

Ei = Cryst	5.406 Refl (h,k,l)	keV EB [keV]	Θ B [°]	\int IR d Θ [μ rad]	Width [μ rad]	Ei cot Θ [meV/ μ rad]	Δ E [meV]	Δ Eg 2m, 50 μ m [meV]	Δ Et 2m, 50 μ m [meV]
Ge	(2,2,4)	5.368	83.22	302.1536	287.85	0.6426	184.99	8.03	185.16
Equiv. Refl.: (2,4,2), (4,2,2)									
Sapph	(2,2,3)	5.405	88.69	460.396	465.6	0.123	57.43	1.54	57.45
Equiv. Refl.: (2,2,-3), (2,-4,3), (2,-4,-3), (4,-2,3), (4,-2,-3), (-2,4,3), (-2,4,-3), (-2,-2,3), (-2,-2,-3), (-4,2,3), (-4,2,-3)									
LiNbO3	(0,0,-12)	5.366	83.04	196.924	187.2	0.66	123.64	8.25	123.91
LiNbO3	(0,0,12)	5.366	83.04	148.548	187.2	0.66	123.64	8.25	123.91
LiNbO3	(1,3,4)	5.323	79.95	85.24	96.6	0.958	92.61	11.98	93.38
Equiv. Refl.: (3,-4,4), (4,-3,4), (-1,4,4), (-3,-1,4), (-4,1,4)									
LiNbO3	(1,-4,-4)	5.323	79.95	78.064	96.6	0.958	92.61	11.98	93.38
Equiv. Refl.: (3,1,-4), (4,-1,-4), (-1,-3,-4), (-3,4,-4), (-4,3,-4)									
LiNbO3	(0,2,10)	5.266	76.93	75.953	83.2	1.255	104.37	15.69	105.55
Equiv. Refl.: (2,-2,10), (-2,0,10)									
Quartz	(-1,4,1)	5.377	84.06	73.139	71	0.562	39.92	7.03	40.53
Equiv. Refl.: (-1,-3,-1)									
Quartz	(-3,4,-1)	5.377	84.06	73.138	71	0.562	39.92	7.03	40.53
Quartz	(-3,-1,1)	5.377	84.06	73.134	71	0.562	39.92	7.03	40.53
Quartz	(4,-1,-1)	5.377	84.06	73.125	71	0.562	39.91	7.03	40.53
Equiv. Refl.: (4,-3,1)									
LiNbO3	(0,-2,-10)	5.266	76.93	68.855	83.2	1.255	104.37	15.69	105.55
Equiv. Refl.: (2,0,-10), (-2,2,-10)									
LiNbO3	(1,3,-2)	5.093	70.4	68.587	71.9	1.925	138.36	24.07	140.44
Equiv. Refl.: (-1,4,-2), (-3,-1,-2), (-4,1,-2)									
LiNbO3	(3,-4,-2)	5.093	70.4	68.586	71.9	1.925	138.36	24.07	140.44
Equiv. Refl.: (4,-3,-2)									
Quartz	(1,3,1)	5.377	84.06	64.9	71	0.562	39.92	7.03	40.53
Quartz	(1,-4,-1)	5.377	84.06	64.899	71	0.562	39.92	7.03	40.53
Quartz	(3,-4,1)	5.377	84.06	64.898	71	0.562	39.92	7.03	40.53
Quartz	(3,1,-1)	5.377	84.06	64.894	71	0.562	39.92	7.03	40.53
Quartz	(-4,1,1)	5.377	84.06	64.887	71	0.562	39.91	7.03	40.53
Equiv. Refl.: (-4,3,-1)									
LiNbO3	(1,-4,2)	5.093	70.4	64.491	71.9	1.925	138.36	24.07	140.44
Equiv. Refl.: (3,1,2), (4,-1,2), (-1,-3,2), (-3,4,2), (-4,3,2)									
LiNbO3	(1,2,8)	5.131	71.66	58.513	65	1.792	116.56	22.4	118.69
Equiv. Refl.: (2,-3,8), (3,-2,8), (-1,3,8), (-2,-1,8), (-3,1,8)									
LiNbO3	(-2,3,-8)	5.131	71.66	56.792	65	1.792	116.56	22.4	118.69
