

gO , Al_2O_3 , and

the values, clear picture the picture is natural minerals, active structures: series nonlinearily to 2 - 5 kbar. In the published kbar [5] and [14, 27]. Its for certain on my recent neous rocks for basalts of sites and dense approach the m the corre-

for oxides and most complete 0° C at atm-/ ∂T is -0.08 to as against

ulus μ

	$\frac{\partial E}{\partial p}$	$\frac{\partial \mu}{\partial p}$
5	9.5	3.9
3	10.0	3.8
7	9.4	3.3
3	6.6	2.3
0	6.1	2.2
1	6.8	2.5
7	7.5	3.4
0	7.5	3.7
2	4.5	2.8
4	7.2	2.9
5	6.7	2.7
1	6.9	3.3

-0.22 to -0.25 from 300 to 1300°K. Anderson et al. [16] have collected results for corundum, periclase, spinel, forsterite, garnet, hematite, quartz, CaO , zincite, and bromellite, for which the values are -0.14, -0.12 and -0.16 (MgO as polycrystal and single crystal -0.13, -0.11, -0.20, -0.17, -0.10, -0.14, -0.13, and -0.12). The $(\partial K_S / \partial T) p$ may be compared with $(\partial K_S / \partial P) T$, which are given [16] for the above minerals as 3.98, 4.58, 4.18, 4.78, 5.43, 4.53, 6.4, 5.23, 4.78, and 5.52.

An open structure should produce a low K , a high K' , and a low $\partial K / \partial T$. Such a substance should also have considerable thermal expansion and a high specific heat. Quartz meets this condition (apart from the thermophysical parameters), as do CaO and zincite to a certain extent. A future paper will examine the relation between these parameters on more extensive evidence.

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