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Table 1. Crystal data and structure refinement for 4.

Identification code	DOE21
Empirical formula	$C_{32}H_{36}CrO_7Si$
Formula weight	612.70
Habit	blocks
Colour	red
Crystal size	0.60 x 0.50 x 0.35 mm
Crystal system	Monoclinic
Space group	$P2_1/n$ (no.14)
Unit cell dimensions	a = 9.774(3) Å α = 90°
	b = 28.900(10) Å β = 107.87(2)°
	c = 11.642(4) Å γ = 90°
Volume	3130(2) Å^3
Z	4
Density (calculated)	1.300 Mg/m^3
Absorption coefficient	0.448 mm^{-1}
F(000)	1288
Diffractometer	Nicolet R3m
Wavelength	0.71073 Å (MoKα)
Temperature	293(2) K
Monochromator	graphite
θ range for data collection	2.30 to 25.05°
Scan-type	omega-scans
Number of Standards	3
Interval of Standards	147 refl
Decay of Standards	none
Index ranges	$-11 \le h \le 11$, $-34 \le k \le 10$, $0 \le \ell \le 13$
Reflections collected	8048
Independent reflections	5545 (R_{int} = 0.0370)

Absorption correction	None
Refinement method	Full-matrix least-squares on F^2
Data / restraints / parameters	5545 / 3 / 367
Goodness-of-fit on F^2	0.975
Final R indices [$I>2\sigma(I)$]	R1 = 0.0498, wR2 = 0.1306
R indices (all data)	R1 = 0.0695, wR2 = 0.1394
Largest diff. peak and hole	0.449 and -0.578 $eÅ^{-3}$

Table 2. Atomic coordinates [x 10^4] and equivalent isotropic displacement parameters [$Å^2$ x 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)	
Cr(1)	1516(1)	1130(1)	3979(1)	33(1)	
C(1A)	22(3)	762(1)	3157(3)	41(1)	
O(1A)	-963(2)	546(1)	2610(2)	62(1)	
C(1B)	626(4)	1586(1)	2928(3)	53(1)	
O(1B)	55(4)	1865(1)	2255(3)	96(1)	
C(1C)	431(3)	1304(1)	4947(3)	47(1)	
O(1C)	-264(3)	1420(1)	5533(2)	80(1)	
C(1)	3451(3)	1236(1)	3336(2)	34(1)	
C(2)	3169(3)	759(1)	3326(2)	31(1)	
C(3)	3104(3)	542(1)	4421(2)	32(1)	
C(4)	3322(3)	802(1)	5473(2)	34(1)	
C(5)	3640(3)	1287(1)	5498(2)	37(1)	
C(6)	3949(4)	1556(1)	6570(3)	50(1)	
C(7)	4247(4)	2013(1)	6556(3)	61(1)	
C(8)	4197(4)	2238(1)	5469(3)	62(1)	
C(9)	3913(4)	1996(1)	4433(3)	49(1)	
C(10)	3671(3)	1507(1)	4416(2)	36(1)	
O(11)	3510(2)	1456(1)	2321(2)	39(1)	
Si(11)	4912(1)	1570(1)	1812(1)	49(1)	
C(11)	6503(5)	1729(2)	3097(4)	120(2)	
C(12)	5362(6)	1070(1)	1031(5)	110(2)	
C(13)	4254(5)	2064(2)	749(4)	78(1)	
C(14)	3722(7)	2463(2)	1323(5)	120(2)	
C(15)	5431(7)	2215(2)	213(5)	121(2)	
C(16)	2939(8)	1888(2)	-302(5)	141(3)	
C(21)	2997(3)	484(1)	2206(2)	34(1)	
C(22)	1871(3)	564(1)	1159(2)	45(1)	
C(23)	1730(4)	306(1)	134(3)	57(1)	
C(24)	2722(4)	-37(1)	137(3)	59(1)	
C(25)	3851(4)	-117(1)	1168(3)	55(1)	
C(26)	3986(3)	143(1)	2196(3)	44(1)	
C(31)	2959(3)	25(1)	4499(2)	37(1)	
C(32)	1845(4)	-198(1)	4924(3)	53(1)	
C(33)	1800(3)	-260(1)	3635(3)	45(1)	
C(34)	2239(4)	-714(1)	3307(3)	55(1)	
O(31)	3250(3)	-930(1)	3906(3)	81(1)	
O(32)	1368(4)	-858(1)	2262(3)	99(1)	
C(35)	1482(12)	-1372(3)	2021(8)	101(2)	a)
C(36)	1684(16)	-1335(4)	835(11)	160(4)	a)
C(35')	2197(16)	-1266(5)	1745(16)	101(2)	b)
C(36')	883(22)	-1503(7)	1093(20)	160(4)	b)
O(41)	3436(2)	579(1)	6539(2)	45(1)	
C(41)	2294(4)	627(1)	7068(3)	62(1)	

a) s.o.f.= 0.63(1); b) s.o.f.= 0.37(1)

Table 3. Bond lengths [Å] and angles [°] for 4.

