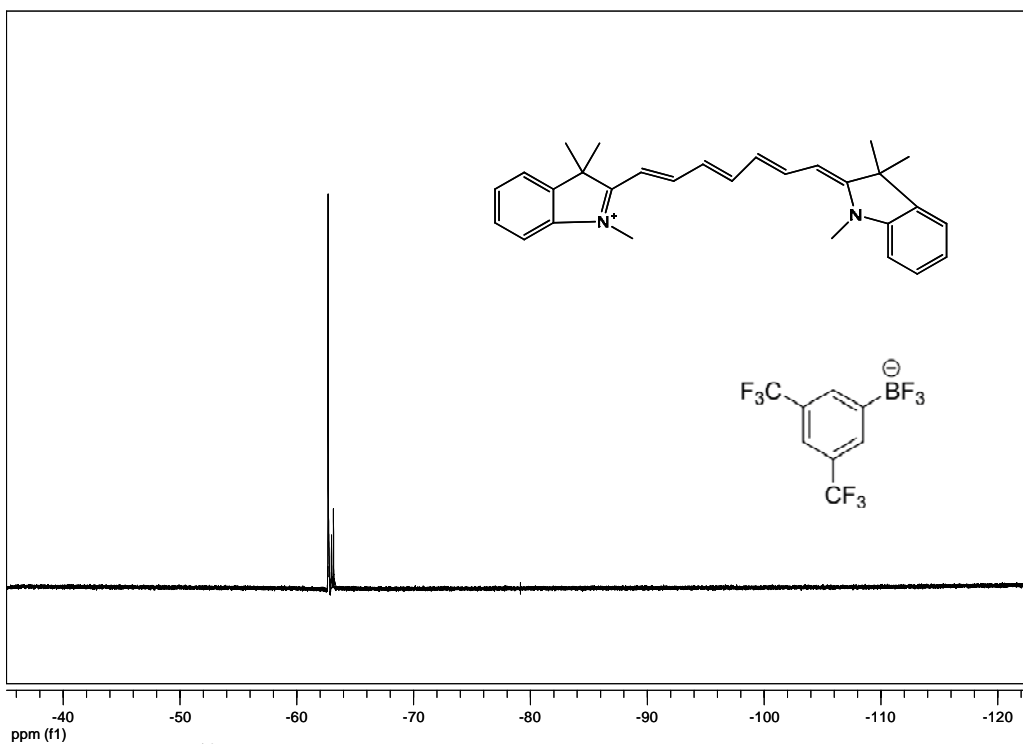


Figure S1-3b. ^{19}F NMR (CDCl_3 , 236MHz) of $[\text{HMT}][3,5\text{-CF}_3\text{PheB}]$.

