

Wire-Like PtC≡CC≡CC≡CC≡CPt Moieties Surrounded by Double-Helical  
"Insulation": New Motifs Featuring P(CH<sub>2</sub>)<sub>20</sub>P and P(CH<sub>2</sub>)<sub>4</sub>O(CH<sub>2</sub>)<sub>2</sub>O(CH<sub>2</sub>)<sub>4</sub>P  
Linkages

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**General Data.** Reactions were conducted under N<sub>2</sub> unless noted, but workups of platinum complexes were carried out in air. Commercial chemicals were treated as follows: THF, distilled from Na/benzophenone; CH<sub>2</sub>Cl<sub>2</sub>, distilled from CaH<sub>2</sub>; acetone, distilled from K<sub>2</sub>CO<sub>3</sub>; HNEt<sub>2</sub>, distilled from KOH; hexanes, distilled; toluene, distilled; methanol, distilled; ethanol, distilled; ethyl acetate, distilled; TMEDA (Aldrich) distilled; HO(CH<sub>2</sub>)<sub>2</sub>CH=CH<sub>2</sub> (Aldrich) distilled from Na, Br(CH<sub>2</sub>)<sub>4</sub>Br (Acros) distilled; Ru(=CHPh)(PCy<sub>3</sub>)<sub>2</sub>(Cl)<sub>2</sub> (Aldrich), Ru(=CHPh)(H<sub>2</sub>IMes)(PCy<sub>3</sub>)-(Cl)<sub>2</sub> (Aldrich), 10% Pd/C (Acros), CuI (Aldrich, 99.999%), ClCH<sub>2</sub>CH<sub>2</sub>Cl (98% Fluka), CuCl (Aldrich, 99.99%), Pd/C (10% Lancaster), alumina (neutral, Fluka), silica gel 60M (Macherey-Nagel), Celite®535 (Fluka), and other materials, used as received.

NMR spectra were recorded on standard 300-400 MHz spectrometers. Mass spectra were recorded on a Micromass Zabspec instrument. IR and UV-visible spectra were recorded on ASI ReactIR-1000 and Shimazu model 3102 spectrometers. DSC and TGA data were recorded on a Mettler-Toledo DSC-821 instrument and treated by standard methods.<sup>s1</sup> Microanalyses were conducted with a Carlo Erba EA1110 instrument.

**trans-(C<sub>6</sub>F<sub>5</sub>)(Ph<sub>2</sub>P(CH<sub>2</sub>)<sub>9</sub>CH=CH<sub>2</sub>)<sub>2</sub>PtCl (1a).**<sup>s2</sup> A Schlenk flask was charged with [Pt( $\mu$ -Cl)(C<sub>6</sub>F<sub>5</sub>)(tht)]<sub>2</sub> (3.000 g, 3.088 mmol),<sup>s3</sup> Ph<sub>2</sub>P(CH<sub>2</sub>)<sub>9</sub>CH=CH<sub>2</sub> (4.286 g, 12.68 mmol),<sup>s2</sup> and CH<sub>2</sub>Cl<sub>2</sub> (150 mL) with stirring. After 20 h, the solvent was removed by rotary evaporation and the residue chromatographed on a silica gel column (20 × 2.5 cm, 70:30 v/v hexanes/CH<sub>2</sub>Cl<sub>2</sub>). The solvent was removed from the product-containing fractions by oil pump vacuum to give **1a** as a colorless oil (6.280 g, 5.867 mmol; 95%). Calcd for C<sub>52</sub>H<sub>62</sub>ClF<sub>5</sub>P<sub>2</sub>Pt: C, 58.13; H, 5.82. Found: C, 57.84; H, 5.40.

NMR ( $\delta$ , CDCl<sub>3</sub>),<sup>s4</sup> <sup>1</sup>H 7.50-7.46 (m, 8H of 4 Ph), 7.33-7.29 (m, 4H of 4 Ph), 7.25-7.22 (m, 8H of 4 Ph), 5.79 (ddt, 1H, <sup>3</sup>J<sub>HHtrans</sub> = 17.0 Hz, <sup>3</sup>J<sub>HHcis</sub> = 10.2 Hz, <sup>3</sup>J<sub>HH</sub> = 6.7 Hz, CH=CH<sub>2</sub>), 4.97 (br d, 1H, <sup>3</sup>J<sub>HHtrans</sub> = 17.0 Hz, CH=CH<sub>EHZ</sub>), 4.91 (br d, 1H, <sup>3</sup>J<sub>HHcis</sub> = 10.2 Hz, CH=CH<sub>EHZ</sub>), 2.58-2.55 (m, 4H, PCH<sub>2</sub>), 2.05-2.01 (m, 4H, CH<sub>2</sub>CH=), 1.89-1.87 (m, 4H, PCH<sub>2</sub>CH<sub>2</sub>) 1.41-1.27 (m, 24H, remaining CH<sub>2</sub>); <sup>13</sup>C{<sup>1</sup>H}<sup>s5</sup> 139.2 (s, CH=), 133.0 (virtual t, <sup>2</sup>J<sub>CP</sub> = 5.8,<sup>s6</sup> o to P), 130.9 (virtual t, <sup>1</sup>J<sub>CP</sub> = 27.4 Hz, <sup>s6</sup> i to P), 130.2 (s, p to P), 127.9 (virtual t, <sup>3</sup>J<sub>CP</sub> = 5.1 Hz,<sup>s6</sup> m to P), 114.1 (s, CH=CH<sub>2</sub>), 33.8 (s, CH<sub>2</sub>CH=), 31.4 (virtual t, <sup>3</sup>J<sub>CP</sub> = 7.5 Hz,<sup>s6</sup> PCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>), 29.4 (s, double intensity, 2CH<sub>2</sub>), 29.2 (s, CH<sub>2</sub>), 29.1 (s, CH<sub>2</sub>), 28.9 (s, CH<sub>2</sub>), 26.0 (virtual t, <sup>1</sup>J<sub>CP</sub> = 17.0 Hz,<sup>s6</sup>

PCH<sub>2</sub>), 25.6 (s, PCH<sub>2</sub>CH<sub>2</sub>); <sup>31</sup>P{<sup>1</sup>H} 16.5 (s, <sup>1</sup>J<sub>PPt</sub> = 2659 Hz).<sup>s7</sup>

IR (cm<sup>-1</sup>, oil film), 3076 (vw), 2926 (m), 2853 (m), 1502 (s), 1463 (s), 1436 (m), 1104 (m), 1058 (m), 996 (w), 957 (vs), 919 (w), 803 (m), 737 (s), 691 (vs); MS,<sup>s8</sup> 1073 (M<sup>+</sup>, 5%), 1038 ([M-Cl]<sup>+</sup>, 100%), 870 ([M-Cl-C<sub>6</sub>F<sub>5</sub>]<sup>+</sup>, 30%).

**trans-(C<sub>6</sub>F<sub>5</sub>)(Ph<sub>2</sub>P(CH<sub>2</sub>)<sub>9</sub>CH=CH<sub>2</sub>)<sub>2</sub>Pt(C≡C)<sub>2</sub>H (2a).** A Schlenk flask was charged with **1a** (0.770 g, 0.717 mmol), CuI (0.027 g, 0.014 mmol), and HNEt<sub>2</sub> (46 mL) with stirring, and cooled to -45 °C. Then H(C≡C)<sub>2</sub>H (4 mL, 19.6 mmol, ≈ 4.9 M in THF)<sup>s9</sup> was added, and the mixture turned light yellow. The cold bath was allowed to warm to 10 °C over the course of 3 h, and was then removed. After an additional 2.5 h (orange supernatant/white precipitate), the solvent was removed by oil pump vacuum. The tan residue was extracted with toluene (3 × 3 mL). The combined extracts were filtered through an alumina column (4 × 2.5 cm), which was eluted with toluene. The solvent was removed from the filtrate/washings by oil pump vacuum to give **2a** as a yellow oil (0.667 g, 0.613 mmol; 80%). Calcd for C<sub>56</sub>H<sub>63</sub>F<sub>5</sub>P<sub>2</sub>Pt: C, 61.81; H, 5.84. Found: C, 61.66; H, 5.99.

NMR ( $\delta$ , CDCl<sub>3</sub>),<sup>s4</sup> <sup>1</sup>H 7.50-7.46 (m, 8H of 4 Ph), 7.33-7.20 (m, 12H of 4 Ph), 5.79 (ddt, 2H, <sup>3</sup>J<sub>HHtrans</sub> = 16.8 Hz, <sup>3</sup>J<sub>HHcis</sub> = 10.2 Hz, <sup>3</sup>J<sub>HH</sub> = 6.6 Hz, CH=CH<sub>2</sub>), 4.98 (br d, 2H, <sup>3</sup>J<sub>HHtrans</sub> = 16.8 Hz, CH<sub>E</sub>H<sub>Z</sub>), 4.90 (br d, 2H, <sup>3</sup>J<sub>HHcis</sub> = 10.2 Hz, CH<sub>E</sub>H<sub>Z</sub>) 2.60-2.54 (m, 4H, PCH<sub>2</sub>), 2.02-1.98 (m, 4H, CH<sub>2</sub>CH=), 1.78 (m, 4H, PCH<sub>2</sub>CH<sub>2</sub>), 1.63 (s, 1H, C≡CH), 1.36-1.26 (m, 24H, remaining CH<sub>2</sub>); <sup>13</sup>C{<sup>1</sup>H} 145.9 (dm, <sup>1</sup>J<sub>CF</sub> = 225 Hz *o* to Pt), 139.2 (s, CH=CH<sub>2</sub>), 136.3 (m, <sup>1</sup>J<sub>CF</sub> = 247 Hz, *m/p* to Pt), 133.0 (virtual t, <sup>2</sup>J<sub>CP</sub> = 5.9 Hz, <sup>s6</sup> *o* to P), 131.6 (virtual t, <sup>1</sup>J<sub>CP</sub> = 27.8 Hz, <sup>s6</sup> *i* to P), 130.2 (s, *p* to P), 127.9 (virtual t, <sup>3</sup>J<sub>CP</sub> = 5.1 Hz, <sup>s6</sup> *m* to P), 114.1 (s, CH=CH<sub>2</sub>), 97.1 (br s, PtC≡C), 92.3 (s, PtC≡C), 72.3 (s, C≡CH), 59.7 (s, C≡CH), 33.8 (s, CH<sub>2</sub>CH=), 31.2 (virtual t, <sup>3</sup>J<sub>CP</sub> = 7.6 Hz, <sup>s6</sup> PCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>), 29.43 (s, CH<sub>2</sub>), 29.41 (s, CH<sub>2</sub>), 29.1 (s, CH<sub>2</sub>), 28.9 (s, CH<sub>2</sub>), 28.2 (virtual t, <sup>1</sup>J<sub>CP</sub> 18.0 Hz, <sup>s6</sup> PCH<sub>2</sub>), 25.5 (virtual t, <sup>2</sup>J<sub>CP</sub> = 13.0 Hz, PCH<sub>2</sub>CH<sub>2</sub>); <sup>31</sup>P{<sup>1</sup>H} 14.1 (s, <sup>1</sup>J<sub>PPt</sub> = 2571 Hz).<sup>s7</sup>

IR (cm<sup>-1</sup>, oil film), v<sub>≡CH</sub> 3311 (w), v<sub>C≡C</sub> 2151 (m); MS,<sup>s8</sup> 1090 (M<sup>+</sup>, 60%), 1039 ([M-C<sub>4</sub>H]<sup>+</sup>, 100%), 869 ([M-C<sub>4</sub>H-C<sub>6</sub>F<sub>5</sub>]<sup>+</sup>, 40%).

**trans,trans-(C<sub>6</sub>F<sub>5</sub>)(Ph<sub>2</sub>P(CH<sub>2</sub>)<sub>9</sub>CH=CH<sub>2</sub>)<sub>2</sub>Pt(C≡C)<sub>4</sub>Pt(Ph<sub>2</sub>P(CH<sub>2</sub>)<sub>9</sub>CH=CH<sub>2</sub>)<sub>2</sub>(C<sub>6</sub>F<sub>5</sub>) (3a).** A two necked flask was charged with **2a** (0.350 g, 0.322 mmol), and acetone (15 mL), and fitted with a gas inlet needle and a condenser with circulating -18 °C ethanol. A Schlenk flask was

charged with CuCl (0.050 g, 0.51 mmol), and acetone (15 mL), and TMEDA (0.100 mL, 0.60 mmol) was added with stirring. After 0.5 h, stirring was halted (blue supernatant/yellow-green solid). Then O<sub>2</sub> was bubbled through the two necked flask with stirring and the solution was heated to 65 °C. The blue supernatant was added in portions over 2 h. After 2.5 h, the solvent was removed by rotary evaporation and oil pump vacuum. Toluene was added and the mixture was transferred to an alumina column (4 × 2.5 cm). The column was eluted with toluene until UV monitoring (fluorescence of spotted TLC plate) showed no absorbing material (ca. 40 mL). The solvent was removed by rotary evaporation. The residue was chromatographed on a silica gel column (20 × 2 cm, 70:30 v/v hexanes/CH<sub>2</sub>Cl<sub>2</sub>). The solvent was removed from the product-containing fractions by oil pump vacuum to give **3a** as a yellow oil (0.271 g, 0.125 mmol; 77%). Calcd for C<sub>112</sub>H<sub>124</sub>F<sub>10</sub>P<sub>4</sub>Pt<sub>2</sub>: C, 61.87; H, 5.74. Found: C, 61.61; H, 5.74.

NMR ( $\delta$ , CDCl<sub>3</sub>), <sup>s4</sup> <sup>1</sup>H 7.48-7.43 (m, 16H of 8 Ph), 7.32-7.30 (m, 8H of 8 Ph), 7.27-7.23 (m, 16H of 8 Ph), 5.81 (ddt, 4H, <sup>3</sup>J<sub>HHtrans</sub> = 17.0 Hz, <sup>3</sup>J<sub>HHcis</sub> 10.2 Hz, <sup>3</sup>J<sub>HH</sub> = 6.7 Hz, CH=CH<sub>2</sub>), 4.99 (br d, 2H, <sup>3</sup>J<sub>HHtrans</sub> = 17.1 Hz, CH=CH<sub>E</sub>H<sub>Z</sub>), 4.92 (br d, 2H, <sup>3</sup>J<sub>HHcis</sub> = 10.2 Hz, CH=CH<sub>E</sub>H<sub>Z</sub>), 2.63-2.50 (m, 8H, PCH<sub>2</sub>), 2.05-2.00 (m, 8H, CH<sub>2</sub>CH=), 1.73-1.72 (m, 8H, PCH<sub>2</sub>CH<sub>2</sub>), 1.36-1.27 (m, 48H, remaining CH<sub>2</sub>); <sup>13</sup>C{<sup>1</sup>H} 146.0 (dm, <sup>1</sup>J<sub>CF</sub> = 226 Hz, *o* to Pt), 139.2 (s, CH=CH<sub>2</sub>), 136.6 (m, <sup>1</sup>J<sub>CF</sub> = 241 Hz, *m/p* to Pt), 133.0 (virtual t, <sup>2</sup>J<sub>CP</sub> = 5.7 Hz, <sup>s6</sup> *o* to P), 131.2 (virtual t, <sup>1</sup>J<sub>CP</sub> = 27.9 Hz, <sup>s6</sup> *i* to P), 130.2 (s, *p* to P), 127.9 (virtual t, <sup>3</sup>J<sub>CP</sub> = 5.0 Hz, <sup>s6</sup> *m* to P), 114.1 (s, CH=CH<sub>2</sub>), 100.2 (br s, PtC≡C), 94.1 (s, PtC≡C), 63.7 (s, PtC≡CC), 57.9 (s, PtC≡CC≡C), 33.8 (s, CH<sub>2</sub>CH=), 31.3 (virtual t, <sup>3</sup>J<sub>CP</sub> = 7.6 Hz, <sup>s6</sup> PCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>), 29.42 (s, CH<sub>2</sub>), 29.35 (s, CH<sub>2</sub>), 29.14 (s, CH<sub>2</sub>), 29.07 (s, CH<sub>2</sub>), 28.90 (s, CH<sub>2</sub>), 28.12 (virtual t, <sup>1</sup>J<sub>CP</sub> = 18.0 Hz, <sup>s6</sup> PCH<sub>2</sub>), 25.4 (br s, PCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>); <sup>31</sup>P{<sup>1</sup>H} 14.1 (s, <sup>1</sup>J<sub>PPt</sub> = 2564 Hz). <sup>s7</sup>

IR (cm<sup>-1</sup>, oil film),  $\nu$ <sub>C≡C</sub> 2146 (m), 2003 (w); UV-vis (1.25 × 10<sup>-5</sup> M, CH<sub>2</sub>Cl<sub>2</sub>) nm ( $\varepsilon$ , M<sup>-1</sup>cm<sup>-1</sup>), 261 (67000), 292 (73000), 320 (91000), 353 (8000), 379 (3800), 411 (1700); MS, <sup>s8</sup> 2174 (M<sup>+</sup>, 20%), 1039 [(C<sub>6</sub>F<sub>5</sub>)<sub>2</sub>P(CH<sub>2</sub>)<sub>9</sub>CH=CH<sub>2</sub>)<sub>2</sub>Pt]<sup>+</sup>, 40%), 869 [(Ph<sub>2</sub>P(CH<sub>2</sub>)<sub>9</sub>CH=CH<sub>2</sub>)<sub>2</sub>Pt]<sup>+</sup>, 100%).

**Alkene Metathesis of **3a**.** A two necked Schlenk flask was charged with Ru(=CHPh)-(PCy<sub>3</sub>)<sub>2</sub>(Cl)<sub>2</sub> (ca. half of 0.009 g, 0.0098 mmol), CH<sub>2</sub>Cl<sub>2</sub> (250 mL), and **3a** (0.327 g, 0.150 mmol), and fitted with a condenser. The solution was refluxed. After 2 h, the remaining catalyst was added.

After an additional 2 h, the solvent was removed by oil pump vacuum, and CH<sub>2</sub>Cl<sub>2</sub> (2 × 3 mL) was added to the oil. The sample was transferred in two portions to an alumina column (3 × 2.5 cm), which was eluted with CH<sub>2</sub>Cl<sub>2</sub> until UV monitoring showed no absorbing material (ca. 40 mL). The solvent was removed by oil pump vacuum to give a mixture of cyclized products as a yellow oil (0.305 g, 0.144 mmol; 96%).

NMR ( $\delta$ , CDCl<sub>3</sub>), <sup>s4</sup> <sup>1</sup>H 7.45-7.43 (m, 16H of 8 Ph), 7.33-7.30 (m, 8H of 8 Ph), 7.26-7.22 (m, 16H of 8 Ph), 5.43-5.30 (m, 4H, CH=CH), 2.70-2.63 (m, 8H, PCH<sub>2</sub>), 2.03-1.99 (m, 16H, PCH<sub>2</sub>CH<sub>2</sub>, CH<sub>2</sub>CH=), 1.51-1.29 (m, 48H, remaining CH<sub>2</sub>); <sup>31</sup>P{<sup>1</sup>H} 14.5 (major, <sup>1</sup>J<sub>PPt</sub> = 2567), <sup>s7</sup> 14.4 (s), 14.2 (s).

MS, <sup>s8</sup> 2118 (M<sup>+</sup>, 100%).

*trans,trans*-(C<sub>6</sub>F<sub>5</sub>)(Ph<sub>2</sub>P(CH<sub>2</sub>)<sub>20</sub>PPh<sub>2</sub>)Pt(C≡C)<sub>4</sub>Pt(Ph<sub>2</sub>P(CH<sub>2</sub>)<sub>20</sub>PPh<sub>2</sub>)(C<sub>6</sub>F<sub>5</sub>) (4) and *trans,trans*-(C<sub>6</sub>F<sub>5</sub>)(Ph<sub>2</sub>P(CH<sub>2</sub>)<sub>20</sub>PPh<sub>2</sub>)Pt(C≡C)<sub>4</sub>Pt(Ph<sub>2</sub>P(CH<sub>2</sub>)<sub>20</sub>PPh<sub>2</sub>)(C<sub>6</sub>F<sub>5</sub>) (5). A Schlenk flask was charged with metathesized **3a** (0.305 g, 0.144 mmol), Pd/C (0.014 g, 0.009 mmol), Cl-CH<sub>2</sub>CH<sub>2</sub>Cl (8 mL), and ethanol (5 mL), flushed with H<sub>2</sub>, and fitted with a balloon filled with H<sub>2</sub>. The mixture was stirred for 14 d. The solvent was removed by oil pump vacuum. The residue was extracted with CH<sub>2</sub>Cl<sub>2</sub> and eluted through an alumina column until UV monitoring showed no absorbing material (ca. 40 mL). The solvent was removed by oil pump vacuum to give crude **4/5** (0.212 g, 69% total). Chromatography on a silica gel column (25 × 2 cm, 80:20 v/v hexanes/CH<sub>2</sub>-Cl<sub>2</sub>) gave fractions containing **4** (0.0551 g, 0.052 mmol; 17%), a **4/5** mixture (2:1 by <sup>31</sup>P NMR; 0.0982 g, 0.0932 mmol; 31%), and **5** (0.0488 g, 0.0461 mmol; 15%). These were isolated as yellow powders following solvent removal by oil pump vacuum.

**4:** Calcd for C<sub>112</sub>H<sub>120</sub>F<sub>10</sub>P<sub>4</sub>Pt<sub>2</sub>: C, 61.13; H, 5.70. Found: C, 60.82; H, 5.71. Dec pt >190 °C (gradual darkening without melting). DSC: exotherm with T<sub>i</sub>, 102.1 °C; T<sub>e</sub>, 113.2 °C; T<sub>p</sub>, 121.7 °C; T<sub>c</sub>, 126.6 °C; T<sub>f</sub>, 137.7 °C; endotherm with T<sub>i</sub>, 197.7 °C; T<sub>e</sub>, 218.7 °C; T<sub>p</sub>, 225.2 °C; T<sub>c</sub>, 226.9 °C; T<sub>f</sub>, 230.5 °C. TGA: weight loss 29%, 272-402 °C.

NMR ( $\delta$ , CDCl<sub>3</sub>), <sup>s4</sup> <sup>1</sup>H 7.42-7.38 (m, 16H of 8 Ph), 7.30-7.26 (m, 8H of 8 Ph), 7.24-7.19 (m, 16H of 8 Ph), 2.63-2.62 (m, 8H, PCH<sub>2</sub>), 1.92 (m, 8H, PCH<sub>2</sub>CH<sub>2</sub>), 1.52 (m, 8H, PCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>), 1.23-1.13 (m, 60 H, remaining CH<sub>2</sub>); <sup>13</sup>C{<sup>1</sup>H} <sup>s5,s10</sup> 132.7 (virtual t, <sup>2</sup>J<sub>CP</sub> = 5.8 Hz, <sup>s6</sup> i to P), 131.3 (virtual t, <sup>1</sup>J<sub>CP</sub> = 27.9 Hz, <sup>s6</sup> i to P), 130.1 (s, p to P), 127.7 (virtual t, <sup>3</sup>J<sub>CP</sub> = 5.0 Hz, <sup>s6</sup> m to P), 93.4

(s, PtC≡C), 68.2 (s, PtC≡CC), 57.5 (s, PtC≡CC≡C), 31.1 (virtual t,  $^3J_{CP} = 7.7$  Hz,<sup>s6</sup> PCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>), 29.04 (s, CH<sub>2</sub>), 28.94 (s, CH<sub>2</sub>), 28.93 (s, CH<sub>2</sub>), 28.87 (s, CH<sub>2</sub>), 28.68 (s, CH<sub>2</sub>), 28.61 (s, CH<sub>2</sub>), 27.9 (virtual t,  $^1J_{CP} = 18.1$  Hz,<sup>s6</sup> PCH<sub>2</sub>), 25.5 (br s, PCH<sub>2</sub>CH<sub>2</sub>);  $^{31}P\{^1H\}$  14.6 (s,  $^1J_{PPt} = 2569$  Hz).<sup>s7</sup>

IR (cm<sup>-1</sup>, powder film),  $\nu_{C\equiv C}$  2144 (m), 2001 (w); UV-vis (1.25 × 10<sup>-5</sup> M, CH<sub>2</sub>Cl<sub>2</sub>) nm ( $\epsilon$ , M<sup>-1</sup>cm<sup>-1</sup>), 263 (87500), 290 (110900), 318 (136100), 352 (6350), 379 (5500), 410 (3000); MS,<sup>s8</sup> 2121 (M<sup>+</sup>, 100%), 1953 ([M-C<sub>6</sub>F<sub>5</sub>]<sup>+</sup>, 10%).

**5:** Calcd for C<sub>108</sub>H<sub>120</sub>F<sub>10</sub>P<sub>4</sub>Pt<sub>2</sub>: C, 61.07; H, 5.70. Found: C, 60.42; H, 5.62. DSC: exotherm with T<sub>i</sub>, 144.8 °C; T<sub>e</sub>, 154.9 °C; T<sub>c</sub>, 173.9 °C; T<sub>f</sub>, 211.7 °C; endotherm with T<sub>i</sub>, 220.5 °C; T<sub>e</sub>, 241.1 °C; T<sub>c</sub>, 244.0 °C; T<sub>f</sub>, 249.6 °C. TGA: weight loss 34%, 260.7-409.6 °C.

NMR ( $\delta$ , CDCl<sub>3</sub>),<sup>s4</sup>  $^1H$  7.45-7.39 (m, 16H of 8Ph), 7.31-2.27 (m, 8H of 8 Ph), 7.24-7.20 (m, 16H of 8 Ph), 2.60-2.55 (m, 8H, PCH<sub>2</sub>), 1.87-1.82 (m, 8H, PCH<sub>2</sub>CH<sub>2</sub>), 1.37-1.21 (m, 64H, remaining CH<sub>2</sub>);  $^{13}C\{^1H\}$ <sup>s5,A</sup> 132.9 (virtual t,  $^2J_{CP} = 5.8$  Hz,<sup>s6</sup> o to P), 131.6 (virtual t,  $^1J_{CP} = 27.8$  Hz,<sup>s6</sup> i to P), 130.2 (s, p to P), 127.9 (virtual t,  $^3J_{CP} = 5.0$  Hz,<sup>s6</sup> m to P), 94.3 (s, PtC≡C), 63.6 (s, Pt-C≡CC), 58.5 (3s, PtC≡CC≡C), 31.2 (virtual t,  $^3J_{CP} = 7.7$  Hz,<sup>s6</sup> PCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>), 29.7 (s, CH<sub>2</sub>), 28.9 (s, CH<sub>2</sub>), 28.8 (s, CH<sub>2</sub>), 28.6 (s, CH<sub>2</sub>), 28.3 (s, CH<sub>2</sub>), 27.9 (CH<sub>2</sub>), 27.8 (s, CH<sub>2</sub>), 25.7 (s, PCH<sub>2</sub>-CH<sub>2</sub>);  $^{31}P\{^1H\}$  14.3 (s,  $^1J_{PPt} = 2574$  Hz).<sup>s7</sup>

IR (cm<sup>-1</sup>, powder film),  $\nu_{C\equiv C}$  2146 (m), 2003 (w); UV-vis (1.25 × 10<sup>-6</sup> M, CH<sub>2</sub>Cl<sub>2</sub>) nm ( $\epsilon$ , M<sup>-1</sup>cm<sup>-1</sup>), 263 (64500), 291 (75000), 320 (93000), 352 (5300), 379 (4900), 410 (2400); MS,<sup>s8</sup> 2121 (M<sup>+</sup>, 10%), 869 ([C<sub>6</sub>F<sub>5</sub>PtPh<sub>2</sub>P(CH<sub>2</sub>)<sub>20</sub>PPh<sub>2</sub>]<sup>+</sup>, 100%).

