



Powder Diffraction

An international journal of materials characterization

Volume 11 Number 4 December 1996

33-1161
 SiO₂
 Silicon Oxide

Quartz, syn
 Rad. CuK α_1
 Cut off λ 1.40598 Filter Mono. d-sp Diff. l/l_{ref} 3.6
 Ref. *Natl. Bur. Stand. (U.S.) Monogr.* 25, 18 61 (1981)

Sys. Hexagonal
 a 4.9133(2) b
 c 5.4053(4) α
 β
 Ref. *Ibid.*

D₂ 2.65 D₂ 2.66
 Ref. Swanson, Fuyat, *Natl. Bur. Stand. (U.S.) Monogr.* 25, 18 61 (1981)

Color Colorless
 Pattern taken at Gaithersburg, Maryland, USA, by University, Fargo, North Dakota, USA. Agrees well with Quartz group. Also as internal standard calculated pattern. Plus 6 additional reflections to 0.9089.

Ground single-crystals of optical quality, North Dakota State University, Fargo, North Dakota, USA. *ICDD Grant-in-Aid* (1990). Also called: low quartz. Silicon used to replace 5-490 and validated by calculations to 0.9089.

dÅ	Int	hkl	dÅ	Int	hkl
4.257	22	100	1.1532	1	311
3.342	100	101	1.1405	<1	204
2.457	8	110	1.1143	<1	303
2.282	8	102	1.0813	2	312
2.237	4	111	1.0635	<1	400
2.127	4	111	1.0476	1	105
1.9792	6	200	1.0438	<1	401
1.8179	4	201	1.0347	1	214
1.8021	14	112	1.0150	1	223
1.6719	<1	003	0.9898	1	402
1.6591	4	202	0.9873	1	313
1.6082	2	103	0.9783	<1	306
1.5418	<1	210	0.9762	1	320
1.4536	9	211	0.9636	<1	205
1.4189	1	113			
1.3820	<1	300			
1.3752	6	212			
1.3718	7	203			
1.2880	8	301			
1.2558	2	104			
1.2285	2	302			
1.1999	1	220			
1.1978	2	213			
1.1843	1	221			
1.1804	3	114			
	3	311			

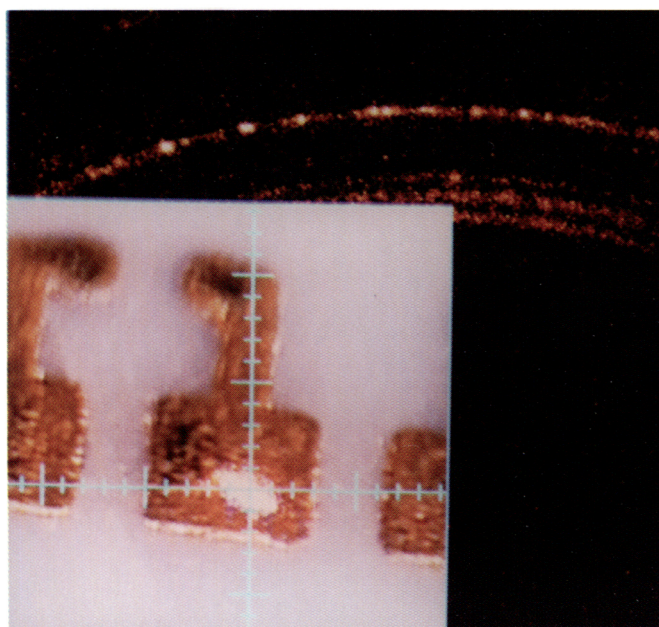
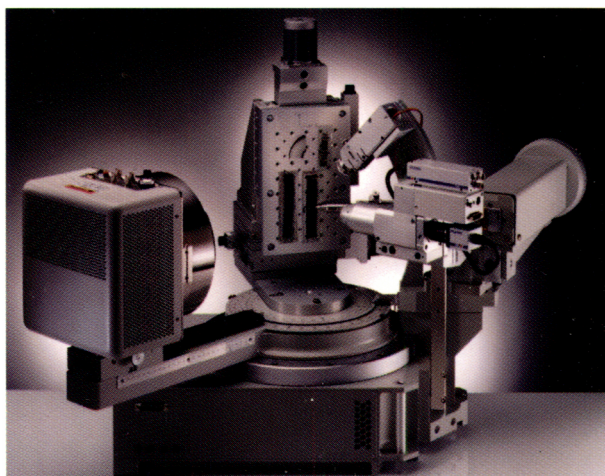