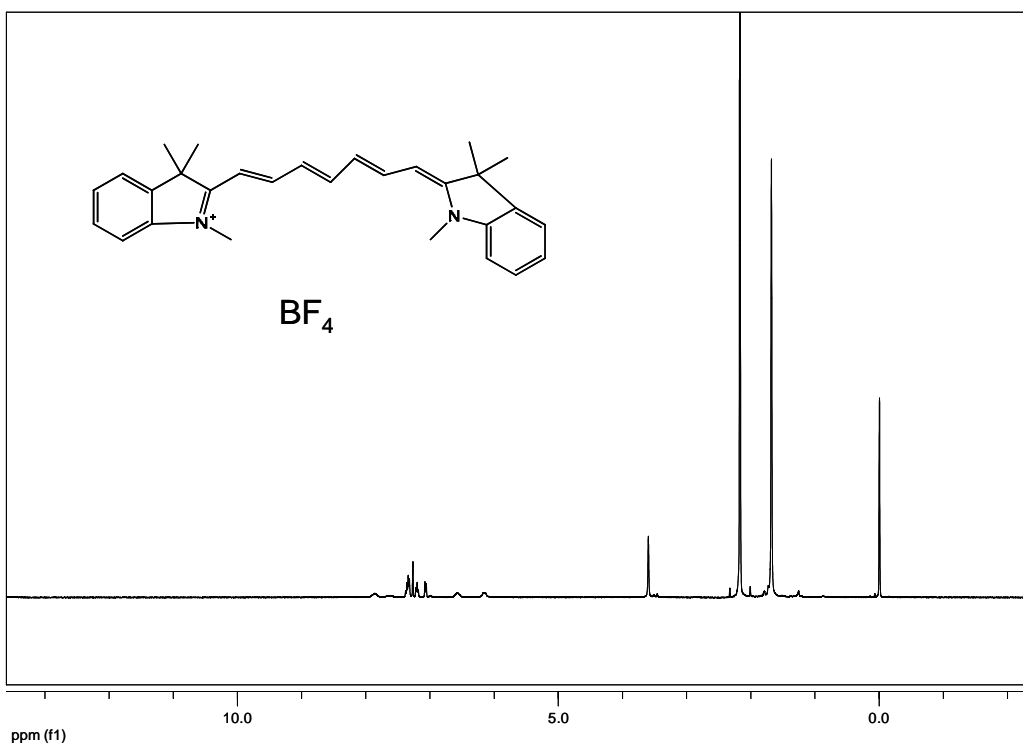


Figure S1-4a. ^1H NMR (CDCl_3 , 400MHz) of $[\text{HMT}][\text{BF}_4]$.

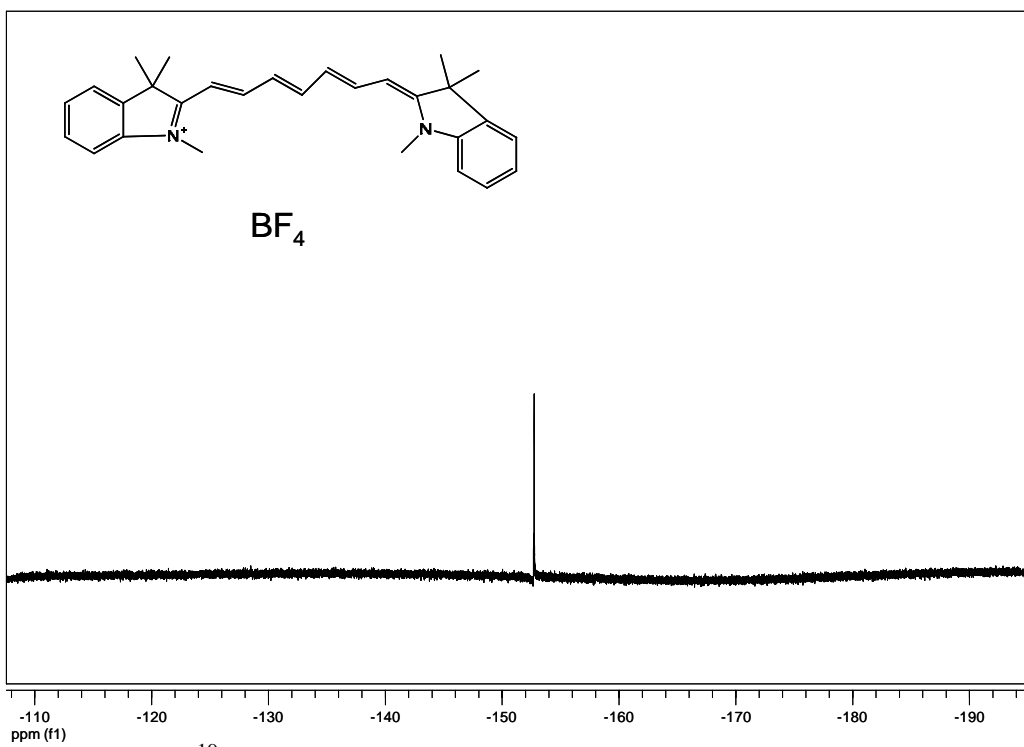


Figure S1-4b. ¹⁹F NMR (CDCl₃, 236MHz) of [HMT][BF₄].

