

## Supporting Information

# Pt(II)- and Pt(IV)-Porphyrin Pincer Complexes: Synthesis, Structures, and Reactivity

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\* = solvents and impurities

Py = pyridyl group.

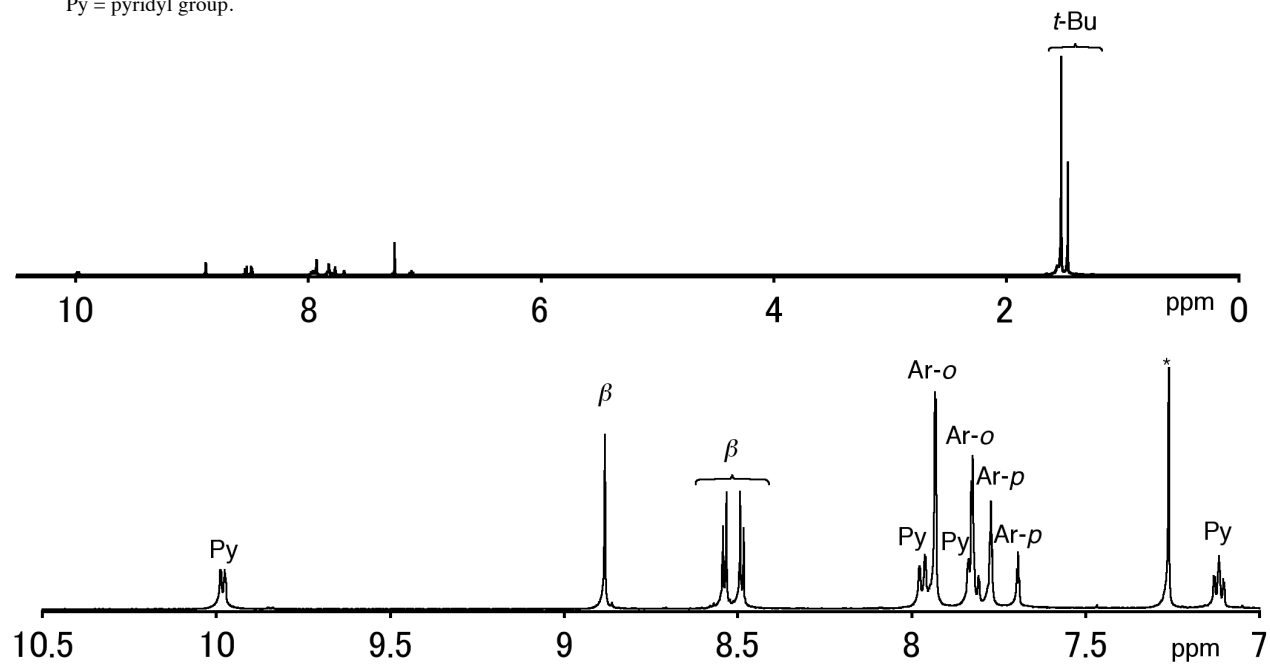


Figure S1. <sup>1</sup>H NMR spectrum of **2** in CDCl<sub>3</sub>.