Cr(1)-C(1A)	1.822(3)	Cr(1)-C(1B)	1.828(3)
Cr(1)-C(1C)	1.839(3)	Cr(1)-C(3)	2.252(3)
Cr(1)-C(2)	2.256(3)	Cr(1)-C(1)	2.258(3)
Cr(1)-C(4)	2.270(3)	Cr(1)-C(10)	2.287(3)
Cr(1)-C(5)	2.322(3)	C(1A)-O(1A)	1.160(4)
C(1B)-O(1B)	1.143(4)	C(1C)-O(1C)	1.150(4)
C(1)-O(11)	1.359(3)	C(1)-C(2)	1.403(4)
C(1)-C(10)	1.442(4)	C(2)-C(3)	1.441(4)
C(2)-C(21)	1.492(4)	C(3)-C(4)	1.397(4)
C(3)-C(31)	1.506(4)	C(4)-O(41)	1.372(3)
C(4)-C(5)	1.434(4)	C(5)-C(10)	1.419(4)
C(5)-C(6)	1.422(4)	C(6)-C(7)	1.352(5)
C(7)-C(8)	1.410(5)	C(8)-C(9)	1.348(4)
C(9)-C(10)	1.430(4)	O(11)-Si(11)	1.685(2)
Si(11)-C(12)	1.830(4)	Si(11)-C(11)	1.855(5)
Si(11)-C(13)	1.869(4)	C(13)-C(14)	1.503(6)
C(13)-C(15)	1.531(6)	C(13)-C(16)	1.562(7)
C(21)-C(26)	1.383(4)	C(21)-C(22)	1.388(4)
C(22)-C(23)	1.378(4)	C(23)-C(24)	1.385(5)
C(24)-C(25)	1.378(5)	C(25)-C(26)	1.385(4)
C(31)-C(32)	1.476(4)	C(31)-C(33)	1.507(4)
C(32)-C(33)	1.499(4)	C(33)-C(34)	1.467(4)
C(34)-O(31)	1.196(4)	C(34)-O(32)	1.320(4)
O(32)-C(35)	1.522(9)	O(32)-C(35′)	1.647(14)
C(35)-C(36)	1.457(13)	C(35′)-C(36′)	1.45(2)
O(41)-C(41)	1.438(4)		

C(1A)-Cr(1)-C(1B)	86.0(2)	C(1A)-Cr(1)-C(1C)	87.8(1)
C(1B)-Cr(1)-C(1C)	88.1(1)	C(1A)-Cr(1)-C(3)	93.7(1)
C(1B)-Cr(1)-C(3)	148.3(1)	C(1C)-Cr(1)-C(3)	123.6(1)
C(1A)-Cr(1)-C(2)	95.0(1)	C(1B)-Cr(1)-C(2)	111.1(1)
C(1C)-Cr(1)-C(2)	160.7(1)	C(3)-Cr(1)-C(2)	37.3(1)
C(1A)-Cr(1)-C(1)	121.5(1)	C(1B)-Cr(1)-C(1)	87.4(1)
C(1C)-Cr(1)-C(1)	149.9(1)	C(3)-Cr(1)-C(1)	65.8(1)
C(2)-Cr(1)-C(1)	36.2(1)	C(1A)-Cr(1)-C(4)	117.9(1)
C(1B)-Cr(1)-C(4)	155.8(1)	C(1C)-Cr(1)-C(4)	96.0(1)
C(3)-Cr(1)-C(4)	36.0(1)	C(2)-Cr(1)-C(4)	65.9(1)
C(1)-Cr(1)-C(4)	77.1(1)	C(1A)-Cr(1)-C(10)	158.5(1)
C(1B)-Cr(1)-C(10)	91.2(1)	C(1C)-Cr(1)-C(10)	113.4(1)
C(3)-Cr(1)-C(10)	77.7(1)	C(2)-Cr(1)-C(10)	66.1(1)
C(1)-Cr(1)-C(10)	37.0(1)	C(4)-Cr(1)-C(10)	65.3(1)
C(1A)-Cr(1)-C(5)	154.1(1)	C(1B)-Cr(1)-C(5)	119.9(1)
C(1C)-Cr(1)-C(5)	91.6(1)	C(3)-Cr(1)-C(5)	65.3(1)
C(2)-Cr(1)-C(5)	77.5(1)	C(1)-Cr(1)-C(5)	65.3(1)
C(4)-Cr(1)-C(5)	36.4(1)	C(10)-Cr(1)-C(5)	35.9(1)
O(1A)-C(1A)-Cr(1)	176.8(3)	O(1B)-C(1B)-Cr(1)	178.6(4)
O(1C)-C(1C)-Cr(1)	178.5(3)	O(11)-C(1)-C(2)	120.8(2)
O(11)-C(1)-C(10)	118.0(2)	C(2)-C(1)-C(10)	121.2(2)
O(11)-C(1)-Cr(1)	127.9(2)	C(2)-C(1)-Cr(1)	71.8(2)
C(10)-C(1)-Cr(1)	72.6(2)	C(1)-C(2)-C(3)	118.9(2)
C(1)-C(2)-C(21)	120.0(2)	C(3)-C(2)-C(21)	121.1(2)
C(1)-C(2)-Cr(1)	72.0(2)	C(3)-C(2)-Cr(1)	71.2(1)
C(21)-C(2)-Cr(1)	130.3(2)	C(4)-C(3)-C(2)	120.3(2)
C(4)-C(3)-C(31)	118.3(2)	C(2)-C(3)-C(31)	121.1(2)
C(4)-C(3)-Cr(1)	72.7(2)	C(2)-C(3)-Cr(1)	71.5(1)
C(31)-C(3)-Cr(1)	133.7(2)	O(41)-C(4)-C(3)	119.2(2)
O(41)-C(4)-C(5)	118.9(2)	C(3)-C(4)-C(5)	121.2(2)
O(41)-C(4)-Cr(1)	135.8(2)	C(3)-C(4)-Cr(1)	71.3(2)
C(5)-C(4)-Cr(1)	73.8(2)	C(10)-C(5)-C(6)	118.5(3)

