

Table 1. Crystal data and structure refinement for complex 3.

Identification code	nosod	
Empirical formula	C34 H19 Au F15 O2 P	
Formula weight	972.43	
Temperature	143(2) K	
Wavelength	0.71073 Å	
Crystal system	Triclinic	
Space group	P -1	
Unit cell dimensions	a = 10.5562(10) Å	$\alpha = 109.378(3)^\circ$
	b = 10.5950(10) Å	$\beta = 104.321(3)^\circ$
	c = 15.7468(14) Å	$\gamma = 91.630(3)^\circ$
Volume	1598.0(3) Å ³	
Z	2	
Density (calculated)	2.021 Mg/m ³	
Absorption coefficient	4.775 mm ⁻¹	
F(000)	936	
Crystal size	0.31 x 0.14 x 0.13 mm ³	
Theta range for data collection	1.42 to 30.03°	
Index ranges	-14 ≤ h ≤ 14, -14 ≤ k ≤ 14, -21 ≤ l ≤ 22	
Reflections collected	28899	
Independent reflections	9287 [R(int) = 0.0387]	
Completeness to theta = 30.00°	99.3 %	
Absorption correction	Semi-empirical from equivalents	
Max. and min. transmission	0.802 and 0.611	
Refinement method	Full-matrix least-squares on F ²	
Data / restraints / parameters	9287 / 146 / 480	
Goodness-of-fit on F ²	1.023	
Final R indices [I > 2σ(I)]	R1 = 0.0299, wR2 = 0.0682	
R indices (all data)	R1 = 0.0369, wR2 = 0.0700	
Largest diff. peak and hole	1.596 and -2.842 e. Å ⁻³	

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

	x	y	z	U(eq)
Au	2831.7(1)	5360.4(1)	2587.5(1)	22.1(1)
P	1083.2(8)	3677.5(8)	2277.3(6)	24.6(2)
C(1)	1063(4)	2075(3)	1345(3)	35.9(7)
C(2)	1537(4)	954(4)	1687(3)	43.0(8)
C(3)	3115(5)	603(6)	2879(5)	78.9(18)
C(4)	2388(5)	-227(5)	424(4)	67.9(15)
O(1)	2742(3)	1396(3)	2313(2)	46.5(7)
O(2)	1502(3)	-262(3)	947(3)	56.7(8)
C(11)	1089(3)	3406(3)	3354(2)	25.3(6)
C(12)	2090(3)	4016(4)	4166(2)	34.8(7)
C(13)	2063(4)	3771(4)	4973(3)	41.7(9)
C(14)	1041(3)	2924(4)	4968(3)	35.3(7)
C(15)	37(3)	2323(3)	4172(2)	31.0(7)
C(16)	46(3)	2559(3)	3357(2)	28.6(6)
C(21)	-525(3)	4216(3)	1914(2)	26.3(6)
C(22)	-1094(3)	4032(4)	982(2)	32.6(7)
C(23)	-2260(3)	4564(4)	725(2)	36.3(7)
C(24)	-2849(3)	5284(4)	1390(3)	36.3(7)
C(25)	-2297(3)	5469(4)	2321(3)	33.2(7)
C(26)	-1136(3)	4942(3)	2587(2)	28.8(6)
C(31)	4327(3)	6911(3)	2976(2)	24.9(6)
C(32)	4704(3)	7362(3)	2350(2)	30.2(6)
C(33)	5657(4)	8445(4)	2611(3)	40.0(8)
C(34)	6250(4)	9118(4)	3538(3)	40.8(8)
C(35)	5897(3)	8701(4)	4188(2)	36.2(7)
C(36)	4948(3)	7611(4)	3912(2)	33.5(7)
F(1)	4121(2)	6749(3)	1427.1(16)	49.8(6)
F(2)	5944(3)	8876(3)	1963(2)	78.3(10)
F(3)	7159(3)	10179(3)	3811(2)	63.1(7)
F(4)	6467(3)	9381(3)	5102.2(17)	58.0(7)
F(5)	4631(3)	7259(3)	4583.2(16)	56.8(7)
C(41)	1529(3)	6783(3)	2641(2)	22.4(5)

C(42)	864(3)	6892(3)	1806(2)	26.0(6)
C(43)	-65(3)	7769(3)	1729(2)	30.1(7)
C(44)	-329(3)	8599(3)	2531(2)	32.4(7)
C(45)	336(4)	8526(3)	3388(2)	33.3(7)
C(46)	1239(3)	7626(3)	3427(2)	27.8(6)
F(6)	1080(2)	6072(2)	1001.3(14)	38.7(5)
F(7)	-725(2)	7808(2)	895.0(15)	44.8(5)
F(8)	-1226(2)	9455(2)	2478.8(18)	49.3(6)
F(9)	67(3)	9318(2)	4171.4(16)	53.2(6)
F(10)	1833(2)	7557(2)	4275.6(14)	40.4(5)
C(51)	4196(3)	4010(3)	2366(2)	28.9(6)
C(52)	5097(3)	3729(3)	3053(3)	34.0(7)
C(53)	6026(3)	2870(4)	2862(3)	44.5(9)
C(54)	6074(3)	2247(4)	1966(3)	46.7(10)
C(55)	5192(4)	2500(4)	1247(3)	41.9(9)
C(56)	4278(3)	3380(3)	1464(3)	32.8(7)
F(11)	5091(2)	4312(3)	3962.3(16)	45.4(5)
F(12)	6903(3)	2648(3)	3572(2)	69.5(8)
F(13)	6979(2)	1418(3)	1767(2)	65.1(8)
F(14)	5229(3)	1903(3)	359(2)	60.3(7)
F(15)	3439(2)	3602(2)	743.6(16)	43.8(5)

Table 3. Bond lengths [Å] and angles [°] for complex 3.