**Br(CH<sub>2</sub>)<sub>4</sub>O(CH<sub>2</sub>)<sub>2</sub>CH=CH<sub>2</sub>.** A Schlenk flask was fitted with a condenser and charged with sodium (0.831 g, 36.1 mmol). Then HO(CH<sub>2</sub>)<sub>2</sub>CH=CH<sub>2</sub> (12.0 mL, 139 mmol) was slowly added with stirring. The mixture was heated at 80 °C until the sodium dissolved (ca. 2 h). Then Br(CH<sub>2</sub>)<sub>4</sub>Br was added (8.3 mL, 73 mmol), and the mixture was refluxed. After 3 h, the excess alcohol was recovered by distillation (110 °C). The residue was allowed to cool and poured into water (30 mL). The organic layer was separated. The aqueous layer was washed with ether (2 × 10 mL). The combined organic phases were washed with water (2 × 5 mL) and dried (CaCl<sub>2</sub>). The solvent was removed by rotary evaporation. The residue was chromatographed on a silica gel column (20 × 2.5 cm, 70:30 v/v hexanes/CH<sub>2</sub>Cl<sub>2</sub>). The first fraction contained the excess

$\text{Br}(\text{CH}_2)_4\text{Br}$ . The solvent was removed from the second fraction by rotary evaporation and oil pump vacuum to give  $\text{Br}(\text{CH}_2)_4\text{O}(\text{CH}_2)_2\text{CH}=\text{CH}_2$  as a colorless oil (4.284 g, 19.92 mmol; 51%).

$\text{NMR} (\delta, \text{CDCl}_3)$ ,  $^1\text{H}$  5.79 (ddt, 1H,  $^3J_{\text{HHtrans}} = 17.1$  Hz,  $^3J_{\text{HHcis}} = 10.3$  Hz,  $^3J_{\text{HH}} = 6.8$  Hz,  $\text{CH}=\text{CH}_2$ ), 5.05 (br d, 1H,  $^3J_{\text{HHtrans}} = 17.2$  Hz,  $\text{CH}_\text{E}\text{H}_\text{Z}$ ), 5.00 (br d, 1H,  $^3J_{\text{HHcis}} = 10.2$  Hz,  $\text{CH}_\text{E}\text{H}_\text{Z}$ ), 3.45-3.39 (m, 6H,  $\text{BrCH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{OCH}_2$ ), 2.32-2.27 (m, 2H,  $\text{CH}_2\text{CH}=\text{CH}_2$ ), 1.93-1.88 and 1.70-1.67 (2m, 4H,  $\text{BrCH}_2\text{CH}_2\text{CH}_2$ );  $^{13}\text{C}\{\text{H}\}$  135.2 (s,  $\text{CH}=\text{CH}_2$ ), 116.3 (s,  $\text{CH}=\text{CH}_2$ ), 70.1 and 69.7 (2s,  $\text{CH}_2\text{OCH}_2$ ), 34.2 and 33.8 (2s,  $\text{CH}_2\text{CH}=\text{CH}_2$  and  $\text{BrCH}_2$ ), 29.7 and 28.2 (2s,  $\text{BrCH}_2\text{CH}_2\text{CH}_2$ ).

**Ph<sub>2</sub>P(CH<sub>2</sub>)<sub>4</sub>O(CH<sub>2</sub>)<sub>2</sub>CH=CH<sub>2</sub>**. A Schlenk flask was charged with  $\text{Br}(\text{CH}_2)_4\text{O}(\text{CH}_2)_2\text{-CH}=\text{CH}_2$  (0.929 g, 4.49 mmol) and THF (20 mL), and cooled to 0 °C. Then KPPh<sub>2</sub> (0.5 M in THF, 9.0 mL, 4.5 mmol) was added dropwise with stirring until a red color persisted. A white precipitate formed. The mixture was stirred for 0.5 h at 0 °C, and the cold bath was removed. After 1 h, the solvent was removed by oil pump vacuum. The residue was extracted with CH<sub>2</sub>Cl<sub>2</sub>. The extract was filtered through a short silica gel column (5 × 2.5 cm), which was rinsed with CH<sub>2</sub>Cl<sub>2</sub>. The solvent was removed by oil pump vacuum to give Ph<sub>2</sub>P(CH<sub>2</sub>)<sub>4</sub>O(CH<sub>2</sub>)<sub>2</sub>CH=CH<sub>2</sub> as an air sensitive, spectroscopically pure white oil (1.16 g, 3.73 mmol; 83%).

$\text{NMR} (\delta, \text{CDCl}_3)$ ,  $^1\text{H}$  7.45-7.37 (m, 4H, of 2 Ph), 7.33-7.29 (m, 6H, of 2 Ph), 5.81-5.74 (m, 1H,  $\text{CH}=\text{CH}_2$ ), 5.07-4.98 (m, 2H,  $\text{CH}=\text{CH}_2$ ), 3.43-3.38 (m, 4H,  $\text{CH}_2\text{OCH}_2$ ), 2.34-2.26 (m, 2H, PCH<sub>2</sub>), 2.07-2.00 (m, 2H,  $\text{CH}_2\text{CH}=$ ), 1.70-1.67 (m, 2H, PCH<sub>2</sub>CH<sub>2</sub>), 1.54-1.47 (m, 2H, OCH<sub>2</sub>CH<sub>2</sub>);  $^{13}\text{C}\{\text{H}\}$ <sup>s11</sup> 138.8 (d,  $^1J_{\text{CP}} = 13.0$  Hz, *i* to P), 135.3 (s,  $\text{CH}=\text{CH}_2$ ), 132.6 (d,  $^2J_{\text{CP}} = 18.4$  Hz, *o* to P), 128.4 (s, *p* to P), 128.3 (d,  $^3J_{\text{CP}} = 6.5$  Hz, *m* to P), 116.2 (s,  $\text{CH}=\text{CH}_2$ ), 70.3 and 70.0 (2 s,  $\text{CH}_2\text{OCH}_2$ ), 34.2 (s,  $\text{CH}_2\text{CH}=$ ), 31.1 (d,  $^1J_{\text{CP}} = 13.0$  Hz, PCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>), 27.9 (d,  $^1J_{\text{CP}} = 11.2$  Hz, PCH<sub>2</sub>), 22.7 (d,  $^1J_{\text{CP}} = 16.7$  Hz, PCH<sub>2</sub>CH<sub>2</sub>);  $^{31}\text{P}\{\text{H}\}$  -15.8 (s).

**trans-(C<sub>6</sub>F<sub>5</sub>)(Ph<sub>2</sub>P(CH<sub>2</sub>)<sub>4</sub>O(CH<sub>2</sub>)<sub>2</sub>CH=CH<sub>2</sub>)<sub>2</sub>PtCl (1b)**. A Schlenk flask was charged with [Pt( $\mu$ -Cl)(C<sub>6</sub>F<sub>5</sub>)(tht)]<sub>2</sub> (0.721 g, 0.752 mmol)<sup>s3</sup> and CH<sub>2</sub>Cl<sub>2</sub> (30 mL). Then Ph<sub>2</sub>P(CH<sub>2</sub>)<sub>4</sub>O-(CH<sub>2</sub>)<sub>2</sub>CH=CH<sub>2</sub> (1.032 g, 3.304 mmol) was added with stirring. After 20 h, the solution was filtered through a Celite/decolorizing carbon pad. The solvent was removed by rotary evaporation. The residue was chromatographed on an alumina column (20 × 2.0 cm, 90:10 v/v hexanes/ethyl acetate). The solvent was removed from the product-containing fractions by oil pump vacuum to

give **1b** as a colorless oil (0.795 g, 0.803 mmol; 52%). Calcd for C<sub>46</sub>H<sub>50</sub>ClF<sub>5</sub>O<sub>2</sub>P<sub>2</sub>Pt; C, 54.04; H, 4.93. Found: C, 54.10; H, 5.02.

<sup>1</sup>NMR ( $\delta$ , CDCl<sub>3</sub>),<sup>s12</sup> <sup>1</sup>H 7.52-7.41 (m, 8H of 4 Ph), 7.34-7.32 (m, 4H, of 4 Ph), 7.27-7.26 (m, 8H of 4 Ph), 5.84-5.76 (m, 2H, CH=CH<sub>2</sub>), 5.07 (br d, 2H, <sup>3</sup>J<sub>HHtrans</sub> = 17.2 Hz, CH<sub>E</sub>H<sub>Z</sub>), 5.00 (br d, 2H, <sup>3</sup>J<sub>HHcis</sub> = 10.2 Hz, CH<sub>E</sub>H<sub>Z</sub>), 3.48-3.45 (m, 8H, CH<sub>2</sub>OCH<sub>2</sub>), 2.65-2.64 (m, 4H, PCH<sub>2</sub>), 2.35-2.31 (m, 4H, CH<sub>2</sub>CH=), 1.98-1.97 (m, 4H, PCH<sub>2</sub>CH<sub>2</sub>), 1.74-1.73 (m, 4H, PCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>); <sup>13</sup>C{<sup>1</sup>H} 135.7 (s, CH=CH<sub>2</sub>), 133.5 (virtual t, <sup>2</sup>J<sub>CP</sub> = 5.7 Hz,<sup>s6</sup> o to P), 131.0 (virtual t, <sup>1</sup>J<sub>CP</sub> = 27.3 Hz,<sup>s6</sup> i to P), 130.7 (s, p to P), 128.4 (virtual t, <sup>3</sup>J<sub>CP</sub> = 5.0 Hz,<sup>s6</sup> m to P), 116.7 (s, CH=CH<sub>2</sub>), 70.6 and 70.5 (2 s, CH<sub>2</sub>OCH<sub>2</sub>), 34.7 (s, CH<sub>2</sub>CH=), 31.5 (virtual t, <sup>2</sup>J<sub>CP</sub> = 7.4 Hz,<sup>s6</sup> PCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>), 26.0 (virtual t, <sup>1</sup>J<sub>CP</sub> = 16.9 Hz,<sup>s6</sup> PCH<sub>2</sub>), 22.7 (s, PCH<sub>2</sub>CH<sub>2</sub>); <sup>31</sup>P{<sup>1</sup>H} 16.48 (s, <sup>1</sup>J<sub>PPt</sub> = 2658 Hz).<sup>s7</sup>

IR (cm<sup>-1</sup>, oil film), 3078 (vw), 3060 (vw), 2935 (w), 2912 (w), 2860 (w), 1640 (w), 1501 (s), 1461 (s), 1436 (ms), 1364 (w), 1104 (s), 1059 (m), 957 (vs), 915 (m), 805 (m), 739 (s), 691 (vs); MS<sup>s8</sup> 986 ([M-Cl]<sup>+</sup>, 100), 818 (18) [M-Cl-C<sub>6</sub>F<sub>5</sub>]<sup>+</sup>, 18%), and other fragments.

**trans-(C<sub>6</sub>F<sub>5</sub>)(Ph<sub>2</sub>P(CH<sub>2</sub>)<sub>4</sub>O(CH<sub>2</sub>)<sub>2</sub>CH=CH<sub>2</sub>)<sub>2</sub>Pt(C≡C)<sub>2</sub>H (2b).** A Schlenk flask was charged with **1b** (0.765 g, 0.269 mmol), CuI (0.285 g, 0.149 mmol, 0.2 equiv), and HNEt<sub>2</sub> (70 mL) with stirring, and cooled to -45 °C. Then H(C≡C)<sub>2</sub>H (9 mL, 15.3 mmol, ≈ 1.7 M in THF)<sup>s9</sup> was added via syringe, and the mixture turned yellow. After 3 h, the cold bath was removed. After an additional 1 h, the solvent was removed by oil pump vacuum. The residue was extracted with 50:50 v/v toluene/ethyl acetate. The extract was chromatographed on an alumina column (10 × 2 cm, 50:50 v/v hexanes/ethyl acetate). The solvent was removed from the product-containing fractions by oil pump vacuum to give **2b** as a yellow oil (0.752 g, 0.261 mmol; 97%). Calcd for C<sub>50</sub>H<sub>51</sub>F<sub>5</sub>-O<sub>2</sub>P<sub>2</sub>Pt: C, 57.97; H, 4.96. Found: C, 58.16; H, 5.06.

<sup>1</sup>NMR ( $\delta$ , CDCl<sub>3</sub>),<sup>s13</sup> <sup>1</sup>H 7.49-7.46 (m, 8H of 4 Ph), 7.34-7.32 (m, 4H of 4 Ph), 7.28-7.24 (m, 8H of 4 Ph), 5.79 (ddt, 2H, <sup>3</sup>J<sub>HHtrans</sub> = 17.1 Hz, J<sub>HHcis</sub> = 10.3 Hz, <sup>3</sup>J<sub>HH</sub> = 6.7 Hz, CH=CH<sub>2</sub>), 5.06 (br d, 2H, <sup>3</sup>J<sub>HHtrans</sub> = 17.2 Hz, CH<sub>E</sub>H<sub>Z</sub>), 4.99 (br d, 2H, <sup>3</sup>J<sub>HHcis</sub> = 10.7 Hz, CH<sub>E</sub>H<sub>Z</sub>), 3.46-3.42 (m, 8H, CH<sub>2</sub>OCH<sub>2</sub>), 2.65-2.63 (m, 4H, PCH<sub>2</sub>), 2.32-2.29 (m, 4H, CH<sub>2</sub>CH=), 1.86-1.85 (m, 4H, PCH<sub>2</sub>CH<sub>2</sub>), 1.72-1.66 (m, 4H, PCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>), 1.66 (s, 1H, C≡CH); <sup>13</sup>C{<sup>1</sup>H} 135.3 (s, CH=CH<sub>2</sub>), 133.1 (virtual t, <sup>2</sup>J<sub>CP</sub> = 5.9 Hz,<sup>s6</sup> o to P), 131.0 (virtual t, <sup>1</sup>J<sub>CP</sub> = 27.9 Hz,<sup>s6</sup> i to P), 130.3 (s, p to P), 127.9 (virtual t, <sup>3</sup>J<sub>CP</sub> = 5.1 Hz,<sup>s6</sup> m to P), 116.2 (s, CH=CH<sub>2</sub>), 92.4 (s, PtC≡C), 72.3 (s, C≡CH) 70.1

and 70.0 (2 s,  $\text{CH}_2\text{OCH}_2$ ), 34.1 (s,  $\text{CH}_2\text{CH}=$ ), 31.0 (virtual t,  $^2J_{\text{CP}} = 7.4$  Hz,  $^{s6}$   $\text{PCH}_2\text{CH}_2\text{CH}_2$ ), 27.9 (virtual t,  $^1J_{\text{CP}} = 17.9$  Hz,  $^{s6}$   $\text{PCH}_2$ ), 22.2 (s,  $\text{PCH}_2\text{CH}_2$ );  $^{31}\text{P}\{\text{H}\}$  14.0 (s,  $^1J_{\text{PPt}} = 2569$  Hz).  $^{s7}$   
IR ( $\text{cm}^{-1}$ , oil film),  $\nu_{\text{C}\equiv\text{C}}$  3308 (w),  $\nu_{\text{C}\equiv\text{C}}$  2150 (m); MS,  $^{s8}$  1037 ( $\text{M}^+$ , 33%), 986 ( $[\text{M}-\text{C}_4\text{H}]^+$ , 100%), and other fragments.

**trans,trans-( $\text{C}_6\text{F}_5$ )( $\text{Ph}_2\text{P}(\text{CH}_2)_4\text{O}(\text{CH}_2)_2\text{CH=CH}_2)_2\text{Pt}(\text{C}\equiv\text{C})_4\text{Pt}(\text{Ph}_2\text{P}(\text{CH}_2)_4\text{O}(\text{CH}_2)_2-\text{CH=CH}_2)_2(\text{C}_6\text{F}_5)$**  (**3b**). A three necked flask was charged with **2b** (0.205 g, 0.200 mmol) and acetone (20 mL), and fitted with a gas inlet needle and a condenser. A Schlenk flask was charged with CuCl (0.090 g, 0.091 mmol) and acetone (20 mL), and TMEDA (0.180 mL, 1.08 mmol) was added with stirring. After 0.5 h, stirring was halted (blue supernatant/yellow-green solid). Then  $\text{O}_2$  was bubbled through the three necked flask with stirring, and the solution was heated to 60 °C. The blue supernatant was added in portions. After 4 h, the solvent was removed by rotary evaporation and oil pump vacuum. The residue was extracted with ethyl acetate and filtered through an alumina column. The solvent was removed from the filtrate by rotary evaporation to give **2b** as a yellow oil (0.177 g, 0.855 mmol; 86%).  $^{s14}$

NMR ( $\delta$ ,  $\text{CDCl}_3$ ),  $^{s13}$   $^1\text{H}$  7.48-7.45 (m, 16H of 8 Ph), 7.42-7.38 (m, 8H of 8 Ph), 7.34-7.31 (m, 16H of 8 Ph), 5.80 (ddt, 4H,  $^3J_{\text{HHtrans}} = 17.1$  Hz,  $J_{\text{HHcis}} = 10.3$  Hz,  $^3J_{\text{HH}} = 6.7$  Hz,  $\text{CH=CH}_2$ ), 5.06 (br d, 2H,  $^3J_{\text{HHtrans}} = 17.2$  Hz,  $\text{CH}_E\text{H}_Z$ ), 4.99 (br d, 2H,  $^3J_{\text{HHcis}} = 10.2$  Hz,  $\text{CH}_E\text{H}_Z$ ), 3.43-3.40 (m, 16H,  $\text{CH}_2\text{OCH}_2$ ), 2.61-2.59 (m, 8H,  $\text{PCH}_2$ ), 2.32-2.29 (m, 8H,  $\text{CH}_2\text{CH}=$ ), 1.85-1.83 (m, 8H,  $\text{PCH}_2\text{CH}_2$ ), 1.69-1.65 (m, 8H,  $\text{PCH}_2\text{CH}_2\text{CH}_2$ );  $^{13}\text{C}\{\text{H}\}$  135.4 (s,  $\text{CH=CH}_2$ ), 133.0 (virtual t,  $^2J_{\text{CP}} = 5.8$  Hz,  $^{s6}$  o to P), 131.0 (virtual t,  $^1J_{\text{CP}} = 27.9$  Hz,  $^{s6}$  i to P), 130.3 (s, p to P), 127.9 (virtual t,  $^3J_{\text{CP}} = 5.0$  Hz,  $^{s6}$  m to P), 116.2 (s,  $\text{CH=CH}_2$ ), 94.1 (s,  $\text{PtC}\equiv\text{C}$ ), 70.1 and 70.0 (2 s,  $\text{CH}_2\text{OCH}_2$ ), 63.7 (s,  $\text{PtC}\equiv\text{CC}\equiv\text{C}$ ), 58.1 (s,  $\text{PtC}\equiv\text{CC}\equiv\text{C}$ ), 34.2 (s,  $\text{CH}_2\text{CH}=$ ), 30.9 (virtual t,  $^2J_{\text{CP}} = 7.5$  Hz,  $^{s6}$   $\text{PCH}_2\text{CH}_2\text{CH}_2$ ), 27.9 (virtual t,  $^1J_{\text{CP}} = 17.9$  Hz,  $^{s6}$   $\text{PCH}_2$ ), 22.2 (s,  $\text{PCH}_2\text{CH}_2$ );  $^{31}\text{P}\{\text{H}\}$  14.0 (s,  $^1J_{\text{PPt}} = 2569$  Hz).  $^{s7}$

IR ( $\text{cm}^{-1}$ , oil film),  $\nu_{\text{C}\equiv\text{C}}$  2142 (m), 2001 (w); MS,  $^{s8}$  2068 ( $\text{M}^+$ , 40%), 1396 ( $[(\text{Ph}_2\text{PCH}_2\text{CH}_2\text{CH}_2)_2\text{PtC}_8\text{Pt}(\text{Ph}_2\text{PCH}_2\text{CH}_2\text{CH}_2)_2]$ , 100%), 985 ( $[\text{Pt}(\text{C}_6\text{F}_5)(\text{PPh}_2(\text{CH}_2)_4\text{O}-(\text{CH}_2)_2\text{CH=CH}_2)_2]^+$ , 80%), and other fragments.

**Alkene Metathesis of **3b**. A.** A two necked Schlenk flask was charged with **3b** (0.211 g, 0.102 mmol), Ru(=CHPh)(PCy<sub>3</sub>)<sub>2</sub>(Cl) (ca. half of 0.006 g, 0.006 mmol), and  $\text{CH}_2\text{Cl}_2$  (150 mL),

and fitted with a condenser. The solution was refluxed. After 2 h, the remaining catalyst was added. After an additional 2 h, the solvent was removed by oil pump vacuum, and  $\text{CH}_2\text{Cl}_2$  was added to the oil. The sample was filtered through an alumina column ( $4 \times 2 \text{ cm}$ ), which was eluted with  $\text{CH}_2\text{Cl}_2$  until UV monitoring showed no absorbing material. A  $^1\text{H}$  NMR spectrum showed 44% conversion. The sample was redissolved in  $\text{CH}_2\text{Cl}_2$  (150 mL), and refluxed with additional  $\text{Ru}(\text{=CHPh})(\text{PCy}_3)_2(\text{Cl})$  (0.012 g, 0.010 mmol; added in three portions over 6 h). An analogous workup and analysis showed 80% conversion. A third cycle (0.006 g, 0.006 mmol of  $\text{Ru}(\text{=CHPh})(\text{PCy}_3)_2(\text{Cl})$ ) gave a mixture of cyclized products as a yellow oil (0.198 g, 0.0972 mmol; 96%).

$^{31}\text{P}\{\text{H}\}$  NMR ( $\delta$ ,  $\text{CDCl}_3$ ) 16.6 (s), 16.5 (s), 16.3 (s), 14.2 (s), 14.12 (s,  $^1J_{\text{PPt}} = 2569 \text{ Hz}$ , major), <sup>s7</sup> 14.05 (s), 14.0 (s).

**B.** A two necked Schlenk flask was charged with **3b** (0.278 g, 0.134 mmol),  $\text{Ru}(\text{=CHPh})(\text{H}_2\text{IMes})(\text{PCy}_3)(\text{Cl})$  (ca. half of 0.007 g, 0.008 mmol), and  $\text{CH}_2\text{Cl}_2$  (125 mL), and fitted with a condenser. The solution was refluxed. After 2 h, the remaining catalyst was added. After an additional 3 h, the solvent was removed by oil pump vacuum, and  $\text{CH}_2\text{Cl}_2$  was added to the oil. The sample was filtered through an alumina column ( $4 \times 2.5 \text{ cm}$ ), which was eluted with  $\text{CH}_2\text{Cl}_2$  until UV monitoring showed no absorbing material. The solvent was removed from the filtrate by oil pump vacuum to give a mixture of cyclized products as a yellow oil (0.261 g, 0.130 mmol; 97%).

$^{31}\text{P}\{\text{H}\}$  NMR ( $\delta$ ,  $\text{CDCl}_3$ ) 14.17 (s,  $^1J_{\text{PPt}} = 2571 \text{ Hz}$ , major), <sup>s7</sup> 14.1, 14.02, 13.98.

*trans,trans-(C<sub>6</sub>F<sub>5</sub>)(Ph<sub>2</sub>P(CH<sub>2</sub>)<sub>4</sub>O(CH<sub>2</sub>)<sub>6</sub>O(CH<sub>2</sub>)<sub>4</sub>PPh<sub>2</sub>)Pt(C≡C)Pt(Ph<sub>2</sub>P(CH<sub>2</sub>)<sub>4</sub>O-(CH<sub>2</sub>)<sub>6</sub>O(CH<sub>2</sub>)<sub>4</sub>PPh<sub>2</sub>)(C<sub>6</sub>F<sub>5</sub>)* (**6**). A Schlenk flask was charged with metathesized **3b** (0.261 g, 0.130 mmol), Pd/C (0.028 g, 0.026 mmol),  $\text{ClCH}_2\text{CH}_2\text{Cl}$  (15 mL), and ethanol (10 mL), flushed with  $\text{H}_2$ , and fitted with a balloon filled with  $\text{H}_2$ . The mixture was stirred for 14 d. The solvent was removed by oil pump vacuum. The residue was extracted with  $\text{CH}_2\text{Cl}_2$  and filtered through an alumina column. The solvent was removed by oil pump vacuum. The residue was chromatographed on an alumina column ( $15 \times 5 \text{ cm}$ , 80:20 v/v hexanes/ethyl acetate). The solvent was removed from the first product-containing fraction by oil pump vacuum to give **6** as a yellow solid (0.070 g, 0.039 mmol; 27%). Calcd for  $\text{C}_{96}\text{H}_{96}\text{Pt}_2\text{P}_4\text{F}_{10}\text{O}_4$ : C, 57.14; H, 4.79. Found: C, 56.25; H, 4.65. DSC: endotherm with  $T_i$ , 175.4 °C;  $T_e$ , 203.7 °C;  $T_c$ , 215.1 °C;  $T_f$ , 228.1 °C. TGA: weight loss 42%, 265–410 °C.

NMR ( $\delta$ , CDCl<sub>3</sub>),<sup>s15</sup> <sup>1</sup>H 7.41-7.37 (m, 16H of 8 Ph), 7.33-7.26 (m, 8H of 8 Ph), 7.26-7.20 (m, 16H of 8 Ph), 3.49 (t, <sup>3</sup>J<sub>HH</sub> = 6.5 Hz, 8H, PCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>O), 3.38 (t, <sup>3</sup>J<sub>HH</sub> = 6.7 Hz, 8H, OCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>), 2.75-2.71 (m, 8H, PCH<sub>2</sub>), 2.05-2.03 (m, 8H, PCH<sub>2</sub>CH<sub>2</sub>), 1.80-1.77 (m, 8H, PCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>), 1.49-1.46 (m, 8H, OCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>), 1.29-1.24 (m, 8H, OCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>); <sup>13</sup>C{<sup>1</sup>H}, 145.8 (dm, <sup>1</sup>J<sub>CF</sub> = 224 Hz, *o* to Pt), 136.4 (dm, <sup>1</sup>J<sub>CF</sub> = 233 Hz, *m/p* to Pt), 132.8 (br s, *o* to P), 131.2 (virtual t, <sup>1</sup>J<sub>CP</sub> = 27.5 Hz,<sup>s6</sup> *i* to P), 130.3 (s, *p* to P), 127.9 (br s, *m* to P), 100.1 (s, PtC≡C), 94.3 (s, PtC≡C), 70.6 (s, PCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>O), 70.1 (s, OCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>), 63.8 (s, PtC≡CC≡C), 58.3 (s, PtC≡CC≡C), 30.8 (virtual t, <sup>2</sup>J<sub>CP</sub> = 7.6 Hz,<sup>s6</sup> PCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>), 29.4 (s, OCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>), 28.0 (virtual t, <sup>1</sup>J<sub>CP</sub> = 17.5 Hz,<sup>s6</sup> PCH<sub>2</sub>), 25.4 (s, OCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>), 22.7 (s, PCH<sub>2</sub>CH<sub>2</sub>); <sup>31</sup>P{<sup>1</sup>H} 14.1 (s, <sup>1</sup>J<sub>PPt</sub> = 2566 Hz).<sup>s7</sup>

IR (cm<sup>-1</sup>, powder film),  $\nu_{C\equiv C}$  2142 (m), 2001 (w); UV-vis (1.25 × 10<sup>-5</sup> M, CH<sub>2</sub>Cl<sub>2</sub>) nm ( $\varepsilon$ , M<sup>-1</sup>cm<sup>-1</sup>), 263 (8500), 291 (1040000), 320 (127000), 353 (7000), 379 (5900), 411 (3400); MS,<sup>s8</sup> 2017 (M<sup>+</sup>, 100%).

**Cyclic Voltammetry.** A BAS CV-50W Voltammetric Analyzer (Cell Stand C3) with the program CV-50W (version 2.0) was employed. Cells were fitted with Pt working and counter electrodes, and a Ag wire pseudoreference electrode. All CH<sub>2</sub>Cl<sub>2</sub> solutions were 7-9 × 10<sup>-5</sup> M in substrate, 0.1 M in *n*-Bu<sub>4</sub>N<sup>+</sup> BF<sub>4</sub><sup>-</sup> (crystallized from ethanol/hexane and dried by oil pump vacuum), and prepared under nitrogen. Ferrocene was subsequently added, and calibration voltammograms recorded. The ambient laboratory temperature was 22.5 ± 1 °C.