C(10)-C(5)-C(4)	118.9(2)	C(6)-C(5)-C(4)	122.6(3)
C(10)-C(5)-Cr(1)	70.7(2)	C(6)-C(5)-Cr(1)	132.5(2)
C(4)-C(5)-Cr(1)	69.8(2)	C(7)-C(6)-C(5)	120.8(3)
C(6)-C(7)-C(8)	120.8(3)	C(9)-C(8)-C(7)	120.4(3)
C(8)-C(9)-C(10)	120.8(3)	C(5)-C(10)-C(9)	118.6(3)
C(5)-C(10)-C(1)	119.4(2)	C(9)-C(10)-C(1)	121.9(3)
C(5)-C(10)-Cr(1)	73.4(2)	C(9)-C(10)-Cr(1)	127.7(2)
C(1)-C(10)-Cr(1)	70.4(2)	C(1)-O(11)-Si(11)	130.9(2)
O(11)-Si(11)-C(12)	111.4(2)	O(11)-Si(11)-C(11)	109.6(2)
C(12)-Si(11)-C(11)	109.1(3)	O(11)-Si(11)-C(13)	103.3(2)
C(12)-Si(11)-C(13)	111.1(2)	C(11)-Si(11)-C(13)	112.2(3)
C(14)-C(13)-C(15)	111.5(4)	C(14)-C(13)-C(16)	106.5(5)
C(15)-C(13)-C(16)	108.3(4)	C(14)-C(13)-Si(11)	112.8(3)
C(15)-C(13)-Si(11)	109.8(4)	C(16)-C(13)-Si(11)	107.7(3)
C(26)-C(21)-C(22)	118.6(3)	C(26)-C(21)-C(2)	119.7(2)
C(22)-C(21)-C(2)	121.7(2)	C(23)-C(22)-C(21)	120.8(3)
C(22)-C(23)-C(24)	120.0(3)	C(25)-C(24)-C(23)	119.7(3)
C(24)-C(25)-C(26)	120.0(3)	C(21)-C(26)-C(25)	120.8(3)
C(32)-C(31)-C(3)	123.1(3)	C(32)-C(31)-C(33)	60.3(2)
C(3)-C(31)-C(33)	124.5(2)	C(31)-C(32)-C(33)	60.9(2)
C(34)-C(33)-C(32)	116.4(3)	C(34)-C(33)-C(31)	116.2(3)
C(32)-C(33)-C(31)	58.8(2)	O(31)-C(34)-O(32)	123.8(3)
O(31)-C(34)-C(33)	124.8(3)	O(32)-C(34)-C(33)	111.4(3)
C(34)-O(32)-C(35)	114.5(4)	C(34)-O(32)-C(35')	108.2(6)
C(36)-C(35)-O(32)	98.2(8)	C(36')-C(35')-O(32)	94.2(12)
C(4)-O(41)-C(41)	119.0(2)		

Table 4. Anisotropic displacement parameters [$Å^2 \times 10^3$] for 4.

The anisotropic displacement factor exponent takes the form:
$-2\pi^2 [(ha^*)^2 U_{11} + ... + 2hka^*b^* U_{12}]$

	U11	U22	U33	U23	U13	U12
Cr(1)	38(1)	31(1)	32(1)	2(1)	15(1)	4(1)
C(1A)	45(2)	42(2)	39(2)	3(1)	17(1)	9(1)
O(1A)	48(1)	70(2)	62(1)	-11(1)	7(1)	-10(1)
C(1B)	53(2)	49(2)	60(2)	14(2)	22(2)	9(2)
O(1B)	105(2)	80(2)	102(2)	57(2)	29(2)	38(2)
C(1C)	47(2)	50(2)	48(2)	-1(2)	18(1)	5(2)
O(1C)	83(2)	96(2)	76(2)	-4(2)	49(2)	25(2)
C(1)	36(1)	33(2)	35(1)	2(1)	15(1)	1(1)
C(2)	30(1)	30(1)	33(1)	1(1)	11(1)	4(1)
C(3)	29(1)	32(1)	35(1)	4(1)	11(1)	4(1)
C(4)	37(1)	37(2)	29(1)	5(1)	10(1)	5(1)
C(5)	42(2)	39(2)	32(1)	-3(1)	11(1)	1(1)
C(6)	65(2)	50(2)	36(2)	-6(2)	15(1)	-6(2)
C(7)	89(3)	51(2)	43(2)	-18(2)	22(2)	-10(2)
C(8)	93(3)	37(2)	62(2)	-13(2)	32(2)	-13(2)
C(9)	71(2)	35(2)	45(2)	-3(1)	25(2)	-9(2)
C(10)	42(2)	32(2)	37(2)	-1(1)	16(1)	-2(1)
O(11)	51(1)	34(1)	36(1)	2(1)	22(1)	-3(1)
Si(11)	56(1)	48(1)	55(1)	2(1)	33(1)	-4(1)
C(11)	64(3)	201(7)	95(4)	1(4)	24(3)	-25(4)
C(12)	146(5)	67(3)	174(5)	-18(3)	131(4)	-8(3)
C(13)	115(3)	67(3)	72(3)	17(2)	58(3)	1(2)
C(14)	210(7)	59(3)	127(4)	37(3)	103(5)	36(4)
C(15)	164(5)	112(4)	118(4)	30(4)	90(4)	-29(4)
C(16)	164(6)	165(6)	71(3)	30(4)	3(4)	-8(5)
C(21)	39(1)	30(1)	35(1)	-1(1)	14(1)	-3(1)
C(22)	47(2)	50(2)	39(2)	-1(1)	15(1)	3(1)
C(23)	60(2)	76(2)	31(2)	-5(2)	7(1)	-8(2)
C(24)	82(2)	54(2)	42(2)	-19(2)	22(2)	-5(2)
C(25)	74(2)	43(2)	52(2)	-9(2)	25(2)	10(2)
C(26)	53(2)	42(2)	37(2)	-3(1)	14(1)	7(1)
C(31)	35(1)	32(1)	43(2)	3(1)	13(1)	0(1)
C(32)	61(2)	46(2)	63(2)	2(2)	32(2)	-9(2)
C(33)	42(2)	37(2)	53(2)	-1(1)	12(1)	-1(1)
C(34)	54(2)	36(2)	76(2)	-6(2)	23(2)	-4(2)
O(31)	67(2)	43(1)	128(3)	-2(2)	26(2)	12(1)
O(32)	132(3)	55(2)	91(2)	-30(2)	4(2)	4(2)
O(41)	55(1)	49(1)	32(1)	9(1)	17(1)	8(1)
C(41)	79(2)	70(2)	50(2)	11(2)	37(2)	5(2)