Au-C(41)	2.065(3)
Au-C(51)	2.068(3)
Au-C(31)	2.067(3)
Au-P	2.3692(8)
P-C(11)	1.810(3)
P-C(21)	1.824(3)
P-C(1)	1.835(4)
C(1)-C(2)	1.509(5)
C(2)-O(1)	1.360(5)
C(2)-O(2)	1.414(5)
C(3)-O(1)	1.414(5)
C(4)-O(2)	1.398(6)
C(11)-C(12)	1.383(4)
C(11)-C(16)	1.402(4)
C(12)-C(13)	1.384(5)
C(13)-C(14)	1.381(5)
C(14)-C(15)	1.369(5)
C(15)-C(16)	1.389(4)
C(21)-C(22)	1.386(4)
C(21)-C(26)	1.397(4)
C(22)-C(23)	1.394(5)
C(23)-C(24)	1.372(5)
C(24)-C(25)	1.381(5)
C(25)-C(26)	1.389(4)
C(31)-C(32)	1.362(4)
C(31)-C(36)	1.386(4)
C(32)-F(1)	1.349(4)
C(32)-C(33)	1.383(5)
C(33)-F(2)	1.341(4)
C(33)-C(34)	1.365(5)
C(34)-F(3)	1.336(4)
C(34)-C(35)	1.365(5)
C(35)-F(4)	1.346(4)
C(35)-C(36)	1.383(5)
C(36)-F(5)	1.340(4)
C(41)-C(42)	1.373(4)

C(41)-C(46)	1.376(4)
C(42)-F(6)	1.355(4)
C(42)-C(43)	1.381(4)
C(43)-F(7)	1.341(4)
C(43)-C(44)	1.377(5)
C(44)-F(8)	1.336(4)
C(44)-C(45)	1.387(5)
C(45)-F(9)	1.343(4)
C(45)-C(46)	1.373(4)
C(46)-F(10)	1.355(3)
C(51)-C(52)	1.372(4)
C(51)-C(56)	1.380(5)
C(52)-F(11)	1.361(4)
C(52)-C(53)	1.376(5)
C(53)-F(12)	1.356(4)
C(53)-C(54)	1.360(6)
C(54)-F(13)	1.339(4)
C(54)-C(55)	1.383(6)
C(55)-F(14)	1.341(5)
C(55)-C(56)	1.386(5)
C(56)-F(15)	1.349(4)

C(41)-Au-C(51)	171.15(11)
C(41)-Au-C(31)	87.62(11)
C(51)-Au-C(31)	88.60(11)
C(41)-Au-P	90.17(8)
C(51)-Au-P	94.24(9)
C(31)-Au-P	174.78(9)
C(11)-P-C(21)	104.40(14)
C(11)-P-C(1)	110.70(16)
C(21)-P-C(1)	104.54(16)
C(11)-P-Au	108.92(11)
C(21)-P-Au	112.12(10)
C(1)-P-Au	115.56(12)
C(2)-C(1)-P	114.5(3)
O(1)-C(2)-O(2)	113.8(3)
O(1)-C(2)-C(1)	108.7(3)
O(2)-C(2)-C(1)	112.7(4)

C(2)-O(1)-C(3)	113.6(4)
C(4)-O(2)-C(2)	115.0(3)
C(12)-C(11)-C(16)	119.8(3)
C(12)-C(11)-P	121.6(2)
C(16)-C(11)-P	118.6(2)
C(11)-C(12)-C(13)	119.7(3)
C(14)-C(13)-C(12)	120.2(3)
C(15)-C(14)-C(13)	120.7(3)
C(14)-C(15)-C(16)	119.9(3)
C(15)-C(16)-C(11)	119.6(3)
C(22)-C(21)-C(26)	119.1(3)
C(22)-C(21)-P	120.6(2)
C(26)-C(21)-P	120.0(2)
C(21)-C(22)-C(23)	120.0(3)
C(24)-C(23)-C(22)	120.5(3)
C(23)-C(24)-C(25)	120.0(3)
C(24)-C(25)-C(26)	120.1(3)
C(25)-C(26)-C(21)	120.2(3)
C(32)-C(31)-C(36)	116.2(3)
C(32)-C(31)-Au	123.0(2)
C(36)-C(31)-Au	120.7(2)
F(1)-C(32)-C(31)	119.5(3)
F(1)-C(32)-C(33)	117.4(3)
C(31)-C(32)-C(33)	123.2(3)
F(2)-C(33)-C(34)	120.2(3)
F(2)-C(33)-C(32)	120.3(3)
C(34)-C(33)-C(32)	119.4(3)
F(3)-C(34)-C(33)	120.7(3)
F(3)-C(34)-C(35)	120.0(4)
C(33)-C(34)-C(35)	119.3(3)
F(4)-C(35)-C(34)	119.1(3)
F(4)-C(35)-C(36)	120.5(3)
C(34)-C(35)-C(36)	120.4(3)
F(5)-C(36)-C(35)	117.7(3)
F(5)-C(36)-C(31)	120.7(3)
C(35)-C(36)-C(31)	121.6(3)
C(42)-C(41)-C(46)	116.2(3)
C(42)-C(41)-Au	117.0(2)

