Table 33A-2-001. RbH_2PO_4 (RDP). Fractional coordinates and temperature parameters at RT [78AlK]. b_{ij} is defined by Eq. (b) in Introduction.

	x	y	z	$b_{11}\cdot10^4$	$b_{22}\cdot10^4$	$b_{33}\cdot10^4$	$b_{12}\cdot10^4$	$b_{13}\cdot10^4$	$b_{23}\cdot10^4$
Centered-hydrogen model									
O	0.1422 (1)	0.0866 (2)	0.1200 (1)	71 (3)	73 (5)	89 (4)	8 (1)	−26 (2)	−19 (2)
H	0.1387 (3)	0.25	0.125	89 (5)	257 (18)	129 (7)	0	0	49 (7)
Rb	0.0	0.0	0.5	79 (4)	79 (4)	58 (5)	0	0	0
P	0.0	0.0	0.0	51 (6)	51 (6)	70 (8)	0	0	0
Disordered-hydrogen model									
O	0.1421 (2)	0.0863 (2)	0.1199 (1)	71 (3)	72 (5)	89 (3)	6 (1)	−23 (2)	−22 (2)
H	0.1382 (6)	0.223	0.125	94 (5)	77 (17)	137 (7)	12 (8)	−49 (14)	46 (6)
Rb	0.0	0.0	0.5	79 (4)	79 (4)	58 (5)	0	0	0
P	0.0	0.0	0.0	51 (5)	51 (5)	71 (8)	0	0	0

Table 33A-2-002. RbH_2PO_4 (RDP). Interatomic distances and bond angles at RT [78AlK]. The primed and unprimed atoms are in an opposite z direction relative to the central atom of the PO_4 tetrahedron.

Distances [Å]		Angles [deg]	
O–H	1.043 (2)	O–H···O	177.17 (15)
O–P	1.541 (1)	O–P–O′	108.91 (6)
O(H)···O	2.497 (2)	O–P–O	110.61 (6)
O···O′	2.508 (2)	P–O–H	115.25 (17)
O···O	2.534 (2)	P–O(H)···O	116.32 (7)

Table 33A-2-003. RbH_2PO_4 (RDP). Fractional coordinates and anisotropic temperature parameters at RT [80Ken]. Temperature parameter U_{ij} [Å^2] is defined by Eq. (d) in Introduction.

	Rb	P	O	H
x	0	0	0.1419(1)	0.1385(5)
y	0	0	0.0859(1)	0.2225(9)
z	0.5	0	0.1201(2)	0.1222(21)
U_{11} [Å^2]	0.0222(7)	0.0134(7)	0.0188(6)	0.0227(11)
U_{22} [Å^2]	0.0222	0.0134	0.0164(9)	0.0167(71)
U_{33} [Å^2]	0.0144(8)	0.0152(9)	0.0233(6)	0.0329(17)
U_{23} [Å^2]	0	0	−0.0046(5)	0.0083(50)
U_{31} [Å^2]	0	0	−0.0076(4)	−0.0061(25)
U_{12} [Å^2]	0	0	0.0028(4)	−0.0017(16)

Table 33A-2-004. RbH_2PO_4 (RDP). Fractional coordinates and anisotropic temperature parameters at $T = \Theta_f + 5$ K [80Ken]. Temperature parameter U_{ij} [Å^2] is defined by Eq. (d) in Introduction.

	Rb	P	O	H
x	0	0	0.1439(3)	0.1421(11)
y	0	0	0.0862(2)	0.2247(6)
z	0.5	0	0.1207(2)	0.1214(19)
U_{11} [Å^2]	0.0126(8)	0.0099(7)	0.0122(7)	0.0243(26)
U_{22} [Å^2]	0.0126	0.0099	0.0093(7)	0.0056(39)
U_{33} [Å^2]	0.0080(9)	0.0135(11)	0.0153(7)	0.0239(20)
U_{23} [Å^2]	0	0	−0.0020(5)	−0.0022(41)
U_{31} [Å^2]	0	0	−0.0023(5)	−0.0059(48)
U_{12} [Å^2]	0	0	0.0027(11)	−0.0079(37)

Table 33A-2-005. RbH_2PO_4 (RDP). Fractional coordinates at 77 K [80Ken]. Orthorhombic phase. O(2) is the oxygen adjacent to the ordered H atom.

	x	y	z
Rb	0	0	0.5165(22)
P	0	0	0
O(1)	0.1146(5)	−0.0282(7)	−0.1116(27)
O(2)	0.0283(8)	0.1141(8)	0.1334(31)
H	−0.0436(12)	0.1817(13)	0.1403(42)

Table 33A-2-006. RbH_2PO_4 (RDP). Interatomic distances around hydrogen bond at 77 K [80Ken]. Orthorhombic phase. PO_4 groups are linked by O(2) – H...O(1)′ bonds. O(1)...O(1) and O(2)...O(2) distances are those within one PO_4 group.