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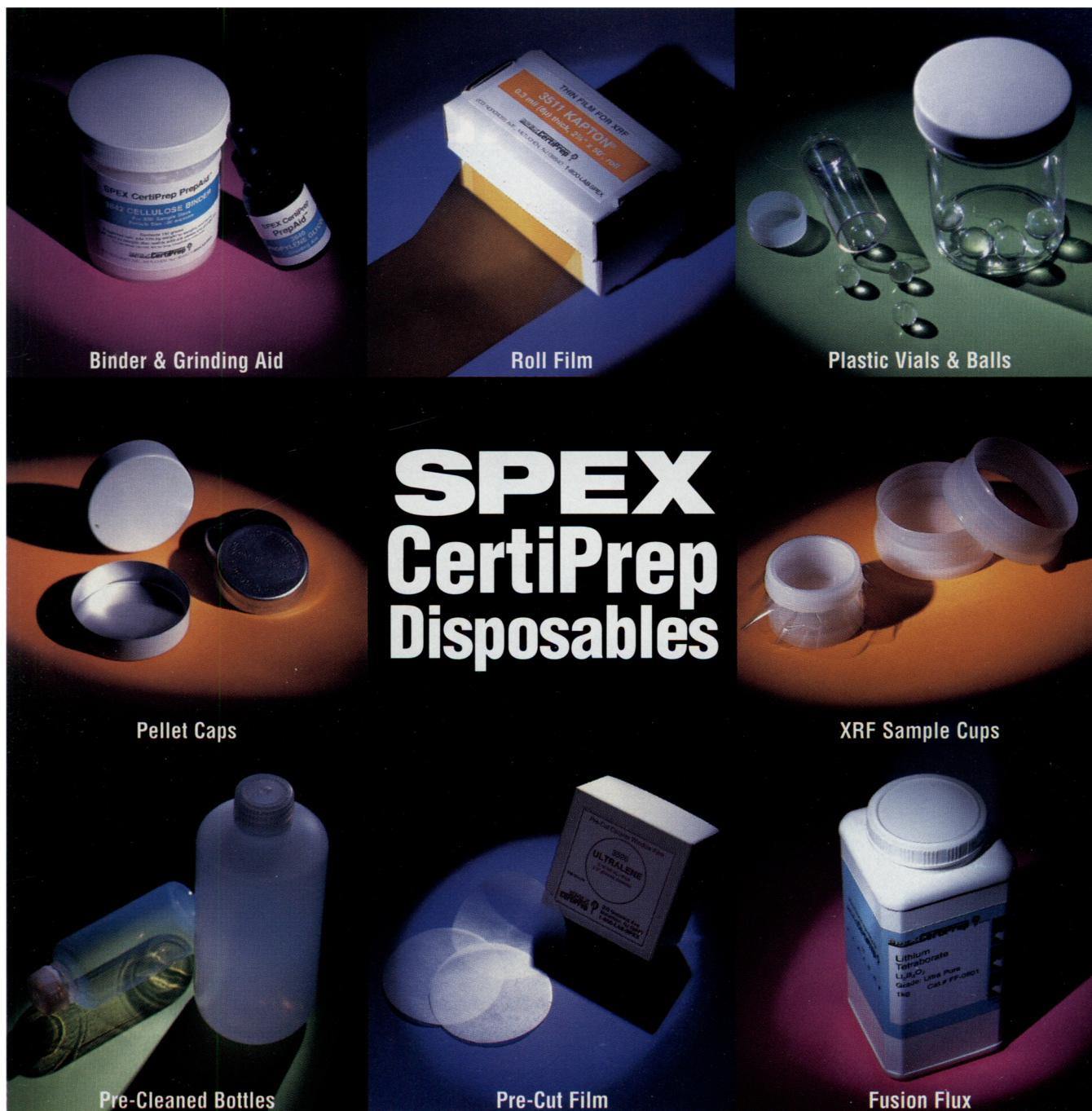
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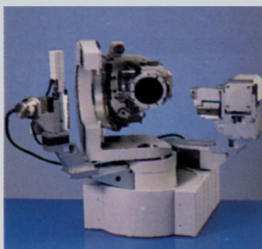


