

Table 1 Redox potentials of Ru complexes

Complex	$E_{1/2} / \text{V}^{\text{a}}$	
	Ru ^{III/II}	L ^{0/-}
1	-0.15	-2.01
2	0.05	-1.97 ^b
3	0.44	-1.71 ^b , -1.95 ^b

^a Measured in an acetonitrile solution of [(*n*-Bu)₄N][PF₆] (0.1 M). Potentials in V vs. Ag⁺/Ag.

^b Irreversible peak potential.

Supplementary material:

Table S1 Crystal data and details of the structure refinements for **1**, **2**, **3**, and **5**

	1 ·0.5MeCN	2 ·1.5Et ₂ O ^a	3	5
Formula	C ₂₈ H _{25.5} F ₆ N _{7.5} PRu	C ₃₃ H ₃₅ F ₆ N ₇ O _{1.5} PRu	C ₂₆ H ₂₄ F ₁₂ N ₈ P ₂ Ru	C ₂₇ H ₂₂ F ₆ N ₇ PRu
Formula Weight	713.09	799.72	839.53	690.55
Crystal Color	red	red	red	red
Crystal System	monoclinic	monoclinic	monoclinic	monoclinic
Lattice Parameters				
<i>a</i> /Å	15.7319(19)	14.580(7)	17.595(7)	17.876(5)
<i>b</i> /Å	27.039(3)	14.084(6)	20.288(8)	13.583(4)
<i>c</i> /Å	26.819(3)	36.532(17)	9.032(4)	22.628(6)
β /°	92.1710(5)	103.512(5)	113.6524(15)	97.1482(17)
<i>V</i> / Å ³	11400(2)	7294(6)	2953(2)	5452(3)
Space Group	<i>P</i> 2 ₁ / <i>n</i> (No. 14)	<i>P</i> 2 ₁ / <i>c</i> (No. 14)	<i>C</i> 2/ <i>c</i> (No. 15)	<i>P</i> 2 ₁ / <i>n</i> (No. 14)
<i>Z</i> value	16	8	4	8
μ (MoK α) / cm ⁻¹	6.800	5.426	7.516	7.075
<i>F</i> (000)	5744	3256	1672	2768
No. Reflections				
Measured				
Total	86254	38231	10128	39968
Unique	25335	38200	3318	12138
Observations	25335	38200	3318	12138
	all data	all data	all data	all data
<i>D</i> _{calc} /g cm ⁻³	1.662	1.518	1.888	1.683
Structure Solution	Direct Methods	Direct Methods	Direct Methods	Direct Methods
	(SIR92)	(SIR92)	(SIR92)	(SIR92)
Reflection/Parameter	15.19 ^b	45.86 ^c	13.77	13.01
Ratio				
<i>R</i> ₁	0.0464 (<i>I</i> > 2.0 σ (<i>I</i>))	0.1552 (<i>I</i> > 2.0 σ (<i>I</i>))	0.0483 (<i>I</i> > 2.0 σ (<i>I</i>))	0.0397 (<i>I</i> > 2.0 σ (<i>I</i>))
<i>R</i>	0.0797 (all data)	0.1788 (all data)	0.0524 (all data)	0.0739 (all data)
<i>R</i> _w	0.1122 (all data)	0.3160 (all data)	0.0726 (all data)	0.0442 (all data)
Goodness of Fit	1.001	1.264	0.938	0.942
Indicator				

^a Despite several attempts, X-ray quality single crystals of **2** could not be obtained.

^b Involving the four crystallographically independent molecules of **1**.

^c Involving the two crystallographically independent molecules of **2**.