O(2)···O(1)′	2.489(14) Å
O(1)···O(1)	2.547(11)
O(2)···O(2)	2.511(14)
O(2)–H	1.06(1)
P–O(1)	1.51(1)
P–O(2)	1.58(1)

Table 33A-2-007. RbH_2PO_4 (RDP), KH_2PO_4 (KDP). Structure of H_2PO_4 ion [80Ken]. θ, ψ, φ: see Table 33A-1-017 and Table 33A-1-019 in No. 33A-1.

	RbH_2PO_4		KH_2PO_4	
T	RT	$\Theta_f + 5$ K	RT	$\Theta_f + 5$ K
O···O	2.498(2) Å	2.486(4) Å	2.4945(5) Å	2.4831(5) Å
O–H	1.040(7)	1.051(5)	1.0658(14)	1.0720(7)
H–H	0.420(14)	0.387(9)	0.367(2)	0.341(1)
P–O	1.536(2)	1.545(4)	1.5403(5)	1.5427(5)
θ	58.81(2)°	59.08(5)°	60.89(1)°	60.99(1)°
ψ	6(4)	8(4)	7(1)	5(1)
φ	−1.6(1)	−1.4(1)	0.28(2)	0.56(2)
a	7.607(2) Å	7.586(3) Å	7.4521(4) Å	7.426(1) Å
c	7.299(3)	7.254(4)	6.974(2)	6.931(3)

Table 33A-2-008. RbH_2PO_4 (RDP). Fractional coordinates and anisotropic temperature parameters [$\cdot 10^{-4}$ Å^2] [90Fuk]. U_{ij} are defined by Eq. (d) in Introduction. Isotropic temperature parameter [$\cdot 10^2$ Å^2] for H defined by Eq. (e) in Introduction is listed under U_{11}.

Atom	x	y	z	U_{11}	U_{22}	U_{33}	U_{12}	U_{13}	U_{23}
paraelectric phase (T = 155 K)									
Rb	0	0	0.5	119(3)	119(3)	86(2)	0	0	0
P	0	0	0	113(8)	113(8)	125(6)	0	0	0
O	0.0288(5)	0.1147(5)	0.1208(6)	90(12)	122(12)	114(12)	–6(12)	6(12)	–47(12)
H	–0.048(9)	0.202(9)	0.125	3(3)					
ferroelectric phase (T = 145 K)									
Rb	0	0	0.4797(2)	113(2)	117(2)	84(2)	3(5)	0	0
P	0	0	0	121(5)	124(6)	86(7)	1(11)	0	0
O1	0.0291(4)	0.1138(4)	0.1168(7)	98(13)	146(17)	129(14)	–1(12)	12(12)	–50(14)
O2	0.1146(4)	–0.0299(4)	–0.1250(7)	110(15)	189(17)	126(15)	1(13)	36(13)	21(14)
H	–0.091(9)	0.235(8)	0.122(17)	2(2)					

Table 33A-2-009. RbD_2PO_4 (monoclinic). Fractional coordinates and isotropic temperature parameters at 332 K [84Hag]. $\overline{u^2} = (U_{11} + U_{22} + U_{33} + 2\,U_{13}\cos\beta)/3$ for non-hydrogen atoms. U_{ij}: temperature parameter defined by Eq. (d) in Introduction.

	x	y	z	$\overline{u^2}$ [$\cdot 10^{-2}$ Å^2]
Rb	0.26385(7)	0.26008(8)	0.28046(7)	3.61(3)
P	0.2440(2)	0.7464(2)	0.5175(2)	2.37(5)
O(1)	0.4012(5)	0.7455(6)	0.4480(5)	3.4(2)
O(2)	0.3301(6)	0.6900(8)	0.6747(5)	4.7(1)
O(3)	0.1006(5)	0.5802(6)	0.4341(5)	3.8(1)
O(4)	0.1595(6)	0.9705(6)	0.4945(6)	4.4(1)
D(1)	0.372(9)	0.749(8)	0.34(1)	0.6(15)
D(2)	0	0.5	0.5	25(18)
D(3)	0	0	0.5	23(25)

Table 33A-2-010. RbD_2PO_4 (monoclinic). Interatomic distances and bond angles at 332 K [84Hag].

