

Figure S1 Infrared spectra of europium hybrid materials.

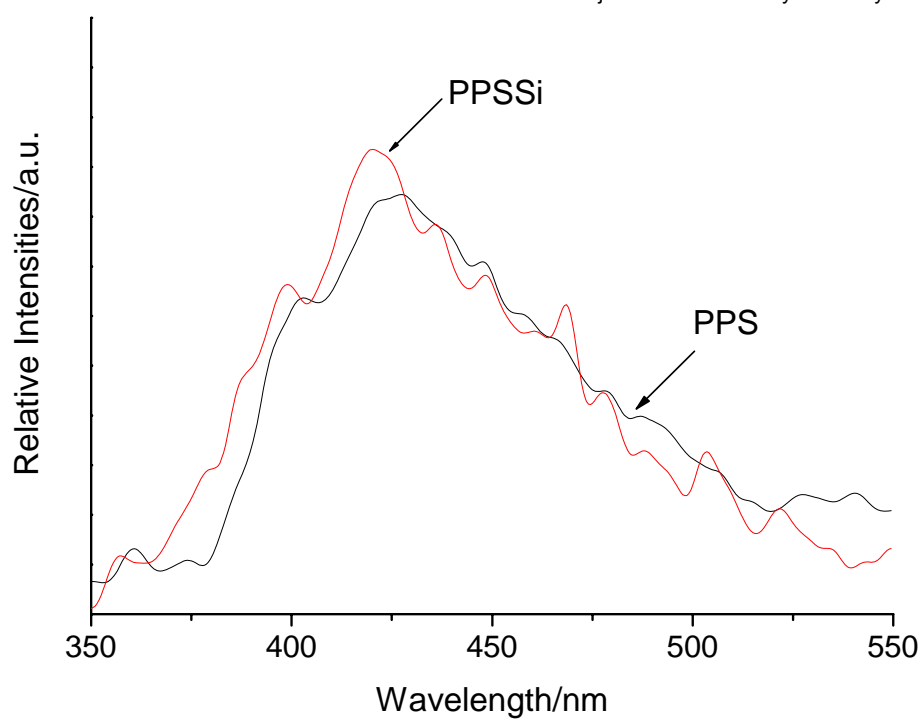


Figure S2 Phosphorescence spectra of PPS and the precursor PPSSi.

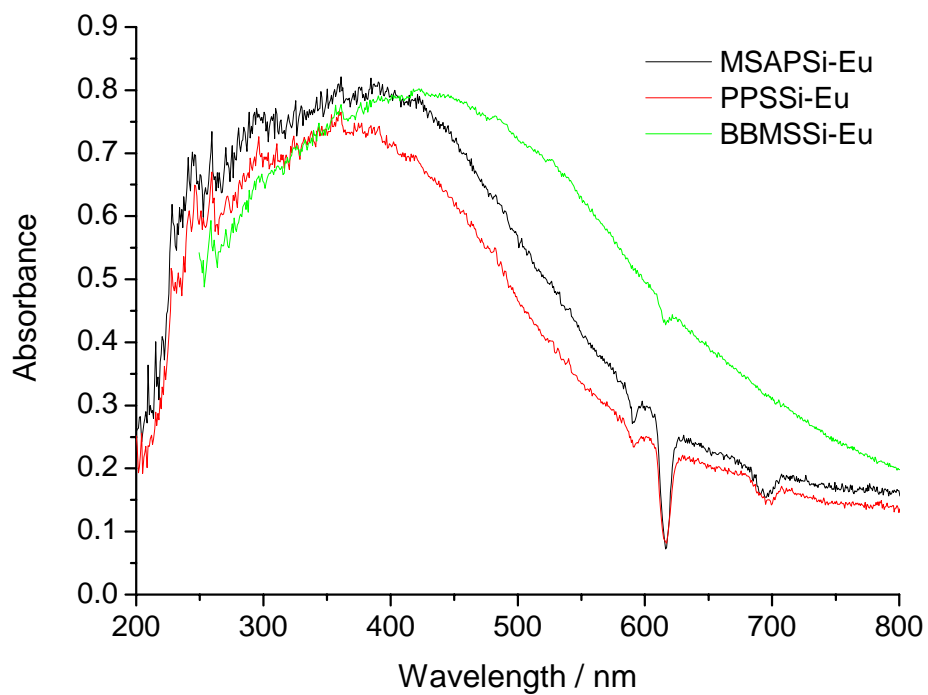


Figure S3 Ultraviolet-visible diffuse reflection absorption spectra of the europium hybrid materials.

