

Yokoo et al. (2023) *American Mineralogist*SUPPORTING TABLE 3. Experimental *P-T* conditions, measured volumes, and Si content of samples for which hcp+B2 coexistence was observed.

Starting material	Pressure (GPa)	Error (GPa)	Temperature (K)	Error (K)	Volume of B2 (cm <sup>3</sup> /mol)	Error (cm <sup>3</sup> /mol)	Si in B2 (wt%)	Error (wt%)	Volume of hcp (cm <sup>3</sup> /mol)	Error (cm <sup>3</sup> /mol)
Fe7Si	32.8	1.3	1110	40	6.0934	0.0075	13.1	1.0	6.0752	0.0030
Fe7Si	33.0	1.5	1260	50	6.1095	0.0070	13.5	1.1	6.0918	0.0026
Fe7Si	33.1	1.6	1390	50	6.1250	0.0057	13.7	1.2	6.1202	0.0024
Fe7Si	41.8	1.8	1490	60	5.9437	0.0076	14.8	1.3	5.9310	0.0021
Fe7Si	41.8	1.8	1510	60	5.9602	0.0067	14.1	1.3	5.9543	0.0022
Fe7Si	41.6	1.6	1180	40	5.9285	0.0066	13.5	1.0	5.9069	0.0037
Fe7Si	41.7	1.7	1340	50	5.9450	0.0048	13.7	1.1	5.9098	0.0037
Fe7Si	41.7	1.7	1390	50	5.9536	0.0046	13.7	1.2	5.9329	0.0040
Fe7Si	41.8	1.8	1450	60	5.9543	0.0045	14.0	1.2	5.9249	0.0030
Fe7Si	41.8	1.9	1570	60	5.9602	0.0046	14.6	1.3	5.9438	0.0031
Fe7Si	41.8	1.9	1640	70	5.9801	0.0052	14.2	1.3	5.9631	0.0029
Fe7Si	41.9	2.1	1770	70	5.9868	0.0039	14.7	1.4	5.9795	0.0019
Fe7Si	54.0	2.1	1520	60	5.7254	0.0047	15.6	1.3	5.7172	0.0026
Fe7Si	54.3	2.2	1620	70	5.7351	0.0050	15.6	1.3	5.7244	0.0032
Fe7Si	54.6	2.3	1780	70	5.7505	0.0043	15.6	1.4	5.7452	0.0031
Fe7Si	54.9	2.4	1910	80	5.7738	0.0040	15.0	1.4	5.7815	0.0032
Fe7Si	55.5	2.5	2010	90	5.8024	0.0037	13.8	1.4	5.8060	0.0037
Fe7Si	66.6	2.4	1580	60	5.5629	0.0049	15.2	1.2	5.5675	0.0024
Fe7Si	66.9	2.5	1740	70	5.5818	0.0044	15.0	1.3	5.5704	0.0025
Fe7Si	67.0	2.6	1870	80	5.6097	0.0046	14.2	1.3	5.6021	0.0026
Fe7Si	67.4	2.8	2040	90	5.6180	0.0061	14.4	1.4	5.5896	0.0047
Fe7Si	67.7	2.9	2120	90	5.6269	0.0065	14.2	1.4	5.6117	0.0046
Fe7Si	67.9	2.9	2190	90	5.6326	0.0056	14.2	1.4	5.6364	0.0041
Fe7Si	68.8	2.2	1290	50	5.5031	0.0075	15.5	1.1	5.5063	0.0036
Fe7Si	68.7	2.3	1380	50	5.5257	0.0053	14.8	1.1	5.5115	0.0034
Fe7Si	68.9	2.3	1440	60	5.5263	0.0054	14.9	1.1	5.5013	0.0033
Fe7Si	68.8	2.3	1390	50	5.5044	0.0066	16.0	1.2	5.5165	0.0036
Fe7Si	69.0	2.3	1410	60	5.4975	0.0066	16.3	1.2	5.5009	0.0038
Fe7Si	68.9	2.3	1460	60	5.5106	0.0061	15.9	1.2	5.5118	0.0034
Fe7Si	69.0	2.4	1550	60	5.5163	0.0064	16.0	1.2	5.5240	0.0036
Fe7Si	68.9	2.4	1530	60	5.5219	0.0065	15.6	1.2	5.5351	0.0049
Fe7Si	69.0	2.4	1560	60	5.5163	0.0067	16.0	1.3	5.5097	0.0055
Fe16Si	87.1	3.1	1980	80	5.3460	0.0009	16.1	1.3	5.3753	0.0021
Fe16Si	87.3	3.2	2040	90	5.3612	0.0011	15.4	1.3	5.3776	0.0024
Fe16Si	87.3	3.2	2080	90	5.3601	0.0010	15.6	1.3	5.3900	0.0026
Fe16Si	87.0	3.3	2150	90	5.3691	0.0009	15.6	1.3	5.3987	0.0019
Fe16Si	87.6	3.4	2260	100	5.3778	0.0025	15.3	1.4	5.4088	0.0026
Fe16Si	87.8	3.4	2290	100	5.3736	0.0019	15.5	1.4	5.4104	0.0030
Fe16Si	87.8	3.4	2320	100	5.3548	0.0028	16.7	1.5	5.3855	0.0040
Fe16Si	87.7	3.4	2240	100	5.3634	0.0026	15.9	1.4	5.4421	0.0037
Fe16Si	88.1	3.4	2280	100	5.3741	0.0015	15.3	1.4	5.3924	0.0047
Fe16Si	88.0	3.5	2370	100	5.3960	0.0031	14.6	1.4	5.3678	0.0041
Fe16Si	92.4	3.2	1960	80	5.2919	0.0008	15.9	1.3	5.3280	0.0030
Fe16Si	91.9	3.3	2050	90	5.3059	0.0009	15.8	1.3	5.3514	0.0035
Fe16Si	91.8	3.3	2110	90	5.3174	0.0010	15.5	1.3	5.3515	0.0027
Fe16Si	91.6	3.4	2160	90	5.3226	0.0010	15.5	1.3	5.3601	0.0045
Fe16Si	91.9	3.4	2210	100	5.3394	0.0012	14.7	1.3	5.3416	0.0042
Fe16Si	92.0	3.5	2330	100	5.3432	0.0020	15.0	1.3	5.3262	0.0043
Fe16Si	91.9	3.6	2370	100	5.3333	0.0025	15.7	1.4	5.2945	0.0048
Fe7Si	98.2	3.4	1970	80	5.2005	0.0044	18.1	1.4	5.2363	0.0014
Fe7Si	98.9	3.5	2090	90	5.2144	0.0055	17.4	1.4	5.2535	0.0011
Fe7Si	98.9	3.5	2180	90	5.2271	0.004	16.9	1.4	5.2789	0.001
Fe7Si	99.3	3.6	2250	100	5.2544	0.0052	15.5	1.3	5.2884	0.0012
Fe7Si	99.5	3.7	2330	100	5.2434	0.0041	16.3	1.4	5.3018	0.0013
Fe7Si	99.0	3.7	2330	100	5.2325	0.0057	17.2	1.5	5.3034	0.0013
Fe7Si	99.1	3.7	2380	100	5.2471	0.0051	16.5	1.4	5.3211	0.0013