C(46)-C(41)-Au	126.8(2)
F(6)-C(42)-C(41)	119.3(3)
F(6)-C(42)-C(43)	117.1(3)
C(41)-C(42)-C(43)	123.5(3)
F(7)-C(43)-C(44)	119.8(3)
F(7)-C(43)-C(42)	121.5(3)
C(44)-C(43)-C(42)	118.7(3)
F(8)-C(44)-C(43)	120.1(3)
F(8)-C(44)-C(45)	120.6(3)
C(43)-C(44)-C(45)	119.3(3)
F(9)-C(45)-C(46)	120.6(3)
F(9)-C(45)-C(44)	119.6(3)
C(46)-C(45)-C(44)	119.8(3)
F(10)-C(46)-C(45)	117.8(3)
F(10)-C(46)-C(41)	119.7(3)
C(45)-C(46)-C(41)	122.5(3)
C(52)-C(51)-C(56)	115.8(3)
C(52)-C(51)-Au	125.4(3)
C(56)-C(51)-Au	118.6(2)
F(11)-C(52)-C(51)	119.8(3)
F(11)-C(52)-C(53)	117.7(3)
C(51)-C(52)-C(53)	122.6(4)
F(12)-C(53)-C(54)	119.7(4)
F(12)-C(53)-C(52)	119.8(4)
C(54)-C(53)-C(52)	120.5(4)
F(13)-C(54)-C(53)	121.3(4)
F(13)-C(54)-C(55)	119.4(4)
C(53)-C(54)-C(55)	119.3(3)
F(14)-C(55)-C(54)	120.3(3)
F(14)-C(55)-C(56)	121.0(4)
C(54)-C(55)-C(56)	118.8(4)
F(15)-C(56)-C(51)	120.1(3)
F(15)-C(56)-C(55)	116.9(3)
C(51)-C(56)-C(55)	123.1(3)

Symmetry transformations used to generate equivalent atoms:

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

	U^{11}	U^{22}	U^{33}	U^{23}	U^{13}	U^{12}
Au	19.6(1)	23.1(1)	22.9(1)	8.7(1)	4.0(1)	1.0(1)
P	24.4(4)	23.2(4)	25.1(4)	7.4(3)	6.2(3)	0.3(3)
C(1)	36.2(18)	30.2(17)	37.3(19)	6.9(15)	9.6(15)	3.2(14)
C(2)	36.5(19)	35.5(19)	51(2)	7.6(17)	11.3(17)	7.8(15)
C(3)	53(3)	96(4)	116(5)	79(4)	13(3)	23(3)
C(4)	61(3)	48(3)	76(4)	-10(2)	30(3)	-11(2)
O(1)	43.4(15)	41.9(15)	53.2(17)	19.5(14)	6.9(13)	9.0(12)
O(2)	46.6(17)	33.9(15)	78(2)	2.7(15)	19.5(16)	4.5(13)
C(11)	23.7(14)	26.9(15)	27.9(15)	13.0(13)	6.4(12)	6.0(11)
C(12)	23.8(15)	45(2)	33.0(18)	15.2(16)	1.2(13)	-7.3(13)
C(13)	33.5(18)	56(2)	29.4(18)	17.9(17)	-4.5(14)	-8.6(16)
C(14)	36.4(18)	42(2)	31.4(17)	18.6(16)	8.7(14)	4.0(15)
C(15)	32.0(16)	29.5(16)	35.1(18)	15.2(14)	10.1(14)	2.1(13)
C(16)	24.4(14)	28.6(16)	30.3(16)	10.2(13)	3.3(12)	0.6(12)
C(21)	23.7(14)	26.7(15)	27.7(16)	11.4(13)	3.3(12)	-1.7(11)
C(22)	31.1(16)	38.3(18)	26.4(16)	10.3(14)	5.6(13)	6.0(14)
C(23)	29.6(16)	46(2)	28.0(17)	13.4(15)	-2.1(13)	5.8(14)
C(24)	25.5(15)	44(2)	40.3(19)	18.7(17)	4.3(14)	5.7(14)
C(25)	30.3(16)	35.8(18)	37.4(18)	15.8(15)	11.9(14)	8.3(14)
C(26)	28.0(15)	30.8(16)	28.6(16)	12.7(13)	6.1(13)	3.7(12)
C(31)	20.4(13)	24.7(14)	29.1(15)	11.1(12)	3.0(12)	6.3(11)
C(32)	24.4(14)	33.8(17)	29.5(16)	11.2(14)	2.4(12)	-1.9(12)
C(33)	33.2(18)	46(2)	44(2)	21.5(18)	8.9(16)	-5.7(15)
C(34)	29.0(17)	31.0(18)	55(2)	10.4(17)	6.5(16)	-5.3(14)
C(35)	30.2(17)	32.6(17)	31.7(18)	-2.8(14)	3.2(14)	-2.6(13)
C(36)	30.0(16)	36.1(18)	30.7(17)	8.9(14)	6.0(14)	-1.9(13)
F(1)	43.0(13)	71.4(17)	30.0(11)	18.4(11)	3.2(10)	-18.8(11)
F(2)	72.1(19)	100(2)	67.9(19)	46.5(18)	9.2(15)	-40.7(17)
F(3)	51.5(15)	48.8(15)	76.2(19)	14.4(14)	8.7(14)	-26.2(12)
F(4)	48.7(14)	60.9(16)	37.9(13)	-8.3(12)	3.0(11)	-17.8(12)
F(5)	55.5(15)	77.4(18)	28.2(12)	16.2(12)	1.9(10)	-24.9(13)