**Crystallography.** A. A CH<sub>2</sub>Cl<sub>2</sub> solution of **4** was layered with ether. After three weeks, yellow prisms of **4** were analyzed using a Nonius KappaCCD area detector as outlined in Table S1. Cell parameters were obtained from 10 frames using a 10° scan and were refined with 18965 reflections. Lorentz, polarization, and absorption corrections<sup>s16</sup> were applied. The space groups were determined from systematic absences and subsequent least-squares refinement. The structure was solved by direct methods. The parameters were refined with all data by full-matrix-least-squares on  $F^2$  using SHELXL-97.<sup>s17</sup> Non-hydrogen atoms were refined with anisotropic thermal parameters. The hydrogen atoms were fixed in idealized positions using a riding model. Scattering factors were taken from the literature.<sup>s18</sup> Electron-density and anisotropic displacement plots showed the sp<sup>3</sup> chain atoms C8A-C16A to be disordered over multiple orientations. This could not be modeled without

introducing some short hydrogen-hydrogen separations (the best solution with all hydrogen atoms was used for Figure 1). The structure was then solved without hydrogen atoms for C8A-C16A (tabular data below and CIF file). While some very large thermal ellipsoids and geometric distortions remain evident, the gross structure of **4** is undoubtedly correct. **B.** A CH<sub>2</sub>Cl<sub>2</sub> solution of **5** was layered with ethanol. After two weeks, yellow prisms of **5** were analyzed using a Nonius KappaCCD area detector as outlined in Table S7. Cell parameters were obtained from 10 frames using a 10° scan and were refined with 10456 reflections. Lorentz, polarization, and absorption corrections<sup>s16</sup> were applied. The space groups were determined from systematic absences and subsequent least-squares refinement. The structure was solved by direct methods. The parameters were refined with all data by full-matrix-least-squares on  $F^2$  using SHELXL-97.<sup>s17</sup> Non-hydrogen atoms were refined with anisotropic thermal parameters. The hydrogen atoms were fixed in idealized positions using a riding model. Scattering factors were taken from the literature.<sup>s18</sup> There is an inversion center at the midpoint between C4 and C4'. **C.** A CH<sub>2</sub>Cl<sub>2</sub> solution of **6** was layered with methanol. After one week, yellow prisms of **6**·MeOH were analyzed using a Nonius KappaCCD area detector as outlined in Table S13. Cell parameters were obtained from 10 frames using a 10° scan and were refined with 20654 reflections. Lorentz, polarization, and absorption corrections<sup>s16</sup> were applied. The space groups were determined from systematic absences and subsequent least-squares refinement. The structure was solved by direct methods. The parameters were refined with all data by full-matrix-least-squares on  $F^2$  using SHELXL-97.<sup>s17</sup> Non-hydrogen atoms were refined with anisotropic thermal parameters. The hydrogen atoms were fixed in idealized positions using a riding model. Scattering factors were taken from the literature.<sup>s18</sup> The molecule of MeOH was disordered and could only be poorly resolved.

## References and Notes

- (s1) Cammenga, H. K.; Epple, M. *Angew. Chem., Int. Ed. Engl.* **1995**, *34*, 1171; *Angew. Chem.* **1995**, *107*, 1284.
- (s2) Bauer, E. B.; Hampel, F.; Gladysz, J. A. *Organometallics*, **2003**, *22*, 5567.
- (s3) Usón, R.; Forniés, J.; Espinet, P; Alfranca, G. *Synth. React. Inorg. Met.-Org. Chem.* **1980**, *10*, 579.

- (s4) All complexes exhibit a characteristic pattern of  $^1\text{H}$  and  $^{13}\text{C}$  signals for the aryl rings and the  $\text{PCH}_2\text{CH}_2\text{CH}_2$  linkages. The signals were assigned by analogy to related platinum complexes.<sup>9a</sup>
- (s5) The  $\text{C}_6\text{F}_5$   $^{13}\text{C}$  signals were not observed.
- (s6) Hersh, W. H. *J. Chem. Educ.* **1997**, *74*, 1485; the J values represent the *apparent* coupling between adjacent peaks of the triplet.
- (s7) This coupling represents a satellite ( $d; ^{195}\text{Pt} = 33.8\%$ ), and is not reflected in the peak multiplicity given.
- (s8) m/z for the most intense peak of the isotope envelope (relative intensity, %).
- (s9) Verkruijsee, H.; Brandsma, L. *Synth. Commun.* **1991**, *21*, 657. The THF solution can be stored at  $-78^\circ\text{C}$  up to 7 days.
- (s10) The PtC  $^{13}\text{C}$  signal was not observed.
- (s11) The  $\text{PC}_6\text{H}_5$   $^{13}\text{C}$  signals were assigned as described by Mann, B. E. *J. Chem. Soc. Perkin Trans. 2*, **1972**, 30. The resonance with the chemical shift closest to benzene was attributed to the meta carbon, and the least intense phosphorous-coupled resonance was attributed to the ipso carbon.
- (s12) A  $^1\text{H}, ^{13}\text{C}\{^1\text{H}\}$  COSY spectrum was used to assign the signals.
- (s13) The signals were assigned by analogy to **1b**.
- (s14) A satisfactory microanalysis was not obtained for this compound.
- (s15)  $^1\text{H}, ^1\text{H}$  COSY and  $^1\text{H}, ^{13}\text{C}\{^1\text{H}\}$  COSY spectra (500 MHz) were used to assign the signals.
- (s16) (a) "Collect" data collection software, Nonius B.V., 1998. (b) "Scalepack" data processing software: Otwinowski, Z.; Minor, W. in *Methods Enzymol.* **1997**, *276*, 307.
- (s17) Sheldrick, G. M. *SHELX-97*, Program for refinement of crystal structures, University of Göttingen, 1997.
- (s18) Cromer, D. T.; Waber, J. T. in *International Tables for X-ray Crystallography*; Ibers, J. A.; Hamilton, W. C. Eds.; Kynoch: Birmingham, England, 1974.

Table S1. Crystal data and structure refinement for **4**.

Empirical formula	$C_{108}H_{120}F_{10}P_4Pt_2$		
Formula weight	2122.10		
Temperature	173(2) K		
Wavelength	0.71073 Å		
Crystal system	Monoclinic		
Space group	$P2_1/c$		
Unit cell dimensions	$a = 39.9137(6)$ Å	$\alpha = 90^\circ$	
	$b = 11.1431(2)$ Å	$\beta = 102.57(3)^\circ$	
	$c = 22.6389(4)$ Å	$\gamma = 90^\circ$	
Volume	$9827.5(3)$ Å <sup>3</sup>		
Z	4		
Density (calculated)	1.434 Mg/m <sup>3</sup>		
Absorption coefficient	2.974 mm <sup>-1</sup>		
F(000)	4296		
Crystal size	$0.20 \times 0.20 \times 0.20$ mm <sup>3</sup>		
Θ range for data collection	1.05 to 27.51°		
Index ranges	$-51 \leq h \leq 51, -12 \leq k \leq 14, -29 \leq l \leq 29$		
Reflections collected	37122		
Independent reflections	21370 [R(int) = 0.0490]		
Reflections [ $I > 2\sigma(I)$ ]	14690		
Completeness to Θ = 27.51°	94.5%		
Absorption correction	Empirical		
Max. and min. transmission	0.5877 and 0.5877		
Refinement method	Full-matrix least-squares on F <sup>2</sup>		
Data / restraints / parameters	21370 / 7 / 1121		
Goodness-of-fit on F <sup>2</sup>	0.974		
Final R indices [ $I > 2\sigma(I)$ ]	R1 = 0.0413, wR2 = 0.0943		
R indices (all data)	R1 = 0.0763, wR2 = 0.1088		
Largest diff. peak and hole	1.012 and $-1.595$ eÅ <sup>-3</sup>		

Table S2. Atomic coordinates ( $\times 10^4$ ) and equivalent isotropic displacement parameters ( $\text{\AA}^2 \times 10^3$ ) for **4**. U(eq) is defined as one third of the trace of the orthogonalized  $U^{ij}$  tensor.

	x	y	z	U(eq)
Pt(1)	3956(1)	-11226(1)	5578(1)	24(1)
P(1)	4012(1)	-11607(1)	4608(1)	26(1)
C(1B)	3387(1)	-10666(6)	6505(2)	40(1)
C(1)	3533(1)	-10356(5)	5193(2)	29(1)
C(1A)	3941(1)	-10266(5)	4133(2)	35(1)
Pt(2)	1099(1)	-7689(1)	2321(1)	31(1)
P(2)	3845(1)	-10794(1)	6512(1)	27(1)
C(2)	3273(1)	-9868(5)	4909(2)	34(1)
C(2B)	3156(2)	-11649(6)	6185(3)	46(2)
C(2A)	4087(1)	-9096(4)	4444(2)	32(1)
P(3)	1026(1)	-9701(1)	2105(1)	36(1)
C(3)	2978(1)	-9388(5)	4572(2)	34(1)
C(3B)	2786(2)	-11223(7)	6018(4)	72(2)
C(3A)	3913(2)	-7985(5)	4117(2)	44(2)
P(4)	1197(1)	-5730(1)	2639(1)	36(1)
C(4)	2716(2)	-9031(5)	4263(2)	39(1)
C(4B)	2543(2)	-12083(8)	5618(5)	126(5)
C(4A)	4045(2)	-6785(5)	4407(3)	53(2)
C(5)	2406(2)	-8702(5)	3906(3)	41(2)
C(5B)	2481(4)	-12030(9)	5026(4)	173(7)
C(5A)	3997(2)	-6618(6)	5048(3)	49(2)
C(6)	2130(2)	-8488(5)	3588(3)	39(1)
C(6B)	2222(3)	-12850(8)	4649(4)	114(4)
C(6A)	3631(2)	-6655(6)	5115(3)	58(2)
C(7)	1816(2)	-8268(5)	3229(2)	36(1)
C(7B)	2269(2)	-12943(8)	3998(4)	97(3)
C(7A)	3580(2)	-6450(7)	5749(3)	69(2)
C(8)	1536(2)	-8075(5)	2904(2)	38(1)
C(8B)	2118(2)	-11979(7)	3617(4)	86(3)
C(8A)	3241(2)	-6504(16)	5871(4)	198(8)
C(9B)	2214(2)	-11883(8)	2982(4)	88(3)
C(9A)	2955(2)	-6150(13)	5511(5)	149(6)
C(10B)	2582(2)	-11442(8)	3045(4)	83(3)

C(10A)	2615(3)	-5930(13)	5586(6)	147(5)
C(11)	4403(1)	-12163(4)	5951(2)	24(1)
C(11B)	2668(3)	-11297(8)	2439(4)	98(3)
C(11A)	2338(4)	-6448(13)	5100(6)	186(7)
F(12)	4103(1)	-13952(3)	6009(2)	44(1)
C(12)	4404(1)	-13336(5)	6117(2)	29(1)
C(12B)	3021(3)	-10736(8)	2486(4)	92(3)
C(12A)	2314(7)	-7455(11)	5485(6)	480(30)
F(13)	4676(1)	-15125(3)	6546(2)	59(1)
C(13)	4692(2)	-13961(5)	6380(2)	37(2)
C(13B)	3072(2)	-9484(8)	2753(4)	78(2)
C(13A)	1982(5)	-7870(30)	5170(11)	310(20)
F(14)	5296(1)	-14019(3)	6727(2)	63(1)
C(14)	5008(2)	-13420(5)	6474(2)	42(2)
C(14B)	2825(2)	-8550(6)	2431(3)	69(2)
C(14A)	1733(10)	-8740(20)	5229(12)	320(20)
C(15)	5023(2)	-12236(5)	6304(2)	33(1)
F(15)	5330(1)	-11676(3)	6381(2)	50(1)
C(15B)	2917(2)	-7297(7)	2672(4)	76(2)
C(15A)	1555(4)	-9860(20)	5140(7)	228(12)
F(16)	4763(1)	-10489(3)	5884(1)	37(1)
C(16)	4723(1)	-11652(4)	6049(2)	25(1)
C(16B)	2703(2)	-6314(7)	2320(4)	76(2)
C(16A)	1220(6)	-10210(20)	4984(8)	272(12)
C(17B)	2338(2)	-6358(8)	2352(3)	78(3)
C(17A)	980(3)	-10312(15)	4416(4)	159(6)
C(18B)	2118(2)	-5280(7)	2034(3)	63(2)
C(18A)	1098(3)	-10856(11)	3876(4)	123(4)
C(19B)	1727(2)	-5427(6)	2000(3)	48(2)
C(19A)	948(2)	-10140(7)	3304(3)	71(2)
C(20B)	1625(2)	-5206(5)	2604(3)	43(2)
C(20A)	1099(2)	-10656(6)	2792(3)	56(2)
C(21)	3688(1)	-12668(5)	4226(2)	31(1)
C(22)	3668(2)	-12998(5)	3625(2)	45(2)
C(23)	3428(2)	-13795(6)	3351(3)	61(2)
C(24)	3203(2)	-14295(6)	3659(3)	57(2)
C(25)	3216(2)	-13993(5)	4242(3)	49(2)
C(26)	3461(2)	-13172(5)	4532(2)	39(1)

C(31)	4416(1)	-12278(5)	4527(2)	27(1)
C(32)	4443(2)	-13513(5)	4506(2)	36(1)
C(33)	4752(2)	-14036(5)	4479(3)	44(2)
C(34)	5040(2)	-13345(5)	4487(3)	39(1)
C(35)	5014(2)	-12104(5)	4510(2)	38(1)
C(36)	4703(1)	-11578(5)	4531(2)	31(1)
C(41)	4018(2)	-9344(5)	6787(2)	32(1)
C(42)	3892(2)	-8705(5)	7224(3)	52(2)
C(43)	4031(2)	-7591(6)	7411(3)	57(2)
C(44)	4294(2)	-7122(6)	7187(3)	52(2)
C(45)	4421(2)	-7753(5)	6754(3)	48(2)
C(46)	4275(2)	-8848(5)	6555(3)	40(2)
C(51)	4033(1)	-11854(5)	7100(2)	28(1)
C(52)	3896(2)	-12988(5)	7102(2)	35(1)
C(53)	4064(2)	-13853(5)	7492(3)	45(2)
C(54)	4370(2)	-13603(6)	7880(3)	49(2)
C(55)	4505(2)	-12467(6)	7893(3)	48(2)
C(56)	4339(2)	-11600(5)	7501(2)	38(1)
C(61)	663(2)	-7285(5)	1679(2)	34(1)
F(62)	934(1)	-7626(3)	873(2)	61(1)
C(62)	652(2)	-7319(5)	1072(3)	42(2)
F(63)	371(1)	-7115(4)	35(2)	82(1)
C(63)	363(2)	-7064(6)	632(3)	55(2)
F(64)	-216(1)	-6513(5)	371(2)	117(2)
C(64)	63(2)	-6776(7)	800(3)	69(2)
C(65)	59(2)	-6725(8)	1397(3)	68(2)
F(65)	-228(1)	-6424(6)	1569(2)	120(2)
F(66)	330(1)	-6913(4)	2410(2)	62(1)
C(66)	358(2)	-6968(6)	1822(3)	43(2)
C(71)	608(2)	-10103(5)	1638(3)	38(1)
C(72)	566(2)	-10383(5)	1033(3)	47(2)
C(73)	244(2)	-10604(6)	684(3)	62(2)
C(74)	-41(2)	-10529(6)	934(3)	55(2)
C(75)	-7(2)	-10252(6)	1525(3)	56(2)
C(76)	316(2)	-10038(5)	1887(3)	47(2)
C(81)	1334(2)	-10310(5)	1700(3)	42(2)
C(82)	1573(2)	-9573(7)	1540(3)	56(2)
C(83)	1818(2)	-10034(8)	1256(3)	77(2)

C(84)	1815(3)	-11231(10)	1121(4)	99(3)
C(85)	1572(3)	-11984(8)	1278(4)	86(3)
C(86)	1333(2)	-11524(6)	1567(3)	61(2)
C(91)	892(2)	-4649(5)	2232(3)	42(2)
C(92)	852(2)	-4568(5)	1618(3)	51(2)
C(93)	593(2)	-3888(6)	1267(4)	67(2)
C(94)	371(2)	-3291(7)	1559(5)	81(3)
C(95)	414(2)	-3347(7)	2176(4)	76(2)
C(96)	671(2)	-4029(5)	2508(3)	55(2)
C(101)	1176(2)	-5538(6)	3427(3)	46(2)
C(102)	1002(2)	-6377(6)	3701(3)	52(2)
C(103)	986(2)	-6248(7)	4305(3)	65(2)
C(104)	1139(2)	-5310(10)	4637(4)	85(3)
C(105)	1308(3)	-4499(10)	4377(4)	107(4)
C(106)	1328(2)	-4567(7)	3764(3)	77(3)

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Table S3. Bond lengths [ $\text{\AA}$ ] and angles [ $^\circ$ ] for **4**.

Pt(1)-C(1)	1.978(5)
Pt(1)-C(11)	2.081(5)
Pt(1)-P(1)	2.2947(13)
Pt(1)-P(2)	2.3031(13)
Pt(1)-Pt(2)	12.781(3)
P(1)-C(31)	1.823(6)
P(1)-C(21)	1.825(5)
P(1)-C(1A)	1.826(5)
C(1B)-C(2B)	1.510(8)
C(1B)-P(2)	1.832(6)
C(1)-C(2)	1.222(7)
C(1A)-C(2A)	1.535(7)
Pt(2)-C(8)	1.992(6)
Pt(2)-C(61)	2.059(5)
Pt(2)-P(3)	2.2995(15)
Pt(2)-P(4)	2.3055(16)
P(2)-C(41)	1.813(5)
P(2)-C(51)	1.815(5)
C(2)-C(3)	1.366(7)
C(2B)-C(3B)	1.522(9)
C(2A)-C(3A)	1.529(7)
P(3)-C(81)	1.817(6)
P(3)-C(71)	1.825(6)
P(3)-C(20A)	1.855(6)
C(3)-C(4)	1.193(7)
C(3B)-C(4B)	1.516(10)
C(3A)-C(4A)	1.531(8)
P(4)-C(101)	1.817(6)
P(4)-C(91)	1.817(6)
P(4)-C(20B)	1.822(6)
C(4)-C(5)	1.371(8)
C(4B)-C(5B)	1.310(13)
C(4A)-C(5A)	1.516(8)
C(5)-C(6)	1.203(8)
C(5B)-C(6B)	1.500(12)
C(5A)-C(6A)	1.503(9)

C(6)-C(7)	1.358(7)
C(6B)-C(7B)	1.529(12)
C(6A)-C(7A)	1.508(9)
C(7)-C(8)	1.216(7)
C(7B)-C(8B)	1.427(10)
C(7A)-C(8A)	1.442(10)
C(8B)-C(9B)	1.570(11)
C(8A)-C(9A)	1.309(10)
C(9B)-C(10B)	1.526(11)
C(9A)-C(10A)	1.426(11)
C(10B)-C(11B)	1.492(11)
C(10A)-C(11A)	1.495(12)
C(11)-C(12)	1.359(7)
C(11)-C(16)	1.371(7)
C(11B)-C(12B)	1.526(12)
C(11A)-C(12A)	1.436(12)
F(12)-C(12)	1.358(6)
C(12)-C(13)	1.363(8)
C(12B)-C(13B)	1.517(11)
C(12A)-C(13A)	1.439(15)
F(13)-C(13)	1.356(6)
C(13)-C(14)	1.374(9)
C(13B)-C(14B)	1.508(9)
C(13A)-C(14A)	1.411(15)
F(14)-C(14)	1.344(6)
C(14)-C(15)	1.378(8)
C(14B)-C(15B)	1.514(9)
C(14A)-C(15A)	1.433(14)
C(15)-F(15)	1.349(6)
C(15)-C(16)	1.376(7)
C(15B)-C(16B)	1.506(10)
C(15A)-C(16A)	1.36(2)
F(16)-C(16)	1.367(5)
C(16B)-C(17B)	1.474(10)
C(16A)-C(17A)	1.431(18)
C(17B)-C(18B)	1.568(10)
C(17A)-C(18A)	1.529(15)
C(18B)-C(19B)	1.554(8)

C(18A)-C(19A)	1.527(10)
C(19B)-C(20B)	1.528(8)
C(19A)-C(20A)	1.529(10)
C(21)-C(26)	1.375(8)
C(21)-C(22)	1.394(7)
C(22)-C(23)	1.356(8)
C(23)-C(24)	1.370(10)
C(24)-C(25)	1.351(9)
C(25)-C(26)	1.395(8)
C(31)-C(32)	1.383(7)
C(31)-C(36)	1.385(7)
C(32)-C(33)	1.377(8)
C(33)-C(34)	1.381(8)
C(34)-C(35)	1.388(8)
C(35)-C(36)	1.380(8)
C(41)-C(46)	1.368(8)
C(41)-C(42)	1.398(8)
C(42)-C(43)	1.388(8)
C(43)-C(44)	1.363(10)
C(44)-C(45)	1.389(9)
C(45)-C(46)	1.385(7)
C(51)-C(52)	1.376(7)
C(51)-C(56)	1.385(7)
C(52)-C(53)	1.379(7)
C(53)-C(54)	1.369(9)
C(54)-C(55)	1.374(8)
C(55)-C(56)	1.379(7)
C(61)-C(62)	1.365(8)
C(61)-C(66)	1.375(8)
F(62)-C(62)	1.343(7)
C(62)-C(63)	1.381(8)
F(63)-C(63)	1.359(7)
C(63)-C(64)	1.371(10)
F(64)-C(64)	1.342(7)
C(64)-C(65)	1.358(10)
C(65)-F(65)	1.330(8)
C(65)-C(66)	1.384(8)
F(66)-C(66)	1.360(7)

C(71)-C(72)	1.380(8)
C(71)-C(76)	1.402(8)
C(72)-C(73)	1.377(8)
C(73)-C(74)	1.376(10)
C(74)-C(75)	1.350(9)
C(75)-C(76)	1.389(8)
C(81)-C(82)	1.367(9)
C(81)-C(86)	1.386(8)
C(82)-C(83)	1.380(10)
C(83)-C(84)	1.368(11)
C(84)-C(85)	1.386(13)
C(85)-C(86)	1.366(11)
C(91)-C(92)	1.368(8)
C(91)-C(96)	1.372(9)
C(92)-C(93)	1.385(9)
C(93)-C(94)	1.383(11)
C(94)-C(95)	1.372(11)
C(95)-C(96)	1.364(10)
C(101)-C(106)	1.385(9)
C(101)-C(102)	1.390(9)
C(102)-C(103)	1.389(9)
C(103)-C(104)	1.354(10)
C(104)-C(105)	1.337(12)
C(105)-C(106)	1.409(10)
C(1)-Pt(1)-C(11)	177.87(19)
C(1)-Pt(1)-P(1)	85.41(15)
C(11)-Pt(1)-P(1)	92.47(13)
C(1)-Pt(1)-P(2)	89.21(15)
C(11)-Pt(1)-P(2)	92.90(13)
P(1)-Pt(1)-P(2)	174.40(5)
C(1)-Pt(1)-Pt(2)	12.94(14)
C(11)-Pt(1)-Pt(2)	165.34(13)
P(1)-Pt(1)-Pt(2)	76.40(4)
P(2)-Pt(1)-Pt(2)	98.03(4)
C(31)-P(1)-C(21)	103.8(2)
C(31)-P(1)-C(1A)	107.6(2)
C(21)-P(1)-C(1A)	104.4(2)

C(31)-P(1)-Pt(1)	116.37(15)
C(21)-P(1)-Pt(1)	111.52(19)
C(1A)-P(1)-Pt(1)	112.20(17)
C(2B)-C(1B)-P(2)	116.7(4)
C(2)-C(1)-Pt(1)	174.4(5)
C(2A)-C(1A)-P(1)	115.5(3)
C(8)-Pt(2)-C(61)	176.6(2)
C(8)-Pt(2)-P(3)	88.98(16)
C(61)-Pt(2)-P(3)	90.84(15)
C(8)-Pt(2)-P(4)	86.11(17)
C(61)-Pt(2)-P(4)	94.26(15)
P(3)-Pt(2)-P(4)	174.04(5)
C(8)-Pt(2)-Pt(1)	7.41(17)
C(61)-Pt(2)-Pt(1)	170.11(16)
P(3)-Pt(2)-Pt(1)	82.96(4)
P(4)-Pt(2)-Pt(1)	92.38(4)
C(41)-P(2)-C(51)	105.3(2)
C(41)-P(2)-C(1B)	103.7(3)
C(51)-P(2)-C(1B)	108.0(3)
C(41)-P(2)-Pt(1)	111.55(18)
C(51)-P(2)-Pt(1)	113.97(17)
C(1B)-P(2)-Pt(1)	113.57(17)
C(1)-C(2)-C(3)	176.4(6)
C(1B)-C(2B)-C(3B)	110.5(5)
C(3A)-C(2A)-C(1A)	112.3(4)
C(81)-P(3)-C(71)	104.5(3)
C(81)-P(3)-C(20A)	102.0(3)
C(71)-P(3)-C(20A)	107.5(3)
C(81)-P(3)-Pt(2)	113.8(2)
C(71)-P(3)-Pt(2)	114.81(19)
C(20A)-P(3)-Pt(2)	113.0(2)
C(4)-C(3)-C(2)	176.3(7)
C(4B)-C(3B)-C(2B)	114.4(7)
C(2A)-C(3A)-C(4A)	115.0(5)
C(101)-P(4)-C(91)	104.5(3)
C(101)-P(4)-C(20B)	104.5(3)
C(91)-P(4)-C(20B)	107.3(3)
C(101)-P(4)-Pt(2)	112.2(2)

C(91)-P(4)-Pt(2)	114.79(19)
C(20B)-P(4)-Pt(2)	112.8(2)
C(3)-C(4)-C(5)	176.0(7)
C(5B)-C(4B)-C(3B)	122.5(9)
C(5A)-C(4A)-C(3A)	114.5(5)
C(6)-C(5)-C(4)	176.0(7)
C(4B)-C(5B)-C(6B)	120.5(10)
C(6A)-C(5A)-C(4A)	114.9(6)
C(5)-C(6)-C(7)	178.9(7)
C(5B)-C(6B)-C(7B)	112.0(9)
C(5A)-C(6A)-C(7A)	115.2(6)
C(8)-C(7)-C(6)	179.5(7)
C(8B)-C(7B)-C(6B)	114.0(9)
C(8A)-C(7A)-C(6A)	120.1(7)
C(7)-C(8)-Pt(2)	175.0(5)
C(7B)-C(8B)-C(9B)	116.8(9)
C(9A)-C(8A)-C(7A)	126.5(11)
C(10B)-C(9B)-C(8B)	110.9(7)
C(8A)-C(9A)-C(10A)	134.4(12)
C(11B)-C(10B)-C(9B)	111.0(8)
C(9A)-C(10A)-C(11A)	114.6(13)
C(12)-C(11)-C(16)	114.1(5)
C(12)-C(11)-Pt(1)	123.0(4)
C(16)-C(11)-Pt(1)	122.9(4)
C(10B)-C(11B)-C(12B)	112.0(8)
C(12A)-C(11A)-C(10A)	89.5(14)
F(12)-C(12)-C(11)	119.1(5)
F(12)-C(12)-C(13)	116.6(5)
C(11)-C(12)-C(13)	124.3(5)
C(13B)-C(12B)-C(11B)	116.6(8)
C(11A)-C(12A)-C(13A)	97(2)
F(13)-C(13)-C(12)	121.7(6)
F(13)-C(13)-C(14)	118.2(5)
C(12)-C(13)-C(14)	120.1(5)
C(14B)-C(13B)-C(12B)	115.1(7)
C(14A)-C(13A)-C(12A)	140(4)
F(14)-C(14)-C(13)	121.4(5)
F(14)-C(14)-C(15)	120.5(6)

