

Supporting Information

for

Light-Induced Charge Separation in Photosystem I from Different Biological Species Characterized by Multifrequency EPR

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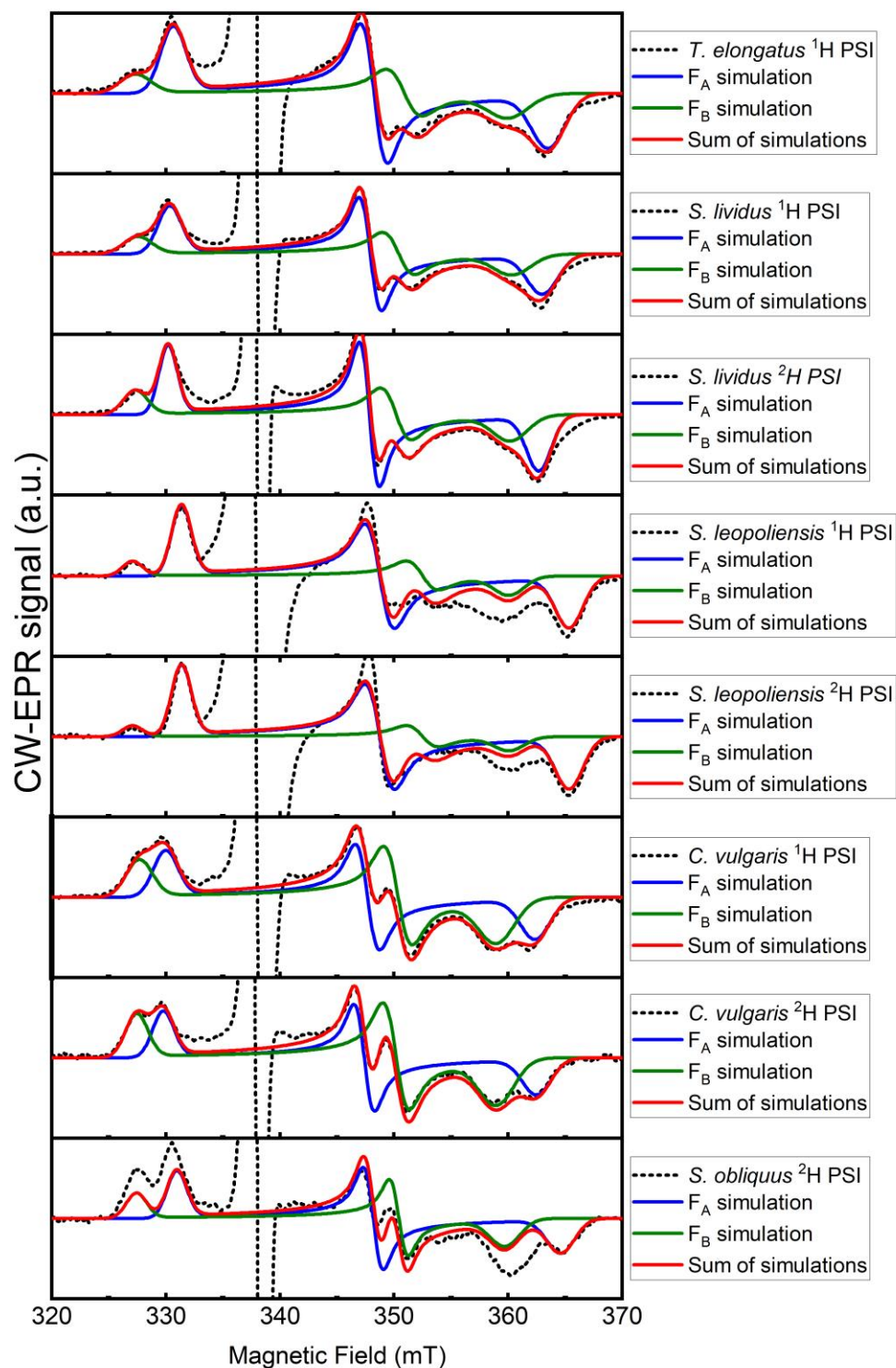


Figure S1: Experimental and simulated continuous wave (cw) X-band (9.5 GHz) EPR spectra of iron sulfur clusters, F_A and F_B in various Photosystem I samples, recorded after illumination at 10 K.

Sample	F _A						F _B						F _A /F _B
	g _x	g _y	g _z	H _x (MHz)	H _y (MHz)	H _z (MHz)	g _x	g _y	g _z	H _x (MHz)	H _y (MHz)	H _z (MHz)	
<i>T. elongatus</i> ¹ H PSI	2.048	1.945	1.863	75	59	89	2.069	1.930	1.881	91	77	107	2.7
<i>S. lividus</i> ¹ H PSI	2.050	1.946	1.865	70	49	82	2.068	1.933	1.879	84	69	100	2.0
<i>S. lividus</i> ² H PSI	2.050	1.947	1.867	55	43	71	2.069	1.933	1.879	71	67	94	2.7
<i>S. leopollensis</i> ¹ H PSI	2.044	1.942	1.854	58	64	74	2.070	1.921	1.880	60	70	80	3.6
<i>S. leopollensis</i> ² H PSI	2.044	1.942	1.854	58	64	74	2.070	1.921	1.880	60	90	80	3.6
<i>C. vulgaris</i> ¹ H PSI	2.052	1.948	1.869	72	53	80	2.067	1.933	1.886	78	62	97	1.0
<i>C. vulgaris</i> ² H PSI	2.054	1.949	1.868	63	45	77	2.068	11.934	1.886	67	57	94	0.9
<i>S. Obliquus</i> ² H PSI	2.046	1.945	1.853	58	44	77	2.067	1.932	1.880	60	41	80	1.3

Table S1: Simulation parameters of the [4Fe-4S] cluster F_A and F_B, and their relative contribution to the EPR spectrum FA/FB (errors vary between species but do not exceed 30%).