Rb–O(1)	3.397(4) Å	P–O(1)	1.558(5) Å
Rb–O(2^{i})	3.624(5)	P–O(2)	1.472(4)
Rb–O(3)	2.972(5)	P–O(3)	1.525(4)
Rb–O(4)	5.011(4)	P–O(4)	1.513(4)
Rb–D(1)	3.13(5)		
O(1)···O(2^{i})	2.519(6)	O(3)···O(3^{ii})	2.497(7)
O(1)–D(1)	0.97(9)	O(4)···O(4^{iii})	2.514(7)
D(1)–O(2^{i})	1.57(9)		
O(1)–P–O(2)	106.4(2)°	O(2)–P–O(3)	112.4(3)°
O(1)–P–O(3)	107.6(2)	O(2)–P–O(4)	113.1(3)
O(1)–P–O(4)	107.3(3)	O(3)–P–O(4)	109.7(2)
O(1)–D(1)–O(2^{i})	167(5)		

Symmetry code: (i) $x, \frac{3}{2}-y, z-\frac{1}{2}$; (ii) $-x, 1-y, 1-z$; (iii) $-x, 2-y, 1-z$.

Table 33A-2-011. RbD_2PO_4 (monoclinic). Fractional coordinates and temperature parameters at RT [83Suz]. B_{ij} is defined by Eq. (a) in Introduction.

Atom	x	y	z	B_{11}	B_{22}	B_{33}	B_{12}	B_{13}	B_{23}
Rb(1)	0.1312(1)	0.2500(2)	0.0278(2)	0.0026(1)	0.0075(4)	0.0052(2)	−0.0030(3)	0.0017(2)	0.0015(4)
Rb(2)	0.3679(1)	0.7224(3)	0.4705(2)	0.0025(1)	0.0074(4)	0.0055(2)	0.0044(3)	0.0020(2)	0.0002(5)
Rb(3)	0.6329(1)	0.2468(2)	0.0367(2)	0.0027(1)	0.0080(4)	0.0057(2)	0.0049(3)	0.0029(2)	0.0064(4)
Rb(4)	0.8670(1)	0.7277(3)	0.4649(2)	0.0028(1)	0.0124(4)	0.0062(2)	0.0041(3)	0.0022(2)	0.0000(5)
P(1)	0.1216(3)	0.7521(8)	0.2654(4)	0.0018(2)	0.0200(15)	0.0032(4)	0.0021(8)	0.0020(5)	0.0004(13)
P(2)	0.3789(3)	0.2373(6)	0.2348(4)	0.0016(2)	0.0015(8)	0.0023(4)	0.0000(6)	0.0024(4)	0.0014(10)
P(3)	0.6227(3)	0.7269(6)	0.2688(3)	0.0016(2)	0.0008(7)	0.0024(4)	0.0008(7)	0.0016(4)	0.0002(11)
P(4)	0.8797(3)	0.2559(6)	0.2327(4)	0.0019(2)	0.0093(12)	0.0040(4)	0.0003(7)	0.0036(4)	0.0029(11)
O(11)	0.2003(8)	0.7298(24)	0.2005(12)	0.0023(6)	0.0233(41)	0.0052(13)	0.0111(28)	0.0019(14)	0.0092(45)
O(12)	0.1582(10)	0.6558(34)	0.4222(14)	0.0042(8)	0.0535(75)	0.0046(14)	−0.0013(42)	0.0074(17)	−0.0050(54)
O(13)	0.0500(9)	0.5723(21)	0.1798(13)	0.0041(7)	0.0126(34)	0.0056(14)	−0.0015(26)	0.0042(17)	−0.0021(37)
O(14)	0.0811(11)	0.9597(23)	0.2404(19)	0.0046(9)	0.0119(37)	0.0191(26)	−0.0111(30)	0.0117(26)	−0.0113(51)
O(21)	0.2959(8)	0.2449(19)	0.3012(11)	0.0020(5)	0.0151(36)	0.0049(12)	−0.0055(22)	0.0048(13)	−0.0016(26)
O(22)	0.3312(8)	0.3052(18)	0.0765(11)	0.0022(5)	0.0050(25)	0.0042(12)	−0.0033(20)	0.0020(13)	0.0009(29)
O(23)	0.4165(8)	0.0111(17)	0.2436(13)	0.0023(6)	0.0025(26)	0.0087(15)	0.0049(20)	0.0039(15)	0.0022(32)
O(24)	0.4538(8)	0.3998(18)	0.3221(12)	0.0030(6)	0.0070(29)	0.0053(13)	−0.0046(22)	0.0026(15)	−0.0057(33)
O(31)	0.6983(8)	0.7316(24)	0.1969(11)	0.0023(6)	0.0244(42)	0.0037(12)	0.0100(28)	0.0021(13)	0.0089(43)
O(32)	0.6610(9)	0.6622(22)	0.4222(13)	0.0042(7)	0.0172(39)	0.0070(15)	−0.0015(27)	0.0093(17)	−0.0051(38)
O(33)	0.5489(7)	0.5714(18)	0.1824(11)	0.0016(5)	0.0086(29)	0.0046(13)	−0.0030(20)	0.0023(13)	−0.0069(32)
O(34)	0.5805(8)	0.9619(16)	0.2413(12)	0.0024(6)	0.0008(24)	0.0064(13)	−0.0004(19)	0.0038(14)	0.0025(30)
O(41)	0.8007(8)	0.2418(18)	0.3080(12)	0.0027(6)	0.0083(32)	0.0080(14)	−0.0078(22)	0.0066(15)	−0.0025(36)
O(42)	0.8323(8)	0.2977(21)	0.0759(11)	0.0021(6)	0.0200(35)	0.0012(11)	−0.0014(23)	−0.0004(12)	0.0026(32)
O(43)	0.9183(11)	0.0179(22)	0.2419(17)	0.0055(9)	0.0105(36)	0.0148(23)	0.0003(20)	0.0101(25)	0.0002(46)
O(44)	0.9523(10)	0.4056(22)	0.3187(13)	0.0051(9)	0.0158(38)	0.0055(15)	−0.0038(29)	0.0055(18)	−0.0014(39)