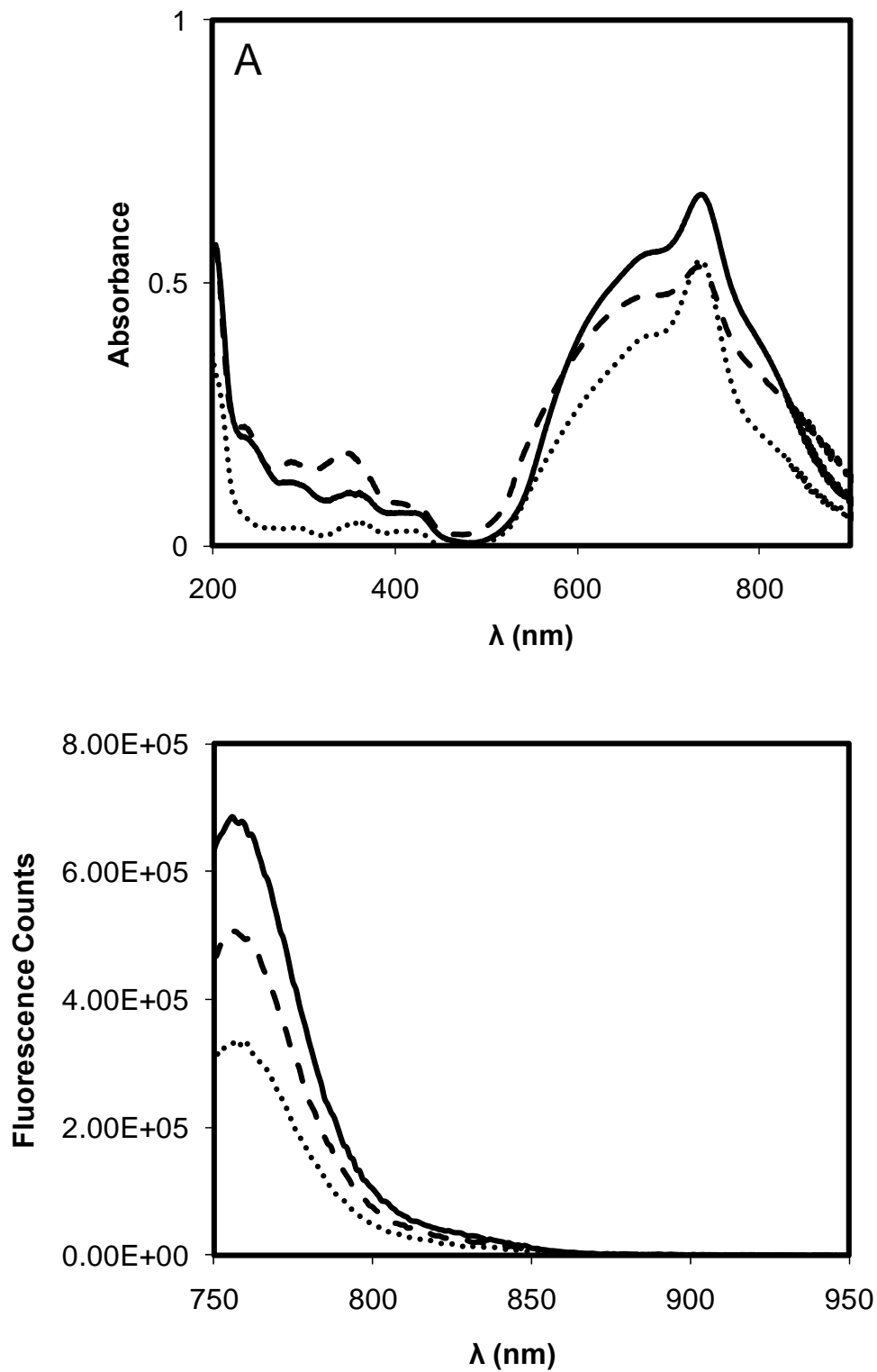


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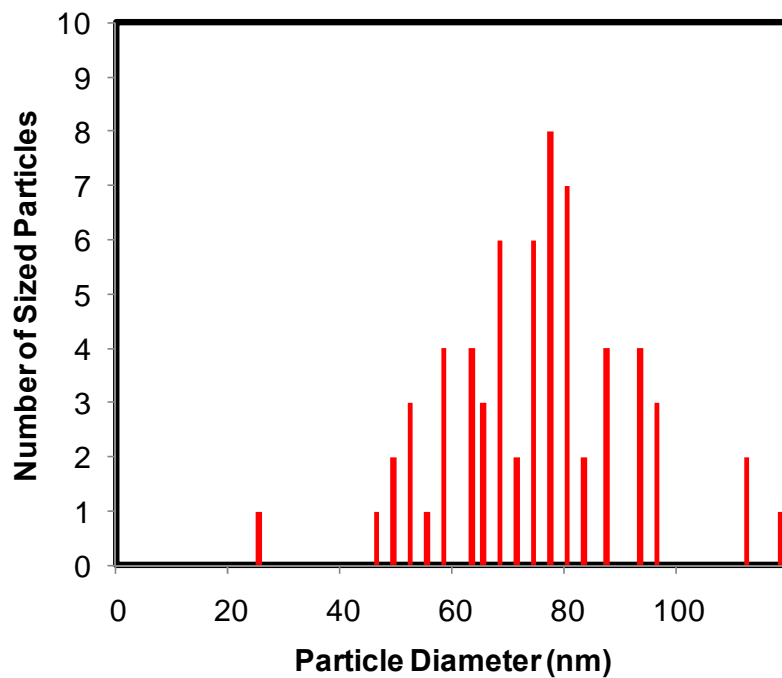