C(13)-C(14)-C(15)	118.1(5)
C(13B)-C(14B)-C(15B)	112.3(7)
C(13A)-C(14A)-C(15A)	157(3)
F(15)-C(15)-C(16)	121.1(5)
F(15)-C(15)-C(14)	120.0(5)
C(16)-C(15)-C(14)	118.9(5)
C(16B)-C(15B)-C(14B)	114.5(7)
C(16A)-C(15A)-C(14A)	136(3)
F(16)-C(16)-C(11)	120.6(4)
F(16)-C(16)-C(15)	114.9(5)
C(11)-C(16)-C(15)	124.5(5)
C(17B)-C(16B)-C(15B)	113.7(7)
C(15A)-C(16A)-C(17A)	133(2)
C(16B)-C(17B)-C(18B)	114.4(7)
C(16A)-C(17A)-C(18A)	119.1(13)
C(19B)-C(18B)-C(17B)	113.5(6)
C(19A)-C(18A)-C(17A)	109.9(10)
C(20B)-C(19B)-C(18B)	113.5(5)
C(18A)-C(19A)-C(20A)	107.5(7)
C(19B)-C(20B)-P(4)	115.0(4)
C(19A)-C(20A)-P(3)	113.8(5)
C(26)-C(21)-C(22)	118.7(5)
C(26)-C(21)-P(1)	120.2(4)
C(22)-C(21)-P(1)	121.1(5)
C(23)-C(22)-C(21)	120.2(6)
C(22)-C(23)-C(24)	120.7(6)
C(25)-C(24)-C(23)	120.4(6)
C(24)-C(25)-C(26)	119.9(6)
C(21)-C(26)-C(25)	120.1(5)
C(32)-C(31)-C(36)	119.3(5)
C(32)-C(31)-P(1)	119.3(4)
C(36)-C(31)-P(1)	121.2(4)
C(33)-C(32)-C(31)	120.1(6)
C(32)-C(33)-C(34)	121.0(6)
C(33)-C(34)-C(35)	119.1(6)
C(36)-C(35)-C(34)	120.0(6)
C(35)-C(36)-C(31)	120.6(5)
C(46)-C(41)-C(42)	118.8(5)

C(46)-C(41)-P(2)	119.2(4)
C(42)-C(41)-P(2)	122.0(5)
C(43)-C(42)-C(41)	119.4(6)
C(44)-C(43)-C(42)	121.2(6)
C(43)-C(44)-C(45)	119.9(6)
C(46)-C(45)-C(44)	118.9(6)
C(41)-C(46)-C(45)	121.9(6)
C(52)-C(51)-C(56)	118.6(5)
C(52)-C(51)-P(2)	120.0(4)
C(56)-C(51)-P(2)	120.9(4)
C(51)-C(52)-C(53)	120.4(6)
C(54)-C(53)-C(52)	120.7(6)
C(53)-C(54)-C(55)	119.5(6)
C(54)-C(55)-C(56)	120.0(6)
C(55)-C(56)-C(51)	120.7(6)
C(62)-C(61)-C(66)	114.1(5)
C(62)-C(61)-Pt(2)	122.8(5)
C(66)-C(61)-Pt(2)	123.1(4)
F(62)-C(62)-C(61)	119.9(5)
F(62)-C(62)-C(63)	116.1(6)
C(61)-C(62)-C(63)	124.0(6)
F(63)-C(63)-C(64)	119.7(6)
F(63)-C(63)-C(62)	120.9(7)
C(64)-C(63)-C(62)	119.4(6)
F(64)-C(64)-C(65)	121.6(7)
F(64)-C(64)-C(63)	119.2(7)
C(65)-C(64)-C(63)	119.1(6)
F(65)-C(65)-C(64)	119.9(6)
F(65)-C(65)-C(66)	120.8(7)
C(64)-C(65)-C(66)	119.3(7)
F(66)-C(66)-C(61)	120.5(5)
F(66)-C(66)-C(65)	115.4(6)
C(61)-C(66)-C(65)	124.0(6)
C(72)-C(71)-C(76)	118.5(5)
C(72)-C(71)-P(3)	121.9(5)
C(76)-C(71)-P(3)	119.3(5)
C(73)-C(72)-C(71)	120.4(7)
C(74)-C(73)-C(72)	120.4(7)

C(75)-C(74)-C(73)	120.4(6)
C(74)-C(75)-C(76)	120.2(7)
C(75)-C(76)-C(71)	120.0(6)
C(82)-C(81)-C(86)	119.9(7)
C(82)-C(81)-P(3)	119.8(5)
C(86)-C(81)-P(3)	120.3(6)
C(81)-C(82)-C(83)	120.4(7)
C(84)-C(83)-C(82)	119.5(9)
C(83)-C(84)-C(85)	120.4(9)
C(86)-C(85)-C(84)	119.7(8)
C(85)-C(86)-C(81)	120.0(8)
C(92)-C(91)-C(96)	119.2(6)
C(92)-C(91)-P(4)	118.4(5)
C(96)-C(91)-P(4)	121.9(5)
C(91)-C(92)-C(93)	121.6(7)
C(94)-C(93)-C(92)	117.8(8)
C(95)-C(94)-C(93)	120.8(8)
C(96)-C(95)-C(94)	120.0(8)
C(95)-C(96)-C(91)	120.6(8)
C(106)-C(101)-C(102)	118.8(6)
C(106)-C(101)-P(4)	121.7(5)
C(102)-C(101)-P(4)	119.5(5)
C(103)-C(102)-C(101)	120.2(7)
C(104)-C(103)-C(102)	121.0(8)
C(105)-C(104)-C(103)	119.2(8)
C(104)-C(105)-C(106)	122.5(8)
C(101)-C(106)-C(105)	118.2(8)

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Table S4. Anisotropic displacement parameters ( $\text{\AA}^2 \times 10^3$ ) for **4**. The anisotropic displacement factor exponent takes the form:  $-2\pi^2[h^2a^*{}^2U^{11} + \dots + 2hka^*b^*U^{12}]$

	U <sup>11</sup>	U <sup>22</sup>	U <sup>33</sup>	U <sup>23</sup>	U <sup>13</sup>	U <sup>12</sup>
Pt(1)	22(1)	31(1)	18(1)	0(1)	3(1)	0(1)
P(1)	28(1)	32(1)	19(1)	-2(1)	4(1)	-3(1)
C(1B)	26(3)	65(4)	29(3)	3(3)	9(2)	2(3)
C(1)	28(3)	37(3)	24(2)	1(2)	7(2)	-5(3)
C(1A)	36(3)	48(4)	22(2)	4(2)	6(2)	8(3)
Pt(2)	22(1)	35(1)	34(1)	3(1)	1(1)	1(1)
P(2)	27(1)	34(1)	19(1)	1(1)	6(1)	1(1)
C(2)	33(3)	44(4)	26(3)	6(2)	8(2)	-1(3)
C(2B)	27(3)	66(4)	48(3)	9(3)	12(3)	2(3)
C(2A)	36(3)	35(3)	25(3)	4(2)	9(2)	2(3)
P(3)	27(1)	35(1)	45(1)	5(1)	2(1)	-1(1)
C(3)	30(3)	44(4)	27(3)	0(2)	5(2)	7(3)
C(3B)	41(4)	82(6)	85(5)	24(4)	0(4)	-18(4)
C(3A)	62(5)	36(3)	32(3)	8(3)	7(3)	4(3)
P(4)	30(1)	40(1)	38(1)	-1(1)	6(1)	1(1)
C(4)	33(3)	47(4)	38(3)	5(3)	9(3)	2(3)
C(4B)	61(6)	100(7)	183(12)	56(8)	-49(7)	-45(6)
C(4A)	72(5)	37(4)	54(4)	9(3)	23(4)	4(4)
C(5)	30(3)	48(4)	44(3)	3(3)	5(3)	0(3)
C(5B)	330(20)	90(7)	67(6)	2(6)	-18(9)	-98(10)
C(5A)	56(5)	35(4)	60(4)	-7(3)	21(3)	-9(3)
C(6)	31(3)	44(4)	38(3)	2(3)	1(3)	2(3)
C(6B)	150(11)	100(7)	89(7)	2(6)	17(7)	-60(7)
C(6A)	61(5)	61(4)	54(4)	4(3)	17(4)	14(4)
C(7)	27(3)	40(3)	39(3)	5(3)	3(3)	3(3)
C(7B)	74(7)	99(7)	106(8)	-1(6)	-9(6)	-14(6)
C(7A)	60(5)	92(6)	56(4)	-15(4)	17(4)	-7(5)
C(8)	38(4)	34(3)	40(3)	5(3)	7(3)	1(3)
C(8B)	74(6)	74(6)	106(7)	13(5)	12(5)	-13(5)
C(8A)	68(7)	460(20)	67(6)	-13(10)	19(6)	103(12)
C(9B)	97(8)	78(6)	77(6)	-8(5)	-9(5)	-12(6)
C(9A)	53(6)	257(16)	148(11)	86(10)	49(7)	33(8)
C(10B)	85(7)	88(6)	75(6)	-10(5)	16(5)	20(5)

C(10A)	96(10)	223(15)	111(9)	-24(9)	-2(8)	42(10)
C(11)	26(3)	27(3)	20(2)	-1(2)	6(2)	3(2)
C(11B)	138(10)	79(6)	80(6)	-20(5)	25(6)	23(7)
C(11A)	230(20)	190(15)	138(13)	-18(11)	39(13)	46(14)
F(12)	48(2)	34(2)	52(2)	-6(2)	15(2)	-11(2)
C(12)	26(3)	33(3)	28(3)	-4(2)	9(2)	-7(3)
C(12B)	117(9)	79(6)	86(6)	3(5)	37(6)	30(6)
C(12A)	1290(90)	86(11)	88(11)	34(9)	180(30)	210(30)
F(13)	85(3)	23(2)	71(2)	12(2)	24(2)	12(2)
C(13)	57(4)	26(3)	32(3)	3(2)	18(3)	12(3)
C(13B)	63(6)	103(7)	73(5)	10(5)	28(4)	16(5)
C(13A)	122(16)	680(70)	145(17)	-160(30)	53(13)	60(30)
F(14)	58(3)	58(2)	65(2)	12(2)	-2(2)	32(2)
C(14)	45(4)	45(4)	32(3)	10(3)	2(3)	14(3)
C(14B)	75(6)	76(6)	56(4)	1(4)	16(4)	26(5)
C(14A)	540(60)	270(30)	159(18)	-118(17)	120(30)	-40(30)
C(15)	29(3)	40(3)	28(3)	2(2)	6(2)	-1(3)
F(15)	26(2)	65(2)	58(2)	3(2)	3(2)	-2(2)
C(15B)	83(7)	85(6)	64(5)	2(4)	24(5)	10(5)
C(15A)	83(10)	480(40)	101(10)	80(17)	-35(8)	39(17)
F(16)	31(2)	35(2)	44(2)	7(1)	9(1)	-4(2)
C(16)	32(3)	19(3)	25(2)	5(2)	8(2)	3(2)
C(16B)	52(5)	103(7)	74(5)	-7(5)	16(4)	1(5)
C(16A)	230(20)	410(30)	145(15)	-58(18)	-25(15)	130(20)
C(17B)	45(5)	120(7)	65(5)	27(5)	4(4)	-5(5)
C(17A)	83(8)	336(19)	60(6)	38(9)	16(6)	-28(10)
C(18B)	60(5)	82(5)	54(4)	-8(4)	27(4)	-20(4)
C(18A)	95(8)	216(12)	58(5)	54(7)	16(5)	19(8)
C(19B)	46(4)	53(4)	46(4)	7(3)	15(3)	-5(3)
C(19A)	61(5)	101(6)	54(4)	27(4)	17(4)	-12(5)
C(20B)	35(3)	41(4)	53(4)	-6(3)	10(3)	-7(3)
C(20A)	57(5)	58(4)	47(4)	19(3)	2(3)	0(4)
C(21)	31(3)	33(3)	26(3)	-1(2)	0(2)	0(3)
C(22)	56(4)	47(4)	31(3)	-9(3)	10(3)	-10(3)
C(23)	73(5)	68(5)	36(3)	-23(3)	-2(3)	-18(4)
C(24)	59(5)	47(4)	55(4)	-15(3)	-8(4)	-16(4)
C(25)	45(4)	51(4)	50(4)	-1(3)	8(3)	-16(3)
C(26)	41(4)	40(3)	35(3)	-2(3)	7(3)	-14(3)

C(31)	32(3)	32(3)	15(2)	-2(2)	1(2)	1(3)
C(32)	29(3)	37(4)	43(3)	2(3)	8(3)	-4(3)
C(33)	49(4)	35(4)	46(3)	8(3)	8(3)	5(3)
C(34)	31(3)	38(4)	48(3)	4(3)	11(3)	10(3)
C(35)	32(3)	48(4)	35(3)	3(3)	9(2)	-4(3)
C(36)	32(3)	30(3)	31(3)	-1(2)	8(2)	0(3)
C(41)	43(4)	27(3)	25(3)	1(2)	7(2)	2(3)
C(42)	79(5)	46(4)	41(3)	-5(3)	33(3)	-9(4)
C(43)	89(6)	45(4)	44(4)	-12(3)	31(4)	-4(4)
C(44)	70(5)	34(4)	49(4)	-11(3)	9(4)	-4(4)
C(45)	58(5)	36(4)	51(4)	-5(3)	16(3)	-6(3)
C(46)	49(4)	33(3)	45(3)	-6(3)	23(3)	1(3)
C(51)	34(3)	29(3)	23(2)	0(2)	8(2)	1(3)
C(52)	41(4)	38(3)	29(3)	4(2)	11(2)	2(3)
C(53)	58(4)	35(4)	46(3)	7(3)	24(3)	8(3)
C(54)	59(5)	60(5)	33(3)	15(3)	20(3)	32(4)
C(55)	43(4)	60(5)	36(3)	4(3)	-2(3)	5(3)
C(56)	41(4)	39(3)	33(3)	1(3)	4(3)	-2(3)
C(61)	28(3)	31(3)	39(3)	0(2)	0(2)	2(3)
F(62)	52(3)	90(3)	43(2)	7(2)	12(2)	18(2)
C(62)	38(4)	43(4)	41(3)	0(3)	2(3)	13(3)
F(63)	88(4)	118(4)	33(2)	-4(2)	-4(2)	30(3)
C(63)	62(5)	59(4)	39(3)	-1(3)	-1(3)	15(4)
F(64)	66(3)	203(6)	64(3)	-5(3)	-26(2)	62(4)
C(64)	50(5)	92(6)	51(4)	-4(4)	-17(4)	33(5)
C(65)	31(4)	104(6)	66(5)	3(4)	5(3)	34(4)
F(65)	42(3)	226(6)	88(3)	3(4)	8(2)	61(4)
F(66)	40(2)	101(3)	45(2)	3(2)	10(2)	17(2)
C(66)	33(3)	52(4)	41(3)	-1(3)	4(3)	4(3)
C(71)	31(3)	32(3)	48(3)	5(3)	0(3)	2(3)
C(72)	39(4)	53(4)	46(3)	11(3)	5(3)	-3(3)
C(73)	50(5)	72(5)	52(4)	11(4)	-12(3)	-9(4)
C(74)	32(4)	53(4)	72(5)	10(4)	-9(3)	-4(3)
C(75)	29(4)	54(4)	83(5)	-3(4)	7(3)	-3(3)
C(76)	41(4)	41(4)	58(4)	0(3)	8(3)	-3(3)
C(81)	33(3)	41(4)	47(3)	0(3)	0(3)	6(3)
C(82)	43(4)	64(5)	64(4)	0(4)	20(3)	5(4)
C(83)	66(6)	97(7)	79(5)	-11(5)	36(4)	2(5)

C(84)	96(8)	127(9)	74(6)	-33(6)	18(6)	44(7)
C(85)	91(8)	62(6)	102(7)	-30(5)	13(6)	23(6)
C(86)	57(5)	42(4)	79(5)	-6(4)	3(4)	10(4)
C(91)	40(4)	31(3)	52(4)	-1(3)	6(3)	-4(3)
C(92)	50(4)	38(4)	61(4)	9(3)	8(3)	-2(3)
C(93)	61(5)	50(5)	81(5)	19(4)	-7(4)	-10(4)
C(94)	54(5)	44(5)	138(8)	36(5)	5(6)	6(4)
C(95)	69(6)	52(5)	109(7)	5(5)	24(5)	14(4)
C(96)	47(4)	37(4)	84(5)	4(3)	21(4)	6(3)
C(101)	37(4)	63(4)	38(3)	-6(3)	8(3)	4(3)
C(102)	42(4)	58(4)	57(4)	1(3)	14(3)	9(4)
C(103)	59(5)	90(6)	55(4)	12(4)	30(4)	20(5)
C(104)	67(6)	146(9)	48(4)	-11(5)	22(4)	3(6)
C(105)	111(9)	150(9)	66(6)	-57(6)	29(6)	-35(8)
C(106)	83(6)	94(6)	61(5)	-35(4)	30(4)	-40(5)

Table S5. Hydrogen coordinates ( $\times 10^4$ ) and isotropic displacement parameters ( $\text{\AA}^2 \times 10^3$ ) for **4**.

	x	y	z	U(eq)
H(1BA)	3361	-10634	6930	47
H(1BB)	3304	-9891	6314	47
H(1AA)	4045	-10400	3778	42
H(1AB)	3691	-10163	3979	42
H(2BA)	3173	-12361	6452	56
H(2BB)	3233	-11886	5814	56
H(2AA)	4056	-9097	4866	38
H(2AB)	4336	-9059	4457	38
H(3BA)	2703	-11092	6395	86
H(3BB)	2778	-10441	5808	86
H(3AA)	3664	-8038	4100	52
H(3AB)	3945	-7994	3696	52
H(4BA)	2628	-12903	5733	151
H(4BB)	2318	-12009	5733	151
H(4AA)	4292	-6715	4408	64
H(4AB)	3924	-6128	4153	64
H(5BA)	2702	-12166	4905	207
H(5BB)	2410	-11197	4908	207
H(5AA)	4128	-7253	5306	59
H(5AB)	4098	-5836	5202	59
H(6BA)	1988	-12547	4645	137
H(6BB)	2243	-13659	4834	137
H(6AA)	3533	-7447	4974	69
H(6AB)	3499	-6038	4847	69
H(7BA)	2518	-12970	4005	116
H(7BB)	2167	-13708	3821	116
H(7AA)	3723	-7047	6014	83
H(7AB)	3676	-5649	5879	83
H(8BA)	2185	-11217	3837	104
H(8BB)	1866	-12051	3552	104
H(9BA)	2189	-12680	2784	106
H(9BB)	2054	-11321	2722	106
H(10A)	2610	-10663	3260	100

H(10B)	2742	-12024	3288	100
H(11A)	2492	-10784	2182	118
H(11B)	2662	-12093	2242	118
H(12A)	3194	-11272	2734	110
H(12B)	3069	-10711	2075	110
H(13A)	3052	-9522	3180	93
H(13B)	3309	-9220	2751	93
H(14A)	2591	-8749	2478	82
H(14B)	2825	-8568	1993	82
H(15A)	2892	-7262	3097	91
H(15B)	3161	-7144	2672	91
H(16A)	2799	-5529	2476	91
H(16B)	2719	-6371	1891	91
H(17A)	2324	-6375	2783	93
H(17B)	2238	-7115	2164	93
H(18A)	2198	-4533	2257	76
H(18B)	2156	-5195	1619	76
H(19A)	1600	-4859	1696	57
H(19B)	1657	-6250	1861	57
H(20A)	1638	-4334	2688	51
H(20B)	1794	-5608	2928	51
H(22A)	3824	-12662	3408	54
H(23A)	3415	-14010	2940	73
H(24A)	3036	-14857	3462	68
H(25A)	3058	-14339	4453	59
H(26A)	3471	-12962	4942	46
H(32A)	4248	-14001	4510	44
H(33A)	4767	-14885	4454	52
H(34A)	5254	-13713	4478	46
H(35A)	5209	-11617	4510	45
H(36A)	4687	-10729	4549	37
H(42A)	3713	-9030	7392	63
H(43A)	3942	-7147	7701	68
H(44A)	4389	-6366	7326	62
H(45A)	4605	-7437	6596	57
H(46A)	4356	-9268	6248	48
H(52A)	3685	-13176	6832	42
H(53A)	3966	-14630	7492	53

H(54A)	4488	-14211	8138	59
H(55A)	4713	-12278	8172	58
H(56A)	4436	-10821	7507	46
H(72A)	761	-10424	855	56
H(73A)	217	-10809	270	74
H(74A)	-262	-10672	689	66
H(75A)	-204	-10204	1694	67
H(76A)	339	-9848	2303	57
H(82A)	1571	-8738	1624	67
H(83A)	1988	-9523	1156	93
H(84A)	1980	-11549	918	119
H(85A)	1571	-12816	1186	103
H(86A)	1166	-12037	1676	73
H(92A)	1007	-4989	1427	61
H(93A)	568	-3834	841	81
H(94A)	187	-2836	1328	97
H(95A)	265	-2910	2372	91
H(96A)	698	-4077	2935	66
H(10C)	893	-7041	3474	62
H(10D)	866	-6827	4487	78
H(10E)	1127	-5229	5049	102
H(10F)	1418	-3851	4615	129
H(10G)	1443	-3963	3587	92

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Table S6. Torsion angles [°] for **4**.

C(1)-Pt(1)-P(1)-C(31)	170.8(2)
C(11)-Pt(1)-P(1)-C(31)	-9.4(2)
P(2)-Pt(1)-P(1)-C(31)	-173.2(5)
Pt(2)-Pt(1)-P(1)-C(31)	-179.8(2)
C(1)-Pt(1)-P(1)-C(21)	-70.4(2)
C(11)-Pt(1)-P(1)-C(21)	109.3(2)
P(2)-Pt(1)-P(1)-C(21)	-54.4(6)
Pt(2)-Pt(1)-P(1)-C(21)	-61.02(18)
C(1)-Pt(1)-P(1)-C(1A)	46.3(2)
C(11)-Pt(1)-P(1)-C(1A)	-133.9(2)
P(2)-Pt(1)-P(1)-C(1A)	62.3(6)
Pt(2)-Pt(1)-P(1)-C(1A)	55.7(2)
C(11)-Pt(1)-C(1)-C(2)	9(9)
P(1)-Pt(1)-C(1)-C(2)	15(5)
P(2)-Pt(1)-C(1)-C(2)	-163(5)
Pt(2)-Pt(1)-C(1)-C(2)	-30(5)
C(31)-P(1)-C(1A)-C(2A)	-90.6(4)
C(21)-P(1)-C(1A)-C(2A)	159.6(4)
Pt(1)-P(1)-C(1A)-C(2A)	38.7(5)
C(1)-Pt(1)-Pt(2)-C(8)	-15.8(15)
C(11)-Pt(1)-Pt(2)-C(8)	169.5(14)
P(1)-Pt(1)-Pt(2)-C(8)	-149.1(13)
P(2)-Pt(1)-Pt(2)-C(8)	31.6(13)
C(1)-Pt(1)-Pt(2)-C(61)	148.5(11)
C(11)-Pt(1)-Pt(2)-C(61)	-26.2(11)
P(1)-Pt(1)-Pt(2)-C(61)	15.3(9)
P(2)-Pt(1)-Pt(2)-C(61)	-164.0(9)
C(1)-Pt(1)-Pt(2)-P(3)	-159.9(7)
C(11)-Pt(1)-Pt(2)-P(3)	25.4(6)
P(1)-Pt(1)-Pt(2)-P(3)	66.87(6)
P(2)-Pt(1)-Pt(2)-P(3)	-112.48(6)
C(1)-Pt(1)-Pt(2)-P(4)	16.4(7)
C(11)-Pt(1)-Pt(2)-P(4)	-158.3(6)
P(1)-Pt(1)-Pt(2)-P(4)	-116.86(5)
P(2)-Pt(1)-Pt(2)-P(4)	63.79(5)
C(2B)-C(1B)-P(2)-C(41)	168.7(4)

C(2B)-C(1B)-P(2)-C(51)	-80.0(5)
C(2B)-C(1B)-P(2)-Pt(1)	47.4(5)
C(1)-Pt(1)-P(2)-C(41)	-86.5(2)
C(11)-Pt(1)-P(2)-C(41)	93.8(2)
P(1)-Pt(1)-P(2)-C(41)	-102.5(5)
Pt(2)-Pt(1)-P(2)-C(41)	-96.00(19)
C(1)-Pt(1)-P(2)-C(51)	154.5(2)
C(11)-Pt(1)-P(2)-C(51)	-25.2(2)
P(1)-Pt(1)-P(2)-C(51)	138.5(5)
Pt(2)-Pt(1)-P(2)-C(51)	145.0(2)
C(1)-Pt(1)-P(2)-C(1B)	30.3(3)
C(11)-Pt(1)-P(2)-C(1B)	-149.4(3)
P(1)-Pt(1)-P(2)-C(1B)	14.3(6)
Pt(2)-Pt(1)-P(2)-C(1B)	20.8(2)
Pt(1)-C(1)-C(2)-C(3)	36(14)
P(2)-C(1B)-C(2B)-C(3B)	-159.7(5)
P(1)-C(1A)-C(2A)-C(3A)	-158.9(4)
C(8)-Pt(2)-P(3)-C(81)	-68.8(3)
C(61)-Pt(2)-P(3)-C(81)	107.8(3)
P(4)-Pt(2)-P(3)-C(81)	-103.2(6)
Pt(1)-Pt(2)-P(3)-C(81)	-64.4(2)
C(8)-Pt(2)-P(3)-C(71)	170.9(3)
C(61)-Pt(2)-P(3)-C(71)	-12.5(3)
P(4)-Pt(2)-P(3)-C(71)	136.4(6)
Pt(1)-Pt(2)-P(3)-C(71)	175.2(2)
C(8)-Pt(2)-P(3)-C(20A)	47.0(3)
C(61)-Pt(2)-P(3)-C(20A)	-136.4(3)
P(4)-Pt(2)-P(3)-C(20A)	12.6(7)
Pt(1)-Pt(2)-P(3)-C(20A)	51.4(3)
C(1)-C(2)-C(3)-C(4)	7(18)
C(1B)-C(2B)-C(3B)-C(4B)	171.8(7)
C(1A)-C(2A)-C(3A)-C(4A)	179.5(5)
C(8)-Pt(2)-P(4)-C(101)	-65.8(3)
C(61)-Pt(2)-P(4)-C(101)	117.6(3)
P(3)-Pt(2)-P(4)-C(101)	-31.3(6)
Pt(1)-Pt(2)-P(4)-C(101)	-69.8(2)
C(8)-Pt(2)-P(4)-C(91)	175.0(3)
C(61)-Pt(2)-P(4)-C(91)	-1.6(3)

