Table 4.2.2.5. *Wavelengths of L-emission lines and L-absorption edges in Å; see text for explanation of typefaces*

Numbers in parentheses are standard uncertainties in the least significant figures.

Z	Symbol	A	$L\alpha_2$	$L\alpha_1$	$L\beta_1$	$L\beta_2$	$L_{\rm I}$ abs. edge	$L_{\rm II}$ abs. edge	$L_{\rm III}$ abs. edge
20	Ca						*28.275(32)*	*35.384(40)*	*35.7704(68)*
			36.331(30)	36.331(30)	35.941(30)			35.131(15)	35.491(15)
21	Sc		*30.947(46)*		*30.587(47)*		*24.896(15)*	*30.718(17)*	*31.109(36)*
			31.350(44)	31.350(44)	31.020(30)				
22	Ti		*27.215(37)*		*26.843(37)*		*22.099(24)*	*26.953(14)*	*27.3105(36)*
			27.420(30)	27.420(30)	27.050(30)			27.290(15)	27.290(15)
23	V		*24.143(30)*		*23.764(30)*		*19.779(19)*	*23.8561(89)*	*24.206(10)*
			24.250(44)	24.250(44)	23.880(59)				
24	Cr		*21.640(24)*	*21.490(11)*	*21.276(24)*		*17.804(15)*	*21.246(18)*	*21.5867(49)*
			21.640(44)	21.640(44)	21.270(15)		16.70(15)	17.90(15)	20.70(15)
25	Mn		*19.390(20)*	*19.359(21)*	*19.036(20)*		*16.113(19)*	*19.0781(57)*	*19.4063(43)*
			19.450(15)	19.450(15)	19.110(30)				
26	Fe		*17.525(17)*	*17.503(17)*	*17.194(17)*		*14.611(34)*	*17.2248(92)*	*17.5402(35)*
			17.590(30)	17.590(30)	17.260(15)			17.2023(74)	17.5253(74)
27	Co		*15.922(14)*	*15.905(15)*	*15.610(14)*		*13.4000(86)*	*15.627(14)*	*15.9290(44)*
			15.9722(89)	15.9722(89)	15.666(12)			15.6182(74)	15.9152(74)
28	Ni		*14.532(12)*	*14.520(12)*	*14.236(12)*		*12.295(13)*	*14.251(23)*	*14.5396(57)*
			14.5612(44)	14.5612(44)	14.2712(89)			14.2422(74)	14.5252(74)
29	Cu		*13.341(10)*	*13.336(11)*	*13.063(10)*		*11.292(16)*	*13.016(14)*	*13.2934(64)*
			13.3362(44)	13.3362(44)	13.0532(44)			13.0142(15)	13.2882(15)
30	Zn		*12.2529(90)*	*12.2489(90)*	*11.9819(93)*		*10.361(12)*	*11.8652(66)*	*12.134(14)*
			12.2542(44)	12.2542(44)	11.9832(44)		13.060(15)	11.8622(15)	12.1312(15)
31	Ga		*11.2916(77)*	*11.2858(78)*	*11.0226(78)*		*9.518(11)*	*10.8414(29)*	*11.1040(29)*
			11.2922(15)	11.2922(15)	11.0232(30)		9.5171(74)	10.8282(74)	11.1002(15)
32	Ge		*10.4371(68)*	*10.4306(68)*	*10.1717(69)*		*8.775(12)*	*9.9340(27)*	*10.1849(46)*
			10.4363(12)	10.4363(12)	10.1752(15)		8.7731(15)	9.9241(15)	10.1872(15)
33	As		*9.6744(60)*	*9.6680(60)*	*9.4126(59)*		*8.092(13)*	*9.1182(17)*	*9.3649(29)*
			9.6710(12)	9.6710(12)	9.4142(12)		8.1071(15)	9.1251(15)	9.3671(15)
34	Se		*8.9914(52)*	*8.9852(52)*	*8.7335(52)*		*7.498(13)*	*8.4105(58)*	*8.64459(77)*
			8.99013(74)	8.99013(74)	8.73593(74)		7.5031(15)	8.4071(15)	8.6461(15)
35	Br		*8.3776(46)*	*8.3715(46)*	*8.1233(46)*		*6.958(14)*	*7.7669(35)*	*7.9991(30)*
			8.37473(74)	8.37473(74)	8.12522(74)		6.9591(74)	7.7531(74)	7.9841(74)
36	Kr		*7.8242(41)*	*7.8180(41)*	*7.5736(40)*		*6.4561(41)*	*7.1630(21)*	*7.3841(17)*
			7.82032(13)	**7.82032(13)**	**7.574441(98)**		6.470(15)	7.1681(15)	7.3921(15)
37	Rb		*7.3226(37)*	*7.3164(36)*	*7.0749(36)*		*6.0010(11)*	*6.6449(59)*	*6.8643(67)*
			7.32521(44)	7.31841(30)	7.07601(44)		6.0081(74)	6.6441(15)	6.8621(15)
38	Sr		*6.8674(33)*	*6.8610(32)*	*6.6224(33)*		*5.5945(16)*	*6.17624(70)*	*6.38937(84)*
			6.86980(44)	6.86290(30)	6.62400(44)		5.5921(74)	6.1731(15)	6.3871(15)
39	Y		*6.4539(30)*	*6.4466(29)*	*6.2110(29)*		*5.22968(53)*	*5.75742(82)*	*5.9658(15)*
			6.45590(44)	6.44890(30)	6.21209(44)		5.2171(74)	5.7561(15)	5.9621(15)
40	Zr		*6.0766(27)*	*6.0684(26)*	*5.8357(26)*		*4.89881(41)*	*5.3773(15)*	*5.5816(15)*
			6.0766(27)	**6.070250(79)**	**5.836214(76)**	5.58638(44)*	4.8791(74)	5.3781(15)	5.5791(15)
41	Nb		*5.7326(24)*	*5.7226(23)*	*5.4931(23)*		*4.59975(43)*	*5.03480(63)*	*5.23529(98)*
			5.73199(44)	5.72439(30)	5.49238(44)	5.23798(44)*	4.5751(74)	5.0311(15)	5.2301(15)
42	Mo		*5.4151(22)*	*5.4054(21)*	*5.1778(21)*	*4.91857(74)*	*4.32423(40)*	*4.72145(60)*	*4.9179(31)*
			5.41445(12)	5.40663(12)	5.17716(12)	4.92327(30)*	4.3041(74)	4.7191(15)	4.9131(15)
43	Tc		*5.1228(20)*	*5.1139(19)*	*4.8880(19)*	*4.6341(13)*		*4.4368(13)*	*4.62991(94)*
				5.11488(44)	4.8874(12)		4.0581(74)	4.4361(15)	4.6301(15)
44	Ru		*4.8541(18)*	*4.8449(17)*	*4.6210(17)*	*4.3681(13)*	*3.8443(16)*	*4.17814(78)*	*4.36776(32)*
			4.85388(10)	4.845823(74)	4.620649(44)	4.37187(30)*	3.8351(74)	4.1801(15)	4.3691(15)
45	Rh		*4.6055(16)*	*4.5966(16)*	*4.3744(16)*	*4.1277(12)*	*3.6334(17)*	*3.94053(55)*	*4.12730(50)*
			4.60552(13)	4.59750(13)	4.374206(59)	4.13106(30)*	3.6291(74)	3.94256(74)	4.12996(74)
46	Pd		*4.3753(15)*	*4.3672(15)*	*4.1461(14)*	*3.9088(10)*	*3.43948(61)*	*3.72251(52)*	*3.90655(62)*
			4.37595(10)	4.367736(74)	4.146282(74)	3.908929(59)*	3.4371(15)	3.72286(15)	3.90746(15)
47	Ag		*4.1623(14)*	*4.1541(13)*	*3.9347(13)*	*3.7034(10)*	*3.25639(29)*	*3.51704(26)*	*3.69817(53)*
			4.163002(74)	4.154492(44)	3.934789(44)	3.703406(44)*	3.25645(15)	3.51645(15)	3.69996(15)
48	Cd		*3.9644(13)*	*3.9560(12)*	*3.7382(12)*	*3.51355(97)*	*3.08443(17)*	*3.32528(29)*	*3.50348(45)*
			3.965020(89)	3.956409(59)	3.738286(59)	3.514133(59)*	3.08495(15)	3.32575(15)	3.50475(15)
49	In		*3.7802(12)*	*3.7716(11)*	*3.5553(11)*	*3.33796(83)*	*2.92533(19)*	*3.14784(47)*	*3.32322(42)*
			3.780787(89)	3.771977(59)	3.555363(59)	3.338430(44)*	2.92604(15)	3.14735(15)	3.32375(15)
50	Sn		*3.6084(11)*	*3.5997(10)*	*3.38472(100)*	*3.17475(77)*	*2.776792(71)*	*2.98309(56)*	*3.15521(70)*
			3.606964(59)	3.599994(44)	3.384921(44)	3.175098(44)*	2.77694(15)	2.98234(15)	3.15575(15)