C(41)	19.7(13)	21.8(13)	23.9(14)	7.0(11)	4.7(11)	0.2(10)
C(42)	22.8(14)	32.1(16)	23.6(15)	10.6(13)	5.9(12)	1.8(12)
C(43)	26.2(15)	35.1(17)	28.0(16)	15.1(14)	0.4(12)	1.2(13)
C(44)	33.9(17)	22.6(15)	40.7(19)	12.2(14)	8.1(15)	7.4(13)
C(45)	46(2)	23.0(15)	32.3(17)	7.8(13)	16.2(15)	7.0(14)
C(46)	33.9(16)	24.7(15)	24.1(15)	9.7(12)	5.2(13)	0.7(12)
F(6)	39.2(11)	53.6(13)	23.8(10)	11.5(9)	11.5(9)	13.5(10)
F(7)	42.9(12)	55.5(14)	36.4(12)	24.3(11)	-0.7(10)	11.7(10)
F(8)	52.4(14)	35.4(12)	58.1(15)	16.4(11)	9.4(12)	22.7(10)
F(9)	85.4(19)	37.5(12)	39.0(13)	8.3(10)	25.6(13)	29.8(13)
F(10)	58.6(14)	39.6(12)	22.0(10)	11.5(9)	7.1(9)	13.5(10)
C(51)	21.3(13)	23.4(15)	41.3(18)	11.1(13)	7.5(13)	1.5(11)
C(52)	23.1(15)	35.2(18)	46(2)	19.2(16)	6.5(14)	0.4(13)
C(53)	20.6(15)	44(2)	73(3)	31(2)	4.5(17)	4.7(14)
C(54)	24.4(16)	30.7(18)	84(3)	16(2)	16.7(19)	6.8(14)
C(55)	29.7(17)	29.8(18)	60(2)	5.6(17)	16.1(17)	1.2(14)
C(56)	26.2(15)	28.3(16)	42.1(19)	9.2(15)	10.3(14)	3.8(12)
F(11)	29.6(11)	64.5(15)	45.0(13)	28.4(12)	2.2(10)	5.5(10)
F(12)	38.3(13)	81(2)	98(2)	52.9(19)	3.2(14)	22.5(13)
F(13)	34.1(12)	46.0(14)	113(2)	21.5(15)	24.0(15)	21.3(11)
F(14)	51.7(15)	51.8(15)	65.7(18)	-4.4(13)	28.8(14)	12.2(12)
F(15)	43.2(12)	51.2(14)	36.2(12)	12.2(10)	12.6(10)	14.2(10)

Table 5. Hydrogen coordinates ($\times 10^4$) and isotropic displacement parameters ($\approx^2 \times 10^{-3}$) for complex 3.

	x	y	z	U(eq)
H(1A)	153	1782	936	43
H(1B)	1623	2228	960	43
H(2)	919	774	2034	52
H(3A)	2490	634	3252	95
H(3B)	4001	955	3297	95
H(3C)	3111	-332	2480	95
H(4A)	2163	427	108	81
H(4B)	2337	-1122	-45	81
H(4C)	3284	41	840	81
H(12)	2792	4600	4171	42
H(13)	2751	4187	5531	50
H(14)	1034	2757	5524	42
H(15)	-664	1746	4177	37
H(16)	-652	2149	2804	34
H(22)	-688	3542	518	39
H(23)	-2651	4428	85	44
H(24)	-3637	5656	1210	44
H(25)	-2711	5958	2780	40
H(26)	-755	5074	3228	35

Table 1. Crystal data and structure refinement for complex 6.

Identification code	nidls
Empirical formula	C52 H30 Au2 Cl3 F15 O P2
Formula weight	1517.98
Temperature	133(2) K
Wavelength	0.71073 Å
Crystal system, space group	Monoclinic, P 21/n
Unit cell dimensions	a = 19.863(3) Å alpha = 90 deg. b = 13.2995(18) Å beta = 92.484(6) c = 19.928(3) Å gamma = 90 deg.
Volume	5259.4(12) Å ³
Z, Calculated density	4, 1.917 Mg/m ³
Absorption coefficient	5.877 mm ⁻¹
F(000)	2896
Crystal size	0.50 x 0.10 x 0.05 mm
Theta range for data collection	1.42 to 28.29 deg.
Limiting indices	-26 ≤ h ≤ 26, -17 ≤ k ≤ 17, -26 ≤ l ≤ 26
Reflections collected / unique	79626 / 13044 [R(int) = 0.0881]
Completeness to theta = 28.00	99.9 %
Absorption correction	SADABS
Max. and min. transmission	0.928 and 0.597
Refinement method	Full-matrix least-squares on F ²
Data / restraints / parameters	13044 / 204 / 676
Goodness-of-fit on F ²	1.028
Final R indices [I > 2sigma(I)]	R1 = 0.0519, wR2 = 0.1349
R indices (all data)	R1 = 0.0844, wR2 = 0.1592
Largest diff. peak and hole	3.044 and -3.860 e.Å ⁻³