P(3)-Pt(2)-P(4)-C(91)	-150.4(6)
Pt(1)-Pt(2)-P(4)-C(91)	171.1(2)
C(8)-Pt(2)-P(4)-C(20B)	51.8(3)
C(61)-Pt(2)-P(4)-C(20B)	-124.8(3)
P(3)-Pt(2)-P(4)-C(20B)	86.3(6)
Pt(1)-Pt(2)-P(4)-C(20B)	47.8(2)
C(2)-C(3)-C(4)-C(5)	22(18)
C(2B)-C(3B)-C(4B)-C(5B)	-90.1(14)
C(2A)-C(3A)-C(4A)-C(5A)	-60.9(8)
C(3)-C(4)-C(5)-C(6)	-5(18)
C(3B)-C(4B)-C(5B)-C(6B)	-176.1(10)
C(3A)-C(4A)-C(5A)-C(6A)	-60.6(8)
C(4)-C(5)-C(6)-C(7)	1(45)
C(4B)-C(5B)-C(6B)-C(7B)	-161.4(13)
C(4A)-C(5A)-C(6A)-C(7A)	-178.2(6)
C(5)-C(6)-C(7)-C(8)	-78(100)
C(5B)-C(6B)-C(7B)-C(8B)	-81.9(12)
C(5A)-C(6A)-C(7A)-C(8A)	-178.0(10)
C(6)-C(7)-C(8)-Pt(2)	-44(99)
C(61)-Pt(2)-C(8)-C(7)	24(9)
P(3)-Pt(2)-C(8)-C(7)	111(6)
P(4)-Pt(2)-C(8)-C(7)	-73(6)
Pt(1)-Pt(2)-C(8)-C(7)	75(6)
C(6B)-C(7B)-C(8B)-C(9B)	169.0(8)
C(6A)-C(7A)-C(8A)-C(9A)	-35(2)
C(7B)-C(8B)-C(9B)-C(10B)	-72.9(10)
C(7A)-C(8A)-C(9A)-C(10A)	-166.5(15)
C(8B)-C(9B)-C(10B)-C(11B)	-177.4(7)
C(8A)-C(9A)-C(10A)-C(11A)	-134(2)
C(1)-Pt(1)-C(11)-C(12)	-88(6)
P(1)-Pt(1)-C(11)-C(12)	-94.7(4)
P(2)-Pt(1)-C(11)-C(12)	83.8(4)
Pt(2)-Pt(1)-C(11)-C(12)	-54.5(8)
C(1)-Pt(1)-C(11)-C(16)	91(6)
P(1)-Pt(1)-C(11)-C(16)	85.0(4)
P(2)-Pt(1)-C(11)-C(16)	-96.6(4)
Pt(2)-Pt(1)-C(11)-C(16)	125.1(5)
C(9B)-C(10B)-C(11B)-C(12B)	174.2(7)

C(9A)-C(10A)-C(11A)-C(12A)	98.4(14)
C(16)-C(11)-C(12)-F(12)	-176.3(4)
Pt(1)-C(11)-C(12)-F(12)	3.4(6)
C(16)-C(11)-C(12)-C(13)	2.4(7)
Pt(1)-C(11)-C(12)-C(13)	-177.9(4)
C(10B)-C(11B)-C(12B)-C(13B)	-61.5(11)
C(10A)-C(11A)-C(12A)-C(13A)	162.1(16)
F(12)-C(12)-C(13)-F(13)	-2.6(7)
C(11)-C(12)-C(13)-F(13)	178.7(5)
F(12)-C(12)-C(13)-C(14)	176.5(5)
C(11)-C(12)-C(13)-C(14)	-2.2(8)
C(11B)-C(12B)-C(13B)-C(14B)	-57.2(11)
C(11A)-C(12A)-C(13A)-C(14A)	-174(4)
F(13)-C(13)-C(14)-F(14)	-0.3(8)
C(12)-C(13)-C(14)-F(14)	-179.4(5)
F(13)-C(13)-C(14)-C(15)	-180.0(5)
C(12)-C(13)-C(14)-C(15)	0.9(8)
C(12B)-C(13B)-C(14B)-C(15B)	-173.1(7)
C(12A)-C(13A)-C(14A)-C(15A)	-95(8)
F(14)-C(14)-C(15)-F(15)	1.3(8)
C(13)-C(14)-C(15)-F(15)	-179.1(5)
F(14)-C(14)-C(15)-C(16)	-179.8(5)
C(13)-C(14)-C(15)-C(16)	-0.1(8)
C(13B)-C(14B)-C(15B)-C(16B)	173.3(7)
C(13A)-C(14A)-C(15A)-C(16A)	-132(9)
C(12)-C(11)-C(16)-F(16)	177.7(4)
Pt(1)-C(11)-C(16)-F(16)	-2.0(6)
C(12)-C(11)-C(16)-C(15)	-1.5(7)
Pt(1)-C(11)-C(16)-C(15)	178.8(4)
F(15)-C(15)-C(16)-F(16)	0.2(7)
C(14)-C(15)-C(16)-F(16)	-178.7(4)
F(15)-C(15)-C(16)-C(11)	179.4(5)
C(14)-C(15)-C(16)-C(11)	0.5(8)
C(14B)-C(15B)-C(16B)-C(17B)	65.7(10)
C(14A)-C(15A)-C(16A)-C(17A)	81(4)
C(15B)-C(16B)-C(17B)-C(18B)	175.1(6)
C(15A)-C(16A)-C(17A)-C(18A)	43(4)
C(16B)-C(17B)-C(18B)-C(19B)	172.5(6)

C(16A)-C(17A)-C(18A)-C(19A)	-138.8(16)
C(17B)-C(18B)-C(19B)-C(20B)	75.3(8)
C(17A)-C(18A)-C(19A)-C(20A)	175.2(8)
C(18B)-C(19B)-C(20B)-P(4)	-165.1(5)
C(101)-P(4)-C(20B)-C(19B)	172.3(5)
C(91)-P(4)-C(20B)-C(19B)	-77.2(5)
Pt(2)-P(4)-C(20B)-C(19B)	50.2(5)
C(18A)-C(19A)-C(20A)-P(3)	-167.1(6)
C(81)-P(3)-C(20A)-C(19A)	163.8(5)
C(71)-P(3)-C(20A)-C(19A)	-86.6(6)
Pt(2)-P(3)-C(20A)-C(19A)	41.2(6)
C(31)-P(1)-C(21)-C(26)	123.1(5)
C(1A)-P(1)-C(21)-C(26)	-124.3(5)
Pt(1)-P(1)-C(21)-C(26)	-2.9(5)
C(31)-P(1)-C(21)-C(22)	-56.0(5)
C(1A)-P(1)-C(21)-C(22)	56.6(5)
Pt(1)-P(1)-C(21)-C(22)	178.0(4)
C(26)-C(21)-C(22)-C(23)	0.4(9)
P(1)-C(21)-C(22)-C(23)	179.5(5)
C(21)-C(22)-C(23)-C(24)	-0.5(11)
C(22)-C(23)-C(24)-C(25)	0.5(12)
C(23)-C(24)-C(25)-C(26)	-0.3(11)
C(22)-C(21)-C(26)-C(25)	-0.3(9)
P(1)-C(21)-C(26)-C(25)	-179.3(5)
C(24)-C(25)-C(26)-C(21)	0.2(10)
C(21)-P(1)-C(31)-C(32)	-31.1(4)
C(1A)-P(1)-C(31)-C(32)	-141.4(4)
Pt(1)-P(1)-C(31)-C(32)	91.8(4)
C(21)-P(1)-C(31)-C(36)	153.8(4)
C(1A)-P(1)-C(31)-C(36)	43.5(4)
Pt(1)-P(1)-C(31)-C(36)	-83.3(4)
C(36)-C(31)-C(32)-C(33)	-1.1(8)
P(1)-C(31)-C(32)-C(33)	-176.3(4)
C(31)-C(32)-C(33)-C(34)	1.6(8)
C(32)-C(33)-C(34)-C(35)	-1.4(8)
C(33)-C(34)-C(35)-C(36)	0.9(8)
C(34)-C(35)-C(36)-C(31)	-0.5(8)
C(32)-C(31)-C(36)-C(35)	0.6(7)

P(1)-C(31)-C(36)-C(35)	175.7(4)
C(51)-P(2)-C(41)-C(46)	103.1(5)
C(1B)-P(2)-C(41)-C(46)	-143.6(5)
Pt(1)-P(2)-C(41)-C(46)	-20.9(5)
C(51)-P(2)-C(41)-C(42)	-77.8(5)
C(1B)-P(2)-C(41)-C(42)	35.5(5)
Pt(1)-P(2)-C(41)-C(42)	158.1(4)
C(46)-C(41)-C(42)-C(43)	-0.1(9)
P(2)-C(41)-C(42)-C(43)	-179.1(5)
C(41)-C(42)-C(43)-C(44)	-1.6(11)
C(42)-C(43)-C(44)-C(45)	1.4(11)
C(43)-C(44)-C(45)-C(46)	0.5(10)
C(42)-C(41)-C(46)-C(45)	1.9(9)
P(2)-C(41)-C(46)-C(45)	-179.0(5)
C(44)-C(45)-C(46)-C(41)	-2.2(9)
C(41)-P(2)-C(51)-C(52)	164.8(4)
C(1B)-P(2)-C(51)-C(52)	54.5(5)
Pt(1)-P(2)-C(51)-C(52)	-72.6(5)
C(41)-P(2)-C(51)-C(56)	-23.9(5)
C(1B)-P(2)-C(51)-C(56)	-134.1(5)
Pt(1)-P(2)-C(51)-C(56)	98.7(5)
C(56)-C(51)-C(52)-C(53)	-0.7(8)
P(2)-C(51)-C(52)-C(53)	170.8(4)
C(51)-C(52)-C(53)-C(54)	-0.5(9)
C(52)-C(53)-C(54)-C(55)	2.1(9)
C(53)-C(54)-C(55)-C(56)	-2.4(10)
C(54)-C(55)-C(56)-C(51)	1.2(10)
C(52)-C(51)-C(56)-C(55)	0.3(9)
P(2)-C(51)-C(56)-C(55)	-171.1(5)
C(8)-Pt(2)-C(61)-C(62)	12(4)
P(3)-Pt(2)-C(61)-C(62)	-74.6(5)
P(4)-Pt(2)-C(61)-C(62)	108.5(5)
Pt(1)-Pt(2)-C(61)-C(62)	-23.5(13)
C(8)-Pt(2)-C(61)-C(66)	-168(3)
P(3)-Pt(2)-C(61)-C(66)	104.9(5)
P(4)-Pt(2)-C(61)-C(66)	-72.0(5)
Pt(1)-Pt(2)-C(61)-C(66)	155.9(7)
C(66)-C(61)-C(62)-F(62)	-179.5(5)

Pt(2)-C(61)-C(62)-F(62)	0.0(8)
C(66)-C(61)-C(62)-C(63)	-0.2(9)
Pt(2)-C(61)-C(62)-C(63)	179.4(5)
F(62)-C(62)-C(63)-F(63)	-0.7(10)
C(61)-C(62)-C(63)-F(63)	180.0(6)
F(62)-C(62)-C(63)-C(64)	178.2(7)
C(61)-C(62)-C(63)-C(64)	-1.1(11)
F(63)-C(63)-C(64)-F(64)	-2.0(12)
C(62)-C(63)-C(64)-F(64)	179.1(7)
F(63)-C(63)-C(64)-C(65)	-179.8(7)
C(62)-C(63)-C(64)-C(65)	1.3(13)
F(64)-C(64)-C(65)-F(65)	0.9(14)
C(63)-C(64)-C(65)-F(65)	178.7(8)
F(64)-C(64)-C(65)-C(66)	-177.9(7)
C(63)-C(64)-C(65)-C(66)	-0.2(13)
C(62)-C(61)-C(66)-F(66)	179.2(5)
Pt(2)-C(61)-C(66)-F(66)	-0.3(8)
C(62)-C(61)-C(66)-C(65)	1.4(10)
Pt(2)-C(61)-C(66)-C(65)	-178.2(6)
F(65)-C(65)-C(66)-F(66)	2.0(11)
C(64)-C(65)-C(66)-F(66)	-179.2(7)
F(65)-C(65)-C(66)-C(61)	179.9(7)
C(64)-C(65)-C(66)-C(61)	-1.2(13)
C(81)-P(3)-C(71)-C(72)	-20.9(6)
C(20A)-P(3)-C(71)-C(72)	-128.8(5)
Pt(2)-P(3)-C(71)-C(72)	104.5(5)
C(81)-P(3)-C(71)-C(76)	164.1(5)
C(20A)-P(3)-C(71)-C(76)	56.2(5)
Pt(2)-P(3)-C(71)-C(76)	-70.5(5)
C(76)-C(71)-C(72)-C(73)	-0.6(9)
P(3)-C(71)-C(72)-C(73)	-175.6(5)
C(71)-C(72)-C(73)-C(74)	1.0(10)
C(72)-C(73)-C(74)-C(75)	-0.8(11)
C(73)-C(74)-C(75)-C(76)	0.1(11)
C(74)-C(75)-C(76)-C(71)	0.3(10)
C(72)-C(71)-C(76)-C(75)	-0.1(9)
P(3)-C(71)-C(76)-C(75)	175.1(5)
C(71)-P(3)-C(81)-C(82)	124.2(5)

C(20A)-P(3)-C(81)-C(82)	-123.9(5)
Pt(2)-P(3)-C(81)-C(82)	-1.8(6)
C(71)-P(3)-C(81)-C(86)	-57.3(5)
C(20A)-P(3)-C(81)-C(86)	54.5(6)
Pt(2)-P(3)-C(81)-C(86)	176.6(4)
C(86)-C(81)-C(82)-C(83)	-1.3(10)
P(3)-C(81)-C(82)-C(83)	177.1(5)
C(81)-C(82)-C(83)-C(84)	1.8(12)
C(82)-C(83)-C(84)-C(85)	-1.3(14)
C(83)-C(84)-C(85)-C(86)	0.4(15)
C(84)-C(85)-C(86)-C(81)	0.1(13)
C(82)-C(81)-C(86)-C(85)	0.3(10)
P(3)-C(81)-C(86)-C(85)	-178.1(6)
C(101)-P(4)-C(91)-C(92)	179.2(5)
C(20B)-P(4)-C(91)-C(92)	68.6(5)
Pt(2)-P(4)-C(91)-C(92)	-57.5(6)
C(101)-P(4)-C(91)-C(96)	-9.2(6)
C(20B)-P(4)-C(91)-C(96)	-119.8(5)
Pt(2)-P(4)-C(91)-C(96)	114.1(5)
C(96)-C(91)-C(92)-C(93)	-0.8(10)
P(4)-C(91)-C(92)-C(93)	171.1(5)
C(91)-C(92)-C(93)-C(94)	-0.3(10)
C(92)-C(93)-C(94)-C(95)	1.8(12)
C(93)-C(94)-C(95)-C(96)	-2.2(13)
C(94)-C(95)-C(96)-C(91)	1.1(12)
C(92)-C(91)-C(96)-C(95)	0.4(10)
P(4)-C(91)-C(96)-C(95)	-171.1(5)
C(91)-P(4)-C(101)-C(106)	-75.6(6)
C(20B)-P(4)-C(101)-C(106)	37.0(7)
Pt(2)-P(4)-C(101)-C(106)	159.4(6)
C(91)-P(4)-C(101)-C(102)	103.9(6)
C(20B)-P(4)-C(101)-C(102)	-143.5(5)
Pt(2)-P(4)-C(101)-C(102)	-21.1(6)
C(106)-C(101)-C(102)-C(103)	-1.1(10)
P(4)-C(101)-C(102)-C(103)	179.4(5)
C(101)-C(102)-C(103)-C(104)	0.0(11)
C(102)-C(103)-C(104)-C(105)	0.0(14)
C(103)-C(104)-C(105)-C(106)	1.1(16)

C(102)-C(101)-C(106)-C(105)	2.1(12)
P(4)-C(101)-C(106)-C(105)	-178.4(7)
C(104)-C(105)-C(106)-C(101)	-2.2(16)

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Table S7. Crystal data and structure refinement for **5**.

Empirical formula	$C_{108}H_{120}F_{10}P_4Pt_2$	
Formula weight	2122.10	
Temperature	173(2) K	
Wavelength	0.71073 Å	
Crystal system	Triclinic	
Space group	P-1	
Unit cell dimensions	$a = 11.4000(2)$ Å	$\alpha = 83.968(1)^\circ$
	$b = 14.3770(3)$ Å	$\beta = 80.358(1)^\circ$
	$c = 15.1140(3)$ Å	$\gamma = 80.128 (1)^\circ$
Volume	$2398.55(8)$ Å <sup>3</sup>	
Z	1	
Density (calculated)	1.469 Mg/m <sup>3</sup>	
Absorption coefficient	3.047 mm <sup>-1</sup>	
F(000)	1074	
Crystal size	$0.20 \times 0.15 \times 0.10$ mm <sup>3</sup>	
Θ range for data collection	1.91 to 27.52°	
Index ranges	$-14 \leq h \leq 14, -18 \leq k \leq 18, -19 \leq l \leq 19$	
Reflections collected	20633	
Independent reflections	10992 [R(int) = 0.0250]	
Reflections [ $I > 2\sigma(I)$ ]	9513	
Completeness to Θ = 27.52°	99.5%	
Absorption correction	Empirical (Scalepack)	
Max. and min. transmission	0.7504 and 0.5809	
Refinement method	Full-matrix least-squares on F <sup>2</sup>	
Data / restraints / parameters	10992 / 0 / 559	
Goodness-of-fit on F <sup>2</sup>	1.019	
Final R indices [ $I > 2\sigma(I)$ ]	R1 = 0.0303, wR2 = 0.0712	
R indices (all data)	R1 = 0.0395, wR2 = 0.0748	
Largest diff. peak and hole	1.619 and $-1.191$ eÅ <sup>-3</sup>	

Table S8. Atomic coordinates ( $\times 10^4$ ) and equivalent isotropic displacement parameters ( $\text{\AA}^2 \times 10^3$ ) for **5**. U(eq) is defined as one third of the trace of the orthogonalized  $U^{ij}$  tensor.

	x	y	z	U(eq)
Pt(1)	1903(1)	-2136(1)	1412(1)	29(1)
P(1)	29(1)	-2178(1)	1037(1)	30(1)
C(1)	1203(3)	-1695(2)	2610(2)	33(1)
P(2)	3792(1)	-2226(1)	1816(1)	31(1)
C(2)	843(3)	-1292(2)	3297(2)	37(1)
C(3)	478(3)	-775(3)	4031(2)	42(1)
C(4)	167(3)	-279(3)	4653(2)	45(1)
C(11)	2697(3)	-2451(2)	134(2)	33(1)
F(12)	2792(2)	-4114(2)	382(2)	62(1)
C(12)	3037(3)	-3340(3)	-176(2)	43(1)
F(13)	3995(2)	-4408(2)	-1263(2)	83(1)
C(13)	3656(3)	-3512(3)	-1028(3)	54(1)
F(14)	4575(3)	-2921(2)	-2434(2)	89(1)
C(14)	3950(4)	-2762(3)	-1608(2)	56(1)
F(15)	3967(3)	-1125(2)	-1894(2)	82(1)
C(15)	3644(3)	-1866(3)	-1339(2)	52(1)
F(16)	2757(2)	-823(2)	-265(2)	55(1)
C(16)	3016(3)	-1727(3)	-493(2)	41(1)
C(21)	-1276(3)	-1424(2)	1615(2)	40(1)
C(22)	-1826(3)	-1841(3)	2532(2)	47(1)
C(23)	-2837(3)	-1127(3)	3007(3)	52(1)
C(24)	-2407(4)	-308(3)	3331(3)	62(1)
C(25)	-3377(4)	368(3)	3867(3)	57(1)
C(26)	-2872(4)	1214(4)	4106(3)	68(1)
C(27)	-3783(4)	1938(3)	4605(3)	66(1)
C(28)	-3233(5)	2684(4)	4946(3)	76(1)
C(29)	-2470(5)	3263(3)	4250(3)	72(1)
C(30)	-2100(5)	4089(3)	4626(3)	71(1)
C(31)	-1137(4)	3790(3)	5236(3)	69(1)
C(32)	116(4)	3585(4)	4720(3)	68(1)
C(33)	1092(4)	3207(3)	5304(3)	66(1)
C(34)	2371(5)	3237(3)	4827(3)	70(1)
C(35)	2698(4)	2744(3)	3952(3)	60(1)

C(36)	2768(4)	1676(3)	4084(3)	57(1)
C(37)	3051(4)	1211(3)	3196(3)	51(1)
C(38)	3336(3)	141(3)	3314(3)	47(1)
C(39)	3517(3)	-348(3)	2439(2)	45(1)
C(40)	3934(3)	-1406(2)	2619(2)	39(1)
C(41)	-375(3)	-3356(2)	1279(2)	36(1)
C(42)	131(4)	-3983(3)	1916(3)	61(1)
C(43)	-272(4)	-4834(3)	2176(4)	80(2)
C(44)	-1173(4)	-5073(3)	1792(4)	71(1)
C(45)	-1691(5)	-4459(3)	1168(4)	74(1)
C(46)	-1283(4)	-3608(3)	907(3)	64(1)
C(51)	-81(3)	-1859(2)	-146(2)	34(1)
C(52)	329(3)	-2508(3)	-791(2)	43(1)
C(53)	317(4)	-2222(3)	-1698(3)	55(1)
C(54)	-101(3)	-1301(3)	-1967(3)	54(1)
C(55)	-524(3)	-660(3)	-1337(3)	49(1)
C(56)	-518(3)	-932(2)	-430(2)	39(1)
C(61)	5030(3)	-2172(2)	887(2)	37(1)
C(62)	5498(3)	-2988(3)	435(2)	44(1)
C(63)	6354(3)	-2939(3)	-332(3)	52(1)
C(64)	6767(3)	-2095(3)	-630(3)	57(1)
C(65)	6338(3)	-1303(3)	-180(3)	53(1)
C(66)	5471(3)	-1333(3)	575(2)	45(1)
C(71)	4220(3)	-3363(2)	2428(2)	39(1)
C(72)	5305(4)	-3564(3)	2764(3)	57(1)
C(73)	5581(5)	-4414(4)	3272(3)	73(1)
C(74)	4802(5)	-5058(3)	3435(3)	70(1)
C(75)	3762(4)	-4879(3)	3084(4)	74(1)
C(76)	3452(4)	-4027(3)	2581(3)	60(1)

Table S9. Bond lengths [ $\text{\AA}$ ] and angles [ $^\circ$ ] for **5**.

Pt(1)-C(1)	1.976(3)
Pt(1)-C(11)	2.052(3)
Pt(1)-P(1)	2.3123(8)
Pt(1)-P(2)	2.3144(8)
Pt(1)-Pt(1)#1	12.7798(3)
P(1)-C(41)	1.814(3)
P(1)-C(51)	1.818(3)
P(1)-C(21)	1.834(3)
C(1)-C(2)	1.218(4)
P(2)-C(61)	1.822(3)
P(2)-C(40)	1.822(3)
P(2)-C(71)	1.824(3)
C(2)-C(3)	1.367(5)
C(3)-C(4)	1.209(5)
C(4)-C(4)#1	1.351(7)
C(11)-C(12)	1.378(5)
C(11)-C(16)	1.386(5)
F(12)-C(12)	1.362(4)
C(12)-C(13)	1.386(5)
F(13)-C(13)	1.347(5)
C(13)-C(14)	1.368(6)
F(14)-C(14)	1.350(4)
C(14)-C(15)	1.362(6)
F(15)-C(15)	1.349(5)
C(15)-C(16)	1.373(5)
F(16)-C(16)	1.351(4)
C(21)-C(22)	1.528(5)
C(22)-C(23)	1.539(5)
C(23)-C(24)	1.505(6)
C(24)-C(25)	1.524(5)
C(25)-C(26)	1.530(6)
C(26)-C(27)	1.504(6)
C(27)-C(28)	1.505(7)
C(28)-C(29)	1.523(7)
C(29)-C(30)	1.518(7)
C(30)-C(31)	1.528(7)

C(31)-C(32)	1.505(6)
C(32)-C(33)	1.527(7)
C(33)-C(34)	1.520(6)
C(34)-C(35)	1.527(6)
C(35)-C(36)	1.517(6)
C(36)-C(37)	1.525(5)
C(37)-C(38)	1.514(5)
C(38)-C(39)	1.530(5)
C(39)-C(40)	1.524(5)
C(41)-C(46)	1.373(5)
C(41)-C(42)	1.378(5)
C(42)-C(43)	1.376(6)
C(43)-C(44)	1.368(7)
C(44)-C(45)	1.361(7)
C(45)-C(46)	1.379(6)
C(51)-C(52)	1.388(5)
C(51)-C(56)	1.391(5)
C(52)-C(53)	1.392(5)
C(53)-C(54)	1.371(6)
C(54)-C(55)	1.366(6)
C(55)-C(56)	1.386(5)
C(61)-C(66)	1.392(5)
C(61)-C(62)	1.400(5)
C(62)-C(63)	1.389(5)
C(63)-C(64)	1.381(6)
C(64)-C(65)	1.363(6)
C(65)-C(66)	1.381(5)
C(71)-C(76)	1.380(5)
C(71)-C(72)	1.388(5)
C(72)-C(73)	1.391(6)
C(73)-C(74)	1.366(7)
C(74)-C(75)	1.353(7)
C(75)-C(76)	1.396(6)
C(1)-Pt(1)-C(11)	173.60(12)
C(1)-Pt(1)-P(1)	92.55(9)
C(11)-Pt(1)-P(1)	90.16(9)
C(1)-Pt(1)-P(2)	88.16(9)

C(11)-Pt(1)-P(2)	89.61(9)
P(1)-Pt(1)-P(2)	175.33(3)
C(1)-Pt(1)-Pt(1)#1	10.60(9)
C(11)-Pt(1)-Pt(1)#1	163.00(9)
P(1)-Pt(1)-Pt(1)#1	96.503(19)
P(2)-Pt(1)-Pt(1)#1	85.00(2)
C(41)-P(1)-C(51)	105.94(15)
C(41)-P(1)-C(21)	103.14(15)
C(51)-P(1)-C(21)	103.07(16)
C(41)-P(1)-Pt(1)	111.18(11)
C(51)-P(1)-Pt(1)	114.15(10)
C(21)-P(1)-Pt(1)	118.08(11)
C(2)-C(1)-Pt(1)	169.6(3)
C(61)-P(2)-C(40)	107.76(16)
C(61)-P(2)-C(71)	103.44(15)
C(40)-P(2)-C(71)	101.17(16)
C(61)-P(2)-Pt(1)	115.71(11)
C(40)-P(2)-Pt(1)	116.52(11)
C(71)-P(2)-Pt(1)	110.51(12)
C(1)-C(2)-C(3)	175.2(4)
C(4)-C(3)-C(2)	176.8(4)
C(3)-C(4)-C(4)#1	179.3(5)
C(12)-C(11)-C(16)	113.8(3)
C(12)-C(11)-Pt(1)	126.7(3)
C(16)-C(11)-Pt(1)	119.4(2)
F(12)-C(12)-C(11)	119.5(3)
F(12)-C(12)-C(13)	116.5(3)
C(11)-C(12)-C(13)	123.9(4)
F(13)-C(13)-C(14)	121.0(3)
F(13)-C(13)-C(12)	120.0(4)
C(14)-C(13)-C(12)	119.0(4)
F(14)-C(14)-C(15)	120.7(4)
F(14)-C(14)-C(13)	119.5(4)
C(15)-C(14)-C(13)	119.8(3)
F(15)-C(15)-C(14)	120.3(3)
F(15)-C(15)-C(16)	120.4(4)
C(14)-C(15)-C(16)	119.3(4)
F(16)-C(16)-C(15)	116.2(3)

