XVI. Appendix Table 4: Catalyst references and properties

No.	Photoredox Catalyst	Local λ max (nm)	*Ered (V vs. SCE)	Ered (V vs. SCE)	*Eox (V vs. SCE)	Eox (V vs. SCE)	Product Number	Reference for catalyst properties	Reference for catalyst use
1	$[Ru(bpy)_3](PF6)_2$	452	0.77	-1.33	-0.81	1.29	**754730**	*Chem. Rev.* **2013**, *113*, 5322	*Science* **2008**, *322*, 77
2	$[Ru(phen)_3]Cl_2 \bullet H_2O$	422	0.82	-1.36	-0.87	1.26	**343714**	*Chem. Rev.* **2013**, *113*, 5322	*Nature* **2011**, *480*, 224
3	$[Ru(bpm)_3]Cl_2$	454	0.99	-0.91	-0.21	1.69	**747785**	*Chem. Rev.* **2013**, *113*, 5322	*Chem. Sci.* **2012**, *3*, 2807
4	$[Ru(bpz)_3](PF6)_2$	443	1.45	-0.8	-0.26	1.86	**747777**	*Chem. Rev.* **2013**, *113*, 5322	*J. Am. Chem. Soc.* **2011**, *133*, 19350
5	fac-$Ir(ppy)_3$	375	0.31	-2.19	-1.73	0.77	**694924**	*Chem. Rev.* **2013**, *113*, 5322	*Nature Chem.* **2012**, *4*, 85
6	fac-$Ir(dFppy)_3$	346	0.77	-2	-1.46	1.29	**900540**	*Inorg. Chem. Front.* **2014**, *1*, 562, *J. Am. Chem. Soc.* **2003**, *125*, 7377	*Nature* **2011**, *480*, 224
7	$[Ir(dmppy)_2(dtbbpy)]PF_6$	--	0.55	-1.52	-0.87	1.21	**N/A**	*J. Am. Chem.* Soc. **2014**, *136*, 6858	*J. Am. Chem. Soc.* 2014, *136*, 6858
8	$[Ir(ppy)_2(dtbbpy)]PF_6$	380	0.66	-1.51	-0.96	1.21	**747769**	*Chem. Rev.* **2013**, *113*, 5322	*J. Am. Chem. Soc.* **2013**, *135*, 17735
9	$[Ir[Fmppy]_2(dtbbpy)]PF_6$	--	0.77	-1.5	-0.94	1.33	**N/A**	*Chem. Mater.* **2005**, *17*, 5712	*Chem. Mater.* **2005**, *17*, 5712
10	$[Ir[dF(Me)ppy]_2(dtbbpy)]PF_6$	360	0.97	-1.44	-0.92	1.49	**901409**	*Chem. Mater.* **2005**, *17*, 5712,*Inorg. Chem.* **2011**, *50*, 11514	*Science* **2017**, *355*, 727
11	$[Ir[dFppy]_2(dtbbpy)]PF_6$	365	1.14	-1.42	-0.96	1.6	**901368**	*J. Organo. Met. Chem.* **2015**, *776*, 51, *J. Mater. Chem. C* **2016**, *4*, 3726, *J. Am. Chem. Soc.* **2016**, *138*, 13862	*J. Am. Chem. Soc.* **2016**, *138*, 13862
12	$[Ir[dF(Cf_3)ppy]_2(dtbbpy)]PF_6$	380	1.21	-1.37	-0.89	1.69	**747793**	*Chem. Rev.* **2013**, 113, 5322 *Chem. Mater.* **2005**, 17, 5712	*Science* **2014**, *345*, 437
13	$[Ir[dF(Cf_3)ppy]_2(bpy)]PF_6$	379	1.32	-1.37	-1	1.69	**804215**	*Inorg. Chem. Front.* **2014**, *1*, 562	*Science* **2014**, *345*, 433
14	$[Ir[dF(Cf_3)ppy]_2(5,5'\text{-}dCf_3\text{-}bpy)]Pf_6$	--	1.68	-0.69	-0.43	1.94	**N/A**	*Nature* **2016**, *539*, 268	*Nature* **2016**, *539*, 268