Table 5. Hydrogen coordinates (x 10^4) and isotropic displacement parameters ($Å^2$ x 10^3) for 4.

	x	y	z	U(eq)
H(6)	3947(4)	1417(1)	7289(3)	60
H(7)	4488(4)	2180(1)	7273(3)	73
H(8)	4362(4)	2554(1)	5468(3)	74
H(9)	3873(4)	2148(1)	3720(3)	58
H(11A)	6273(5)	1991(2)	3510(4)	180
H(11B)	7290(5)	1806(2)	2802(4)	180
H(11C)	6768(5)	1473(2)	3645(4)	180
H(12A)	4542(6)	986(1)	365(5)	166
H(12B)	5629(6)	815(1)	1582(5)	166
H(12C)	6150(6)	1148(1)	739(5)	166
H(14A)	2987(7)	2357(2)	1649(5)	181
H(14B)	3333(7)	2697(2)	727(5)	181
H(14C)	4506(7)	2590(2)	1959(5)	181
H(15A)	5746(7)	1953(2)	-146(5)	181
H(15B)	6228(7)	2340(2)	840(5)	181
H(15C)	5055(7)	2447(2)	-392(5)	181
H(16A)	3229(8)	1632(2)	-697(5)	211
H(16B)	2591(8)	2134(2)	-872(5)	211
H(16C)	2189(8)	1791(2)	18(5)	211
H(22)	1204(3)	795(1)	1149(2)	54
H(23)	969(4)	362(1)	-561(3)	69
H(24)	2626(4)	-212(1)	-553(3)	70
H(25)	4523(4)	-346(1)	1172(3)	66
H(26)	4750(3)	87(1)	2889(3)	53
H(31)	3888(3)	-135(1)	4771(2)	44
H(32A)	1122(4)	-1(1)	5086(3)	64
H(32B)	2128(4)	-463(1)	5459(3)	64
H(33)	1051(3)	-93(1)	3019(3)	54
H(35A)	2300(12)	-1515(3)	2608(8)	122 a)
H(35B)	611(12)	-1538(3)	1993(8)	122 a)
H(36A)	1779(16)	-1639(4)	536(11)	240 a)
H(36B)	2537(16)	-1159(4)	897(11)	240 a)
H(36C)	868(16)	-1183(4)	290(11)	240 a)
H(35C)	2717(16)	-1148(5)	1220(16)	122 b)
H(35D)	2825(16)	-1454(5)	2381(16)	122 b)
H(36D)	1109(22)	-1769(7)	694(20)	240 b)
H(36E)	281(22)	-1297(7)	505(20)	240 b)
H(36F)	387(22)	-1598(7)	1648(20)	240 b)
H(41A)	2524(4)	453(1)	7806(3)	93
H(41B)	1415(4)	513(1)	6517(3)	93
H(41C)	2181(4)	948(1)	7237(3)	93

a) s.o.f.= 0.63(1); b) s.o.f.= 0.37(1)

Table 1. Crystal data and structure refinement for 7.

Identification code	DOE23
Empirical formula	$C_{36}H_{34}CrO_{11}SiW$
Formula weight	906.57
Habit	plate
Colour	red
Crystal size	0.35 x 0.20 x 0.15 mm
Crystal system	Orthorhombic
Space group	$Pna2_1$ (no.33)
Unit cell dimensions	a = 18.789(6) Å α = 90°
	b = 7.370(2) Å β = 90°
	c = 27.472(7) Å γ = 90°
Volume	3804(2) Å^3
Z	4
Density (calculated)	1.583 Mg/m^3
Absorption coefficient	3.394 mm^{-1}
F(000)	1800
Diffractometer	Nicolet R3m
Wavelength	0.71073 Å (MoKα)
Temperature	293(2) K
Monochromator	graphite
θ range for data collection	2.17 to 25.06°
Scan-type	omega-scans
Number of Standards	3
Interval of Standards	147 refl
Decay of Standards	none
Index ranges	$-22 \leq h \leq 1$, $-8 \leq k \leq 1$, $-32 \leq \ell \leq 32$
Reflections collected	8350
Independent reflections	6735 (R_{int} = 0.0293)