Equiv. Refl.: (-3,2,-8)									
LiNbO3	(1,-3,-8)	5.131	71.66	56.791	65	1.792	116.56	22.4	118.69
Equiv. Refl.: (2,1,-8), (3,-1,-8), (-1,-2,-8)									
Quartz	(4,-1,0)	5.253	76.35	44.185	42	1.313	55.13	16.41	57.52
Equiv. Refl.: (4,-3,0), (-1,4,0), (-1,-3,0), (-3,4,0), (-3,-1,0)									
Quartz	(1,3,0)	5.253	76.35	43.17	42	1.313	55.13	16.41	57.52
Equiv. Refl.: (1,-4,0), (3,1,0), (3,-4,0), (-4,1,0), (-4,3,0)									
Quartz	(-1,2,4)	5.236	75.61	39.285	36.9	1.387	51.2	17.34	54.06
Quartz	(-1,-1,-4)	5.236	75.61	39.284	36.9	1.387	51.2	17.34	54.06
Quartz	(-1,2,-4)	5.236	75.61	39.276	36.9	1.387	51.19	17.34	54.05
Quartz	(-1,-1,4)	5.236	75.61	39.27	36.9	1.387	51.18	17.34	54.04
Quartz	(2,-1,-4)	5.236	75.61	39.263	36.9	1.387	51.18	17.34	54.04

Ei = Cryst	5.406 Refl (h,k,l)	keV EB [keV]	ØB [°]	∫ IR dØ [µrad]	Width [µrad]	Ei cotØ [meV/µrad]	ΔE [meV]	ΔEg 2m, 50µm [meV]	ΔEt 2m, 50µm [meV]
Quartz	(2,-1,4)	5.236	75.61	39.262	36.9	1.387	51.18	17.34	54.03
Quartz	(1,1,4)	5.236	75.61	36.215	36.9	1.387	51.2	17.34	54.06
Equiv. Refl.: (1,-2,-4)									
Quartz	(1,-2,4)	5.236	75.61	36.21	36.9	1.387	51.19	17.34	54.05
Quartz	(1,1,-4)	5.236	75.61	36.204	36.9	1.387	51.18	17.34	54.04
Quartz	(-2,1,4)	5.236	75.61	36.198	36.9	1.387	51.18	17.34	54.04
Quartz	(-2,1,-4)	5.236	75.61	36.197	36.9	1.387	51.18	17.34	54.03
Quartz	(-3,2,3)	5.167	72.91	34.261	33	1.662	54.92	20.78	58.72
Quartz	(-3,1,-3)	5.167	72.91	34.26	33	1.662	54.92	20.78	58.72
Quartz	(2,-3,-3)	5.167	72.91	34.254	33	1.662	54.91	20.78	58.71
Quartz	(2,1,3)	5.167	72.91	34.251	33	1.662	54.91	20.78	58.71
Quartz	(1,-3,3)	5.167	72.91	34.25	33	1.662	54.91	20.78	58.71
Quartz	(1,2,-3)	5.167	72.91	34.248	33	1.662	54.9	20.78	58.7
Quartz	(3,-1,3)	5.167	72.91	33.745	33	1.662	54.92	20.78	58.72
Equiv. Refl.: (3,-2,-3)									
Quartz	(-2,3,3)	5.167	72.91	33.739	33	1.662	54.91	20.78	58.71
Quartz	(-2,-1,-3)	5.167	72.91	33.736	33	1.662	54.91	20.78	58.71
Quartz	(-1,3,-3)	5.167	72.91	33.734	33	1.662	54.91	20.78	58.71
Quartz	(-1,-2,3)	5.167	72.91	33.732	33	1.662	54.9	20.78	58.7
Sapph	(2,2,0)	5.211	74.58	31.635	33.1	1.491	49.36	18.64	52.76
Equiv. Refl.: (2,-4,0), (4,-2,0), (-2,4,0), (-2,-2,0), (-4,2,0)									
Quartz	(3,-4,-1)	5.377	84.06	18.743	25	0.562	14.06	7.03	15.72
Quartz	(3,1,1)	5.377	84.06	18.742	25	0.562	14.06	7.03	15.72