15	$[Cr(Ph_2phen)_3](Bf_4)_3$	300-400	1.4	-0.27	--	--	**N/A**	*Angew. Chem. Int. Ed.* **2015**, 54, 6506	*Angew. Chem. Int. Ed.* **2015**, *54*, 6506
16	Rose Bengal [$RB\text{-}Na_2$] (T1)	549	0.81	-0.99	-0.96	0.84	**330000**	*Chem. Rev.* **2016**, *116*, 10075	*Green Chem.* **2012**, *14*, 1293
17	Eosin Y [$EY\text{-}Na_2$] (T1)	520	0.83	-1.08	-1.15	0.76	**E4382**	*Chem. Rev.* **2016**, *116*, 10075	Adv. Synth. Catal. **2015**, *357*, 2050
18	Rhodamine 6G [Rh6G] (S1)	530	1.18	-1.14	-1.09	1.23	**252433**	*Chem. Rev.* **2016**, *116*, 10075	*J. Am. Chem. Soc.* D **1969**, 6, 251
19	Rhodamine B [RhB] (S1)	550	1.26	-0.96	-1.31	0.91	**83689**	*Chem. Rev.* **2016**, *116*, 10075	*Synlett* **2015**, 26, 265
20	9,10-Dicyanoanthracene [DCA]	422	1.99	-0.91	--	--	**459852**	*Chem. Rev.* **2016**, *116*, 10075	*J. Am. Chem. Soc.* **1988**, *110*, 3677
21	1,2,3,5-Tetrakis(carbazol-9-yl)-4,6-dicyanobenzene [4CzIPN]	435	1.35	-1.21	-1.04	1.52	**901817**	*ACS Catal.* **2016**, *6*, 873	*ACS Catal.* **2016**, *6*, 873
22	Mes-(MeO)4Acr-Ph-Bf_4	412	1.62	-0.84	--	--	**900693**	*J. Org. Chem.* **2016**, *81*, 7244	*J. Org. Chem.* **2016**, *81*, 7244
23	Mes-(MeO)4Acr-Ar-Bf_4, Ar = 3,5-dimethoxyphenyl	414	1.65	-0.82	--	--	**900694**	*J. Org. Chem.* **2016**, *81*, 7244	*J. Org. Chem.* **2016**, *81*, 7244
24	Mes-Acr-Me-Bf_4	425	2.08	-0.57	--	--	**794171**	*Chem. Rev.* **2016**, *116*, 10075	*J. Am. Chem. Soc.* **2013**, *135*, 9588
25	Mes-(t-Bu)2Acr-Ph-Bf_4	420	2.08	-0.59	--	--	**900421**	*J. Org. Chem.* **2016**, *81*, 7244	*Science* **2015**, *349*, 1326
26	Mes-Me2Acr-Ph-Bf_4	438	2.09	-0.58	--	--	**793876**	Nature Chem. **2014**, *6*, 720, *Acc. Chem. Res.* 2016, *49*, 1997	*Nature Chem.* **2014**, *6*, 720
27	Mes-Acr-Ph-Bf_4	432	2.17	-0.5	--	--	**793221**	*Nature Chem.* **2014**, 6, 720, Acc. Chem. Res. 2016, *49*, 1997	*Org. Lett.* **2015**, *17*, 1316
28	2,4,6-tris(4-methoxyphenyl) pyrylium-Bf_4 [p-MeO-TPT]	470	1.84	-0.5	--	--	**900692**	*Chem. Ber.* **1993**, *126*, 1671	*Chem. Sci.* **2013**, *4*, 2625
29	2,4,6-tri-p-tolylpyrylium-Bf_4 [p-Me-TPT]	444	2.13	-0.42	--	--	**900685**	*Chem. Ber.* **1993**, *126*, 1671	*J. Am. Chem. Soc.* **2015**, *137*, 15684
30	2,4,6-Triphenylpyrylium-Bf_4 [TPT]	416	2.39	-0.27	--	--	**272345**	*Chem. Ber.* **1993**, *126*, 1671	*Chem. Ber.* **1993**, *126*, 1671
31	10-Phenylphenothiazine [PTh]	<300	--	--	-2.1	0.68	**903167**	*Chem. Rev.* **2016**, *116*, 10075	*J. Am. Chem. Soc.* **2014**, *136*, 16096