

Phase stability data of laser-heated FeSi in a diamond anvil cell, which is plotted in Fig. 1.

P (GPa)	T (K)	errT (K)	phase	pressure medium
10.2	1830	80	epsilon	neon
10.2	1540	40	epsilon	neon
16.2	1920	90	epsilon	neon
16.2	1730	100	epsilon	neon
25.2	2100	60	epsilon	neon
27.2	2270	70	epsilon	neon
7.2	1870	30	epsilon	neon
25.5	1850	70	epsilon	neon
25.5	1680	60	epsilon	neon
30.0	2400	150	epsilon	neon
30.0	1810	20	epsilon	neon
30.0	1450	100	epsilon	neon
30.0	1480	40	B2	neon
37.2	1620	40	B2	neon
37.2	2450	60	B2	neon
37.2	1870	40	B2	neon
37.2	1430	40	B2	neon
37.2	2110	110	B2	neon
47.2	1700	30	B2	neon
47.2	2090	40	B2	neon
47.2	2590	50	B2	neon
47.2	2770	80	B2	neon
32.6	2110	110	B2	neon
32.6	1600	50	B2	neon
32.3	1530	80	B2	neon
8.8	1240	80	epsilon	argon
8.8	1370	90	epsilon	argon
8.8	1430	40	epsilon	argon
8.8	1530	50	epsilon	argon
8.8	1650	90	epsilon	argon
8.8	1390	100	epsilon	argon
8.8	1380	20	epsilon	argon
8.8	1640	50	epsilon	argon
8.8	1690	50	epsilon	argon
8.8	1780	80	epsilon	argon
8.8	1810	50	epsilon	argon
8.8	1790	20	epsilon	argon
8.8	1770	70	epsilon	argon
8.8	1810	50	epsilon	argon
8.8	1750	60	epsilon	argon
17.0	1160	20	epsilon	argon
17.0	1150	20	epsilon	argon

17.0	1320	40	epsilon	argon
17.0	1460	80	epsilon	argon
17.0	1170	80	epsilon	argon
17.0	1160	70	epsilon	argon
17.0	1200	60	epsilon	argon
22.9	1210	90	epsilon	argon
22.9	1210	30	epsilon	argon
22.9	1350	50	epsilon	argon
22.9	1360	20	epsilon	argon
22.9	1140	70	epsilon	argon
22.9	1140	20	epsilon	argon
22.9	1310	70	epsilon	argon
22.9	1370	0	epsilon	argon
22.9	1560	60	epsilon	argon
25.2	1990	20	epsilon	argon
25.2	2100	70	epsilon	argon
25.2	2090	40	epsilon	argon
25.2	2050	50	epsilon	argon
25.2	2110	30	epsilon	argon
25.2	2150	30	epsilon	argon
25.2	2170	40	epsilon	argon
25.2	2090	70	epsilon	argon
25.2	2090	40	epsilon	argon
25.2	2180	40	epsilon	argon
25.2	2220	40	epsilon	argon
25.2	2250	70	epsilon	argon
25.2	2230	80	epsilon	argon
25.2	2270	70	epsilon	argon
23.4	2110	90	epsilon	argon
23.4	2090	90	epsilon	argon
23.4	2310	20	epsilon	argon
23.4	2350	60	epsilon	argon
23.4	2130	60	epsilon	argon
23.4	2160	50	epsilon	argon
23.4	2190	80	epsilon	argon
23.4	1550	40	epsilon	argon
23.4	1530	40	epsilon	argon
23.4	1530	30	epsilon	argon
23.4	1440	50	epsilon	argon
23.4	1270	50	epsilon	argon
23.4	1210	20	epsilon	argon
28.8	2280	90	epsilon	argon
28.8	2340	80	epsilon	argon
28.8	2410	50	epsilon	argon
31.4	1290	40	epsilon	argon
27.3	1230	70	epsilon	argon
27.3	1240	20	epsilon	argon
27.3	1260	70	epsilon	argon
27.3	1240	90	epsilon	argon

27.3	1190	30	epsilon	argon
27.3	1210	30	epsilon	argon
31.9	1440	100	B2	argon
25.2	1200	90	B2	argon
25.2	1200	90	B2	argon
25.2	1360	100	B2	argon
25.2	1480	60	B2	argon
25.2	1580	90	B2	argon
25.2	1710	90	B2	argon
31.4	1330	60	B2	argon
31.4	1400	30	B2	argon
31.4	1400	20	B2	argon
31.4	1680	80	B2	argon
31.4	1630	30	B2	argon
31.4	1840	10	B2	argon
31.4	1990	30	B2	argon
31.4	2120	80	B2	argon
31.4	1600	70	B2	argon
31.4	1590	70	B2	argon
31.4	1570	30	B2	argon
31.4	1270	0	B2	argon
30.0	1710	90	B2	argon
30.0	1790	50	B2	argon
30.0	1730	40	B2	argon
30.0	1580	60	B2	argon
30.0	1590	40	B2	argon
30.0	1440	40	B2	argon
30.0	1280	80	B2	argon
30.0	1300	10	B2	argon
24.9	1880	40	mixed	argon
24.9	1820	30	mixed	argon
24.9	1720	50	mixed	argon
24.9	1740	50	mixed	argon
24.9	1650	60	mixed	argon
24.9	1600	70	mixed	argon
24.9	1470	10	mixed	argon
24.9	1390	10	mixed	argon
24.7	1400	20	mixed	argon
24.7	1460	30	mixed	argon
24.7	1540	10	mixed	argon
24.7	1650	50	mixed	argon
24.7	1730	40	mixed	argon
24.7	1830	40	mixed	argon
24.7	1880	10	mixed	argon
24.7	1980	20	mixed	argon
24.7	2010	50	mixed	argon
24.7	2240	80	mixed	argon

24.7	1990	40	mixed	argon
24.7	1770	40	mixed	argon
24.7	1510	20	mixed	argon
25.2	1960	80	mixed	argon
25.2	1980	40	mixed	argon
25.2	2330	60	mixed	argon
25.2	1740	70	mixed	argon
25.2	1710	40	mixed	argon
25.2	1260	50	mixed	argon
25.2	1260	30	mixed	argon
23.4	2080	60	mixed	argon
28.4	1590	30	mixed	argon
28.4	1950	90	mixed	argon
28.4	1940	20	mixed	argon
28.4	1930	70	mixed	argon
28.4	1440	70	mixed	argon
28.4	1260	20	mixed	argon
28.3	1570	40	mixed	argon
28.3	2080	90	mixed	argon
28.3	1610	50	mixed	argon
28.3	1510	60	mixed	argon
28.3	1510	50	mixed	argon
28.3	1220	30	mixed	argon
28.3	1170	20	mixed	argon
28.9	2140	80	mixed	argon
28.9	2020	80	mixed	argon
28.9	1770	80	mixed	argon
28.9	1660	30	mixed	argon
28.9	1540	20	mixed	argon
27.3	1570	60	mixed	argon
27.3	1610	20	mixed	argon
28.4	1720	60	mixed	argon
28.4	1780	80	mixed	argon
28.4	1850	90	mixed	argon
28.4	1610	90	mixed	argon
28.4	1630	60	mixed	argon
30.0	1280	30	mixed	argon
30.0	1460	30	mixed	argon
30.0	1520	20	mixed	argon
30.0	1720	30	mixed	argon