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

	x	y	z	U(eq)
Au (1)	2408 (1)	4361 (1)	4258 (1)	22 (1)
Au (2)	5135 (1)	2437 (1)	3875 (1)	24 (1)
P (1)	3462 (1)	4746 (2)	4785 (1)	22 (1)
P (2)	5829 (1)	1376 (2)	3330 (1)	25 (1)
C (1)	4088 (4)	3961 (6)	4507 (4)	26 (2)
C (2)	4499 (4)	3385 (6)	4281 (4)	24 (2)
C (11)	3470 (3)	4618 (6)	5686 (4)	26 (2)
C (12)	4056 (4)	4875 (6)	6053 (4)	37 (2)
C (13)	4093 (5)	4749 (8)	6750 (5)	47 (2)
C (14)	3563 (4)	4368 (7)	7073 (5)	43 (2)
C (15)	2974 (4)	4104 (7)	6714 (4)	40 (2)
C (16)	2923 (4)	4243 (6)	6021 (4)	31 (2)
C (21)	3743 (3)	6011 (6)	4626 (4)	24 (2)
C (22)	4190 (3)	6195 (6)	4114 (4)	29 (2)
C (23)	4359 (4)	7170 (6)	3960 (4)	35 (2)
C (24)	4080 (4)	7972 (6)	4305 (4)	33 (2)
C (25)	3649 (4)	7799 (6)	4816 (4)	31 (2)
C (26)	3479 (4)	6815 (6)	4982 (4)	27 (2)
C (31)	5557 (3)	1229 (6)	2450 (4)	28 (2)
C (32)	5990 (4)	922 (7)	1960 (4)	42 (2)
C (33)	5752 (5)	803 (8)	1311 (5)	50 (2)
C (34)	5086 (5)	993 (9)	1125 (5)	54 (3)
C (35)	4649 (5)	1282 (8)	1610 (5)	47 (2)
C (36)	4881 (4)	1405 (7)	2261 (4)	36 (2)
C (41)	6687 (4)	1840 (6)	3315 (4)	33 (2)
C (42)	7234 (4)	1336 (8)	3610 (4)	42 (2)
C (43)	7878 (4)	1749 (10)	3627 (5)	57 (3)
C (44)	7965 (5)	2683 (8)	3316 (6)	65 (3)
C (45)	7433 (5)	3201 (9)	3015 (7)	67 (3)
C (46)	6786 (5)	2776 (7)	3026 (6)	53 (3)
C (51)	5908 (4)	126 (6)	3684 (4)	30 (2)
C (52)	6190 (5)	-658 (7)	3330 (5)	48 (2)
C (53)	6242 (5)	-1617 (7)	3613 (6)	54 (3)
C (54)	6027 (5)	-1802 (7)	4250 (5)	48 (2)
C (55)	5749 (4)	-1012 (7)	4602 (5)	43 (2)
C (56)	5686 (4)	-49 (6)	4319 (4)	35 (2)
C (61)	1483 (3)	4026 (6)	3779 (3)	27 (2)
C (62)	956 (4)	3710 (6)	4132 (4)	40 (2)
C (63)	334 (4)	3491 (7)	3819 (5)	47 (2)
C (64)	254 (4)	3589 (8)	3135 (4)	48 (2)
C (65)	768 (4)	3913 (7)	2770 (4)	40 (2)
C (66)	1393 (4)	4123 (6)	3097 (4)	29 (2)
F (1)	1012 (3)	3597 (5)	4798 (3)	57 (2)
F (2)	-190 (3)	3189 (7)	4185 (4)	80 (2)
F (3)	-346 (3)	3380 (6)	2832 (4)	73 (2)
F (4)	682 (3)	4043 (5)	2106 (3)	57 (2)
F (5)	1894 (3)	4437 (4)	2722 (2)	39 (1)
C (71)	2646 (4)	2850 (6)	4219 (3)	30 (2)
C (72)	2493 (4)	2143 (7)	4691 (4)	40 (2)
C (73)	2672 (5)	1121 (7)	4619 (5)	53 (2)
C (74)	3002 (5)	828 (7)	4079 (5)	58 (3)
C (75)	3154 (4)	1488 (7)	3597 (5)	50 (2)

F(6)	2177(3)	2424(4)	5247(3)	53(2)
F(7)	2532(4)	467(5)	5116(4)	78(2)
F(8)	3171(3)	-154(5)	4014(5)	85(3)
F(9)	3482(3)	1204(5)	3046(4)	73(2)
F(10)	3141(3)	3141(4)	3176(3)	45(1)
C(81)	2144(3)	5861(6)	4225(3)	24(2)
C(82)	2373(3)	6486(6)	3733(4)	31(2)
C(83)	2233(4)	7503(6)	3690(5)	40(2)
C(84)	1833(4)	7913(7)	4175(4)	45(2)
C(85)	1580(4)	7320(6)	4683(5)	41(2)
C(86)	1748(4)	6306(6)	4692(4)	30(2)
F(11)	2766(2)	6108(4)	3257(2)	41(1)
F(12)	2473(3)	8084(5)	3220(3)	59(2)
F(13)	1689(3)	8917(4)	4174(4)	63(2)
F(14)	1189(3)	7731(4)	5134(3)	52(2)
F(15)	1499(3)	5759(4)	5195(3)	42(1)
Cl(1)	878(5)	-415(8)	2657(5)	236(5)
Cl(2)	1395(5)	1225(9)	3206(6)	256(5)
Cl(3)	140(8)	1036(9)	3118(9)	400(10)
C(99)	470(50)	1200(70)	5650(40)	160(40)
O(1)	306(15)	1650(20)	5311(16)	57(7)
C(99')	1707(12)	1110(20)	6442(13)	40(6)
O(1')	1251(10)	1269(15)	6401(10)	51(5)
C(99'')	821(14)	-180(20)	5520(15)	49(7)
O(1'')	988(11)	371(17)	5274(11)	56(6)

Table 3. Bond lengths [Å] and angles [deg] for complex 6.