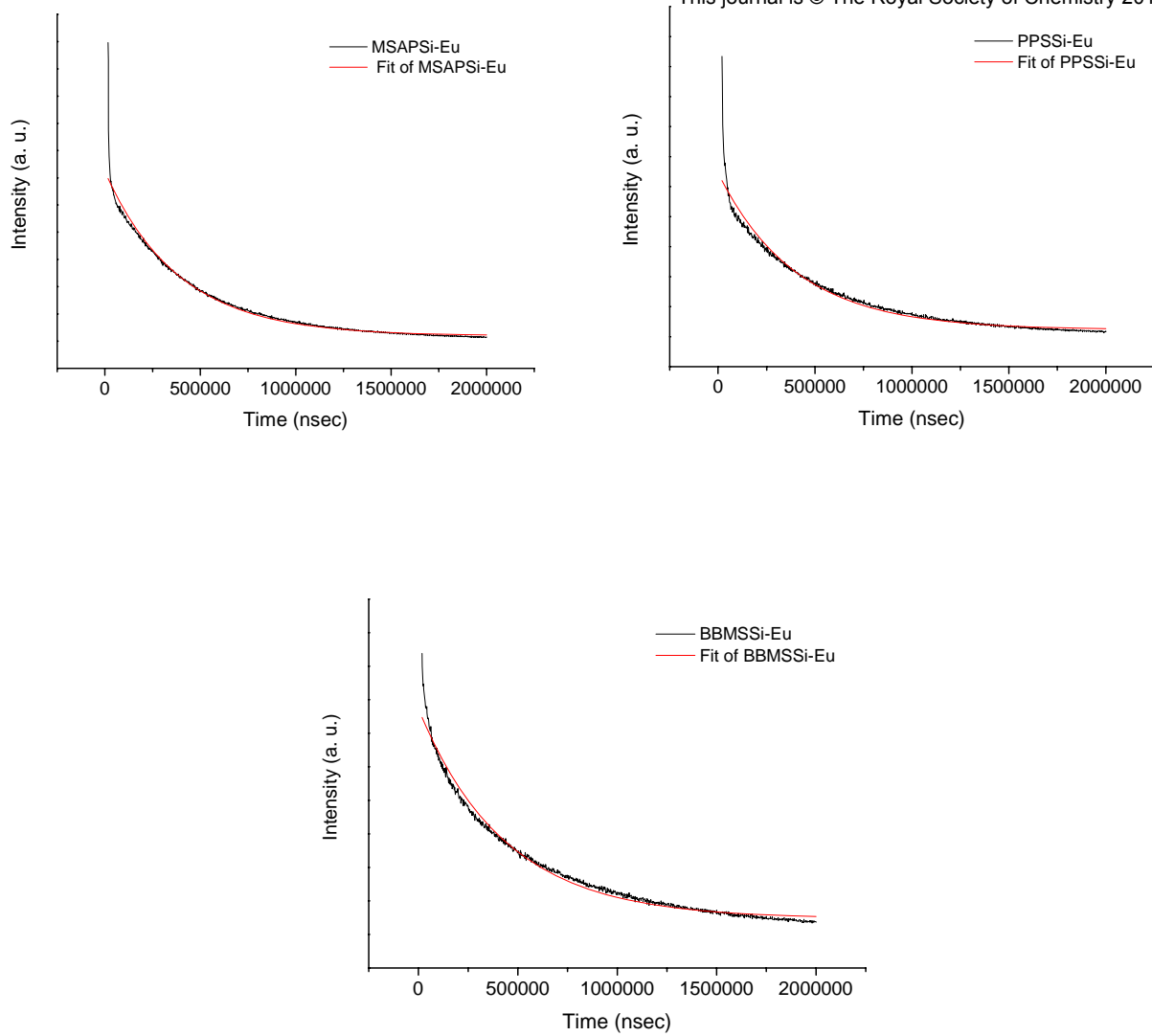


Figure S4 The emission decay curves and the fit curves of the europium hybrid materials.