Table 33A-2-012. RbD_2PO_4 (monoclinic). Interatomic distances of the deuterium bond [83Suz]. T = RT. See Fig. 33A-2-004.

		RbD_2PO_4
along *b* axis	O13–O44	2.52(2)A
	O14–O43	2.53(2)
	O23–O34	2.54(2)
	O24–O33	2.51(2)
along *c* axis	O11–O42	2.56(2)A
	O12–O41	2.51(2)
	O21–O32	2.56(2)
	O22–O31	2.55(2)

Table 33A-2-013. RbH_2PO_4 (monoclinic). Fractional coordinates and isotropic temperature parameters at 293 K [85Ave]. Isotropic temperature parameter B is defined by Eq. (e) in Introduction.

	x	y	z	B [$\cdot 10^{-2}$ Å^2]
Rb	0.28464(6)	0.2383(1)	0.26559(8)	2.44(1)
P	0.4823(1)	0.2458(4)	0.7577(2)	1.66(2)
O(1)	0.4452(4)	0.7551(10)	0.3979(5)	2.31(8)
O(2)	0.9307(5)	0.5839(8)	0.0944(7)	2.54(9)
O(3)	0.6751(4)	0.8198(9)	0.3312(7)	2.97(11)
O(4)	0.0010(6)	0.9747(9)	0.1618(7)	3.20(10)
H(1)	0.501(9)	0.55(1)	0.07(1)	4(2)
H(2)	0.346(9)	0.74(2)	0.37(1)	5(2)

Table 33A-2-014. RbH_2PO_4 (monoclinic). Interatomic distances [Å] and bond angles [°] at 293 K [85Ave].

PO_4 tetrahedron				
P	O(1)	O(2)	O(3)	O(4)
O(1)	1.575(4) Å	2.515(6) Å	2.460(5) Å	2.513(7) Å
O(2)	107.2(3)°	1.550(5)	2.533(6)	2.537(7)
O(3)	106.3(2)	112.4(3)°	1.499(4)	2.540(7)
O(4)	107.3(3)	110.1(3)	113.1(3)°	1.545(6)

RbO_8 polyhedron			
Rb–O(1)	3.387(5) Å	Rb–O(3)	3.038(5) Å
Rb–O(1)	3.017(3)	Rb–O(3)	3.051(5)
Rb–O(2)	3.083(5)	Rb–O(4)	3.056(6)
Rb–O(2)	2.996(5)	Rb–O(4)	3.043(6)

Table 33A-2-015. RbH_2PO_4 (monoclinic). Interatomic distances [Å] and bond angles [°] in hydrogen bonds at 293 K [85Ave].