Au(1)-C(81)	2.063(8)
Au(1)-C(71)	2.067(8)
Au(1)-C(61)	2.082(7)
Au(1)-P(1)	2.3572(18)
Au(2)-C(2)	1.982(8)
Au(2)-P(2)	2.280(2)
P(1)-C(1)	1.733(8)
P(1)-C(11)	1.803(8)
P(1)-C(21)	1.804(8)
P(2)-C(51)	1.809(8)
P(2)-C(41)	1.815(8)
P(2)-C(31)	1.823(8)
C(1)-C(2)	1.220(11)
C(11)-C(16)	1.391(9)
C(11)-C(12)	1.391(9)
C(12)-C(13)	1.398(11)
C(13)-C(14)	1.356(11)
C(14)-C(15)	1.389(11)
C(15)-C(16)	1.392(11)
C(21)-C(26)	1.397(9)
C(21)-C(22)	1.403(9)
C(22)-C(23)	1.378(11)
C(23)-C(24)	1.396(10)
C(24)-C(25)	1.379(10)
C(25)-C(26)	1.395(10)
C(31)-C(32)	1.391(10)
C(31)-C(36)	1.397(9)
C(32)-C(33)	1.367(12)
C(33)-C(34)	1.382(12)
C(34)-C(35)	1.381(12)
C(35)-C(36)	1.366(11)
C(41)-C(42)	1.387(10)
C(41)-C(46)	1.388(11)
C(42)-C(43)	1.391(11)
C(43)-C(44)	1.403(13)
C(44)-C(45)	1.377(13)
C(45)-C(46)	1.405(12)
C(51)-C(56)	1.378(10)
C(51)-C(52)	1.390(10)
C(52)-C(53)	1.398(12)
C(53)-C(54)	1.379(12)
C(54)-C(55)	1.390(12)
C(55)-C(56)	1.402(11)
C(61)-C(62)	1.352(10)
C(61)-C(66)	1.370(9)
C(62)-F(1)	1.336(9)
C(62)-C(63)	1.391(10)
C(63)-F(2)	1.358(10)
C(63)-C(64)	1.370(11)
C(64)-F(3)	1.341(10)
C(64)-C(65)	1.351(11)
C(65)-F(4)	1.338(9)
C(65)-C(66)	1.403(10)
C(66)-F(5)	1.338(9)
C(71)-C(72)	1.374(10)
C(71)-C(76)	1.377(11)
C(72)-F(6)	1.349(10)
C(72)-C(73)	1.413(12)
C(73)-C(74)	1.343(12)

C(74)-C(75)	1.344(12)
C(74)-F(8)	1.356(11)
C(75)-F(9)	1.355(11)
C(75)-C(76)	1.413(11)
C(76)-F(10)	1.343(10)
C(81)-C(86)	1.377(10)
C(81)-C(82)	1.379(9)
C(82)-F(11)	1.352(9)
C(82)-C(83)	1.383(11)
C(83)-F(12)	1.320(10)
C(83)-C(84)	1.389(11)
C(84)-F(13)	1.365(11)
C(84)-C(85)	1.394(11)
C(85)-F(14)	1.331(10)
C(85)-C(86)	1.389(11)
C(86)-F(15)	1.350(9)
C(99)-O(1)	0.95(3)
C(99)-O(1")	1.71(10)
C(99)-C(99")	1.99(9)
C(99')-O(1')	0.93(2)
C(99")-O(1")	0.95(2)

C(81)-Au(1)-C(71)	175.8(3)
C(81)-Au(1)-C(61)	88.5(3)
C(71)-Au(1)-C(61)	88.5(3)
C(81)-Au(1)-P(1)	91.36(18)
C(71)-Au(1)-P(1)	91.56(19)
C(61)-Au(1)-P(1)	179.12(19)
C(2)-Au(2)-P(2)	175.7(2)
C(1)-P(1)-C(11)	106.6(4)
C(1)-P(1)-C(21)	105.9(4)
C(11)-P(1)-C(21)	105.9(3)
C(1)-P(1)-Au(1)	111.3(3)
C(11)-P(1)-Au(1)	113.1(2)
C(21)-P(1)-Au(1)	113.6(2)
C(51)-P(2)-C(41)	104.6(4)
C(51)-P(2)-C(31)	107.1(4)
C(41)-P(2)-C(31)	105.0(3)
C(51)-P(2)-Au(2)	115.3(3)
C(41)-P(2)-Au(2)	112.7(3)
C(31)-P(2)-Au(2)	111.4(2)
C(2)-C(1)-P(1)	175.8(7)
C(1)-C(2)-Au(2)	177.1(7)
C(16)-C(11)-C(12)	119.2(8)
C(16)-C(11)-P(1)	122.6(6)
C(12)-C(11)-P(1)	118.1(6)
C(11)-C(12)-C(13)	120.0(8)
C(14)-C(13)-C(12)	120.5(8)
C(13)-C(14)-C(15)	120.2(9)
C(14)-C(15)-C(16)	120.0(8)
C(11)-C(16)-C(15)	119.9(8)
C(26)-C(21)-C(22)	119.9(7)
C(26)-C(21)-P(1)	119.9(5)
C(22)-C(21)-P(1)	120.0(6)
C(23)-C(22)-C(21)	119.6(7)
C(22)-C(23)-C(24)	120.3(8)
C(25)-C(24)-C(23)	120.5(8)
C(24)-C(25)-C(26)	119.8(8)
C(25)-C(26)-C(21)	119.9(7)
C(32)-C(31)-C(36)	118.5(8)
C(32)-C(31)-P(2)	122.7(6)
C(36)-C(31)-P(2)	118.8(6)
C(33)-C(32)-C(31)	119.9(8)