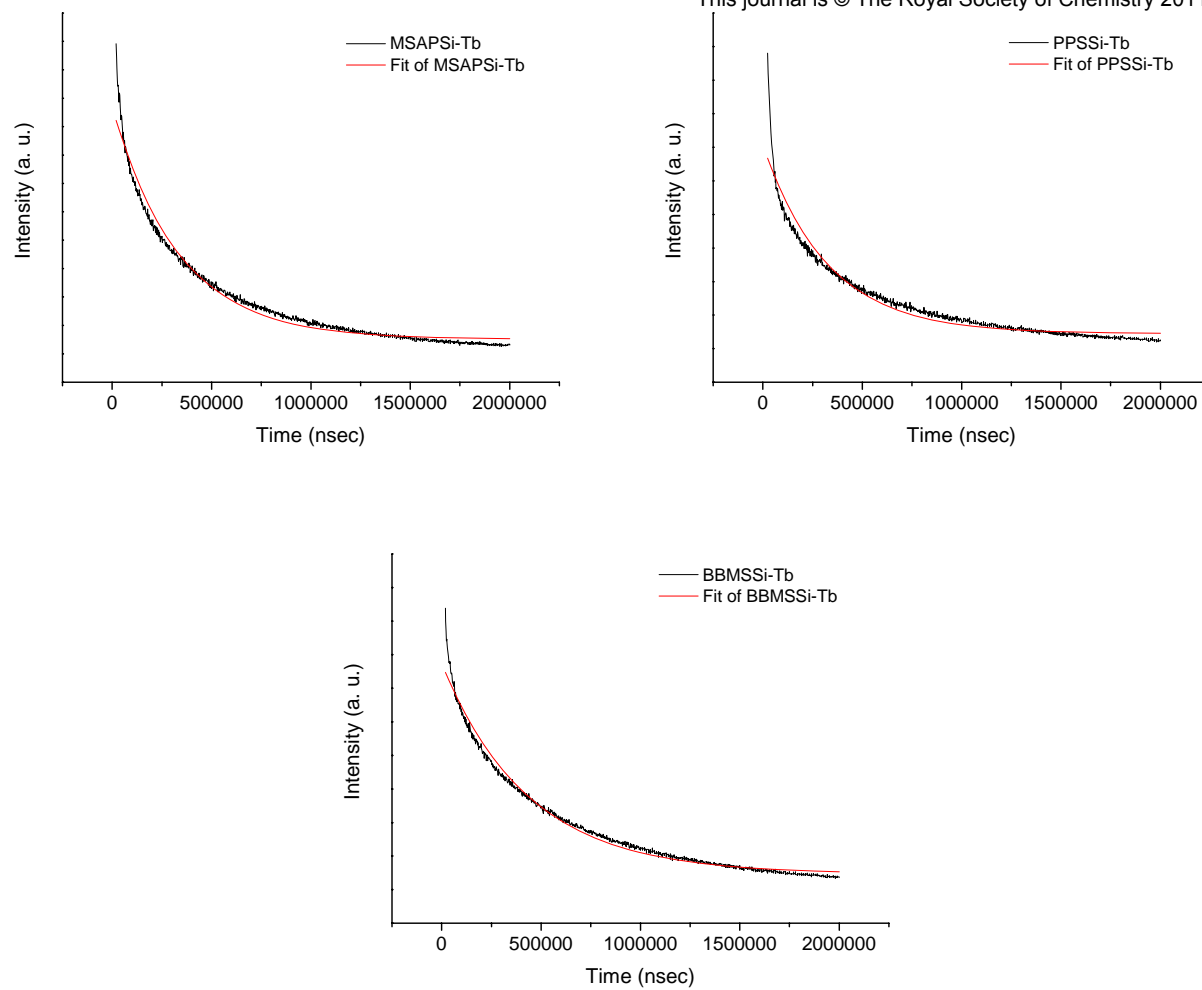


Figure S5 The emission decay curves and the fit curves of the terbium hybrid materials.

Assignment (cm ⁻¹)	v _{S=O}	v _{C=O}	v _{C-H(CH₂)}	v _{N-H}	v _{Si-C}	v _{Si-O}
MSAP	1029	1672	2941			
MSAPSi		1663	2974, 2927, 2887	3348	1197	
MSAPSi-Eu		1647	2932, 2864		1205	1050
PPS	1053	1669	2963			
PPSSi		1652	2968, 2882	3332	1182	
PPSSi-Eu		1636	2928, 2861		1201	1040
BBMS	1039	1690	2952			
BBMSSi		1684	2975, 2928, 2887	3339	1192	
BBMSSi-Eu		1670	2933, 2874		1206	1039

Table S2 Triple state energies of organic ligands and their energy transfer with rare earth ions

Electronic Supplementary Information for Dalton Transactions
This journal is © The Royal Society of Chemistry 2011

	Triplet state energies (cm ⁻¹)	$\Delta E(\text{Tr-Eu}^{3+})$ (cm ⁻¹)	$\Delta E(\text{Tr-Tb}^{3+})$ (cm ⁻¹)
MSAP	22727	5462	2227
MSAPSi	23095	5830	2595
PPS	23364	5099	2864
PPSSi	23866	6601	3366
BBMS	21053 ^[23]	3812	553
BBMSSi	21476	4211	976