Electronic Supporting Information

Anionic cyclometallated Pt(II) square planar complexes. New sets of highly luminescent compounds

Loredana Ricciardi, ^a Massimo La Deda, ^{a,b} Andreea Ionescu, *^b Nicolas Godbert, ^{a,b}

Iolinda Aiello,^{a,b} and Mauro Ghedini^{a,b}

^aCNR NANOTEC-Istituto di Nanotecnologia U.O.S. Cosenza, 87036 Arcavacata di Rende (CS), Italy, UOS di Cosenza Ponte Pietro Bucci Cubo 31/C, 87036 Rende (CS), Italy

^bMAT_INLAB (Laboratorio di Materiali Molecolari Inorganici), Centro di Eccellenza CEMIF.CAL, LASCAMM CR-INSTM, Unità INSTM della Calabria, Dipartimento di Chimica e Tecnologie Chimiche, Università della Calabria, I-87036 Arcavacata di Rende (CS), Italy

Table S1. Emission quantum yields of 1, 5 in frozen DMSO solution $(1 \cdot 10^{-5} \text{M})$ at T=4°C

Compound	Φ(%)	
1	1.9	
5	0.10	

Molar concentration	Lifetime, $\tau(\alpha)/ns(\%)$
3.4.10-4	163.3(3.55),
	445.3(96.45)
$1.7 \cdot 10^{-4}$	174.5(5.89),
	415.5(94.11)
8.6.10-5	201.2(5.53),
	445.1(94.47)
4.3.10-5	263.7(13.17),
	458.6(86.83)
2.1.10-5	271.1(13.26),
	463.5(86.74)
1.10-5	331.1(28.43),
	471.2(71.57)
5.3.10-6	169.2(4.25),
	435.1(95.75)
2.6.10-6	118.2(2.52),
	428.7(97.48)
1.3.10-6	15.1(0.95),
	424.2(99.05)

Table S2. Lifetime data of complex **3** in DMSO solution at 298K at different concentration (Excitation wavelength: 379 nm)



Figure S1. Emission spectra of complex **3** in DMSO solution at 298K at different concentration (Excitation wavelength: 379 nm)



Figure S2. Absorption spectra of complex 3 in DMSO solution at 298K at different concentration

Compound	Х	У
1	0.28	0.59
2	0.23	0.35
3	0.54	0.45
4	0.27	0.54
5	0.33	0.51
6	0.29	0.41
7	0.48	0.51
8	0.41	0.55

Table S3. CIE chromaticity coordinates of 1-8 in the solid phase























