

Table 3. List of elemental solids with values of Z or $Z - 1.65$ (see text), Z_{eff} from Eq. (5)], errors in the f-sum rule, values of P_{eff} from Eq. (6), and errors in the KK-sum rule. Values of Z_{eff} and P_{eff} were determined with $\Delta E_{\text{max}} = 30$ keV.

Element	Z or $Z - 1.65$	Z_{eff}	Error in f-sum rule (%)	P_{eff}	Error in KK-sum rule (%)
Li	3	3.06	2.1	1.018	1.8
Be	4	4.09	2.4	1.066	6.6
C (graphite)	6	6.29	4.8	1.077	7.7
C (diamond)	6	5.97	-0.5	0.998	-0.2
C (glassy)	6	5.77	-3.9	0.998	-0.2
Na	11	11.13	1.2	1.035	3.5
Mg	12	13.28	10.6	0.974	-2.6
Al	13	13.12	0.9	1.017	1.7
Si	14	14.10	0.7	0.959	-4.1
K	19	17.72	-6.8	0.840	-16.0
Sc	21	22.90	9.0	0.925	-7.5
Ti	22	21.90	-0.5	1.023	2.3
V	23	22.81	-0.8	1.013	1.3
Cr	24	22.30	-7.1	1.059	5.9
Fe	26	23.90	-8.1	1.068	6.8
Co	27	26.55	-1.7	1.012	1.2
Ni	28	27.32	-2.4	1.065	6.5
Cu	29	28.55	-1.5	0.996	-0.4
Ge	32	32.65	2.0	1.042	4.2
Y	39	37.76	-3.2	0.902	-9.8
Nb	41	37.90	-7.6	0.854	-14.6
Mo	42	39.53	-5.9	0.989	-1.1
Ru	44	41.43	-5.9	1.092	9.2
Rh	45	44.11	-2.0	1.126	12.6
Pd	46	44.94	-2.3	1.126	12.6
Ag	47	49.97	6.3	1.005	0.5
In	49	47.25	-3.6	0.917	-8.3
Sn	48.35	48.64	0.6	0.769	-23.1
Cs	53.35	49.33	-7.5	1.004	0.4

Gd	62.35	62.27	-0.1	1.026	2.6
Tb	63.35	64.89	2.4	1.066	6.6
Dy	64.35	66.42	3.2	0.989	-1.1
Hf	70.35	69.50	-1.2	0.918	-8.2
Ta	71.35	70.65	-1.0	1.025	2.5
W	72.35	71.39	-1.3	1.013	1.3
Re	73.35	72.10	-1.7	1.072	7.2
Os	74.35	71.42	-3.9	1.040	4.0
Ir	75.35	73.55	-2.4	1.099	9.9
Pt	76.35	74.87	-1.9	1.113	11.3
Au	77.35	75.99	-1.8	1.089	8.9
Bi	81.35	83.58	2.7	0.980	-2.0