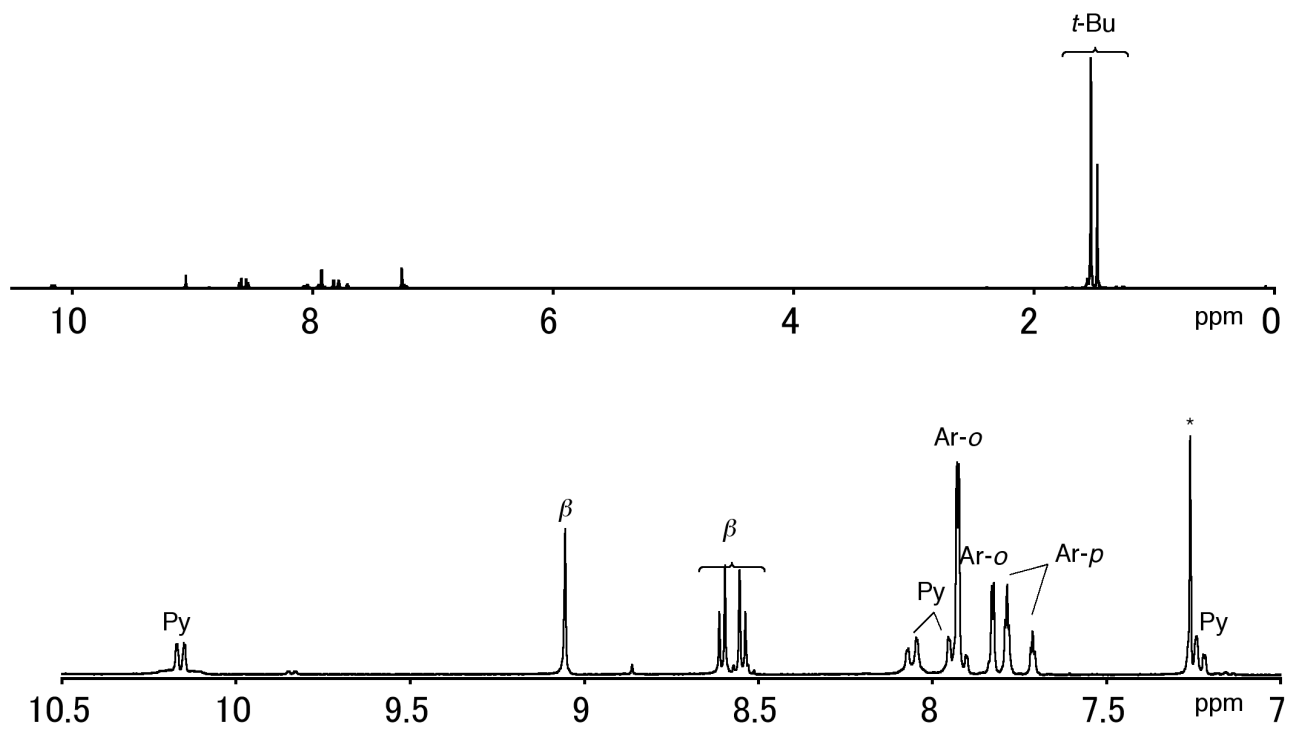
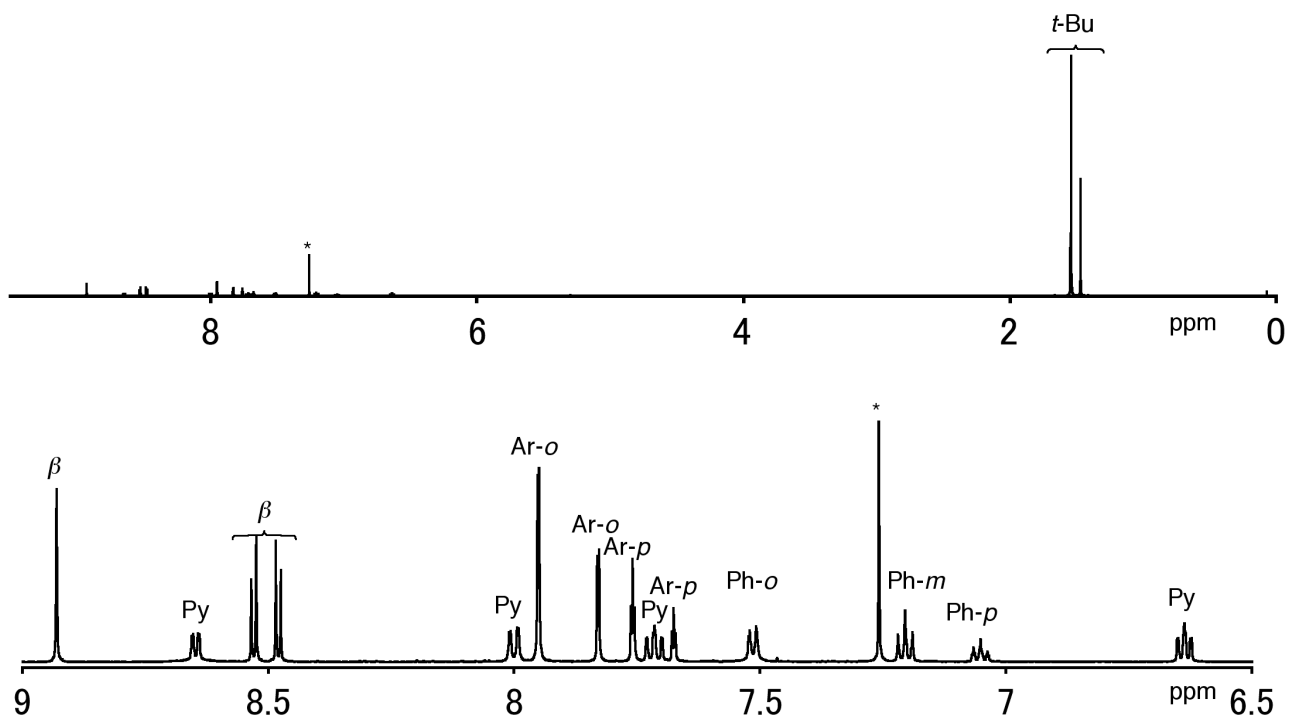