Quartz	(-4,1,-1)	5.377	84.06	18.738	25	0.562	14.06	7.03	15.72
Quartz	(-4,3,1)	5.377	84.06	18.736	25	0.562	14.06	7.03	15.72
Quartz	(1,3,-1)	5.377	84.06	18.734	25	0.562	14.06	7.03	15.72
Equiv. Refl.: (1,-4,1)									
Quartz	(4,-2,1)	5.176	73.22	16.473	18.4	1.63	30	20.38	36.27
Equiv. Refl.: (4,-2,-1), (-2,4,-1), (-2,-2,1)									
Quartz	(-2,4,1)	5.176	73.22	16.469	18.4	1.63	30	20.38	36.26
Equiv. Refl.: (-2,-2,-1)									
Quartz	(-4,2,1)	5.176	73.22	15.641	18.4	1.63	30	20.38	36.27
Quartz	(2,2,-1)	5.176	73.22	15.64	18.4	1.63	30	20.38	36.27
Equiv. Refl.: (2,-4,1), (-4,2,-1)									
Quartz	(2,-4,-1)	5.176	73.22	15.637	18.4	1.63	30	20.38	36.26
Quartz	(2,2,1)	5.176	73.22	15.636	18.4	1.63	30	20.38	36.26
Quartz	(-3,4,1)	5.377	84.06	14.397	25	0.562	14.06	7.03	15.72
Quartz	(-3,-1,-1)	5.377	84.06	14.396	25	0.562	14.06	7.03	15.72
Quartz	(4,-1,1)	5.377	84.06	14.392	25	0.562	14.06	7.03	15.72
Quartz	(4,-3,-1)	5.377	84.06	14.39	25	0.562	14.06	7.03	15.72
Quartz	(-1,4,-1)	5.377	84.06	14.389	25	0.562	14.06	7.03	15.72
Quartz	(-1,-3,1)	5.377	84.06	14.388	25	0.562	14.06	7.03	15.72
Quartz	(3,-1,-3)	5.167	72.91	13.701	15.4	1.662	25.53	20.78	32.92
Quartz	(3,-2,3)	5.167	72.91	13.7	15.4	1.662	25.53	20.78	32.92
Quartz	(-1,-2,-3)	5.167	72.91	13.688	15.3	1.662	25.51	20.78	32.9
Quartz	(-1,3,3)	5.167	72.91	13.686	15.3	1.662	25.51	20.78	32.9
Equiv. Refl.: (-2,3,-3)									
Quartz	(-2,-1,3)	5.167	72.91	13.684	15.3	1.662	25.51	20.78	32.9
Quartz	(-3,1,3)	5.167	72.91	11.633	15.4	1.662	25.53	20.78	32.92
Equiv. Refl.: (-3,2,-3)									

Ei =	5.406	keV						ΔEg	ΔEt
Cryst	Refl	EB	ΘB	$\int IR d\Theta$	Width	Ei cotΘ	ΔE	2m, 50μm	2m, 50μm
	(h,k,l)	[keV]	[°]	[μrad]	[μrad]	[meV/μrad]	[meV]	[meV]	[meV]
Quartz	(1,2,3)	5.167	72.91	11.621	15.3	1.662	25.51	20.78	32.9
Quartz	(1,-3,-3)	5.167	72.91	11.619	15.3	1.662	25.51	20.78	32.9
Quartz	(2,-3,3)	5.167	72.91	11.618	15.3	1.662	25.51	20.78	32.9
Quartz	(2,1,-3)	5.167	72.91	11.616	15.3	1.662	25.51	20.78	32.9
Sapph	(1,2,-7)	5.197	74	9.439	14.1	1.55	21.9	19.37	29.23
	Equiv. Refl.: (1,-3,7), (2,1,7), (2,-3,-7), (3,-1,7), (3,-2,-7), (-1,3,-7), (-1,-2,7), (-2,3,7), (-2,-1,-7), (-3,1,-7), (-3,2,7)								
Sapph	(0,3,6)	5.345	81.39	4.837	11.4	0.818	9.36	10.23	13.86
	Equiv. Refl.: (0,3,-6), (0,-3,6), (0,-3,-6), (3,0,6), (3,0,-6), (3,-3,6), (3,-3,-6), (-3,0,6), (-3,0,-6), (-3,3,6), (-3,3,-6)								