

Sm2Si2O7

Samarium Silicate

				d(A)	Int	h	k	l					d(A)	Int	h	k	l							
Rad.:	λ :	Filter:	d-sp:	7.118	87	1	1	0	2.6920	47	0	0	2	6.433	27	2	0	0	2.6530	23	3	2	1	
Cut off:	Int.:	I/lor.:		5.145	10	2	1	0	2.6450	23	4	1	1	4.996	3	1	0	1	2.6240	18	3	2	1	
Ref: Tas, A., Middle East Technical Univ., Ankara, Turkey, Private Communication, (1996)				4.940	4	1	0	1	2.6080	23	4	1	1	4.557	1	0	1	1	2.5690	13	4	2	0	
				4.317	8	1	1	1	2.5680	12	0	1	2	4.280	21	0	2	0	2.5100	7	1	1	2	
Sys.: Monoclinic		S.G.: P2 ₁ /n (14)		4.064	2	1	2	0	2.4990	5	2	0	2	3.743	9	2	1	1	2.4702	24	1	3	1	
a: 12.8553(3)	b: 8.5603(2)	c: 5.3849(2)	A: 1.5017	C: 0.6291	3.693	7	2	1	2.4670	14	2	0	2	3.563	10	2	2	0	2.4621	21	5	1	0	
α :	β : 91.47	γ :	Z: 4	mp:	3.382	86	3	0	1	2.3989	7	2	1	2	3.350	100	0	2	1	2.3752	4	3	3	0
Ref: Ibid.					3.324	72	3	0	1	2.3708	5	2	1	2	3.251	52	1	2	1	2.3528	5	2	3	1
Dx: 5.258	Dm: 5.230	SS/FOM: F ₃₀ = 19(0.044 , 35)			3.235	47	1	2	1	2.3398	4	2	3	1	3.099	14	3	1	1	2.3360	5	5	0	1
					3.028	49	3	2	0	2.3321	5	4	2	1	3.080	21	4	1	0	2.3060	3	4	2	1
High temperature form. PSC: mP44. Sec 24-711 for low temperature form. Mwt: 468.97. Volume[CD]: 592.39.					2.9840	8	2	2	1	2.2793	8	0	2	2	2.9570	3	2	2	1	2.2527	2	5	1	1

d(A)	Int	h	k	l	d(A)	Int	h	k	l	d(A)	Int	h	k	l	d(A)	Int	h	k	l
2.2491	3	1	2	2	1.7814	10	4	4	0	1.4268	2	0	6	0	1.1719	1	10	3	0
2.2385	3	1	2	2	1.7727	5	3	3	2	1.4251	6	5	5	0	1.1703	2	4	6	2
2.2249	2	5	1	1	1.7289	5	7	0	1	1.4196	3	7	2	2	1.1680	1	10	0	2
2.2040	1	5	2	0	1.7177	2	5	2	2	1.4002	3	8	3	0	1.1637	1	9	4	1
2.1860	4	3	1	2	1.7135	4	6	3	0	1.3936	6	7	4	0	1.1620	2	6	6	1
2.1811	3	3	3	1	1.6973	10	1	5	0	1.3904	2	8	0	2	1.1578	3	11	1	0
2.1651	6	3	3	1	1.6961	13	4	4	1	1.3788	2	0	6	1	1.1520	1	10	0	2
2.1578	8	2	2	2	1.6943	11	7	1	1	1.3746	3	9	0	1	1.1500	3	3	7	1
2.1420	26	6	0	0	1.6924	10	5	2	2	1.3706	2	1	6	1					
2.1397	25	0	4	0	1.6910	12	6	0	2	1.3572	7	9	1	1					
2.1377	15	2	2	2	1.6878	11	7	2	0	1.3536	6	3	6	0					
2.1334	18	4	3	0	1.6861	9	4	4	1	1.3520	8	8	1	2					
2.1107	25	1	4	0	1.6822	8	4	3	2	1.3471	9	2	6	1					
2.0817	5	4	0	2	1.6752	13	0	4	2	1.3312	2	7	3	2					
2.0782	13	6	1	0	1.6636	11	1	4	2	1.3268	4	6	4	2					
2.0500	8	5	2	1	1.6626	21	4	3	2	1.3224	5	8	2	2					
2.0457	38	4	0	2	1.6546	18	2	5	0	1.3148	2	3	6	1					
2.0307	28	2	4	0	1.6446	13	5	4	0	1.3129	1	4	5	2					
2.0287	9	5	2	1	1.6394	13	6	3	1	1.3087	2	9	2	1					
2.0244	38	3	2	2	1.6311	9	6	1	2	1.2945	4	6	5	1					
2.0225	36	4	1	2	1.6198	8	1	5	1	1.2852	1	10	0	0					
1.9999	34	3	2	2	1.6069	1	8	0	0	1.2770	1	9	3	0					
1.9913	15	4	3	1	1.5901	2	3	5	0	1.2646	2	5	5	2					
1.9899	12	4	1	2	1.5733	7	6	2	2	1.2543	3	5	5	2					
1.9882	32	0	4	1	1.5679	2	5	4	1	1.2539	4	8	4	1					
1.9759	11	4	3	1	1.5660	3	3	4	2	1.2502	3	8	3	2					
1.9630	9	1	4	1	1.5546	2	3	4	2	1.2476	6	5	6	0					
1.9582	7	0	3	2	1.5493	2	6	2	2	1.2470	8	9	3	1					
1.9501	7	6	1	1	1.5478	2	5	3	2	1.2457	4	8	4	1					
1.9396	3	1	3	2	1.5439	5	7	3	0	1.2443	3	7	4	2					
1.9323	5	1	3	2	1.5275	1	3	5	1	1.2420	3	10	1	1					
1.9157	9	6	2	0	1.5222	1	8	1	1	1.2390	2	2	6	2					
1.9141	9	3	4	0	1.5143	8	6	4	0	1.2350	3	2	6	2					
1.9098	11	5	3	0	1.5112	3	4	5	0	1.2344	4	8	3	2					
1.9037	14	2	4	1	1.5083	2	8	1	1	1.2311	8	10	2	0					
1.8823	16	4	2	2	1.5044	3	8	2	0	1.2229	3	7	5	1					
1.8668	7	2	3	2	1.4924	2	4	4	2	1.2185	5	9	2	2					
1.8453	9	4	2	2	1.4820	2	7	1	2	1.2162	1	0	3	4					
1.8319	6	5	1	2	1.4787	1	4	4	2	1.2031	2	6	5	2					
1.8138	18	6	2	1	1.4623	7	6	4	1	1.1957	2	10	2	1					
1.8081	14	3	4	1	1.4582	1	4	5	1	1.1926	1	0	7	1					
1.8074	13	5	3	1	1.4516	2	4	5	1	1.1878	4	1	7	1					
1.8015	21	5	1	2	1.4451	2	0	5	2	1.1875	4	6	6	0					
1.7956	20	6	2	1	1.4403	4	7	2	2	1.1871	5	1	7	1					
1.7951	13	7	1	0	1.4371	1	1	5	2	1.1758	1	3	7	0					
1.7925	18	5	3	1	1.4340	2	1	5	2	1.1733	1	2	7	1					