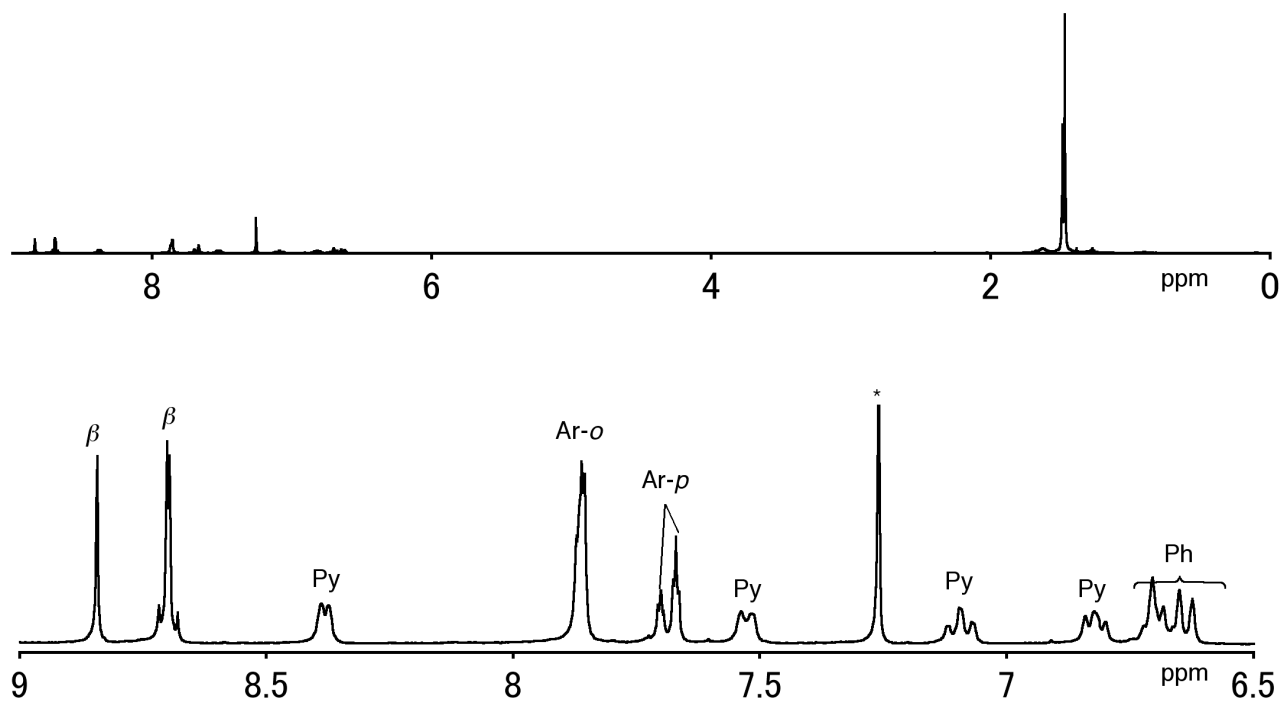