F(16)-C(16)-C(11)	119.6(3)
C(15)-C(16)-C(11)	124.1(3)
C(22)-C(21)-P(1)	115.3(3)
C(21)-C(22)-C(23)	111.7(3)
C(24)-C(23)-C(22)	114.3(3)
C(23)-C(24)-C(25)	115.4(3)
C(24)-C(25)-C(26)	111.5(4)
C(27)-C(26)-C(25)	115.0(4)
C(28)-C(27)-C(26)	113.6(4)
C(27)-C(28)-C(29)	116.9(4)
C(30)-C(29)-C(28)	113.5(4)
C(29)-C(30)-C(31)	113.6(4)
C(32)-C(31)-C(30)	113.1(4)
C(33)-C(32)-C(31)	114.6(4)
C(32)-C(33)-C(34)	114.5(4)
C(33)-C(34)-C(35)	114.7(4)
C(36)-C(35)-C(34)	113.9(4)
C(35)-C(36)-C(37)	112.5(4)
C(38)-C(37)-C(36)	113.2(3)
C(37)-C(38)-C(39)	114.3(3)
C(40)-C(39)-C(38)	109.9(3)
C(39)-C(40)-P(2)	120.0(2)
C(46)-C(41)-C(42)	118.2(3)
C(46)-C(41)-P(1)	120.9(3)
C(42)-C(41)-P(1)	120.5(3)
C(43)-C(42)-C(41)	120.7(4)
C(44)-C(43)-C(42)	120.1(4)
C(45)-C(44)-C(43)	120.0(4)
C(44)-C(45)-C(46)	119.7(4)
C(41)-C(46)-C(45)	121.3(4)
C(52)-C(51)-C(56)	118.4(3)
C(52)-C(51)-P(1)	121.6(3)
C(56)-C(51)-P(1)	119.9(3)
C(51)-C(52)-C(53)	120.1(4)
C(54)-C(53)-C(52)	120.6(4)
C(55)-C(54)-C(53)	119.7(4)
C(54)-C(55)-C(56)	120.5(4)
C(55)-C(56)-C(51)	120.6(3)

C(66)-C(61)-C(62)	118.9(3)
C(66)-C(61)-P(2)	122.2(3)
C(62)-C(61)-P(2)	118.7(3)
C(63)-C(62)-C(61)	119.7(4)
C(62)-C(63)-C(64)	120.0(4)
C(65)-C(64)-C(63)	120.6(4)
C(64)-C(65)-C(66)	120.2(4)
C(65)-C(66)-C(61)	120.5(4)
C(76)-C(71)-C(72)	119.2(4)
C(76)-C(71)-P(2)	120.1(3)
C(72)-C(71)-P(2)	120.7(3)
C(71)-C(72)-C(73)	119.6(4)
C(74)-C(73)-C(72)	120.7(4)
C(75)-C(74)-C(73)	119.9(4)
C(74)-C(75)-C(76)	120.8(5)
C(71)-C(76)-C(75)	119.7(4)

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Symmetry transformations used to generate equivalent atoms:

#1 -x, -y, -z+1

Table S10. Anisotropic displacement parameters ( $\text{\AA}^2 \times 10^3$ ) for **5**. The anisotropic displacement factor exponent takes the form:  $-2\pi^2[h^2a^*{}^2U^{11} + \dots + 2hka^*b^*U^{12}]$

	U <sup>11</sup>	U <sup>22</sup>	U <sup>33</sup>	U <sup>23</sup>	U <sup>13</sup>	U <sup>12</sup>
Pt(1)	29(1)	29(1)	28(1)	-4(1)	-4(1)	-6(1)
P(1)	30(1)	29(1)	32(1)	-3(1)	-5(1)	-7(1)
C(1)	31(2)	32(2)	36(2)	-7(1)	-6(1)	-2(1)
P(2)	29(1)	33(1)	30(1)	0(1)	-5(1)	-7(1)
C(2)	32(2)	45(2)	34(2)	-5(2)	-7(1)	-5(1)
C(3)	35(2)	55(2)	37(2)	-9(2)	-7(1)	-7(2)
C(4)	39(2)	60(2)	37(2)	-14(2)	-8(2)	-6(2)
C(11)	28(2)	40(2)	33(2)	-7(1)	-7(1)	-6(1)
F(12)	72(2)	42(1)	70(2)	-19(1)	20(1)	-23(1)
C(12)	36(2)	51(2)	46(2)	-14(2)	0(2)	-16(2)
F(13)	80(2)	82(2)	90(2)	-56(2)	31(2)	-32(2)
C(13)	43(2)	68(3)	57(2)	-35(2)	7(2)	-19(2)
F(14)	86(2)	136(3)	42(1)	-33(2)	21(1)	-29(2)
C(14)	47(2)	90(3)	34(2)	-17(2)	4(2)	-18(2)
F(15)	88(2)	93(2)	47(1)	25(1)	10(1)	-5(2)
C(15)	48(2)	70(3)	34(2)	9(2)	-6(2)	-9(2)
F(16)	60(1)	42(1)	53(1)	9(1)	2(1)	0(1)
C(16)	37(2)	50(2)	36(2)	0(2)	-10(1)	-2(2)
C(21)	34(2)	43(2)	42(2)	-7(2)	-3(1)	-8(1)
C(22)	41(2)	56(2)	45(2)	-11(2)	4(2)	-13(2)
C(23)	40(2)	66(3)	49(2)	-11(2)	2(2)	-14(2)
C(24)	42(2)	75(3)	71(3)	-26(2)	-13(2)	-2(2)
C(25)	52(2)	68(3)	49(2)	-9(2)	-12(2)	5(2)
C(26)	59(3)	82(3)	64(3)	-22(2)	-18(2)	6(2)
C(27)	67(3)	72(3)	53(2)	-2(2)	-12(2)	4(2)
C(28)	93(4)	63(3)	68(3)	-9(2)	-2(3)	-8(3)
C(29)	83(3)	63(3)	65(3)	4(2)	-17(2)	3(2)
C(30)	77(3)	58(3)	76(3)	-3(2)	-14(3)	1(2)
C(31)	75(3)	56(3)	70(3)	-3(2)	2(2)	-3(2)
C(32)	78(3)	65(3)	55(3)	0(2)	1(2)	-10(2)
C(33)	82(3)	57(3)	55(3)	-3(2)	-3(2)	-8(2)
C(34)	83(3)	49(2)	78(3)	-7(2)	-11(3)	-13(2)
C(35)	65(3)	45(2)	66(3)	-5(2)	2(2)	-10(2)

C(36)	70(3)	46(2)	56(2)	-8(2)	-7(2)	-14(2)
C(37)	54(2)	48(2)	51(2)	-3(2)	-7(2)	-14(2)
C(38)	49(2)	44(2)	50(2)	-8(2)	-4(2)	-16(2)
C(39)	49(2)	43(2)	46(2)	2(2)	-13(2)	-14(2)
C(40)	36(2)	44(2)	39(2)	-5(2)	-9(1)	-11(1)
C(41)	36(2)	31(2)	43(2)	-1(1)	-10(1)	-9(1)
C(42)	52(2)	59(3)	78(3)	26(2)	-30(2)	-22(2)
C(43)	76(3)	61(3)	105(4)	42(3)	-39(3)	-26(2)
C(44)	77(3)	39(2)	102(4)	10(2)	-18(3)	-25(2)
C(45)	85(3)	54(3)	99(4)	11(3)	-40(3)	-37(2)
C(46)	75(3)	48(2)	83(3)	16(2)	-43(2)	-28(2)
C(51)	30(2)	37(2)	36(2)	1(1)	-8(1)	-10(1)
C(52)	42(2)	45(2)	43(2)	-3(2)	-13(2)	0(2)
C(53)	57(2)	65(3)	41(2)	-8(2)	-11(2)	-1(2)
C(54)	50(2)	73(3)	39(2)	9(2)	-13(2)	-16(2)
C(55)	47(2)	42(2)	61(2)	17(2)	-22(2)	-17(2)
C(56)	34(2)	32(2)	53(2)	1(2)	-14(2)	-9(1)
C(61)	29(2)	48(2)	34(2)	4(1)	-10(1)	-7(1)
C(62)	33(2)	57(2)	43(2)	-2(2)	-5(2)	-7(2)
C(63)	38(2)	74(3)	41(2)	-6(2)	-3(2)	-2(2)
C(64)	34(2)	90(3)	41(2)	9(2)	-2(2)	-8(2)
C(65)	43(2)	67(3)	48(2)	12(2)	-5(2)	-18(2)
C(66)	40(2)	50(2)	45(2)	7(2)	-9(2)	-11(2)
C(71)	40(2)	38(2)	35(2)	2(1)	-4(1)	0(1)
C(72)	52(2)	54(2)	66(3)	6(2)	-27(2)	0(2)
C(73)	79(3)	68(3)	66(3)	5(2)	-31(3)	21(3)
C(74)	82(3)	47(2)	61(3)	16(2)	4(2)	16(2)
C(75)	65(3)	47(2)	95(4)	23(2)	6(3)	-3(2)
C(76)	48(2)	47(2)	78(3)	15(2)	-6(2)	-6(2)

Table S11. Hydrogen coordinates ( $\times 10^4$ ) and isotropic displacement parameters ( $\text{\AA}^2 \times 10^3$ ) for **5**.

	x	y	z	U(eq)
H(21A)	-1030	-815	1698	47
H(21B)	-1907	-1286	1222	47
H(22A)	-1188	-2031	2916	57
H(22B)	-2155	-2415	2451	57
H(23A)	-3413	-875	2585	62
H(23B)	-3276	-1465	3528	62
H(24A)	-2023	57	2802	74
H(24B)	-1779	-564	3711	74
H(25A)	-3718	24	4428	69
H(25B)	-4036	599	3509	69
H(26A)	-2230	975	4477	82
H(26B)	-2496	1531	3542	82
H(27A)	-4358	2250	4201	79
H(27B)	-4244	1609	5123	79
H(28A)	-2726	2370	5397	91
H(28B)	-3893	3126	5264	91
H(29A)	-1736	2843	3997	86
H(29B)	-2930	3510	3751	86
H(30A)	-2821	4447	4971	85
H(30B)	-1792	4521	4118	85
H(31A)	-1167	4300	5634	83
H(31B)	-1320	3217	5621	83
H(32A)	123	3116	4284	82
H(32B)	318	4174	4373	82
H(33A)	1016	2543	5524	79
H(33B)	950	3581	5836	79
H(34A)	2938	2938	5242	84
H(34B)	2485	3907	4693	84
H(35A)	2090	3002	3556	72
H(35B)	3487	2894	3640	72
H(36A)	1989	1522	4413	68
H(36B)	3399	1411	4458	68
H(37A)	2352	1390	2869	61

H(37B)	3747	1457	2821	61
H(38A)	2670	-98	3735	56
H(38B)	4076	-36	3594	56
H(39A)	2751	-244	2191	54
H(39B)	4127	-72	1991	54
H(1A)	3487	-1608	3208	46
H(1B)	4794	-1492	2690	46
H(42A)	765	-3826	2179	74
H(43A)	76	-5256	2622	95
H(44A)	-1436	-5667	1962	86
H(45A)	-2332	-4616	912	89
H(46A)	-1637	-3188	462	77
H(52A)	618	-3148	-612	52
H(53A)	600	-2669	-2136	65
H(54A)	-95	-1109	-2588	64
H(55A)	-825	-24	-1521	59
H(56A)	-814	-480	2	46
H(62A)	5230	-3572	651	53
H(63A)	6656	-3486	-651	63
H(64A)	7355	-2066	-1153	68
H(65A)	6636	-728	-387	64
H(66A)	5174	-778	884	54
H(72A)	5856	-3123	2648	68
H(73A)	6318	-4549	3509	87
H(74A)	4991	-5630	3793	83
H(75A)	3237	-5339	3181	88
H(76A)	2714	-3905	2344	72

Table S12. Torsion angles [°] for **5**.

C(1)-Pt(1)-P(1)-C(41)	-94.99(15)
C(11)-Pt(1)-P(1)-C(41)	90.81(15)
P(2)-Pt(1)-P(1)-C(41)	3.6(4)
Pt(1)#1-Pt(1)-P(1)-C(41)	-104.86(12)
C(1)-Pt(1)-P(1)-C(51)	145.24(15)
C(11)-Pt(1)-P(1)-C(51)	-28.96(15)
P(2)-Pt(1)-P(1)-C(51)	-116.2(3)
Pt(1)#1-Pt(1)-P(1)-C(51)	135.37(12)
C(1)-Pt(1)-P(1)-C(21)	23.89(16)
C(11)-Pt(1)-P(1)-C(21)	-150.31(16)
P(2)-Pt(1)-P(1)-C(21)	122.5(3)
Pt(1)#1-Pt(1)-P(1)-C(21)	14.02(13)
C(11)-Pt(1)-C(1)-C(2)	1(2)
P(1)-Pt(1)-C(1)-C(2)	-113.9(16)
P(2)-Pt(1)-C(1)-C(2)	70.8(16)
Pt(1)#1-Pt(1)-C(1)-C(2)	-1.6(12)
C(1)-Pt(1)-P(2)-C(61)	-157.31(16)
C(11)-Pt(1)-P(2)-C(61)	16.68(16)
P(1)-Pt(1)-P(2)-C(61)	103.9(3)
Pt(1)#1-Pt(1)-P(2)-C(61)	-147.18(13)
C(1)-Pt(1)-P(2)-C(40)	-29.11(16)
C(11)-Pt(1)-P(2)-C(40)	144.89(16)
P(1)-Pt(1)-P(2)-C(40)	-127.9(3)
Pt(1)#1-Pt(1)-P(2)-C(40)	-18.97(13)
C(1)-Pt(1)-P(2)-C(71)	85.59(15)
C(11)-Pt(1)-P(2)-C(71)	-100.42(15)
P(1)-Pt(1)-P(2)-C(71)	-13.2(4)
Pt(1)#1-Pt(1)-P(2)-C(71)	95.72(11)
Pt(1)-C(1)-C(2)-C(3)	3(6)
C(1)-C(2)-C(3)-C(4)	11(10)
C(2)-C(3)-C(4)-C(4)#1	-57(58)
C(1)-Pt(1)-C(11)-C(12)	159.3(10)
P(1)-Pt(1)-C(11)-C(12)	-85.7(3)
P(2)-Pt(1)-C(11)-C(12)	89.7(3)
Pt(1)#1-Pt(1)-C(11)-C(12)	161.0(2)
C(1)-Pt(1)-C(11)-C(16)	-16.1(12)

P(1)-Pt(1)-C(11)-C(16)	99.0(3)
P(2)-Pt(1)-C(11)-C(16)	-85.7(3)
Pt(1)#1-Pt(1)-C(11)-C(16)	-14.4(5)
C(16)-C(11)-C(12)-F(12)	179.0(3)
Pt(1)-C(11)-C(12)-F(12)	3.4(5)
C(16)-C(11)-C(12)-C(13)	0.9(5)
Pt(1)-C(11)-C(12)-C(13)	-174.7(3)
F(12)-C(12)-C(13)-F(13)	-0.8(5)
C(11)-C(12)-C(13)-F(13)	177.4(3)
F(12)-C(12)-C(13)-C(14)	-178.5(3)
C(11)-C(12)-C(13)-C(14)	-0.3(6)
F(13)-C(13)-C(14)-F(14)	0.9(6)
C(12)-C(13)-C(14)-F(14)	178.6(4)
F(13)-C(13)-C(14)-C(15)	-177.0(4)
C(12)-C(13)-C(14)-C(15)	0.6(6)
F(14)-C(14)-C(15)-F(15)	-0.3(6)
C(13)-C(14)-C(15)-F(15)	177.7(4)
F(14)-C(14)-C(15)-C(16)	-179.5(3)
C(13)-C(14)-C(15)-C(16)	-1.5(6)
F(15)-C(15)-C(16)-F(16)	-0.1(5)
C(14)-C(15)-C(16)-F(16)	179.1(3)
F(15)-C(15)-C(16)-C(11)	-177.0(3)
C(14)-C(15)-C(16)-C(11)	2.2(6)
C(12)-C(11)-C(16)-F(16)	-178.6(3)
Pt(1)-C(11)-C(16)-F(16)	-2.6(4)
C(12)-C(11)-C(16)-C(15)	-1.8(5)
Pt(1)-C(11)-C(16)-C(15)	174.1(3)
C(41)-P(1)-C(21)-C(22)	39.2(3)
C(51)-P(1)-C(21)-C(22)	149.3(3)
Pt(1)-P(1)-C(21)-C(22)	-83.8(3)
P(1)-C(21)-C(22)-C(23)	174.7(3)
C(21)-C(22)-C(23)-C(24)	-70.3(5)
C(22)-C(23)-C(24)-C(25)	-175.5(4)
C(23)-C(24)-C(25)-C(26)	-175.7(4)
C(24)-C(25)-C(26)-C(27)	177.8(4)
C(25)-C(26)-C(27)-C(28)	171.6(4)
C(26)-C(27)-C(28)-C(29)	57.8(6)
C(27)-C(28)-C(29)-C(30)	171.7(4)

C(28)-C(29)-C(30)-C(31)	72.6(6)
C(29)-C(30)-C(31)-C(32)	80.7(6)
C(30)-C(31)-C(32)-C(33)	-175.3(4)
C(31)-C(32)-C(33)-C(34)	-165.1(4)
C(32)-C(33)-C(34)-C(35)	-54.4(6)
C(33)-C(34)-C(35)-C(36)	-68.1(6)
C(34)-C(35)-C(36)-C(37)	177.9(4)
C(35)-C(36)-C(37)-C(38)	170.1(4)
C(36)-C(37)-C(38)-C(39)	175.0(3)
C(37)-C(38)-C(39)-C(40)	173.8(3)
C(38)-C(39)-C(40)-P(2)	161.4(2)
C(61)-P(2)-C(40)-C(39)	79.0(3)
C(71)-P(2)-C(40)-C(39)	-172.8(3)
Pt(1)-P(2)-C(40)-C(39)	-53.0(3)
C(51)-P(1)-C(41)-C(46)	-38.6(4)
C(21)-P(1)-C(41)-C(46)	69.4(4)
Pt(1)-P(1)-C(41)-C(46)	-163.1(3)
C(51)-P(1)-C(41)-C(42)	148.6(3)
C(21)-P(1)-C(41)-C(42)	-103.5(3)
Pt(1)-P(1)-C(41)-C(42)	24.0(3)
C(46)-C(41)-C(42)-C(43)	-0.5(7)
P(1)-C(41)-C(42)-C(43)	172.5(4)
C(41)-C(42)-C(43)-C(44)	0.9(8)
C(42)-C(43)-C(44)-C(45)	-1.5(9)
C(43)-C(44)-C(45)-C(46)	1.7(9)
C(42)-C(41)-C(46)-C(45)	0.7(7)
P(1)-C(41)-C(46)-C(45)	-172.3(4)
C(44)-C(45)-C(46)-C(41)	-1.3(8)
C(41)-P(1)-C(51)-C(52)	-41.3(3)
C(21)-P(1)-C(51)-C(52)	-149.3(3)
Pt(1)-P(1)-C(51)-C(52)	81.3(3)
C(41)-P(1)-C(51)-C(56)	142.6(3)
C(21)-P(1)-C(51)-C(56)	34.6(3)
Pt(1)-P(1)-C(51)-C(56)	-94.8(3)
C(56)-C(51)-C(52)-C(53)	1.1(5)
P(1)-C(51)-C(52)-C(53)	-175.1(3)
C(51)-C(52)-C(53)-C(54)	-0.1(6)
C(52)-C(53)-C(54)-C(55)	-0.9(6)

C(53)-C(54)-C(55)-C(56)	1.0(6)
C(54)-C(55)-C(56)-C(51)	0.0(5)
C(52)-C(51)-C(56)-C(55)	-1.0(5)
P(1)-C(51)-C(56)-C(55)	175.2(3)
C(40)-P(2)-C(61)-C(66)	-35.6(3)
C(71)-P(2)-C(61)-C(66)	-142.2(3)
Pt(1)-P(2)-C(61)-C(66)	96.9(3)
C(40)-P(2)-C(61)-C(62)	148.8(3)
C(71)-P(2)-C(61)-C(62)	42.2(3)
Pt(1)-P(2)-C(61)-C(62)	-78.8(3)
C(66)-C(61)-C(62)-C(63)	-2.4(5)
P(2)-C(61)-C(62)-C(63)	173.4(3)
C(61)-C(62)-C(63)-C(64)	1.9(6)
C(62)-C(63)-C(64)-C(65)	-0.2(6)
C(63)-C(64)-C(65)-C(66)	-0.8(6)
C(64)-C(65)-C(66)-C(61)	0.3(6)
C(62)-C(61)-C(66)-C(65)	1.4(5)
P(2)-C(61)-C(66)-C(65)	-174.3(3)
C(61)-P(2)-C(71)-C(76)	-123.9(3)
C(40)-P(2)-C(71)-C(76)	124.6(3)
Pt(1)-P(2)-C(71)-C(76)	0.5(3)
C(61)-P(2)-C(71)-C(72)	57.7(3)
C(40)-P(2)-C(71)-C(72)	-53.9(3)
Pt(1)-P(2)-C(71)-C(72)	-177.9(3)
C(76)-C(71)-C(72)-C(73)	-2.1(6)
P(2)-C(71)-C(72)-C(73)	176.4(3)
C(71)-C(72)-C(73)-C(74)	0.8(7)
C(72)-C(73)-C(74)-C(75)	1.4(7)
C(73)-C(74)-C(75)-C(76)	-2.2(8)
C(72)-C(71)-C(76)-C(75)	1.3(6)
P(2)-C(71)-C(76)-C(75)	-177.2(3)
C(74)-C(75)-C(76)-C(71)	0.9(7)

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Symmetry transformations used to generate equivalent atoms:

#1 -x, -y, -z+1

Table S13. Crystal data and structure refinement for **6**·MeOH.

Empirical formula	$C_{97}H_{100}F_{10}O_5P_4Pt_2$		
Formula weight	2049.83		
Temperature	173(2) K		
Wavelength	0.71073 Å		
Crystal system	Monoclinic		
Space group	$P2_1/n$		
Unit cell dimensions	$a = 21.4114(3)$ Å	$\alpha = 90^\circ$	
	$b = 17.9695(3)$ Å	$\beta = 101.855(1)^\circ$	
	$c = 24.2342(3)$ Å	$\gamma = 90^\circ$	
Volume	$9125.3(2)$ Å <sup>3</sup>		
Z	4		
Density (calculated)	1.492 Mg/m <sup>3</sup>		
Absorption coefficient	3.204 mm <sup>-1</sup>		
F(000)	4112		
Crystal size	$0.15 \times 0.15 \times 0.15$ mm <sup>3</sup>		
Θ range for data collection	2.06 to 27.49°		
Index ranges	$-27 \leq h \leq 27, -23 \leq k \leq 23, -31 \leq l \leq 31$		
Reflections collected	39762		
Independent reflections	20905 [R(int) = 0.0497]		
Reflections [ $I > 2\sigma(I)$ ]	13238		
Completeness to Θ = 27.49°	99.7%		
Absorption correction	Empirical (Scalepack)		
Max. and min. transmission	0.6450 and 0.6450		
Refinement method	Full-matrix least-squares on F <sup>2</sup>		
Data / restraints / parameters	20905 / 0 / 1063		
Goodness-of-fit on F <sup>2</sup>	0.966		
Final R indices [ $I > 2\sigma(I)$ ]	R1 = 0.0421, wR2 = 0.0848		
R indices (all data)	R1 = 0.0886, wR2 = 0.0979		
Largest diff. peak and hole	1.123 and -0.956 eÅ <sup>-3</sup>		

Table S14. Atomic coordinates ( $\times 10^4$ ) and equivalent isotropic displacement parameters ( $\text{\AA}^2 \times 10^3$ ) for **6**. U(eq) is defined as one third of the trace of the orthogonalized  $U^{ij}$  tensor.

	x	y	z	U(eq)
Pt(1)	8253(1)	-6960(1)	866(1)	40(1)
P(1)	8039(1)	-6649(1)	1729(1)	49(1)
C(1)	8171(2)	-5902(3)	643(2)	47(1)
C(1B)	7887(2)	-6802(3)	-562(2)	48(1)
C(1A)	8499(3)	-5820(3)	2009(3)	62(2)
Pt(2)	6665(1)	-749(1)	-1560(1)	35(1)
P(2)	8494(1)	-7195(1)	2(1)	40(1)
C(2)	8080(3)	-5267(3)	472(2)	48(1)
C(2B)	7195(3)	-6967(3)	-542(3)	65(2)
C(2A)	8372(3)	-5498(3)	2549(2)	73(2)
P(3)	6095(1)	-565(1)	-857(1)	37(1)
C(3)	7930(3)	-4575(3)	249(2)	48(1)
C(3A)	8879(4)	-4905(4)	2784(3)	100(3)
C(3B)	6722(3)	-6476(4)	-955(3)	80(2)
P(4)	7164(1)	-1115(1)	-2268(1)	44(1)
C(4)	7789(3)	-3977(3)	32(2)	50(1)
C(4A)	8986(3)	-4314(4)	2381(3)	86(2)
C(4B)	6717(4)	-5702(4)	-743(3)	99(3)
C(5)	7614(3)	-3338(3)	-246(2)	51(1)
O(5A)	8401(2)	-3916(3)	2205(2)	91(1)
O(5B)	6250(2)	-5300(3)	-1139(2)	96(2)
C(6)	7444(2)	-2790(3)	-541(2)	47(1)
C(6B)	6210(4)	-4519(4)	-1021(4)	114(3)
C(6A)	8339(4)	-3490(6)	1688(4)	115(3)
C(7)	7243(2)	-2180(3)	-867(2)	47(1)
C(7A)	8765(4)	-2856(5)	1735(4)	116(3)
C(7B)	5841(5)	-4423(5)	-504(4)	130(4)
C(8)	7050(2)	-1636(3)	-1140(2)	43(1)
C(8B)	5651(4)	-3632(4)	-479(4)	111(3)
C(8A)	8652(4)	-2424(6)	1150(5)	158(5)
C(9B)	5304(4)	-3484(5)	5(4)	105(3)
C(9A)	9095(6)	-1946(7)	1071(4)	154(5)
C(10B)	5690(4)	-3651(5)	571(4)	103(3)

C(10A)	8957(5)	-1534(5)	516(3)	121(3)
C(11)	8281(2)	-8076(3)	1056(2)	41(1)
C(11A)	9038(3)	-1996(4)	12(3)	77(2)
C(11B)	6292(4)	-3199(4)	709(3)	88(2)
C(12)	8822(3)	-8488(3)	1230(3)	59(2)
F(12)	9401(2)	-8151(2)	1289(2)	96(1)
O(12A)	9042(2)	-1498(2)	-449(2)	67(1)
O(12B)	6136(2)	-2422(2)	711(2)	72(1)
F(13)	9374(2)	-9628(2)	1464(3)	134(2)
C(13)	8822(3)	-9246(3)	1325(3)	75(2)
C(13A)	9099(3)	-1860(3)	-958(3)	61(2)
C(13B)	6698(3)	-1990(3)	859(3)	61(2)
C(14)	8257(3)	-9612(3)	1265(3)	63(2)
F(14)	8246(2)	-10348(2)	1370(2)	101(1)
C(14B)	6503(3)	-1185(3)	864(2)	55(1)
C(14A)	9080(2)	-1283(3)	-1406(3)	60(2)
C(15)	7704(3)	-9227(3)	1105(3)	57(2)
F(15)	7138(2)	-9584(2)	1037(2)	98(1)
C(15B)	6115(3)	-887(3)	305(2)	50(1)
C(15A)	8420(2)	-928(3)	-1620(2)	59(2)
F(16)	7158(2)	-8128(2)	836(2)	84(1)
C(16)	7728(2)	-8486(3)	997(2)	47(1)
C(16B)	6500(2)	-876(3)	-159(2)	43(1)
C(16A)	7992(2)	-1419(3)	-2035(2)	54(1)
C(21)	8263(3)	-7373(3)	2249(2)	60(2)
C(22)	7826(3)	-7934(3)	2317(3)	69(2)
C(23)	8042(4)	-8573(4)	2634(3)	88(2)
C(24)	8682(5)	-8640(4)	2866(3)	102(3)
C(25)	9101(5)	-8065(5)	2820(4)	123(3)
C(26)	8895(4)	-7448(4)	2493(3)	92(2)
C(31)	7211(3)	-6393(3)	1713(3)	57(2)
C(32)	6974(3)	-6340(4)	2212(3)	81(2)
C(33)	6359(4)	-6045(5)	2190(4)	98(3)
C(34)	5980(4)	-5822(4)	1699(4)	98(3)
C(35)	6213(4)	-5882(4)	1202(4)	94(2)
C(36)	6826(3)	-6160(4)	1217(3)	69(2)
C(41)	9225(2)	-6731(3)	-100(2)	46(1)
C(42)	9618(3)	-6398(3)	357(3)	62(2)

C(43)	10158(3)	-6030(4)	277(4)	90(2)
C(44)	10291(4)	-5970(4)	-245(5)	97(3)
C(45)	9908(3)	-6298(4)	-700(4)	87(2)
C(46)	9370(3)	-6697(3)	-628(3)	60(2)
C(51)	8602(2)	-8164(3)	-165(2)	44(1)
C(52)	8092(3)	-8637(3)	-342(2)	55(1)
C(53)	8192(3)	-9391(3)	-425(3)	63(2)
C(54)	8792(3)	-9668(3)	-338(3)	72(2)
C(55)	9304(3)	-9209(3)	-163(3)	87(2)
C(56)	9210(3)	-8469(3)	-84(3)	71(2)
C(61)	6260(2)	177(3)	-2002(2)	38(1)
F(62)	6924(2)	1015(2)	-1398(1)	65(1)
C(62)	6455(2)	896(3)	-1858(2)	45(1)
F(63)	6404(2)	2209(2)	-1966(2)	93(1)
C(63)	6209(3)	1529(3)	-2134(3)	63(2)
C(64)	5734(3)	1444(4)	-2614(3)	77(2)
F(64)	5473(2)	2044(2)	-2913(2)	123(2)
C(65)	5523(3)	737(4)	-2792(3)	72(2)
F(65)	5061(2)	651(3)	-3256(2)	108(2)
F(66)	5552(2)	-538(2)	-2671(1)	68(1)
C(66)	5789(3)	143(3)	-2472(2)	53(1)
C(71)	5373(2)	-1124(3)	-1023(2)	40(1)
C(72)	4819(2)	-944(3)	-840(2)	52(1)
C(73)	4281(3)	-1375(4)	-979(3)	61(2)
C(74)	4274(3)	-2009(4)	-1299(3)	65(2)
C(75)	4833(3)	-2209(3)	-1467(3)	68(2)
C(76)	5375(3)	-1775(3)	-1337(2)	57(2)
C(81)	5833(2)	386(3)	-776(2)	44(1)
C(82)	6176(3)	861(3)	-375(2)	52(1)
C(83)	6005(4)	1598(3)	-362(3)	70(2)
C(84)	5500(4)	1868(3)	-730(3)	76(2)
C(85)	5146(3)	1415(4)	-1134(3)	71(2)
C(86)	5320(3)	668(3)	-1157(3)	58(2)
C(91)	7132(2)	-421(3)	-2825(2)	48(1)
C(92)	6750(3)	-530(3)	-3350(2)	55(1)
C(93)	6669(3)	36(3)	-3753(3)	70(2)
C(94)	6979(4)	705(4)	-3624(3)	89(2)
C(95)	7364(4)	804(4)	-3102(3)	84(2)

C(96)	7447(3)	246(3)	-2702(3)	67(2)
C(101)	6788(3)	-1951(3)	-2619(2)	49(1)
C(102)	7102(3)	-2425(3)	-2927(2)	61(2)
C(103)	6800(4)	-3051(3)	-3186(3)	71(2)
C(104)	6192(4)	-3221(4)	-3161(3)	78(2)
C(105)	5873(3)	-2769(4)	-2861(3)	84(2)
C(106)	6172(3)	-2128(3)	-2586(3)	66(2)
O(200)	5193(4)	-5591(7)	-1872(6)	281(7)
C(200)	5581(10)	-5463(15)	-2352(6)	430(20)

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Table S15. Bond lengths [ $\text{\AA}$ ] and angles [ $^\circ$ ] for **6**.