	O–H	H···O	O–O	O–H···O	P–O–H
O(4)–H(1)···O(4)	0.71(8) Å	1.85(7) Å	2.518(11) Å	156(10)°	101(2)°
O(1)–H(2)···O(3)	0.91(8) Å	1.61(8) Å	2.518(5) Å	171(11)°	122(5)°

Table 33A-2-016. RbH_2PO_4 (RDP). Elastic compliances $s_{\lambda\mu}$ and stiffnesses $c_{\lambda\mu}$.

c_{11}	c_{12}	c_{13}	c_{33}	c_{44}	c_{66}	T	Ref.
[$\cdot 10^9$ N m^{-2}]						[°C]	
67	2				4	10	50Jon
66.97	–5.49	14.92	52.96	10.20	3.58	20	64Hau

s_{11}	s_{12}	s_{13}	s_{33}	s_{44}	s_{66}	T	Ref.
[$\cdot 10^{-12}$ m^2 N^{-1}]						[°C]	
18.5	2.2	–1.3	22.9	87.6	285.8	25	69Adh1

Table 33A-2-017. $Rb(H_{1-x}D_x)_2PO_4$. Refractive indices [71Vol]. Parameter: x, λ.

x	500 nm		550 nm		600 nm		650 nm	
	n_o	n_e	n_o	n_e	n_o	n_e	n_o	n_e
0	1.5125	1.4813	1.5093	1.4804	1.5067	1.4784	1.5046	1.4767
0.30	1.5114	1.4808	1.5082	1.4799	1.5057	1.4778	1.5037	1.4762
0.50	1.5109	1.4805	1.5079	1.4796	1.5054	1.4776	1.5033	1.4760
0.60	1.5105	1.4803	1.5075	1.4794	1.5050	1.4774	1.5030	1.4759
0.88	1.5086	1.4792	1.5056	1.4782	1.5031	1.4763	1.5012	1.4750

Table 33A-2-018. RbH_2PO_4 (RDP). Ordinary (n_o) and extraordinary (n_e) refractive indices with respect to air [87Kir]. T = 33.0(4) °C. IF: narrow-band interference filter.

λ [Å]	Source	n_o	n_e
4046.56	Hg	1.52078	1.48995
4358.33	Hg	1.51741	1.48689
4678.15	Cd	1.51447	1.48439
4799.91	Cd	1.51343	1.48356
5085.82	Cd	1.51138	1.48187
5460.74	Hg	1.50915	1.48002
5893.0	Na	1.50697	1.47830
6438.47	Cd	1.50469	1.47658
7800.27	Rb	1.49995	1.47339
7947.60	Rb	1.49946	1.47321
8521.13	Cs	1.49774	1.47222
8943.46	Cs	1.49655	1.47160
10640.00	Xe + IF	1.49208	1.46957

Table 33A-2-019. RbD_2PO_4 (DRDP, tetragonal). Ordinary (n_o) and extraordinary (n_e) refractive indices with respect to air [87Kir]. T = 33.0(4) °C.

λ [Å]	Source	n_o	n_e
4046.56	Hg	1.51655	1.48780
4358.33	Hg	1.51325	1.48486
4678.15	Cd	1.51058	1.48240
4799.91	Cd	1.50963	1.48162
5085.82	Cd	1.50772	1.48001
5460.74	Hg	1.50555	1.47814
5790.66	Hg	1.50410	1.47683
6438.47	Cd	1.50150	1.47474
7800.27	Rb	1.49742	1.47166
7947.60	Rb	1.49705	1.47146
8521.13	Cs	1.49565	1.47050
8943.46	Cs	1.49472	1.46997
10640.00	Xe	1.49136	1.46818

Table 33A-2-020. $Rb(H_{1-x}D_x)_2PO_4$. Electrooptic constants [71Vol]. Parameter: x. λ = 633 nm.

x	r_{41}	r_{63}
	[$\cdot 10^{-12}$ m V^{-1}]	
0	7.7(3)	12.5(7)
0.196	8.0(3)	13.7(7)
0.30		16.0(7)
0.42	8.3(3)	16.7(7)
0.50	8.5(3)	17.3(7)
0.60		18(1)
0.65		18.5(10)
0.79		23(1)
0.88		28(2)

Table 33A-2-021. RbH_2PO_4 (RDP). ^{87}Rb quadrupole coupling tensor components in the tetragonal $X(a)$, $Y(b)$, $Z(c)$ coordinates system [69Bli2]. A and B are two physically non-equivalent Rb sites in the unit cell. Primed and unprimed symbols refer to oppositely polarized domains.