Absorption correction	Semi-empirical from ψ-scans
Max. and min. transmission	0.807 and 0.651
Refinement method	Full-matrix least-squares on F^2
Data / restraints / parameters	6735 / 1 / 451
Goodness-of-fit on F^2	0.926
Final R indices [$I>2\sigma(I)$]	R1 = 0.0421, wR2 = 0.0923
R indices (all data)	R1 = 0.0645, wR2 = 0.0991
Absolute structure parameter	−0.038(10)
Largest diff. peak and hole	0.646 and −0.531 $e\text{Å}^{-3}$

Table 2. Atomic coordinates [x 10^4] and equivalent isotropic displacement parameters [$Å^2$ x 10^3] for 1. U(eq) is defined as one third of the trace of the orthogonalized U_{ij} tensor.

	x	y	z	U(eq)
C(1)	7160(7)	5532(15)	2735(4)	47(3)
C(2)	6513(5)	5499(12)	2508(3)	40(2)
C(3)	6443(5)	5191(12)	1987(3)	39(2)
C(4)	7063(5)	4968(11)	1721(3)	36(2)
C(5)	7757(5)	4991(12)	1940(3)	41(2)
C(6)	8397(5)	4719(13)	1670(3)	52(3)
C(7)	9045(6)	4701(15)	1890(4)	62(3)
C(8)	9088(5)	5078(16)	2397(4)	59(3)
C(9)	8502(6)	5371(15)	2665(3)	57(3)
C(10)	7804(5)	5296(12)	2454(3)	38(2)
Cr(1)	7167(1)	7586(2)	2110(1)	44(1)
C(1A)	6484(6)	9304(14)	2084(4)	56(3)
O(1A)	6042(5)	10434(11)	2068(3)	88(3)
C(1B)	7635(8)	9252(18)	2474(5)	94(5)
O(1B)	7921(9)	10312(19)	2702(6)	169(7)
C(1C)	7562(8)	8539(17)	1558(5)	81(4)
O(1C)	7798(7)	9054(14)	1205(4)	147(5)
O(11)	7239(3)	5901(9)	3220(2)	45(2)
Si(11)	7251(2)	4719(4)	3736(1)	47(1)
C(11)	8023(8)	3094(16)	3731(4)	82(4)
C(12)	6413(7)	3444(17)	3832(4)	82(4)
C(13)	7373(6)	6545(17)	4204(3)	59(3)
C(14)	6779(8)	7926(22)	4188(5)	121(6)
C(15)	8074(8)	7589(21)	4096(5)	98(5)
C(16)	7415(10)	5664(21)	4710(4)	136(7)
C(21)	5838(5)	5606(15)	2806(3)	47(3)
C(22)	5682(5)	7150(16)	3081(3)	58(3)
C(23)	5050(7)	7133(20)	3364(4)	75(4)
C(24)	4605(6)	5672(23)	3366(4)	82(4)
C(25)	4771(6)	4202(23)	3099(4)	86(4)
C(26)	5379(5)	4151(17)	2824(3)	60(3)
C(31)	5733(5)	5054(13)	1745(3)	43(2)
C(32)	5171(5)	6446(16)	1811(3)	59(3)
C(33)	5554(5)	6332(13)	1316(3)	45(2)
C(34)	5126(5)	5717(13)	898(3)	44(2)
O(31)	4710(4)	4397(10)	1047(2)	57(2)
C(35)	4177(6)	3593(15)	719(4)	70(3)
W(3)	5214(1)	7063(1)	194(1)	47(1)
C(3A)	6291(5)	6545(13)	191(7)	64(3)
O(3A)	6881(4)	6318(13)	159(5)	103(3)
C(3B)	4177(5)	7685(13)	184(7)	65(3)
O(3B)	3596(4)	8211(12)	209(6)	106(3)
C(3C)	5279(6)	8400(21)	-456(4)	77(4)
O(3C)	5277(5)	9111(15)	-811(3)	106(3)
C(3D)	5095(6)	4718(18)	-181(3)	64(3)
O(3D)	5045(7)	3445(16)	-414(4)	118(4)
C(3E)	5426(8)	9376(21)	560(5)	86(4)
O(3E)	5528(6)	10741(14)	748(5)	138(5)
O(41)	7041(3)	4746(9)	1221(2)	51(2)
C(41)	6929(8)	2922(17)	1061(4)	76(4)

Table 3. Bond lengths [Å] and angles [°] for 7.