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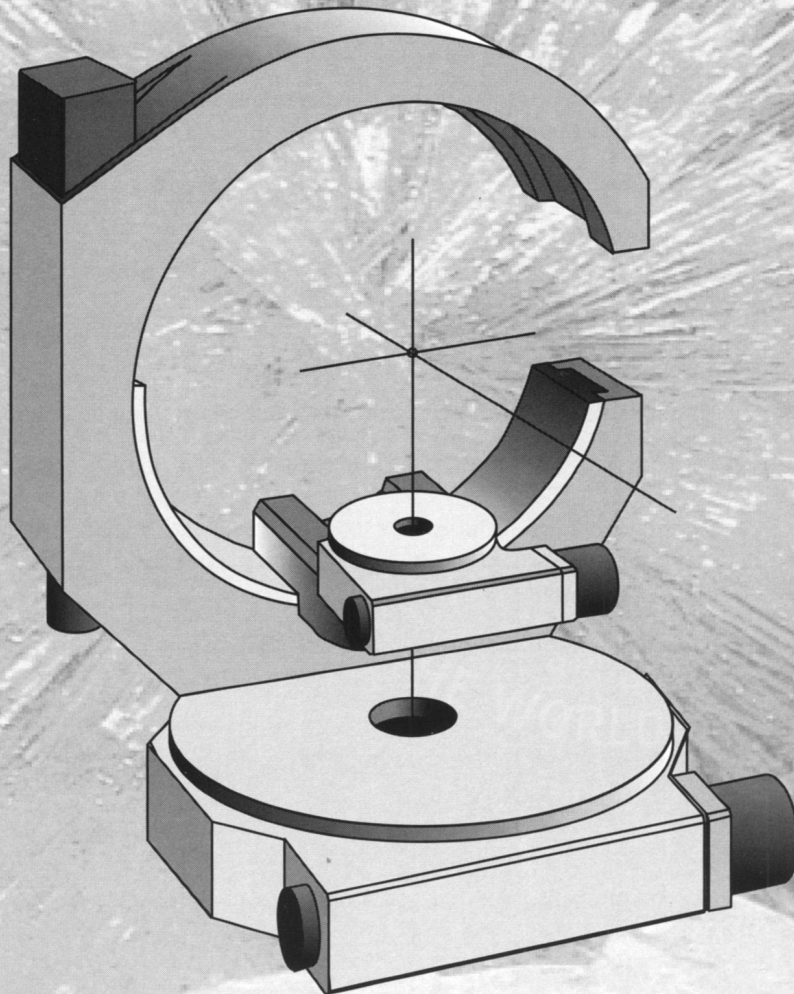
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