

Supplementary Table 1. Solvent Parameters and Transition Energies for Bands I and II for $[\text{Mn}(\text{II})_5\text{Mn}(\text{II})_4](\text{ClO}_4)_{10}$ (**9**).

Solvent	D_s (temp. °C)	$\lambda_{\text{max}}, \text{nm} (E_{\text{abs}}, \text{cm}^{-1})$		e (Band I)/e (Band II)
		Band I	Band II	
Acetone	20.70 (25)	988 (10119)	687 (14548)	0.92
Nitromethane	36.15 (22)	1010 (9894)	693 (14418)	0.99
Acetonitrile	37.50 (20)	1004 (9957)	700 (14275)	1.04
Dimethyl Sulfoxide	46.68 (20)	988 (10119)	715 (13984)	1.03
Water	80.10 (20)	1007 (9925)	696 (14361)	1.07