Pt(1)-C(1)	1.975(5)
Pt(1)-C(11)	2.056(5)
Pt(1)-P(2)	2.2969(13)
Pt(1)-P(1)	2.2984(14)
Pt(1)-Pt(2)	12.7478(3)
P(1)-C(21)	1.808(6)
P(1)-C(31)	1.824(6)
P(1)-C(1A)	1.838(6)
C(1)-C(2)	1.216(7)
C(1B)-C(2B)	1.523(7)
C(1B)-P(2)	1.823(5)
C(1A)-C(2A)	1.506(8)
Pt(2)-C(8)	1.979(5)
Pt(2)-C(61)	2.069(5)
Pt(2)-P(4)	2.2954(13)
Pt(2)-P(3)	2.3149(12)
P(2)-C(51)	1.812(5)
P(2)-C(41)	1.835(5)
C(2)-C(3)	1.367(7)
C(2B)-C(3B)	1.546(8)
C(2A)-C(3A)	1.544(9)
P(3)-C(71)	1.819(5)
P(3)-C(81)	1.822(5)
P(3)-C(16B)	1.824(5)
C(3)-C(4)	1.207(7)
C(3A)-C(4A)	1.492(10)
C(3B)-C(4B)	1.484(9)
P(4)-C(91)	1.828(5)
P(4)-C(101)	1.830(6)
P(4)-C(16A)	1.831(5)
C(4)-C(5)	1.346(7)
C(4A)-O(5A)	1.429(8)
C(4B)-O(5B)	1.431(7)
C(5)-C(6)	1.227(7)
O(5A)-C(6A)	1.451(9)
O(5B)-C(6B)	1.438(8)

C(6)-C(7)	1.368(7)
C(6B)-C(7B)	1.624(12)
C(6A)-C(7A)	1.449(11)
C(7)-C(8)	1.205(7)
C(7A)-C(8A)	1.591(12)
C(7B)-C(8B)	1.484(10)
C(8B)-C(9B)	1.534(11)
C(8A)-C(9A)	1.320(12)
C(9B)-C(10B)	1.481(11)
C(9A)-C(10A)	1.512(11)
C(10B)-C(11B)	1.502(10)
C(10A)-C(11A)	1.515(10)
C(11)-C(12)	1.366(7)
C(11)-C(16)	1.376(7)
C(11A)-O(12A)	1.434(7)
C(11B)-O(12B)	1.437(7)
C(12)-F(12)	1.360(6)
C(12)-C(13)	1.381(8)
O(12A)-C(13A)	1.421(7)
O(12B)-C(13B)	1.416(7)
F(13)-C(13)	1.349(6)
C(13)-C(14)	1.360(8)
C(13A)-C(14A)	1.495(8)
C(13B)-C(14B)	1.506(7)
C(14)-F(14)	1.348(6)
C(14)-C(15)	1.356(8)
C(14B)-C(15B)	1.533(7)
C(14A)-C(15A)	1.541(7)
C(15)-F(15)	1.351(6)
C(15)-C(16)	1.362(7)
C(15B)-C(16B)	1.524(6)
C(15A)-C(16A)	1.499(7)
F(16)-C(16)	1.363(6)
C(21)-C(26)	1.367(9)
C(21)-C(22)	1.408(8)
C(22)-C(23)	1.404(9)
C(23)-C(24)	1.375(10)
C(24)-C(25)	1.388(11)

C(25)-C(26)	1.382(10)
C(31)-C(36)	1.377(8)
C(31)-C(32)	1.406(8)
C(32)-C(33)	1.411(10)
C(33)-C(34)	1.355(11)
C(34)-C(35)	1.400(11)
C(35)-C(36)	1.398(9)
C(41)-C(46)	1.377(7)
C(41)-C(42)	1.382(8)
C(42)-C(43)	1.380(8)
C(43)-C(44)	1.357(11)
C(44)-C(45)	1.366(11)
C(45)-C(46)	1.398(8)
C(51)-C(52)	1.380(7)
C(51)-C(56)	1.390(7)
C(52)-C(53)	1.393(7)
C(53)-C(54)	1.352(8)
C(54)-C(55)	1.368(9)
C(55)-C(56)	1.365(8)
C(61)-C(66)	1.360(7)
C(61)-C(62)	1.381(7)
F(62)-C(62)	1.355(6)
C(62)-C(63)	1.369(7)
F(63)-C(63)	1.328(7)
C(63)-C(64)	1.387(9)
C(64)-F(64)	1.354(7)
C(64)-C(65)	1.388(9)
C(65)-F(65)	1.344(7)
C(65)-C(66)	1.372(8)
F(66)-C(66)	1.374(6)
C(71)-C(72)	1.386(7)
C(71)-C(76)	1.396(7)
C(72)-C(73)	1.372(7)
C(73)-C(74)	1.377(8)
C(74)-C(75)	1.389(8)
C(75)-C(76)	1.381(8)
C(81)-C(86)	1.378(7)
C(81)-C(82)	1.385(7)

C(82)-C(83)	1.377(7)
C(83)-C(84)	1.344(9)
C(84)-C(85)	1.374(9)
C(85)-C(86)	1.396(8)
C(91)-C(96)	1.377(8)
C(91)-C(92)	1.379(7)
C(92)-C(93)	1.395(7)
C(93)-C(94)	1.378(9)
C(94)-C(95)	1.373(10)
C(95)-C(96)	1.382(9)
C(101)-C(106)	1.375(8)
C(101)-C(102)	1.393(7)
C(102)-C(103)	1.381(8)
C(103)-C(104)	1.351(9)
C(104)-C(105)	1.363(9)
C(105)-C(106)	1.417(8)
O(200)-C(200)	1.580(19)

C(1)-Pt(1)-C(11)	176.0(2)
C(1)-Pt(1)-P(2)	87.21(15)
C(11)-Pt(1)-P(2)	91.30(14)
C(1)-Pt(1)-P(1)	89.55(15)
C(11)-Pt(1)-P(1)	92.05(14)
P(2)-Pt(1)-P(1)	176.31(5)
C(1)-Pt(1)-Pt(2)	14.16(15)
C(11)-Pt(1)-Pt(2)	161.86(13)
P(2)-Pt(1)-Pt(2)	80.16(3)
P(1)-Pt(1)-Pt(2)	97.04(4)
C(21)-P(1)-C(31)	108.3(3)
C(21)-P(1)-C(1A)	106.3(3)
C(31)-P(1)-C(1A)	104.3(3)
C(21)-P(1)-Pt(1)	112.7(2)
C(31)-P(1)-Pt(1)	114.7(2)
C(1A)-P(1)-Pt(1)	110.0(2)
C(2)-C(1)-Pt(1)	174.7(5)
C(2B)-C(1B)-P(2)	116.6(4)
C(2A)-C(1A)-P(1)	117.0(4)
C(8)-Pt(2)-C(61)	179.8(2)

C(8)-Pt(2)-P(4)	86.90(13)
C(61)-Pt(2)-P(4)	93.07(13)
C(8)-Pt(2)-P(3)	87.83(13)
C(61)-Pt(2)-P(3)	92.17(12)
P(4)-Pt(2)-P(3)	171.02(5)
C(8)-Pt(2)-Pt(1)	9.40(14)
C(61)-Pt(2)-Pt(1)	170.39(13)
P(4)-Pt(2)-Pt(1)	88.46(3)
P(3)-Pt(2)-Pt(1)	85.19(3)
C(51)-P(2)-C(1B)	108.0(2)
C(51)-P(2)-C(41)	104.8(2)
C(1B)-P(2)-C(41)	102.6(2)
C(51)-P(2)-Pt(1)	116.29(16)
C(1B)-P(2)-Pt(1)	110.71(17)
C(41)-P(2)-Pt(1)	113.38(18)
C(1)-C(2)-C(3)	175.1(6)
C(1B)-C(2B)-C(3B)	112.4(5)
C(1A)-C(2A)-C(3A)	110.2(6)
C(71)-P(3)-C(81)	106.0(2)
C(71)-P(3)-C(16B)	104.8(2)
C(81)-P(3)-C(16B)	106.6(2)
C(71)-P(3)-Pt(2)	108.18(16)
C(81)-P(3)-Pt(2)	115.66(15)
C(16B)-P(3)-Pt(2)	114.69(16)
C(4)-C(3)-C(2)	177.4(6)
C(4A)-C(3A)-C(2A)	116.2(6)
C(4B)-C(3B)-C(2B)	111.2(6)
C(91)-P(4)-C(101)	105.7(2)
C(91)-P(4)-C(16A)	108.5(2)
C(101)-P(4)-C(16A)	101.7(2)
C(91)-P(4)-Pt(2)	113.83(17)
C(101)-P(4)-Pt(2)	110.80(17)
C(16A)-P(4)-Pt(2)	115.17(18)
C(3)-C(4)-C(5)	175.8(6)
O(5A)-C(4A)-C(3A)	108.0(6)
O(5B)-C(4B)-C(3B)	107.1(6)
C(6)-C(5)-C(4)	174.4(6)
C(4A)-O(5A)-C(6A)	116.2(6)

C(4B)-O(5B)-C(6B)	114.9(6)
C(5)-C(6)-C(7)	178.9(6)
O(5B)-C(6B)-C(7B)	108.4(7)
O(5A)-C(6A)-C(7A)	113.7(7)
C(8)-C(7)-C(6)	177.3(6)
C(6A)-C(7A)-C(8A)	109.7(8)
C(8B)-C(7B)-C(6B)	108.4(8)
C(7)-C(8)-Pt(2)	175.1(4)
C(7B)-C(8B)-C(9B)	112.2(8)
C(9A)-C(8A)-C(7A)	117.7(9)
C(10B)-C(9B)-C(8B)	114.0(7)
C(8A)-C(9A)-C(10A)	115.7(11)
C(9B)-C(10B)-C(11B)	112.7(7)
C(9A)-C(10A)-C(11A)	114.5(8)
C(12)-C(11)-C(16)	113.6(5)
C(12)-C(11)-Pt(1)	125.6(4)
C(16)-C(11)-Pt(1)	120.8(4)
O(12A)-C(11A)-C(10A)	107.8(5)
O(12B)-C(11B)-C(10B)	109.6(6)
F(12)-C(12)-C(11)	119.2(5)
F(12)-C(12)-C(13)	116.9(5)
C(11)-C(12)-C(13)	123.8(5)
C(13A)-O(12A)-C(11A)	114.0(5)
C(13B)-O(12B)-C(11B)	110.3(5)
F(13)-C(13)-C(14)	119.7(6)
F(13)-C(13)-C(12)	120.9(6)
C(14)-C(13)-C(12)	119.4(5)
O(12A)-C(13A)-C(14A)	108.6(5)
O(12B)-C(13B)-C(14B)	107.8(5)
F(14)-C(14)-C(15)	120.4(5)
F(14)-C(14)-C(13)	120.3(5)
C(15)-C(14)-C(13)	119.2(5)
C(13B)-C(14B)-C(15B)	115.4(5)
C(13A)-C(14A)-C(15A)	114.7(5)
F(15)-C(15)-C(14)	120.1(5)
F(15)-C(15)-C(16)	120.6(5)
C(14)-C(15)-C(16)	119.3(5)
C(16B)-C(15B)-C(14B)	112.3(4)

C(16A)-C(15A)-C(14A)	112.0(5)
C(15)-C(16)-F(16)	116.7(5)
C(15)-C(16)-C(11)	124.6(5)
F(16)-C(16)-C(11)	118.6(4)
C(15B)-C(16B)-P(3)	117.6(4)
C(15A)-C(16A)-P(4)	116.7(4)
C(26)-C(21)-C(22)	120.1(6)
C(26)-C(21)-P(1)	118.0(5)
C(22)-C(21)-P(1)	120.6(5)
C(23)-C(22)-C(21)	119.8(7)
C(24)-C(23)-C(22)	118.9(7)
C(23)-C(24)-C(25)	120.6(7)
C(26)-C(25)-C(24)	120.5(8)
C(21)-C(26)-C(25)	119.9(7)
C(36)-C(31)-C(32)	118.3(6)
C(36)-C(31)-P(1)	119.9(5)
C(32)-C(31)-P(1)	121.3(5)
C(31)-C(32)-C(33)	119.5(7)
C(34)-C(33)-C(32)	122.0(8)
C(33)-C(34)-C(35)	118.6(8)
C(36)-C(35)-C(34)	120.3(8)
C(31)-C(36)-C(35)	121.4(7)
C(46)-C(41)-C(42)	120.5(5)
C(46)-C(41)-P(2)	120.4(4)
C(42)-C(41)-P(2)	119.0(4)
C(43)-C(42)-C(41)	119.1(6)
C(44)-C(43)-C(42)	120.7(8)
C(43)-C(44)-C(45)	120.8(7)
C(44)-C(45)-C(46)	119.5(7)
C(41)-C(46)-C(45)	119.3(6)
C(52)-C(51)-C(56)	117.4(5)
C(52)-C(51)-P(2)	122.1(4)
C(56)-C(51)-P(2)	120.4(4)
C(51)-C(52)-C(53)	120.6(5)
C(54)-C(53)-C(52)	120.3(6)
C(53)-C(54)-C(55)	120.1(6)
C(56)-C(55)-C(54)	120.0(6)
C(55)-C(56)-C(51)	121.6(6)

C(66)-C(61)-C(62)	112.7(5)
C(66)-C(61)-Pt(2)	123.9(4)
C(62)-C(61)-Pt(2)	123.3(4)
F(62)-C(62)-C(63)	114.7(5)
F(62)-C(62)-C(61)	119.3(4)
C(63)-C(62)-C(61)	126.0(6)
F(63)-C(63)-C(62)	123.3(6)
F(63)-C(63)-C(64)	119.3(6)
C(62)-C(63)-C(64)	117.5(6)
F(64)-C(64)-C(63)	120.8(7)
F(64)-C(64)-C(65)	119.3(7)
C(63)-C(64)-C(65)	119.8(6)
F(65)-C(65)-C(66)	122.2(7)
F(65)-C(65)-C(64)	120.1(6)
C(66)-C(65)-C(64)	117.7(6)
C(61)-C(66)-C(65)	126.2(6)
C(61)-C(66)-F(66)	119.3(5)
C(65)-C(66)-F(66)	114.5(5)
C(72)-C(71)-C(76)	118.0(5)
C(72)-C(71)-P(3)	123.0(4)
C(76)-C(71)-P(3)	119.0(4)
C(73)-C(72)-C(71)	121.3(6)
C(72)-C(73)-C(74)	121.1(5)
C(73)-C(74)-C(75)	118.0(5)
C(76)-C(75)-C(74)	121.5(6)
C(75)-C(76)-C(71)	120.0(5)
C(86)-C(81)-C(82)	118.6(5)
C(86)-C(81)-P(3)	119.6(4)
C(82)-C(81)-P(3)	121.5(4)
C(83)-C(82)-C(81)	120.2(6)
C(84)-C(83)-C(82)	120.9(6)
C(83)-C(84)-C(85)	120.7(6)
C(84)-C(85)-C(86)	119.0(6)
C(81)-C(86)-C(85)	120.6(6)
C(96)-C(91)-C(92)	119.7(5)
C(96)-C(91)-P(4)	119.4(4)
C(92)-C(91)-P(4)	120.7(4)
C(91)-C(92)-C(93)	120.5(6)

C(94)-C(93)-C(92)	119.5(6)
C(95)-C(94)-C(93)	119.5(6)
C(94)-C(95)-C(96)	121.3(7)
C(91)-C(96)-C(95)	119.5(6)
C(106)-C(101)-C(102)	117.6(5)
C(106)-C(101)-P(4)	119.9(4)
C(102)-C(101)-P(4)	122.5(5)
C(103)-C(102)-C(101)	120.6(6)
C(104)-C(103)-C(102)	122.0(6)
C(103)-C(104)-C(105)	118.8(6)
C(104)-C(105)-C(106)	120.5(7)
C(101)-C(106)-C(105)	120.5(6)

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Table S16. Anisotropic displacement parameters ( $\text{\AA}^2 \times 10^3$ ) for **6**. The anisotropic displacement factor exponent takes the form:  $-2\pi^2[h^2a^*{}^2U^{11} + \dots + 2hka^*b^*U^{12}]$

	U <sup>11</sup>	U <sup>22</sup>	U <sup>33</sup>	U <sup>23</sup>	U <sup>13</sup>	U <sup>12</sup>
Pt(1)	52(1)	29(1)	39(1)	3(1)	6(1)	2(1)
P(1)	64(1)	42(1)	42(1)	-1(1)	10(1)	-5(1)
C(1)	60(3)	44(3)	37(3)	0(2)	11(2)	9(3)
C(1B)	55(3)	39(3)	49(3)	2(2)	6(2)	11(2)
C(1A)	67(4)	51(4)	65(4)	-1(3)	5(3)	2(3)
Pt(2)	38(1)	36(1)	33(1)	5(1)	10(1)	5(1)
P(2)	49(1)	30(1)	39(1)	3(1)	5(1)	2(1)
C(2)	66(3)	37(3)	42(3)	0(2)	10(3)	3(3)
C(2B)	57(3)	55(4)	73(4)	8(3)	-7(3)	3(3)
C(2A)	109(5)	59(4)	45(4)	-9(3)	3(3)	3(4)
P(3)	38(1)	36(1)	38(1)	4(1)	12(1)	5(1)
C(3)	62(3)	41(3)	40(3)	-3(2)	7(2)	8(3)
C(3A)	132(7)	62(5)	75(5)	-24(4)	-47(5)	20(4)
C(3B)	64(4)	67(4)	100(6)	-13(4)	-4(4)	8(3)
P(4)	47(1)	51(1)	35(1)	2(1)	13(1)	6(1)
C(4)	71(4)	34(3)	45(3)	2(2)	11(3)	5(3)
C(4A)	68(4)	78(5)	101(6)	-20(4)	-11(4)	-7(4)
C(4B)	103(6)	87(6)	87(6)	-18(4)	-22(4)	40(5)
C(5)	65(3)	34(3)	55(4)	1(3)	17(3)	10(3)
O(5A)	100(4)	87(4)	86(4)	11(3)	19(3)	5(3)
O(5B)	92(3)	76(3)	103(4)	-10(3)	-19(3)	33(3)
C(6)	57(3)	37(3)	49(3)	0(3)	16(3)	7(3)
C(6B)	141(8)	66(5)	119(7)	-9(5)	-9(6)	25(5)
C(6A)	119(7)	133(8)	92(7)	28(6)	18(5)	-3(6)
C(7)	53(3)	42(3)	48(3)	2(3)	18(3)	7(3)
C(7A)	120(7)	113(7)	118(8)	38(6)	32(6)	-2(6)
C(7B)	136(8)	99(7)	148(9)	-49(6)	14(7)	29(6)
C(8)	45(3)	47(3)	41(3)	3(2)	20(2)	4(2)
C(8B)	122(7)	82(6)	116(7)	-11(5)	-7(6)	28(5)
C(8A)	95(7)	148(10)	209(13)	101(9)	-20(7)	-34(6)
C(9B)	109(6)	80(6)	124(8)	-25(5)	21(6)	4(5)
C(9A)	182(11)	189(12)	103(8)	53(8)	57(8)	77(10)
C(10B)	101(6)	83(6)	121(8)	-4(5)	15(5)	-4(5)

C(10A)	188(9)	117(7)	68(5)	28(5)	55(6)	56(7)
C(11)	47(3)	36(3)	39(3)	2(2)	4(2)	1(2)
C(11A)	82(5)	67(4)	79(5)	27(4)	10(4)	11(4)
C(11B)	103(6)	62(4)	103(6)	1(4)	32(5)	14(4)
C(12)	47(3)	46(3)	80(4)	14(3)	2(3)	-3(3)
F(12)	47(2)	69(2)	158(4)	31(2)	-10(2)	-4(2)
O(12A)	82(3)	53(2)	66(3)	3(2)	16(2)	10(2)
O(12B)	77(3)	53(3)	89(3)	7(2)	22(2)	1(2)
F(13)	81(3)	72(3)	229(6)	51(3)	-12(3)	24(2)
C(13)	64(4)	52(4)	102(6)	18(4)	0(4)	24(3)
C(13A)	59(3)	56(4)	69(4)	-7(3)	14(3)	-1(3)
C(13B)	58(3)	64(4)	59(4)	15(3)	10(3)	-2(3)
C(14)	76(4)	30(3)	81(5)	16(3)	10(3)	1(3)
F(14)	124(3)	37(2)	138(4)	23(2)	18(3)	1(2)
C(14B)	70(4)	60(4)	35(3)	2(3)	13(3)	-14(3)
C(14A)	38(3)	74(4)	71(4)	2(3)	16(3)	2(3)
C(15)	61(3)	40(3)	71(4)	-2(3)	17(3)	-12(3)
F(15)	80(2)	52(2)	161(4)	9(2)	22(3)	-26(2)
C(15B)	61(3)	50(3)	44(3)	6(2)	25(3)	3(3)
C(15A)	50(3)	69(4)	60(4)	-4(3)	20(3)	1(3)
F(16)	46(2)	56(2)	145(4)	17(2)	9(2)	-4(2)
C(16)	45(3)	42(3)	52(3)	4(2)	8(2)	-1(3)
C(16B)	54(3)	43(3)	34(3)	7(2)	11(2)	4(2)
C(16A)	50(3)	64(4)	50(3)	-11(3)	16(3)	3(3)
C(21)	87(4)	57(4)	35(3)	6(3)	6(3)	3(3)
C(22)	97(5)	57(4)	54(4)	2(3)	21(3)	-6(4)
C(23)	125(7)	63(5)	77(5)	12(4)	25(5)	-5(4)
C(24)	140(8)	71(5)	84(6)	31(4)	0(5)	5(5)
C(25)	137(8)	102(7)	104(7)	34(5)	-39(6)	-3(6)
C(26)	107(6)	66(5)	85(5)	31(4)	-23(4)	-7(4)
C(31)	63(4)	51(3)	60(4)	-6(3)	16(3)	-5(3)
C(32)	87(5)	80(5)	81(5)	-3(4)	29(4)	-6(4)
C(33)	96(6)	101(6)	110(7)	-24(5)	46(5)	5(5)
C(34)	82(5)	82(6)	127(8)	-9(5)	14(5)	10(4)
C(35)	81(5)	93(6)	108(7)	5(5)	17(5)	8(4)
C(36)	55(4)	72(4)	81(5)	7(4)	14(3)	6(3)
C(41)	54(3)	32(3)	52(3)	4(2)	11(3)	2(2)
C(42)	61(4)	53(4)	74(4)	-14(3)	16(3)	-6(3)

C(43)	65(4)	68(5)	141(8)	-20(5)	31(5)	-19(4)
C(44)	74(5)	57(5)	172(10)	1(5)	53(6)	-13(4)
C(45)	78(5)	71(5)	124(7)	48(5)	49(5)	18(4)
C(46)	61(4)	59(4)	61(4)	14(3)	15(3)	6(3)
C(51)	58(3)	37(3)	35(3)	3(2)	6(2)	7(2)
C(52)	61(3)	40(3)	61(4)	-1(3)	4(3)	2(3)
C(53)	82(4)	36(3)	70(4)	-4(3)	13(3)	-9(3)
C(54)	100(5)	34(3)	78(5)	-6(3)	9(4)	17(3)
C(55)	79(5)	42(4)	132(7)	-9(4)	7(4)	21(3)
C(56)	58(4)	46(3)	102(5)	-10(3)	3(3)	7(3)
C(61)	39(3)	43(3)	34(3)	8(2)	11(2)	5(2)
F(62)	72(2)	54(2)	68(2)	-4(2)	13(2)	-15(2)
C(62)	49(3)	42(3)	49(3)	11(2)	19(3)	-1(2)
F(63)	107(3)	37(2)	147(4)	17(2)	49(3)	-2(2)
C(63)	71(4)	39(3)	88(5)	15(3)	35(4)	4(3)
C(64)	78(5)	60(4)	98(6)	41(4)	30(4)	19(4)
F(64)	125(4)	91(3)	154(4)	81(3)	31(3)	46(3)
C(65)	63(4)	88(5)	59(4)	28(4)	2(3)	19(4)
F(65)	92(3)	129(4)	86(3)	41(3)	-22(2)	21(3)
F(66)	69(2)	66(2)	59(2)	-2(2)	-10(2)	-1(2)
C(66)	57(3)	47(3)	56(4)	8(3)	15(3)	5(3)
C(71)	40(3)	43(3)	39(3)	9(2)	11(2)	-1(2)
C(72)	45(3)	59(4)	52(3)	7(3)	12(3)	2(3)
C(73)	43(3)	72(4)	68(4)	13(3)	15(3)	-3(3)
C(74)	48(3)	73(4)	72(4)	14(3)	7(3)	-16(3)
C(75)	75(4)	56(4)	73(5)	-11(3)	15(3)	-18(3)
C(76)	55(3)	52(3)	68(4)	0(3)	22(3)	-3(3)
C(81)	46(3)	41(3)	49(3)	9(2)	22(2)	8(2)
C(82)	68(4)	41(3)	49(3)	-2(3)	17(3)	-5(3)
C(83)	106(5)	40(3)	71(5)	-4(3)	36(4)	-5(4)
C(84)	110(6)	38(3)	98(6)	3(4)	66(5)	8(4)
C(85)	66(4)	58(4)	97(5)	28(4)	37(4)	21(3)
C(86)	52(3)	51(3)	72(4)	12(3)	17(3)	10(3)
C(91)	54(3)	58(3)	36(3)	2(2)	21(2)	1(3)
C(92)	78(4)	50(3)	38(3)	3(3)	13(3)	5(3)
C(93)	112(5)	57(4)	42(4)	10(3)	17(3)	12(4)
C(94)	151(7)	70(5)	55(5)	12(4)	42(5)	-4(5)
C(95)	128(6)	63(4)	71(5)	2(4)	40(5)	-28(4)