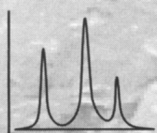
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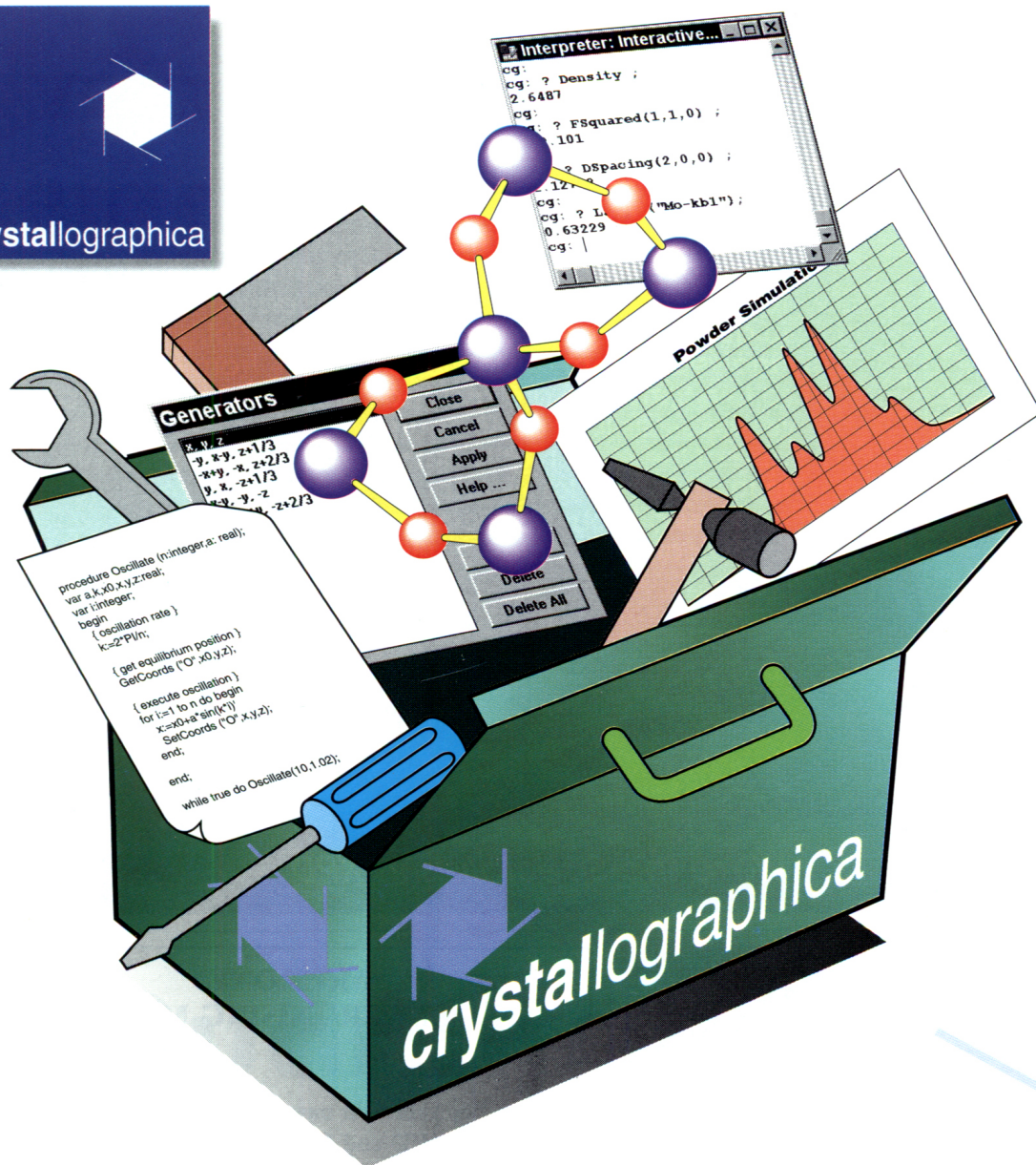
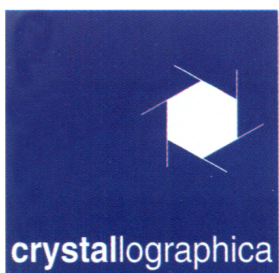