T		$eQ\phi_{zz}/h$	$eQ\phi_{yy}/h$	$eQ\phi_{xx}/h$	$eQ\phi_{xy}/h$
[K]		[MHz]			
108	A	5.76(6)	–5.34(6)	–0.42(6)	0.21(3)
	B	5.76(6)	–0.42(6)	–5.34(6)	0.21(3)
	B′	5.76(6)	–0.42(6)	–5.34(6)	–0.21(3)
	A′	5.76(6)	–5.34(6)	–0.42(6)	–0.21(3)
370	A = B	6.90(6)	–3.45(6)	–3.45(6)	0

Table 33A-2-022. RbD_2PO_4 (monoclinic). e^2qQ/h, η and direction cosines μ_λ of the largest principal axes of ^{87}Rb EFG tensor [84Top]. (***a****, ***b***, ***c***) frame (see Fig. 33A-2-076). η: asymmetry parameter. ***a**** || ***b*** × ***c***.

		ϕ_{xx}	ϕ_{yy}	ϕ_{zz}
$T = 110$ °C				
ϕ_0	$e^2qQ/h = 1.40$ MHz	$\mu_a =$ 0.00	0.9760	−0.2193
	$\eta = 0.36$	$\mu_b =$ 1.00	0.0000	0.0000
		$\mu_c =$ 0.00	0.2193	0.9760
$T = 69$ °C				
ϕ_1	$e^2qQ/h = 2.01$ MHz	$\mu_a = -0.2209$	0.8888	0.4015
	$\eta = 0.43$	$\mu_b = -0.8840$	−0.3564	0.3023
		$\mu_c =$ 0.4118	−0.2881	0.8644
ϕ_2	$e^2qQ/h = 2.01$ MHz	$\mu_a = -0.2209$	−0.8888	0.4015
	$\eta = 0.43$	$\mu_b =$ 0.8840	−0.3564	−0.3023
		$\mu_c =$ 0.4118	0.2881	0.8544
$T = 38$ °C				
ϕ_{1a}	$e^2qQ/h = 3.15$ MHz	$\mu_a = -0.0001$	−0.8649	0.5018
	$\eta = 0.55$	$\mu_b = -0.9728$	0.1176	0.200
		$\mu_c =$ 0.2310	0.4878	0.8417
ϕ_{1b}	$e^2qQ/h = 3.15$ MHz	$\mu_a = -0.0001$	0.8649	0.5018
	$\eta = 0.55$	$\mu_b =$ 0.9728	0.1176	−0.200
		$\mu_c =$ 0.2310	−0.4878	0.8417
ϕ_{2a}	$e^2qQ/h = 1.77$ MHz	$\mu_a =$ 0.550	0.7510	0.360
	$\eta = 0.55$	$\mu_b = -0.564$	−0.656	0.500
		$\mu_c =$ 0.613	0.007	0.788
ϕ_{2b}	$e^2qQ/h = 1.77$ MHz	$\mu_a =$ 0.550	0.7510	0.360
	$\eta = 0.55$	$\mu_b = -0.564$	0.656	−0.500
		$\mu_c = -0.613$	0.007	0.788

Table 33A-2-023. RbH_2PO_4: SeO_4^{3-}. g and A tensors for SeO_4^{3-} center [90Mat]. θ: angle between the c axis and a principal direction. φ: angle between the projection of the principal direction in the ab plane and $a(b)$ axis.

T	g-tensor [MHz]	θ	φ	A-tensor [MHz]	θ	φ
201 K	2.007	90.1	–45.6	2991	85.6	44.8
($T > \Theta_f$)	2.006	87.0	44.3	3001	90.0	–45.2
	2.002	3.0	42.4	3402	4.4	45.0
137 K	2.013	91.6	63.8	2909	88.3	–28.8
($T < \Theta_f$)	2.001	59.8	–25.3	3030	85.2	61.3
	2.002	30.4	–29.0	3420	5.1	41.4