C(96)	86(4)	64(4)	56(4)	2(3)	26(3)	-20(3)
C(101)	70(4)	45(3)	34(3)	3(2)	14(3)	16(3)
C(102)	75(4)	64(4)	45(3)	8(3)	13(3)	11(3)
C(103)	105(5)	50(4)	52(4)	-6(3)	5(4)	18(4)
C(104)	103(6)	53(4)	74(5)	-14(3)	9(4)	-9(4)
C(105)	90(5)	67(4)	91(5)	-24(4)	13(4)	-23(4)
C(106)	75(4)	57(4)	69(4)	-13(3)	23(3)	-4(3)
O(200)	117(6)	343(15)	350(17)	-145(13)	-28(8)	-8(8)
C(200)	330(30)	830(60)	135(13)	-240(20)	81(15)	30(30)

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Table S17. Hydrogen coordinates ( $\times 10^4$ ) and isotropic displacement parameters ( $\text{\AA}^2 \times 10^3$ ) for **6**.

	x	y	z	U(eq)
H(1BA)	7944	-6255	-558	58
H(1BB)	7967	-6986	-926	58
H(1AA)	8958	-5946	2069	74
H(1AB)	8416	-5427	1716	74
H(2BA)	7130	-6883	-154	78
H(2BB)	7103	-7497	-637	78
H(2AA)	8382	-5900	2830	88
H(2AB)	7942	-5269	2478	88
H(3AA)	8754	-4662	3111	120
H(3AB)	9290	-5162	2924	120
H(3BA)	6844	-6473	-1327	96
H(3BB)	6287	-6690	-1005	96
H(4AA)	9327	-3971	2566	104
H(4AB)	9118	-4541	2050	104
H(4BA)	6605	-5698	-366	118
H(4BB)	7143	-5472	-711	118
H(6BA)	5975	-4256	-1360	136
H(6BB)	6644	-4303	-917	136
H(6AA)	7893	-3312	1574	138
H(6AB)	8424	-3822	1386	138
H(7AA)	9213	-3027	1838	139
H(7AB)	8684	-2518	2035	139
H(7BA)	5458	-4746	-565	156
H(7BB)	6125	-4569	-144	156
H(8BA)	5368	-3492	-840	134
H(8BB)	6036	-3314	-428	134
H(8AA)	8600	-2798	845	190
H(8AB)	8243	-2151	1106	190
H(9BA)	5175	-2954	-7	126
H(9BB)	4911	-3789	-56	126
H(9AA)	9502	-2219	1101	185
H(9AB)	9156	-1576	1380	185
H(10A)	5802	-4187	592	124

H(10B)	5431	-3552	858	124
H(10C)	9245	-1098	545	145
H(10D)	8514	-1345	449	145
H(11A)	9443	-2279	102	92
H(11B)	8681	-2355	-87	92
H(11C)	6542	-3346	1084	105
H(11D)	6556	-3295	426	105
H(13A)	8745	-2217	-1072	73
H(13B)	9507	-2137	-901	73
H(13C)	6973	-2066	581	73
H(13D)	6942	-2138	1235	73
H(14A)	6893	-879	974	66
H(14B)	6248	-1120	1159	66
H(14C)	9224	-1514	-1730	72
H(14D)	9388	-884	-1256	72
H(15A)	5732	-1202	184	60
H(15B)	5970	-375	364	60
H(15C)	8216	-830	-1296	70
H(15D)	8474	-445	-1802	70
H(16A)	6661	-1386	-196	52
H(16B)	6876	-552	-32	52
H(16C)	7989	-1920	-1866	64
H(16D)	8183	-1470	-2373	64
H(22A)	7386	-7881	2150	82
H(23A)	7751	-8952	2686	105
H(24A)	8838	-9083	3060	122
H(25A)	9533	-8097	3015	148
H(26A)	9191	-7076	2438	110
H(32A)	7226	-6503	2560	97
H(33A)	6206	-6000	2530	118
H(34A)	5566	-5630	1693	118
H(35A)	5954	-5733	853	113
H(36A)	6980	-6190	877	83
H(42A)	9518	-6421	720	75
H(43A)	10440	-5816	591	108
H(44A)	10656	-5697	-295	117
H(45A)	10006	-6256	-1064	104
H(46A)	9107	-6941	-938	72

H(52A)	7669	-8447	-407	66
H(53A)	7838	-9712	-544	75
H(54A)	8858	-10182	-399	86
H(55A)	9725	-9406	-96	104
H(56A)	9570	-8154	30	85
H(72A)	4812	-513	-615	62
H(73A)	3906	-1233	-852	73
H(74A)	3898	-2302	-1401	78
H(75A)	4842	-2654	-1677	81
H(76A)	5751	-1919	-1461	68
H(82A)	6531	677	-109	62
H(83A)	6246	1920	-88	84
H(84A)	5387	2377	-712	91
H(85A)	4789	1607	-1394	85
H(86A)	5082	352	-1437	69
H(92A)	6539	-993	-3439	66
H(93A)	6402	-39	-4113	84
H(94A)	6926	1095	-3895	107
H(95A)	7579	1265	-3015	101
H(96A)	7718	322	-2343	80
H(10E)	7527	-2317	-2960	73
H(10F)	7027	-3371	-3387	85
H(10G)	5990	-3649	-3349	94
H(10H)	5447	-2885	-2837	100
H(10I)	5946	-1818	-2378	79
H(20D)	5444	-5510	-1558	422
H(20A)	5302	-5314	-2697	643
H(20B)	5923	-5111	-2257	643
H(20C)	5752	-5947	-2399	643

Table S18. Torsion angles [°] for **6**.

C(1)-Pt(1)-P(1)-C(21)	-163.2(3)
C(11)-Pt(1)-P(1)-C(21)	20.5(3)
P(2)-Pt(1)-P(1)-C(21)	-134.9(8)
Pt(2)-Pt(1)-P(1)-C(21)	-175.3(2)
C(1)-Pt(1)-P(1)-C(31)	72.3(3)
C(11)-Pt(1)-P(1)-C(31)	-104.0(2)
P(2)-Pt(1)-P(1)-C(31)	100.6(8)
Pt(2)-Pt(1)-P(1)-C(31)	60.2(2)
C(1)-Pt(1)-P(1)-C(1A)	-44.8(3)
C(11)-Pt(1)-P(1)-C(1A)	138.8(2)
P(2)-Pt(1)-P(1)-C(1A)	-16.5(8)
Pt(2)-Pt(1)-P(1)-C(1A)	-56.9(2)
C(11)-Pt(1)-C(1)-C(2)	-4(7)
P(2)-Pt(1)-C(1)-C(2)	65(5)
P(1)-Pt(1)-C(1)-C(2)	-117(5)
Pt(2)-Pt(1)-C(1)-C(2)	5(5)
C(21)-P(1)-C(1A)-C(2A)	-63.0(5)
C(31)-P(1)-C(1A)-C(2A)	51.3(5)
Pt(1)-P(1)-C(1A)-C(2A)	174.7(4)
C(1)-Pt(1)-Pt(2)-C(8)	27.2(10)
C(11)-Pt(1)-Pt(2)-C(8)	-154.8(9)
P(2)-Pt(1)-Pt(2)-C(8)	-91.9(8)
P(1)-Pt(1)-Pt(2)-C(8)	85.7(8)
C(1)-Pt(1)-Pt(2)-C(61)	-153.2(10)
C(11)-Pt(1)-Pt(2)-C(61)	24.9(9)
P(2)-Pt(1)-Pt(2)-C(61)	87.8(8)
P(1)-Pt(1)-Pt(2)-C(61)	-94.7(8)
C(1)-Pt(1)-Pt(2)-P(4)	107.5(6)
C(11)-Pt(1)-Pt(2)-P(4)	-74.4(4)
P(2)-Pt(1)-Pt(2)-P(4)	-11.55(5)
P(1)-Pt(1)-Pt(2)-P(4)	166.03(5)
C(1)-Pt(1)-Pt(2)-P(3)	-78.8(6)
C(11)-Pt(1)-Pt(2)-P(3)	99.2(4)
P(2)-Pt(1)-Pt(2)-P(3)	162.11(5)
P(1)-Pt(1)-Pt(2)-P(3)	-20.32(5)
C(2B)-C(1B)-P(2)-C(51)	79.9(5)

C(2B)-C(1B)-P(2)-C(41)	-169.8(4)
C(2B)-C(1B)-P(2)-Pt(1)	-48.5(4)
C(1)-Pt(1)-P(2)-C(51)	-176.1(2)
C(11)-Pt(1)-P(2)-C(51)	0.2(2)
P(1)-Pt(1)-P(2)-C(51)	155.5(8)
Pt(2)-Pt(1)-P(2)-C(51)	-163.72(19)
C(1)-Pt(1)-P(2)-C(1B)	-52.3(2)
C(11)-Pt(1)-P(2)-C(1B)	123.9(2)
P(1)-Pt(1)-P(2)-C(1B)	-80.7(8)
Pt(2)-Pt(1)-P(2)-C(1B)	-39.96(18)
C(1)-Pt(1)-P(2)-C(41)	62.4(2)
C(11)-Pt(1)-P(2)-C(41)	-121.3(2)
P(1)-Pt(1)-P(2)-C(41)	34.0(8)
Pt(2)-Pt(1)-P(2)-C(41)	74.74(17)
Pt(1)-C(1)-C(2)-C(3)	7(11)
P(2)-C(1B)-C(2B)-C(3B)	167.5(4)
P(1)-C(1A)-C(2A)-C(3A)	169.3(4)
C(8)-Pt(2)-P(3)-C(71)	-85.5(2)
C(61)-Pt(2)-P(3)-C(71)	94.3(2)
P(4)-Pt(2)-P(3)-C(71)	-31.4(4)
Pt(1)-Pt(2)-P(3)-C(71)	-76.47(16)
C(8)-Pt(2)-P(3)-C(81)	155.8(2)
C(61)-Pt(2)-P(3)-C(81)	-24.4(2)
P(4)-Pt(2)-P(3)-C(81)	-150.1(3)
Pt(1)-Pt(2)-P(3)-C(81)	164.85(19)
C(8)-Pt(2)-P(3)-C(16B)	31.1(2)
C(61)-Pt(2)-P(3)-C(16B)	-149.1(2)
P(4)-Pt(2)-P(3)-C(16B)	85.2(3)
Pt(1)-Pt(2)-P(3)-C(16B)	40.13(19)
C(1)-C(2)-C(3)-C(4)	-39(18)
C(1A)-C(2A)-C(3A)-C(4A)	51.3(8)
C(1B)-C(2B)-C(3B)-C(4B)	-74.3(8)
C(8)-Pt(2)-P(4)-C(91)	-170.2(2)
C(61)-Pt(2)-P(4)-C(91)	10.0(2)
P(3)-Pt(2)-P(4)-C(91)	135.6(3)
Pt(1)-Pt(2)-P(4)-C(91)	-179.48(19)
C(8)-Pt(2)-P(4)-C(101)	70.8(2)
C(61)-Pt(2)-P(4)-C(101)	-108.9(2)

P(3)-Pt(2)-P(4)-C(101)	16.7(4)
Pt(1)-Pt(2)-P(4)-C(101)	61.56(18)
C(8)-Pt(2)-P(4)-C(16A)	-43.9(3)
C(61)-Pt(2)-P(4)-C(16A)	136.3(3)
P(3)-Pt(2)-P(4)-C(16A)	-98.1(4)
Pt(1)-Pt(2)-P(4)-C(16A)	-53.2(2)
C(2)-C(3)-C(4)-C(5)	6(20)
C(2A)-C(3A)-C(4A)-O(5A)	61.4(8)
C(2B)-C(3B)-C(4B)-O(5B)	-177.8(6)
C(3)-C(4)-C(5)-C(6)	-11(13)
C(3A)-C(4A)-O(5A)-C(6A)	-160.6(7)
C(3B)-C(4B)-O(5B)-C(6B)	-175.9(7)
C(4)-C(5)-C(6)-C(7)	105(36)
C(4B)-O(5B)-C(6B)-C(7B)	-75.6(9)
C(4A)-O(5A)-C(6A)-C(7A)	-68.1(10)
C(5)-C(6)-C(7)-C(8)	23(46)
O(5A)-C(6A)-C(7A)-C(8A)	-179.3(8)
O(5B)-C(6B)-C(7B)-C(8B)	-165.5(7)
C(6)-C(7)-C(8)-Pt(2)	-23(18)
C(61)-Pt(2)-C(8)-C(7)	-63(60)
P(4)-Pt(2)-C(8)-C(7)	-145(6)
P(3)-Pt(2)-C(8)-C(7)	27(6)
Pt(1)-Pt(2)-C(8)-C(7)	-46(5)
C(6B)-C(7B)-C(8B)-C(9B)	-179.3(7)
C(6A)-C(7A)-C(8A)-C(9A)	-164.0(11)
C(7B)-C(8B)-C(9B)-C(10B)	60.6(10)
C(7A)-C(8A)-C(9A)-C(10A)	-178.3(9)
C(8B)-C(9B)-C(10B)-C(11B)	59.9(10)
C(8A)-C(9A)-C(10A)-C(11A)	-74.8(13)
C(1)-Pt(1)-C(11)-C(12)	146(3)
P(2)-Pt(1)-C(11)-C(12)	78.2(5)
P(1)-Pt(1)-C(11)-C(12)	-100.3(5)
Pt(2)-Pt(1)-C(11)-C(12)	139.5(4)
C(1)-Pt(1)-C(11)-C(16)	-32(3)
P(2)-Pt(1)-C(11)-C(16)	-99.7(4)
P(1)-Pt(1)-C(11)-C(16)	81.9(4)
Pt(2)-Pt(1)-C(11)-C(16)	-38.4(7)
C(9A)-C(10A)-C(11A)-O(12A)	-166.5(8)

C(9B)-C(10B)-C(11B)-O(12B)	61.8(9)
C(16)-C(11)-C(12)-F(12)	178.2(5)
Pt(1)-C(11)-C(12)-F(12)	0.2(8)
C(16)-C(11)-C(12)-C(13)	1.5(9)
Pt(1)-C(11)-C(12)-C(13)	-176.5(5)
C(10A)-C(11A)-O(12A)-C(13A)	-178.6(6)
C(10B)-C(11B)-O(12B)-C(13B)	178.1(6)
F(12)-C(12)-C(13)-F(13)	-0.7(10)
C(11)-C(12)-C(13)-F(13)	176.0(6)
F(12)-C(12)-C(13)-C(14)	-179.2(6)
C(11)-C(12)-C(13)-C(14)	-2.4(11)
C(11A)-O(12A)-C(13A)-C(14A)	178.5(5)
C(11B)-O(12B)-C(13B)-C(14B)	-178.9(5)
F(13)-C(13)-C(14)-F(14)	3.2(11)
C(12)-C(13)-C(14)-F(14)	-178.3(6)
F(13)-C(13)-C(14)-C(15)	-177.6(6)
C(12)-C(13)-C(14)-C(15)	0.9(11)
O(12B)-C(13B)-C(14B)-C(15B)	-59.2(6)
O(12A)-C(13A)-C(14A)-C(15A)	-71.9(6)
F(14)-C(14)-C(15)-F(15)	-1.5(10)
C(13)-C(14)-C(15)-F(15)	179.3(6)
F(14)-C(14)-C(15)-C(16)	-179.4(6)
C(13)-C(14)-C(15)-C(16)	1.3(10)
C(13B)-C(14B)-C(15B)-C(16B)	-65.2(6)
C(13A)-C(14A)-C(15A)-C(16A)	-79.4(6)
F(15)-C(15)-C(16)-F(16)	1.9(8)
C(14)-C(15)-C(16)-F(16)	179.8(5)
F(15)-C(15)-C(16)-C(11)	179.7(5)
C(14)-C(15)-C(16)-C(11)	-2.4(9)
C(12)-C(11)-C(16)-C(15)	1.0(8)
Pt(1)-C(11)-C(16)-C(15)	179.0(4)
C(12)-C(11)-C(16)-F(16)	178.7(5)
Pt(1)-C(11)-C(16)-F(16)	-3.2(7)
C(14B)-C(15B)-C(16B)-P(3)	177.9(4)
C(71)-P(3)-C(16B)-C(15B)	-52.1(4)
C(81)-P(3)-C(16B)-C(15B)	60.0(4)
Pt(2)-P(3)-C(16B)-C(15B)	-170.6(3)
C(14A)-C(15A)-C(16A)-P(4)	173.6(4)

C(91)-P(4)-C(16A)-C(15A)	81.6(5)
C(101)-P(4)-C(16A)-C(15A)	-167.2(4)
Pt(2)-P(4)-C(16A)-C(15A)	-47.3(5)
C(31)-P(1)-C(21)-C(26)	-154.6(5)
C(1A)-P(1)-C(21)-C(26)	-43.0(6)
Pt(1)-P(1)-C(21)-C(26)	77.5(6)
C(31)-P(1)-C(21)-C(22)	38.1(6)
C(1A)-P(1)-C(21)-C(22)	149.7(5)
Pt(1)-P(1)-C(21)-C(22)	-89.8(5)
C(26)-C(21)-C(22)-C(23)	-0.5(9)
P(1)-C(21)-C(22)-C(23)	166.6(5)
C(21)-C(22)-C(23)-C(24)	-0.7(10)
C(22)-C(23)-C(24)-C(25)	4.1(13)
C(23)-C(24)-C(25)-C(26)	-6.5(15)
C(22)-C(21)-C(26)-C(25)	-1.8(11)
P(1)-C(21)-C(26)-C(25)	-169.2(7)
C(24)-C(25)-C(26)-C(21)	5.2(14)
C(21)-P(1)-C(31)-C(36)	-148.0(5)
C(1A)-P(1)-C(31)-C(36)	99.1(5)
Pt(1)-P(1)-C(31)-C(36)	-21.2(6)
C(21)-P(1)-C(31)-C(32)	39.7(6)
C(1A)-P(1)-C(31)-C(32)	-73.2(6)
Pt(1)-P(1)-C(31)-C(32)	166.5(4)
C(36)-C(31)-C(32)-C(33)	-0.9(10)
P(1)-C(31)-C(32)-C(33)	171.5(5)
C(31)-C(32)-C(33)-C(34)	1.4(12)
C(32)-C(33)-C(34)-C(35)	-0.7(13)
C(33)-C(34)-C(35)-C(36)	-0.5(12)
C(32)-C(31)-C(36)-C(35)	-0.3(10)
P(1)-C(31)-C(36)-C(35)	-172.8(5)
C(34)-C(35)-C(36)-C(31)	1.1(11)
C(51)-P(2)-C(41)-C(46)	64.7(5)
C(1B)-P(2)-C(41)-C(46)	-48.0(5)
Pt(1)-P(2)-C(41)-C(46)	-167.5(4)
C(51)-P(2)-C(41)-C(42)	-117.2(4)
C(1B)-P(2)-C(41)-C(42)	130.0(4)
Pt(1)-P(2)-C(41)-C(42)	10.6(5)
C(46)-C(41)-C(42)-C(43)	-0.1(9)

P(2)-C(41)-C(42)-C(43)	-178.1(5)
C(41)-C(42)-C(43)-C(44)	2.5(10)
C(42)-C(43)-C(44)-C(45)	-2.7(12)
C(43)-C(44)-C(45)-C(46)	0.4(11)
C(42)-C(41)-C(46)-C(45)	-2.2(8)
P(2)-C(41)-C(46)-C(45)	175.9(4)
C(44)-C(45)-C(46)-C(41)	2.0(9)
C(1B)-P(2)-C(51)-C(52)	-46.6(5)
C(41)-P(2)-C(51)-C(52)	-155.4(4)
Pt(1)-P(2)-C(51)-C(52)	78.6(5)
C(1B)-P(2)-C(51)-C(56)	137.5(5)
C(41)-P(2)-C(51)-C(56)	28.6(5)
Pt(1)-P(2)-C(51)-C(56)	-97.4(5)
C(56)-C(51)-C(52)-C(53)	0.9(8)
P(2)-C(51)-C(52)-C(53)	-175.1(4)
C(51)-C(52)-C(53)-C(54)	-0.5(9)
C(52)-C(53)-C(54)-C(55)	0.6(10)
C(53)-C(54)-C(55)-C(56)	-1.1(11)
C(54)-C(55)-C(56)-C(51)	1.5(12)
C(52)-C(51)-C(56)-C(55)	-1.4(10)
P(2)-C(51)-C(56)-C(55)	174.7(6)
C(8)-Pt(2)-C(61)-C(66)	-13(58)
P(4)-Pt(2)-C(61)-C(66)	69.6(4)
P(3)-Pt(2)-C(61)-C(66)	-103.1(4)
Pt(1)-Pt(2)-C(61)-C(66)	-29.3(11)
C(8)-Pt(2)-C(61)-C(62)	169(100)
P(4)-Pt(2)-C(61)-C(62)	-108.6(4)
P(3)-Pt(2)-C(61)-C(62)	78.7(4)
Pt(1)-Pt(2)-C(61)-C(62)	152.5(6)
C(66)-C(61)-C(62)-F(62)	-179.8(4)
Pt(2)-C(61)-C(62)-F(62)	-1.5(6)
C(66)-C(61)-C(62)-C(63)	1.2(8)
Pt(2)-C(61)-C(62)-C(63)	179.6(4)
F(62)-C(62)-C(63)-F(63)	-0.9(8)
C(61)-C(62)-C(63)-F(63)	178.1(5)
F(62)-C(62)-C(63)-C(64)	179.0(5)
C(61)-C(62)-C(63)-C(64)	-2.0(9)
F(63)-C(63)-C(64)-F(64)	0.6(9)

C(62)-C(63)-C(64)-F(64)	-179.3(5)
F(63)-C(63)-C(64)-C(65)	-179.6(6)
C(62)-C(63)-C(64)-C(65)	0.5(9)
F(64)-C(64)-C(65)-F(65)	-0.3(10)
C(63)-C(64)-C(65)-F(65)	179.9(6)
F(64)-C(64)-C(65)-C(66)	-178.6(6)
C(63)-C(64)-C(65)-C(66)	1.5(10)
C(62)-C(61)-C(66)-C(65)	1.1(8)
Pt(2)-C(61)-C(66)-C(65)	-177.2(5)
C(62)-C(61)-C(66)-F(66)	179.2(4)
Pt(2)-C(61)-C(66)-F(66)	0.9(7)
F(65)-C(65)-C(66)-C(61)	179.2(5)
C(64)-C(65)-C(66)-C(61)	-2.5(10)
F(65)-C(65)-C(66)-F(66)	1.0(9)
C(64)-C(65)-C(66)-F(66)	179.3(5)
C(81)-P(3)-C(71)-C(72)	-28.9(5)
C(16B)-P(3)-C(71)-C(72)	83.7(5)
Pt(2)-P(3)-C(71)-C(72)	-153.5(4)
C(81)-P(3)-C(71)-C(76)	152.6(4)
C(16B)-P(3)-C(71)-C(76)	-94.8(4)
Pt(2)-P(3)-C(71)-C(76)	28.0(5)
C(76)-C(71)-C(72)-C(73)	-2.2(8)
P(3)-C(71)-C(72)-C(73)	179.3(4)
C(71)-C(72)-C(73)-C(74)	0.9(9)
C(72)-C(73)-C(74)-C(75)	1.3(9)
C(73)-C(74)-C(75)-C(76)	-2.2(9)
C(74)-C(75)-C(76)-C(71)	0.8(9)
C(72)-C(71)-C(76)-C(75)	1.4(8)
P(3)-C(71)-C(76)-C(75)	179.9(4)
C(71)-P(3)-C(81)-C(86)	-43.5(5)
C(16B)-P(3)-C(81)-C(86)	-154.8(4)
Pt(2)-P(3)-C(81)-C(86)	76.4(4)
C(71)-P(3)-C(81)-C(82)	143.1(4)
C(16B)-P(3)-C(81)-C(82)	31.8(5)
Pt(2)-P(3)-C(81)-C(82)	-97.0(4)
C(86)-C(81)-C(82)-C(83)	-0.1(8)
P(3)-C(81)-C(82)-C(83)	173.3(4)
C(81)-C(82)-C(83)-C(84)	0.7(9)

C(82)-C(83)-C(84)-C(85)	-0.6(10)
C(83)-C(84)-C(85)-C(86)	-0.2(9)
C(82)-C(81)-C(86)-C(85)	-0.6(8)
Pt(3)-C(81)-C(86)-C(85)	-174.2(4)
C(84)-C(85)-C(86)-C(81)	0.8(9)
C(101)-P(4)-C(91)-C(96)	-172.5(4)
C(16A)-P(4)-C(91)-C(96)	-64.0(5)
Pt(2)-P(4)-C(91)-C(96)	65.7(5)
C(101)-P(4)-C(91)-C(92)	13.7(5)
C(16A)-P(4)-C(91)-C(92)	122.2(4)
Pt(2)-P(4)-C(91)-C(92)	-108.1(4)
C(96)-C(91)-C(92)-C(93)	-1.3(8)
P(4)-C(91)-C(92)-C(93)	172.5(5)
C(91)-C(92)-C(93)-C(94)	0.5(9)
C(92)-C(93)-C(94)-C(95)	0.2(11)
C(93)-C(94)-C(95)-C(96)	-0.2(11)
C(92)-C(91)-C(96)-C(95)	1.3(9)
P(4)-C(91)-C(96)-C(95)	-172.6(5)
C(94)-C(95)-C(96)-C(91)	-0.6(11)
C(91)-P(4)-C(101)-C(106)	-102.1(5)
C(16A)-P(4)-C(101)-C(106)	144.6(5)
Pt(2)-P(4)-C(101)-C(106)	21.6(5)
C(91)-P(4)-C(101)-C(102)	77.5(5)
C(16A)-P(4)-C(101)-C(102)	-35.8(5)
Pt(2)-P(4)-C(101)-C(102)	-158.7(4)
C(106)-C(101)-C(102)-C(103)	-0.3(8)
P(4)-C(101)-C(102)-C(103)	-180.0(4)
C(101)-C(102)-C(103)-C(104)	1.3(9)
C(102)-C(103)-C(104)-C(105)	-1.5(11)
C(103)-C(104)-C(105)-C(106)	0.7(11)
C(102)-C(101)-C(106)-C(105)	-0.4(9)
P(4)-C(101)-C(106)-C(105)	179.3(5)
C(104)-C(105)-C(106)-C(101)	0.2(11)