C(35)-C(34)-C(33)	119.1(9)
C(36)-C(35)-C(34)	120.1(8)
C(35)-C(36)-C(31)	121.1(8)
C(42)-C(41)-C(46)	119.1(8)
C(42)-C(41)-P(2)	123.2(7)
C(46)-C(41)-P(2)	117.6(6)
C(41)-C(42)-C(43)	121.5(10)
C(42)-C(43)-C(44)	118.1(9)
C(45)-C(44)-C(43)	121.9(10)
C(44)-C(45)-C(46)	118.4(11)
C(41)-C(46)-C(45)	121.0(10)
C(56)-C(51)-C(52)	119.4(8)
C(56)-C(51)-P(2)	119.2(6)
C(52)-C(51)-P(2)	121.4(7)
C(51)-C(52)-C(53)	120.3(9)
C(54)-C(53)-C(52)	120.9(9)
C(53)-C(54)-C(55)	118.4(9)
C(54)-C(55)-C(56)	121.2(9)
C(51)-C(56)-C(55)	119.8(8)
C(62)-C(61)-C(66)	118.4(7)
C(62)-C(61)-Au(1)	121.0(5)
C(66)-C(61)-Au(1)	120.6(5)
F(1)-C(62)-C(61)	121.3(7)
F(1)-C(62)-C(63)	117.1(7)
C(61)-C(62)-C(63)	121.6(8)
F(2)-C(63)-C(64)	120.3(7)
F(2)-C(63)-C(62)	120.5(8)
C(64)-C(63)-C(62)	119.2(8)
F(3)-C(64)-C(65)	120.1(8)
F(3)-C(64)-C(63)	119.3(7)
C(65)-C(64)-C(63)	120.6(8)
F(4)-C(65)-C(64)	120.5(7)
F(4)-C(65)-C(66)	120.4(8)
C(64)-C(65)-C(66)	119.1(7)
F(5)-C(66)-C(61)	121.0(7)
F(5)-C(66)-C(65)	117.8(7)
C(61)-C(66)-C(65)	121.1(7)
C(72)-C(71)-C(76)	116.6(8)
C(72)-C(71)-Au(1)	125.6(6)
C(76)-C(71)-Au(1)	117.8(6)
F(6)-C(72)-C(71)	119.8(8)
F(6)-C(72)-C(73)	118.5(8)
C(71)-C(72)-C(73)	121.6(9)
C(74)-C(73)-F(7)	121.5(9)
C(74)-C(73)-C(72)	119.6(9)
F(7)-C(73)-C(72)	118.8(10)
C(73)-C(74)-C(75)	121.0(9)
C(73)-C(74)-F(8)	119.2(9)
C(75)-C(74)-F(8)	119.8(9)
C(74)-C(75)-F(9)	121.8(8)
C(74)-C(75)-C(76)	119.4(9)
F(9)-C(75)-C(76)	118.8(9)
F(10)-C(76)-C(71)	121.1(7)
F(10)-C(76)-C(75)	117.2(8)
C(71)-C(76)-C(75)	121.7(9)
C(86)-C(81)-C(82)	115.9(7)
C(86)-C(81)-Au(1)	123.1(5)
C(82)-C(81)-Au(1)	121.0(5)
F(11)-C(82)-C(81)	119.6(7)
F(11)-C(82)-C(83)	116.2(7)
C(81)-C(82)-C(83)	124.2(8)
F(12)-C(83)-C(82)	122.5(9)
F(12)-C(83)-C(84)	120.0(8)

F(13)-C(84)-C(83)	120.6(8)
F(13)-C(84)-C(85)	118.2(8)
C(83)-C(84)-C(85)	121.2(8)
F(14)-C(85)-C(86)	122.5(8)
F(14)-C(85)-C(84)	119.8(8)
C(86)-C(85)-C(84)	117.7(8)
F(15)-C(86)-C(81)	120.6(7)
F(15)-C(86)-C(85)	115.9(7)
C(81)-C(86)-C(85)	123.6(8)
O(1)-C(99)-O(1")	107(8)
O(1)-C(99)-C(99")	127(9)
O(1")-C(99)-C(99")	28.6(17)
O(1")-C(99")-C(99)	59(3)
C(99")-O(1")-C(99)	92(4)

Symmetry transformations used to generate equivalent atoms:

Table 4. Anisotropic displacement parameters ($\text{\AA}^2 \times 10^3$) for complex 6. The anisotropic displacement factor exponent takes the form: $-2 \pi^2 [h^2 a^{*2} U_{11} + \dots + 2 h k a^* b^* U_{12}]$