C(1)-O(11)	1.366(12)	C(1)-C(2)	1.367(15)
C(1)-C(10)	1.446(14)	C(1)-Cr(1)	2.289(11)
C(2)-C(3)	1.453(11)	C(2)-C(21)	1.513(12)
C(2)-Cr(1)	2.251(9)	C(3)-C(4)	1.385(11)
C(3)-C(31)	1.495(12)	C(3)-Cr(1)	2.254(9)
C(4)-O(41)	1.384(9)	C(4)-C(5)	1.436(12)
C(4)-Cr(1)	2.214(8)	C(5)-C(6)	1.427(12)
C(5)-C(10)	1.432(12)	C(5)-Cr(1)	2.259(9)
C(6)-C(7)	1.361(13)	C(7)-C(8)	1.423(13)
C(8)-C(9)	1.341(13)	C(9)-C(10)	1.435(13)
C(10)-Cr(1)	2.275(9)	Cr(1)-C(1A)	1.804(11)
Cr(1)-C(1B)	1.811(14)	Cr(1)-C(1C)	1.830(13)
C(1A)-O(1A)	1.177(11)	C(1B)-O(1B)	1.14(2)
C(1C)-O(1C)	1.130(13)	O(11)-Si(11)	1.666(6)
Si(11)-C(12)	1.851(12)	Si(11)-C(13)	1.875(11)
Si(11)-C(11)	1.882(12)	C(13)-C(14)	1.51(2)
C(13)-C(16)	1.535(15)	C(13)-C(15)	1.55(2)
C(21)-C(26)	1.377(14)	C(21)-C(22)	1.397(14)
C(22)-C(23)	1.420(15)	C(23)-C(24)	1.36(2)
C(24)-C(25)	1.34(2)	C(25)-C(26)	1.371(14)
C(31)-C(32)	1.483(13)	C(31)-C(33)	1.544(12)
C(32)-C(33)	1.539(12)	C(33)-C(34)	1.473(12)
C(34)-O(31)	1.313(11)	C(34)-W(3)	2.179(9)
O(31)-C(35)	1.471(11)	W(3)-C(3B)	2.002(9)
W(3)-C(3E)	2.017(14)	W(3)-C(3D)	2.026(12)
W(3)-C(3C)	2.043(10)	W(3)-C(3A)	2.058(9)
C(3A)-O(3A)	1.125(10)	C(3B)-O(3B)	1.160(11)
C(3C)-O(3C)	1.109(12)	C(3D)-O(3D)	1.139(14)
C(3E)-O(3E)	1.148(15)	O(41)-C(41)	1.430(13)

O(11)-C(1)-C(2)	123.0(9)	O(11)-C(1)-C(10)	117.0(10)
C(2)-C(1)-C(10)	119.8(9)	O(11)-C(1)-Cr(1)	126.8(7)
C(2)-C(1)-Cr(1)	71.0(6)	C(10)-C(1)-Cr(1)	71.0(5)
C(1)-C(2)-C(3)	122.2(8)	C(1)-C(2)-C(21)	119.9(8)
C(3)-C(2)-C(21)	117.6(8)	C(1)-C(2)-Cr(1)	74.0(6)
C(3)-C(2)-Cr(1)	71.3(5)	C(21)-C(2)-Cr(1)	133.2(7)
C(4)-C(3)-C(2)	117.5(8)	C(4)-C(3)-C(31)	120.5(7)
C(2)-C(3)-C(31)	122.0(7)	C(4)-C(3)-Cr(1)	70.4(5)
C(2)-C(3)-Cr(1)	71.1(5)	C(31)-C(3)-Cr(1)	131.2(6)
O(41)-C(4)-C(3)	120.9(8)	O(41)-C(4)-C(5)	116.4(7)
C(3)-C(4)-C(5)	122.7(7)	O(41)-C(4)-Cr(1)	125.8(6)
C(3)-C(4)-Cr(1)	73.5(5)	C(5)-C(4)-Cr(1)	73.0(5)
C(6)-C(5)-C(10)	118.9(8)	C(6)-C(5)-C(4)	123.0(8)
C(10)-C(5)-C(4)	118.1(8)	C(6)-C(5)-Cr(1)	129.8(7)
C(10)-C(5)-Cr(1)	72.2(5)	C(4)-C(5)-Cr(1)	69.6(5)
C(7)-C(6)-C(5)	121.7(9)	C(6)-C(7)-C(8)	118.9(9)
C(9)-C(8)-C(7)	121.5(9)	C(8)-C(9)-C(10)	121.4(9)
C(5)-C(10)-C(9)	117.5(8)	C(5)-C(10)-C(1)	119.6(9)
C(9)-C(10)-C(1)	122.9(9)	C(5)-C(10)-Cr(1)	71.0(5)
C(9)-C(10)-Cr(1)	128.3(7)	C(1)-C(10)-Cr(1)	72.1(6)
C(1A)-Cr(1)-C(1B)	83.8(5)	C(1A)-Cr(1)-C(1C)	89.2(5)
C(1B)-Cr(1)-C(1C)	90.0(7)	C(1A)-Cr(1)-C(4)	122.0(4)
C(1B)-Cr(1)-C(4)	154.1(5)	C(1C)-Cr(1)-C(4)	88.3(5)
C(1A)-Cr(1)-C(2)	96.4(4)	C(1B)-Cr(1)-C(2)	117.4(5)
C(1C)-Cr(1)-C(2)	152.4(5)	C(4)-Cr(1)-C(2)	65.8(3)
C(1A)-Cr(1)-C(3)	96.6(4)	C(1B)-Cr(1)-C(3)	155.0(5)
C(1C)-Cr(1)-C(3)	115.0(5)	C(4)-Cr(1)-C(3)	36.1(3)
C(2)-Cr(1)-C(3)	37.6(3)	C(1A)-Cr(1)-C(5)	159.2(4)
C(1B)-Cr(1)-C(5)	116.7(5)	C(1C)-Cr(1)-C(5)	87.4(4)