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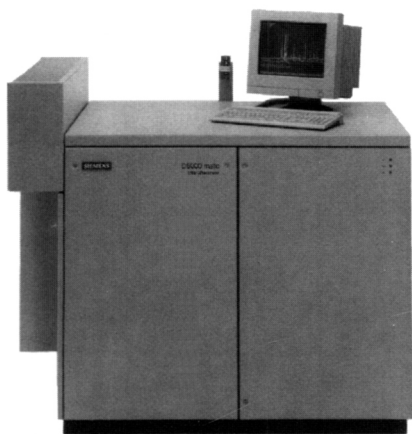
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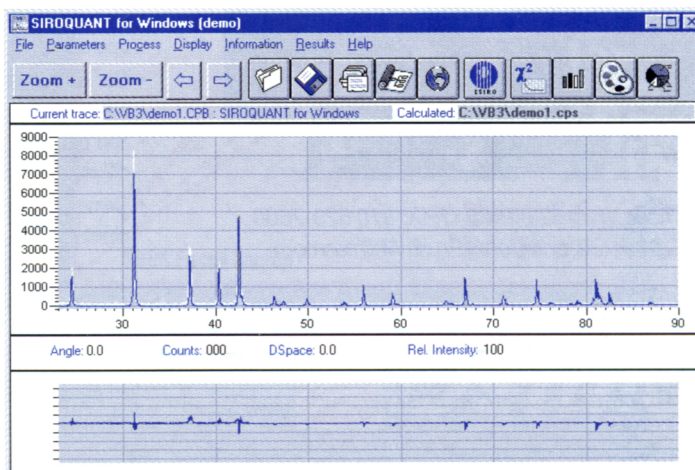
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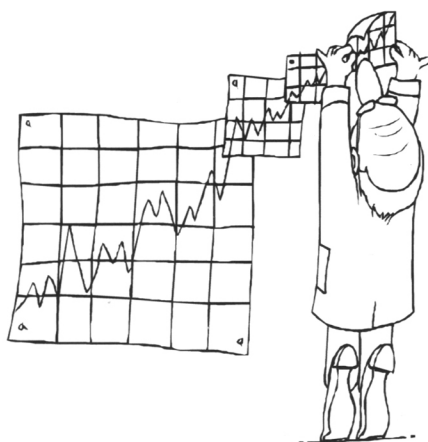
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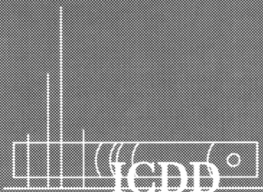
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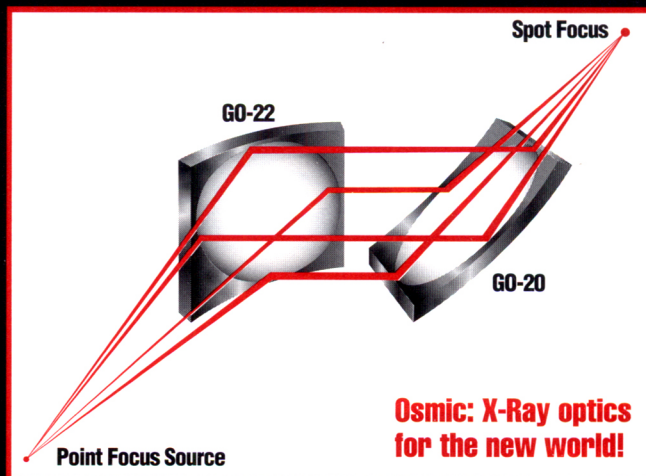
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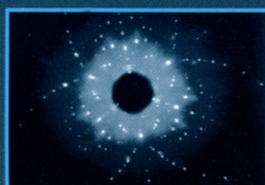
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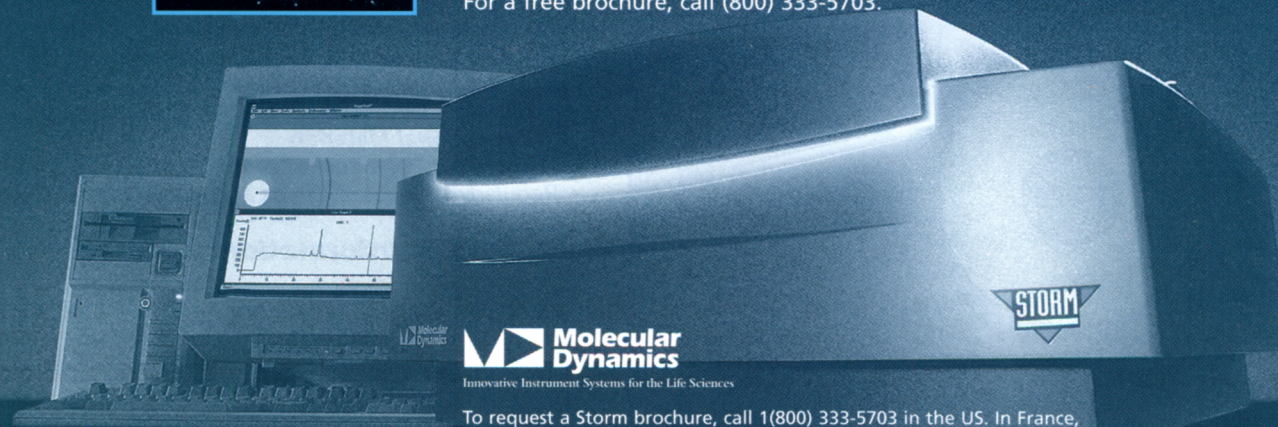
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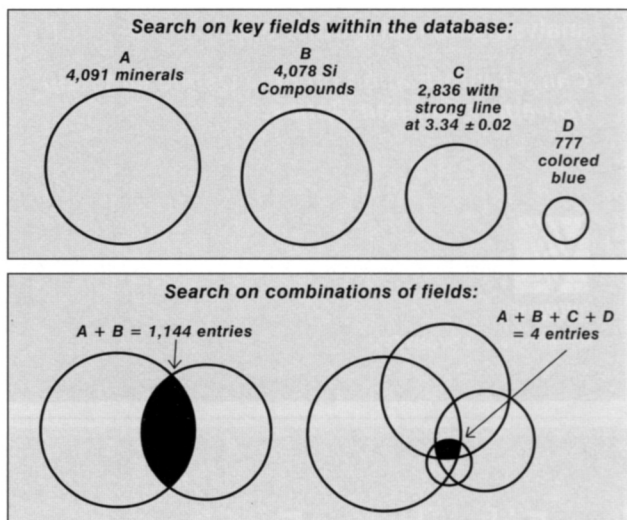
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