	U11	U22	U33	U23	U13	U12
Au(1)	19(1)	23(1)	25(1)	0(1)	-3(1)	1(1)
Au(2)	21(1)	24(1)	28(1)	-1(1)	0(1)	4(1)
P(1)	18(1)	20(1)	29(1)	-1(1)	-4(1)	3(1)
P(2)	23(1)	25(1)	26(1)	-2(1)	-2(1)	5(1)
C(1)	26(4)	23(4)	30(4)	1(3)	-5(3)	2(3)
C(2)	21(3)	23(4)	29(4)	3(3)	0(3)	1(3)
C(11)	26(4)	26(4)	26(4)	1(3)	0(3)	2(3)
C(12)	26(4)	43(5)	40(4)	8(4)	-3(3)	-9(4)
C(13)	45(5)	54(6)	42(5)	6(5)	-12(4)	-5(4)
C(14)	53(5)	46(6)	29(4)	3(4)	2(3)	9(4)
C(15)	36(4)	46(6)	40(5)	9(4)	15(4)	6(4)
C(16)	23(3)	33(5)	39(4)	0(4)	6(3)	3(3)
C(21)	19(3)	21(4)	32(4)	1(3)	-4(3)	2(3)
C(22)	22(3)	29(4)	36(4)	0(3)	2(3)	-1(3)
C(23)	31(4)	32(4)	40(5)	4(4)	1(3)	-1(3)
C(24)	39(4)	21(4)	39(5)	7(3)	-8(3)	-7(3)
C(25)	34(4)	23(4)	35(4)	-5(3)	-6(3)	-2(3)
C(26)	29(4)	24(4)	28(4)	1(3)	-7(3)	2(3)
C(31)	26(3)	31(4)	26(4)	2(3)	-5(3)	-3(3)
C(32)	31(4)	57(6)	39(5)	0(4)	0(3)	4(4)
C(33)	58(5)	61(7)	31(4)	-7(5)	6(4)	-7(5)
C(34)	65(6)	70(8)	26(4)	-5(5)	-7(4)	-11(6)
C(35)	38(4)	60(7)	42(5)	6(5)	-9(3)	-10(4)
C(36)	28(4)	46(6)	34(4)	8(4)	-4(3)	-4(4)
C(41)	28(4)	42(5)	27(4)	-11(3)	0(3)	-2(3)
C(42)	31(4)	62(6)	33(5)	-5(4)	-2(3)	2(4)
C(43)	28(4)	88(7)	53(6)	-24(5)	-9(4)	-3(5)
C(44)	25(4)	83(7)	86(9)	-42(6)	6(5)	-14(4)
C(45)	50(6)	52(7)	100(10)	-12(6)	15(6)	-14(5)
C(46)	34(4)	37(5)	88(8)	-6(5)	11(5)	-3(4)
C(51)	30(4)	20(4)	38(4)	-3(3)	-12(3)	2(3)
C(52)	61(6)	43(5)	39(5)	-1(4)	-4(4)	28(5)
C(53)	63(7)	34(5)	62(6)	-5(5)	-10(5)	19(5)
C(54)	47(5)	30(5)	65(6)	12(4)	-23(4)	0(4)
C(55)	28(4)	44(5)	55(6)	16(4)	-6(4)	-5(4)
C(56)	28(4)	32(4)	44(5)	1(4)	-3(3)	2(3)
C(61)	20(3)	29(4)	29(4)	-4(3)	-10(3)	-2(3)
C(62)	23(4)	59(6)	37(4)	1(4)	-1(3)	-3(4)
C(63)	21(4)	66(7)	53(5)	-7(5)	-4(4)	-5(4)
C(64)	21(4)	63(7)	57(5)	-12(5)	-13(4)	-4(4)
C(65)	46(5)	35(5)	36(4)	-4(4)	-23(3)	6(4)
C(66)	24(3)	30(4)	34(4)	3(3)	-3(3)	2(3)
F(1)	42(3)	100(5)	30(3)	2(3)	12(2)	-15(3)
F(2)	30(3)	127(7)	83(5)	8(5)	10(3)	-25(4)
F(3)	34(3)	96(6)	87(5)	-1(4)	-33(3)	-6(3)
F(4)	66(4)	64(4)	38(3)	-4(3)	-29(3)	4(3)
F(5)	39(3)	53(3)	24(2)	8(2)	3(2)	-1(2)
C(71)	31(4)	23(4)	34(4)	0(3)	-13(3)	-2(3)
C(72)	40(5)	37(5)	42(5)	4(4)	-12(4)	-5(4)
C(73)	49(6)	29(5)	77(7)	20(5)	-26(4)	-11(4)
C(74)	40(5)	24(5)	107(9)	-12(4)	-26(5)	3(4)
C(75)	29(4)	37(5)	83(7)	-26(4)	-5(4)	2(4)
C(76)	22(4)	34(4)	55(5)	-8(4)	-4(3)	0(3)

F(7)	95(5)	44(4)	93(6)	27(4)	-35(4)	-19(4)
F(8)	60(4)	25(3)	168(8)	-16(4)	-28(5)	11(3)
F(9)	50(4)	55(4)	117(6)	-44(4)	19(4)	-3(3)
F(10)	47(3)	46(3)	43(3)	-10(3)	5(2)	-1(3)
C(81)	20(3)	24(4)	27(4)	3(3)	-11(3)	0(3)
C(82)	29(4)	35(4)	28(4)	4(3)	-9(3)	-5(3)
C(83)	40(5)	31(4)	49(5)	13(4)	-15(4)	-6(4)
C(84)	49(5)	20(4)	62(6)	1(4)	-20(4)	6(4)
C(85)	34(5)	37(5)	52(5)	-11(4)	-6(4)	8(4)
C(86)	25(4)	31(4)	35(4)	3(3)	-4(3)	-3(3)
F(11)	41(3)	50(3)	32(3)	3(2)	5(2)	-4(2)
F(12)	75(4)	45(4)	57(4)	24(3)	-21(3)	-12(3)
F(13)	70(4)	34(3)	82(5)	-2(3)	-21(3)	16(3)
F(14)	42(3)	46(3)	69(4)	-16(3)	3(3)	14(3)
F(15)	44(3)	41(3)	42(3)	-2(2)	12(2)	5(2)
Cl(1)	262(11)	246(10)	194(8)	-41(8)	-72(8)	101(9)
Cl(2)	179(8)	308(14)	281(13)	13(11)	3(8)	38(9)
Cl(3)	500(20)	246(13)	440(20)	-92(15)	-169(19)	-143(15)

Table 5. Hydrogen coordinates ($\times 10^4$) and isotropic displacement parameters ($\text{\AA}^2 \times 10^3$) for complex 6.

	x	y	z	U(eq)
H(12)	4431	5137	5830	44
H(13)	4493	4931	6999	57
H(14)	3594	4282	7546	51
H(15)	2606	3829	6941	48
H(16)	2516	4082	5777	38
H(22)	4375	5650	3875	35
H(23)	4667	7298	3618	41
H(24)	4188	8643	4186	40
H(25)	3468	8347	5055	37
H(26)	3186	6691	5337	32
H(32)	6452	796	2076	51
H(33)	6051	586	981	60
H(34)	4930	925	670	65
H(35)	4187	1395	1492	56
H(36)	4579	1614	2590	44
H(42)	7168	693	3805	50
H(43)	8248	1408	3842	68
H(44)	8404	2966	3312	78
H(45)	7502	3832	2805	80
H(46)	6411	3134	2834	63
H(52)	6348	-541	2893	57
H(53)	6427	-2150	3363	64
H(54)	6068	-2452	4444	58
H(55)	5598	-1127	5041	51
H(56)	5491	481	4565	42