

substance: FeO (Fe_{1-x}O)
property: lattice parameters, density

lattice parameters in the cubic phase

<i>a</i>	4.3390 Å	<i>T</i> = 300 K	extrapolated to <i>x</i> = 0 from the <i>da/dx</i> data below	33J
	4.3370 Å			66L
	4.3297 Å			68F
	4.3453 Å			60R
	4.3202 Å			65V
	4.323 Å			measured on stoichiometric FeO
	4.332 Å		70H	
<i>da/dx</i>	0.5643 Å	<i>T</i> = 300 K	<i>x</i> -dependence of <i>a</i> : Figs. 1, 2 <i>T</i> -dependence of <i>a</i> : Fig. 3	33J
	0.5286 Å			66L
	0.4256 Å			68F
	0.625 Å			60R
	0.3025 Å			65V
density				
<i>d</i>	5.87 g cm ⁻³		X-ray density	70H

References:

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66L Levin, R. L., Wagner, J. B.: Trans. AIME 236 (1966) 516.
67K Katsura, T., Iwasaki, B., Kimura, S., Akimoto, S.: J. Chem. Phys. 47 (1967) 4559.
68F Fujii, C. T., Meussner, R. A.: Trans. AIME 242 (1968) 1259.
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Fig. 1.

Fe_{1-x}O . Lattice parameter vs. composition for two temperatures. Arrows show the phase boundaries at each temperature [72H].

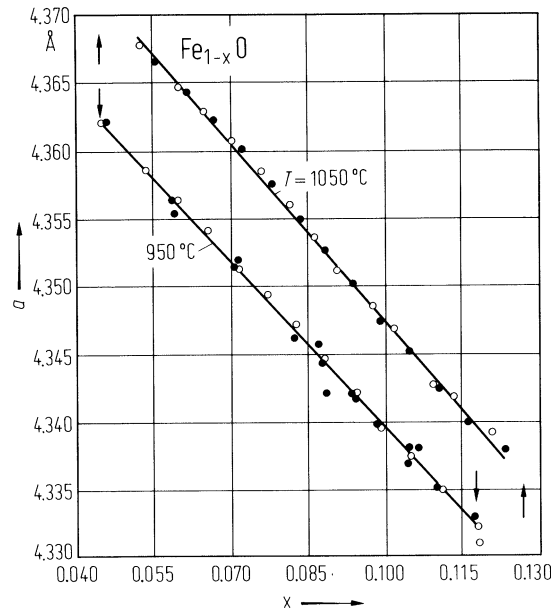


Fig. 2.

Fe_{1-x}O . Lattice parameter vs. composition for quenched samples at 298 K. Results of different authors [80B].

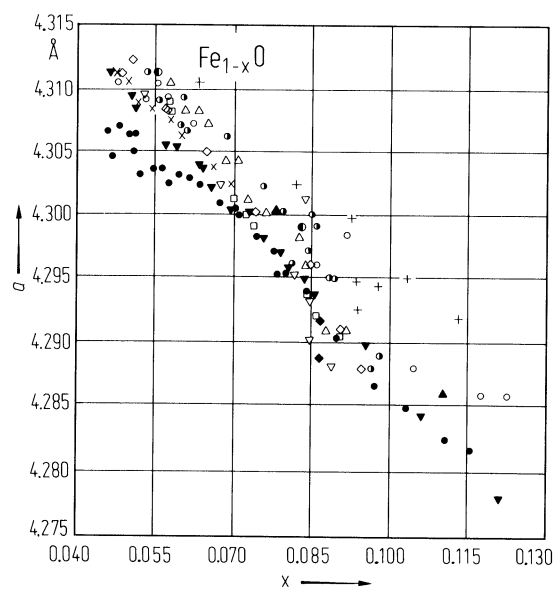


Fig. 3.

Fe_{1-x}O . Lattice constant vs. temperature for Fe_{1-x}O in 34% CO [72H]. $1-x = 0.905 \dots 0.908$.

