

Table 1 Averaged composition obtained from EMPA analyses
 on grossular synthetic single crystal garnets.

n. analyses	8		
	<i>wt%</i>		<i>a.p.f.u.</i>
SiO ₂	40.13 (13)	Si	3.00(1)
Al ₂ O ₃	22.33 (10)	Al	1.98(1)
CaO	37.83 (16)	Ca	3.04(1)
Total	100.32		8.01(1)
Standard deviations are given in parentheses.			

Table 2. Unit-cell edge and volume of grossular at different temperatures.

T (K)	a (Å)	V (Å ³)
100(2)	11.8403(13)	1659.92(33)
110(2)	11.8405(14)	1659.99(33)
120(2)	11.8407(13)	1660.10(32)
130(2)	11.841(13)	1660.20(33)
150(2)	11.8417(13)	1660.52(33)
170(2)	11.8425(14)	1660.84(34)
190(2)	11.8437(14)	1661.37(34)
210(2)	11.8446(14)	1661.75(34)
230(2)	11.8454(14)	1662.05(35)
276(2)	11.8485(15)	1663.36(37)
293(2)	11.8499(5)	1663.98(20)
301(2)	11.8500(12)	1664.01(29)
303(2)	11.8503(6)	1664.15(23)
323(2)	11.8525(6)	1665.04(25)
348(2)	11.8548(5)	1666.02(21)
373(2)	11.8570(6)	1666.95(24)
423(2)	11.8627(7)	1669.36(28)
448(2)	11.8648(5)	1670.26(22)
473(2)	11.8673(7)	1671.31(31)

523(2)	11.8716(12)	1673.12(49)
523(2)	11.8726(5)	1673.55(21)
573(2)	11.8776(6)	1675.65(26)
623(2)	11.8826(5)	1677.78(22)
673(2)	11.8880(5)	1680.08(22)
698(2)	11.8905(5)	1681.14(21)
723(2)	11.8934(5)	1682.38(23)
773(2)	11.8984(5)	1684.47(23)
798(2)	11.9009(5)	1685.53(22)
823(2)	11.9041(6)	1686.92(24)
873(2)	11.9088(6)	1688.90(25)
898(2)	11.9114(5)	1690.01(22)
923(2)	11.9139(5)	1691.09(23)
973(2)	11.9193(5)	1693.38(22)
998(2)	11.9224(5)	1694.69(21)
1023(2)	11.9248(5)	1695.71(22)

Note: Standard deviations are given in
parentheses.

Table 3. Unit-cell edge and volume at different pressures.

P (GPa)	a (Å)	V (Å ³)
0.0001(1)	11.8508(3)	1664.34(14)
1.013(9)	11.8275(4)	1654.55(15)
2.392(10)	11.7963(4)	1641.47(15)
3.568(10)	11.7712(3)	1631.04(13)
4.715(11)	11.7469(3)	1620.95(13)
6.559(15)	11.7101(4)	1605.76(15)
7.149(12)	11.6986(3)	1601.05(14)
7.674(19)	11.6886(5)	1596.95(19)

Standard deviations are given in parentheses.