C(4)-Cr(1)-C(5)	37.4(3)	C(2)-Cr(1)-C(5)	77.9(3)
C(3)-Cr(1)-C(5)	66.6(3)	C(1A)-Cr(1)-C(10)	155.7(4)
C(1B)-Cr(1)-C(10)	91.0(5)	C(1C)-Cr(1)-C(10)	114.6(5)
C(4)-Cr(1)-C(10)	66.4(3)	C(2)-Cr(1)-C(10)	65.1(3)
C(3)-Cr(1)-C(10)	78.4(3)	C(5)-Cr(1)-C(10)	36.8(3)
C(1A)-Cr(1)-C(1)	119.3(4)	C(1B)-Cr(1)-C(1)	92.1(5)
C(1C)-Cr(1)-C(1)	151.4(5)	C(4)-Cr(1)-C(1)	77.6(3)
C(2)-Cr(1)-C(1)	35.0(4)	C(3)-Cr(1)-C(1)	65.9(4)
C(5)-Cr(1)-C(1)	66.3(3)	C(10)-Cr(1)-C(1)	36.9(4)
O(1A)-C(1A)-Cr(1)	179.6(9)	O(1B)-C(1B)-Cr(1)	179.1(15)
O(1C)-C(1C)-Cr(1)	176.7(14)	C(1)-O(11)-Si(11)	136.7(7)
O(11)-Si(11)-C(12)	112.0(4)	O(11)-Si(11)-C(13)	102.2(4)
C(12)-Si(11)-C(13)	111.8(5)	O(11)-Si(11)-C(11)	109.7(5)
C(12)-Si(11)-C(11)	109.5(6)	C(13)-Si(11)-C(11)	111.5(5)
C(14)-C(13)-C(16)	110.4(11)	C(14)-C(13)-C(15)	106.6(12)
C(16)-C(13)-C(15)	109.9(11)	C(14)-C(13)-Si(11)	111.9(8)
C(16)-C(13)-Si(11)	108.9(9)	C(15)-C(13)-Si(11)	109.2(7)
C(26)-C(21)-C(22)	119.0(9)	C(26)-C(21)-C(2)	120.3(9)
C(22)-C(21)-C(2)	120.7(10)	C(21)-C(22)-C(23)	117.7(11)
C(24)-C(23)-C(22)	121.5(11)	C(25)-C(24)-C(23)	119.4(11)
C(24)-C(25)-C(26)	121.1(13)	C(25)-C(26)-C(21)	121.3(11)
C(32)-C(31)-C(3)	122.3(8)	C(32)-C(31)-C(33)	61.1(6)
C(3)-C(31)-C(33)	119.5(8)	C(31)-C(32)-C(33)	61.4(6)
C(34)-C(33)-C(32)	116.8(8)	C(34)-C(33)-C(31)	121.7(8)
C(32)-C(33)-C(31)	57.5(6)	O(31)-C(34)-C(33)	108.1(7)
O(31)-C(34)-W(3)	131.2(7)	C(33)-C(34)-W(3)	120.7(7)
C(34)-O(31)-C(35)	120.9(7)	C(3B)-W(3)-C(3E)	90.3(5)
C(3B)-W(3)-C(3D)	94.6(5)	C(3E)-W(3)-C(3D)	175.0(5)
C(3B)-W(3)-C(3C)	86.3(6)	C(3E)-W(3)-C(3C)	90.9(7)
C(3D)-W(3)-C(3C)	88.4(5)	C(3B)-W(3)-C(3A)	177.2(4)
C(3E)-W(3)-C(3A)	88.0(5)	C(3D)-W(3)-C(3A)	87.0(5)
C(3C)-W(3)-C(3A)	91.6(6)	C(3B)-W(3)-C(34)	92.5(6)
C(3E)-W(3)-C(34)	87.6(5)	C(3D)-W(3)-C(34)	93.2(4)
C(3C)-W(3)-C(34)	178.1(5)	C(3A)-W(3)-C(34)	89.6(5)
O(3A)-C(3A)-W(3)	175.2(17)	O(3B)-C(3B)-W(3)	172.4(13)
O(3C)-C(3C)-W(3)	176.4(11)	O(3D)-C(3D)-W(3)	176.2(10)
O(3E)-C(3E)-W(3)	176.4(12)	C(4)-O(41)-C(41)	114.9(7)

Table 4. Anisotropic displacement parameters [$Å^2 \times 10^3$] for 7.

The anisotropic displacement factor exponent takes the form:

$-2\pi^2 [(ha^*)^2 U_{11} + \ldots + 2hka^*b^* U_{12}]$

	U11	U22	U33	U23	U13	U12
C(1)	54(7)	49(7)	39(5)	-2(5)	3(5)	-1(6)
C(2)	46(5)	43(6)	30(4)	5(4)	3(4)	7(5)
C(3)	45(5)	38(5)	36(4)	4(4)	1(4)	4(4)
C(4)	49(5)	30(5)	29(4)	-4(4)	8(4)	1(5)
C(5)	43(5)	33(5)	47(5)	-4(4)	9(4)	-2(4)
C(6)	42(6)	61(7)	53(6)	-6(5)	17(5)	11(5)
C(7)	51(6)	61(7)	73(7)	-10(6)	20(5)	-2(6)
C(8)	34(5)	83(8)	60(7)	5(6)	-7(5)	-6(5)
C(9)	56(7)	72(8)	44(5)	-4(5)	-1(5)	3(6)
C(10)	37(5)	33(5)	43(5)	1(4)	3(4)	-3(4)
Cr(1)	51(1)	42(1)	39(1)	-3(1)	4(1)	1(1)
C(1A)	67(7)	48(6)	55(6)	-10(5)	11(5)	4(6)
O(1A)	92(6)	59(5)	114(7)	-3(5)	9(5)	32(5)
C(1B)	117(12)	57(9)	108(10)	-9(8)	-39(9)	-6(8)
O(1B)	204(17)	108(10)	194(13)	-49(9)	-82(13)	-55(12)
C(1C)	109(11)	46(8)	87(10)	6(7)	40(9)	15(8)
O(1C)	220(14)	82(7)	140(9)	42(7)	122(9)	30(8)
O(11)	50(4)	60(4)	26(3)	-4(3)	-2(3)	5(3)
Si(11)	53(2)	53(2)	36(1)	2(1)	-7(1)	-3(1)
C(11)	100(10)	67(8)	77(8)	-5(7)	-25(8)	24(8)
C(12)	106(10)	76(9)	64(7)	14(6)	-14(7)	-43(8)
C(13)	57(6)	92(9)	29(4)	-9(5)	3(4)	1(6)
C(14)	89(11)	149(15)	123(12)	-78(12)	-10(9)	37(10)
C(15)	81(9)	115(13)	96(11)	-34(10)	1(9)	-32(9)
C(16)	256(21)	118(13)	35(6)	-6(7)	-17(9)	-49(14)
C(21)	39(5)	76(7)	27(4)	-4(5)	0(4)	12(5)
C(22)	55(6)	83(8)	38(5)	-2(5)	-7(4)	10(6)
C(23)	77(8)	108(10)	40(5)	-13(6)	10(5)	46(8)
C(24)	41(7)	135(13)	69(8)	-13(9)	9(5)	0(8)
C(25)	57(7)	143(13)	57(6)	-16(8)	11(6)	-7(9)
C(26)	60(7)	75(8)	44(5)	-3(5)	8(5)	-1(6)
C(31)	47(5)	59(6)	22(4)	-2(4)	-1(4)	-3(5)
C(32)	50(5)	83(8)	43(5)	-11(5)	-10(5)	30(6)
C(33)	51(5)	49(6)	34(4)	-5(4)	-3(4)	-2(5)
C(34)	42(5)	42(6)	47(5)	8(5)	4(4)	2(5)
O(31)	65(5)	62(5)	43(4)	5(3)	-9(3)	-18(4)
C(35)	72(8)	71(8)	66(6)	7(6)	-15(6)	-39(6)
W(3)	46(1)	58(1)	39(1)	9(1)	-6(1)	-6(1)
C(3A)	53(5)	75(7)	65(5)	13(11)	16(10)	-13(5)
O(3A)	57(4)	161(8)	93(6)	32(10)	4(7)	10(5)
C(3B)	52(5)	85(7)	59(5)	5(13)	-11(10)	-15(5)
O(3B)	57(4)	127(7)	134(6)	7(11)	7(10)	15(5)
C(3C)	77(8)	119(13)	35(5)	33(7)	6(6)	3(8)
O(3C)	117(8)	129(9)	72(5)	55(6)	9(6)	4(7)
C(3D)	79(8)	76(8)	36(5)	-11(6)	-7(5)	-29(7)
O(3D)	168(11)	109(9)	78(6)	-32(6)	-2(6)	-24(8)
C(3E)	107(11)	92(11)	60(7)	-14(8)	-50(7)	10(9)
O(3E)	163(11)	72(7)	177(11)	-37(8)	-74(9)	-7(7)
O(41)	65(4)	61(4)	28(3)	-12(3)	6(3)	4(4)
C(41)	114(11)	59(8)	57(7)	-24(6)	12(8)	-1(8)

Table 5. Hydrogen coordinates (x 10^4) and isotropic displacement parameters ($Å^2$ x 10^3) for 7.

	x	y	z	U(eq)
H(6)	8369(5)	4550(13)	1335(3)	63
H(7)	9454(6)	4447(15)	1712(4)	74
H(8)	9532(5)	5121(16)	2546(4)	71
H(9)	8550(6)	5630(15)	2995(3)	69
H(11A)	8457(8)	3756(16)	3682(4)	122
H(11B)	7961(8)	2232(16)	3473(4)	122
H(11C)	8045(8)	2466(16)	4037(4)	122
H(12A)	6368(7)	2524(17)	3587(4)	123
H(12B)	6017(7)	4261(17)	3812(4)	123
H(12C)	6421(7)	2887(17)	4148(4)	123
H(14A)	6760(8)	8465(22)	3870(5)	181
H(14B)	6866(8)	8852(22)	4427(5)	181
H(14C)	6334(8)	7339(22)	4257(5)	181
H(15A)	8468(8)	6759(21)	4102(5)	147
H(15B)	8144(8)	8511(21)	4338(5)	147
H(15C)	8044(8)	8144(21)	3780(5)	147
H(16A)	7794(10)	4791(21)	4715(4)	204
H(16B)	6972(10)	5069(21)	4781(4)	204
H(16C)	7504(10)	6582(21)	4950(4)	204
H(22)	5982(5)	8154(16)	3078(3)	70
H(23)	4937(7)	8141(20)	3552(4)	90
H(24)	4189(6)	5692(23)	3550(4)	98
H(25)	4469(6)	3203(23)	3102(4)	103
H(26)	5484(5)	3112(17)	2645(3)	72
H(31)	5554(5)	3813(13)	1707(3)	52
H(32A)	5279(5)	7474(16)	2019(3)	70
H(32B)	4681(5)	6034(16)	1826(3)	70
H(33)	5901(5)	7291(13)	1249(3)	54
H(35A)	3922(6)	2655(15)	889(4)	104
H(35B)	4411(6)	3085(15)	440(4)	104
H(35C)	3849(6)	4514(15)	616(4)	104
H(41A)	6922(8)	2890(17)	711(4)	115
H(41B)	6484(8)	2486(17)	1185(4)	115
H(41C)	7309(8)	2167(17)	1178(4)	115