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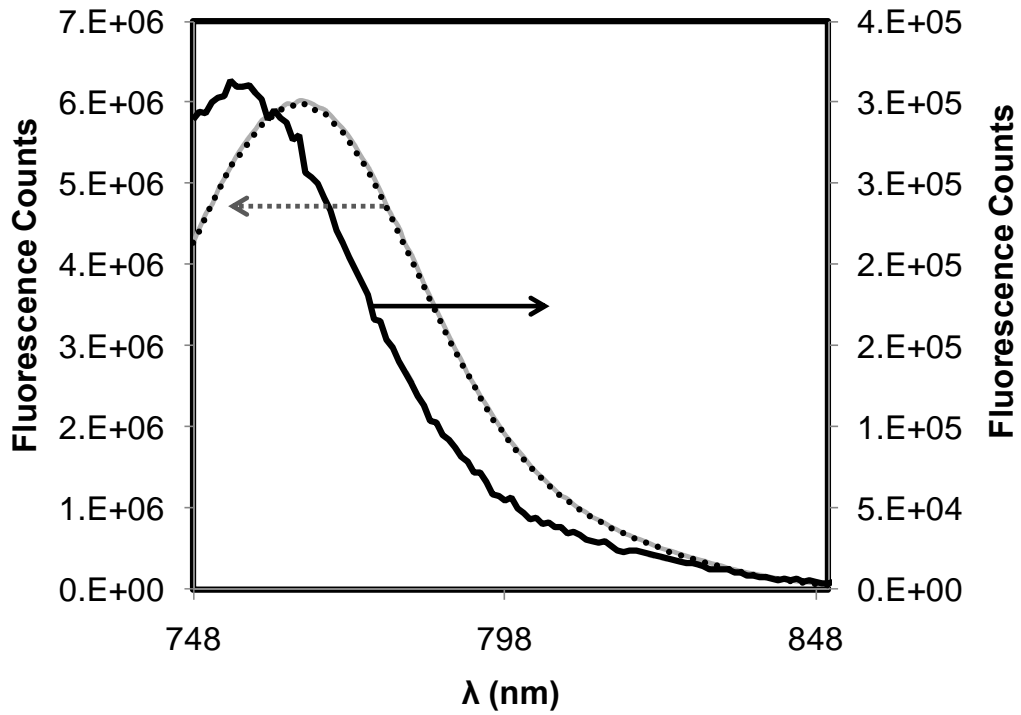


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