

Ce2Si2O7

Cerium Silicate

Rad.: CuK α λ : 1.5418 Filter: d- sp: Diff.

Cut off: Int.: Diffract. l/lor:

Ref: Tas, A., Middle East Technical Univ., Ankara, Turkey,
Private Communication, (1996)

Sys.: Monoclinic

S.G.: P2₁/n (14)

a: 13.0803(6) b: 8.7270(4) c: 5.4054(5) A: 1.4988 C: 0.6194

 α : β : 90.134 γ : Z: 4 mp:

Ref: Ibid.

Dx: 4.827 Dm: 4.780 SS/FOM: F₃₀ = 48(.0130, 48)Made by reaction of Ce O and Si O₂ in flowing argon and quenched.

High temperature form. Silicon used as an external stand. PSC:

mP44. To replace 23--318. Mwt: 448.41. Volume[CD]: 617.03.

d(A)	Int	h	k	l	d(A)	Int	h	k	l
7.266	38	1	1	0	2.5070	7	5	1	0
6.547	11	2	0	0	2.4194	1	3	3	0
5.237	5	2	1	0	2.4050	2	2	1	2
4.363	8	0	2	0	2.3990	2	2	1	2
4.341	3	1	1	1	2.3868	1	2	3	1
4.331	5	1	1	1	2.3828	1	2	3	1
3.902	1	3	1	0	2.3580	2	4	2	1
3.757	4	2	1	1	2.2644	1	1	2	2
3.630	2	2	2	0	2.2616	1	1	2	2
3.396	100	0	2	1	2.1814	10	0	4	0
3.289	29	1	2	1	2.1796	9	6	0	0
3.283	20	1	2	1	2.1739	4	4	3	0
3.167	10	3	1	1	2.1694	3	2	2	2
3.156	6	3	1	1	2.1648	4	2	2	2
3.0850	24	3	2	0	2.1519	13	1	4	0
3.0630	4	4	1	0	2.1153	5	6	1	0
3.0160	1	2	2	1	2.0737	2	5	2	1
2.8410	7	1	3	0	2.0692	1	5	2	1
2.6690	9	4	1	1	2.0358	13	3	2	2
2.6590	11	4	1	1	2.0300	21	4	1	2
2.6170	5	4	2	0	2.0240	4	0	4	1
2.5320	3	1	1	2	2.0185	3	4	3	1
2.5150	10	1	3	1	2.0000	2	1	4	1
2.5120	8	1	3	1	1.9984	2	1	4	1

d(A)	Int	h	k	l	d(A)	Int	h	k	l
1.9715	1	6	1	1	1.4564	1	1	5	2
1.9675	1	6	1	1	1.4520	2	7	2	2
1.9591	1	1	3	2	1.4455	1	1	6	0
1.9560	1	1	3	2	1.4336	1	9	1	0
1.9510	2	3	4	0	1.4315	1	2	5	2
1.9335	8	2	4	1	1.4257	1	5	4	2
1.8972	4	2	3	2	1.4228	1	5	4	2
1.8934	4	2	3	2	1.4198	3	2	6	0
1.8825	4	4	2	2	1.4190	1	7	4	0
1.8770	4	4	2	2	1.4045	1	9	0	1
1.8368	10	6	2	1	1.4018	2	9	0	1
1.8347	10	3	4	1	1.3970	1	1	6	1
1.8320	8	5	3	1	1.3872	1	9	1	1
1.8288	6	5	3	1	1.3846	1	9	1	1
1.8153	3	4	4	0	1.3799	1	3	6	0
1.8049	2	3	3	2	1.3791	2	8	3	1
1.8010	1	3	3	2	1.3735	5	7	4	1
1.7649	1	7	0	1	1.3606	2	7	3	2
1.7300	4	1	5	0	1.3573	3	7	3	2
1.7217	4	4	4	1	1.3388	1	4	5	2
1.7188	3	4	4	1	1.3375	1	6	4	2
1.6972	3	0	4	2	1.3361	1	3	6	1
1.6952	2	4	3	2	1.3287	2	4	6	0
1.6919	2	4	3	2	1.3217	3	6	5	1
1.6842	4	1	4	2	1.2937	1	10	1	0
1.6825	1	1	4	2	1.2908	2	4	6	1
1.6757	3	5	4	0	1.2801	3	5	5	2
1.6623	6	6	1	2	1.2572	2	2	6	2
1.6481	2	1	5	1	1.2382	1	5	6	1
1.6470	2	1	5	1	1.2367	3	5	6	1
1.6381	2	7	2	1	1.2301	3	9	2	2
1.6349	1	7	2	1	1.2266	2	9	2	2
1.6104	7	2	5	1	1.2213	1	10	2	1
1.6073	2	8	1	0	1.2197	1	10	2	1
1.6011	1	5	4	1	1.2179	1	6	5	2
1.5995	1	5	4	1	1.2156	1	6	5	2
1.5829	2	3	4	2	1.2100	1	6	6	0
1.5804	1	5	3	2	1.1984	1	3	7	0
1.5532	2	3	5	1	1.1917	1	4	6	2
1.5513	2	3	5	1	1.1764	1	8	4	2
1.5420	3	6	4	0	1.1698	1	9	3	2
1.5312	1	8	2	0	1.1651	3	10	1	2
1.5083	1	7	3	1					
1.5049	1	4	4	2					
1.4840	1	6	4	1					