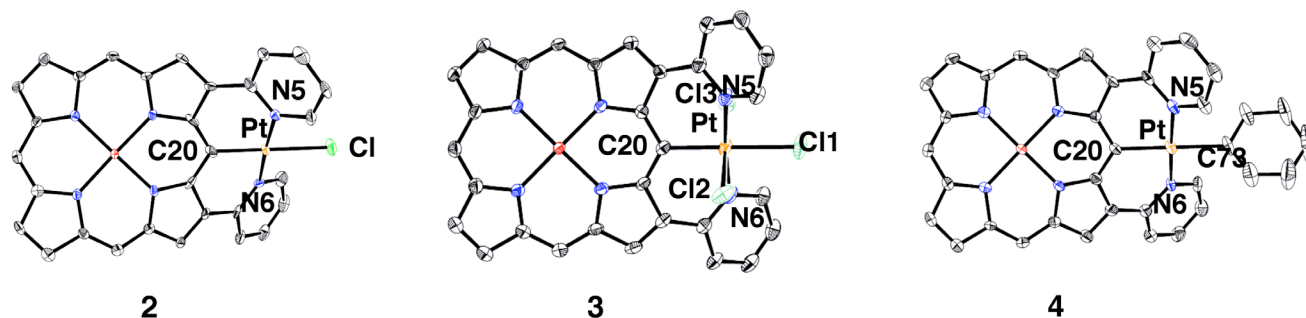
Figure S2. <sup>1</sup>H NMR spectrum of **3** in CDCl<sub>3</sub>.



**Figure S3.**  $^1\text{H}$ NMR spectrum of **4** in  $\text{CDCl}_3$ .

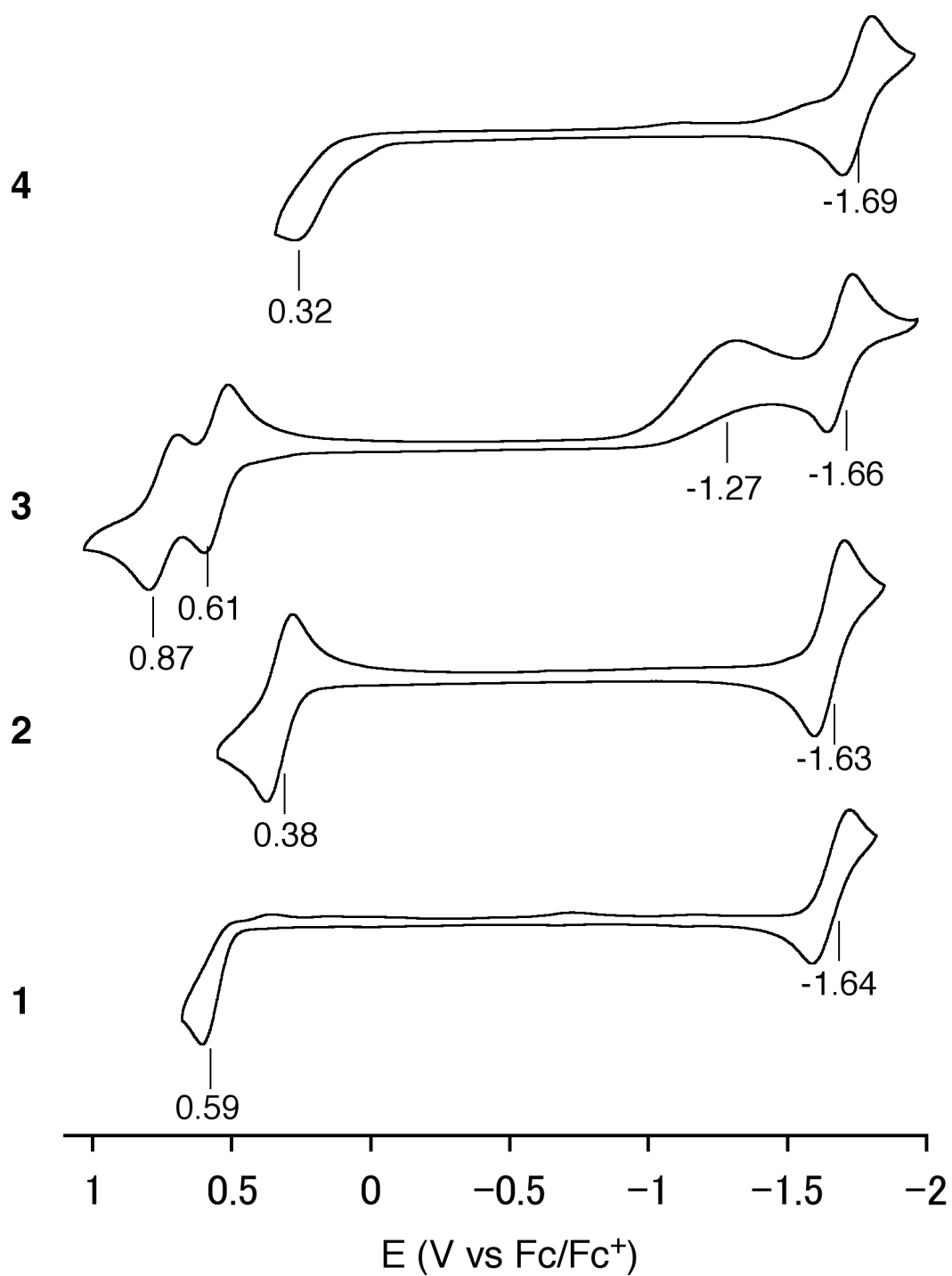


**Figure S4.**  $^1\text{H}$  NMR spectrum of **5** in  $\text{CDCl}_3$ .



**Table S1.** Selected bond lengths (Å) and angles (°)

2		3		4	
Pt–C20	1.957(9)	Pt–C20	2.025(4)	Pt–C20	2.028(6)
Pt–Cl	2.404(2)	Pt–Cl1	2.4235(12)	Pt–C73	2.097(4)
Pt–N5	2.024(8)	Pt–Cl2	2.3237(13)	Pt–N5	2.046(5)
Pt–N6	2.030(8)	Pt–Cl3	2.3187(13)	Pt–N6	2.038(5)
		Pt–N5	2.044(4)		
		Pt–N6	2.047(4)		
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C20–Pt–N5	91.6(4)	C20–Pt–N5	91.95(15)	C20–Pt–N6	91.5(2)
C20–Pt–N6	91.2(4)	C20–Pt–N6	93.35(16)	C20–Pt–N5	90.9(2)
N5–Pt–N6	176.5(3)	N5–Pt–N6	174.70(14)	N6–Pt–N5	177.11(18)
C20–Pt–Cl	178.7(3)	C20–Pt–Cl3	88.73(11)	C20–Pt–C73	178.5(2)
N5–Pt–Cl	89.3(2)	N5–Pt–Cl3	89.98(11)	N6–Pt–C73	89.9(2)
N6–Pt–Cl	87.9(2)	N6–Pt–Cl3	90.28(11)	N5–Pt–C73	87.7(3)
		C20–Pt–Cl2	90.33(11)		
		N5–Pt–Cl2	89.93(11)		
		N6–Pt–Cl2	89.90(11)		
		Cl3–Pt–Cl2	179.05(5)		
		C20–Pt–Cl1	179.01(11)		
		N5–Pt–Cl1	87.54(10)		
		N6–Pt–Cl1	87.16(11)		
		Cl3–Pt–Cl1	90.42(5)		
		Cl2–Pt–Cl1	90.52(5)		



**Figure S5.** Cyclic voltammograms ( $0.1 \text{ V}\cdot\text{s}^{-1}$ ) of **1**, **2**, **3**, and **4** in  $\text{CH}_2\text{Cl}_2$  ( $0.1 \text{ M TBAPF}_6$ ). working electrode: Pt, counter electrode: Pt, reference electrode:  $\text{Ag}/\text{AgClO}_4$ .