* These values are for the unresolved $L\beta_2$ and $L\beta_{15}$ emission lines.

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Table 4.2.2.5. *Wavelengths of L-emission lines and L-absorption edges in Å (cont.)*

Z	Symbol	A	$L\alpha_2$	$L\alpha_1$	$L\beta_1$	$L\beta_2$	$L_{\rm I}$ abs. edge	$L_{\rm II}$ abs. edge	$L_{\rm III}$ abs. edge
51	Sb		*3.44794(99)*	*3.43913(93)*	*3.22551(92)*	*3.02325(67)*	*2.638437(69)*	*2.82990(51)*	*2.99986(66)*
			3.448452(89)	3.439462(59)	3.225718(59)	3.023395(44)*	2.63884(15)	2.82944(74)	3.00035(15)
52	Te		*3.29788(92)*	*3.28894(86)*	*3.07663(85)*	*2.88209(61)*	*2.50998(50)*	*2.687685(87)*	*2.85523(35)*
			3.29851(13)	3.289249(89)	3.076816(89)	2.88221(12)*	2.50994(15)	2.68794(15)	2.85554(15)
53	I		*3.15734(85)*	*3.14828(81)*	*2.93720(78)*	*2.75031(54)*	*2.38965(37)*	*2.55532(31)*	*2.72067(32)*
			3.157957(89)	3.148647(89)	2.937484(89)	2.75057(12)*	2.38804(74)	2.55424(74)	2.71964(74)
54	Xe		*3.02568(78)*	*3.01640(76)*	*2.80659(69)*	*2.62740(47)*	*2.273869(70)*	*2.427862(95)*	*2.590303(89)*
			3.025940(22)	**3.016582(15)**	**2.806553(19)**		2.27373(15)	2.42924(15)	2.59264(15)
55	Cs		*2.90167(73)*	*2.89237(69)*	*2.68362(66)*	*2.51216(47)*	*2.1676(29)*	*2.3135(17)*	*2.47326(16)*
			2.90204(30)	2.89244(30)	2.68374(30)	2.51184(30)*	2.16733(74)	2.31393(15)	2.47404(15)
56	Ba		*2.78522(68)*	*2.77580(64)*	*2.56812(61)*	*2.40421(26)*	*2.0697(15)*	*2.20482(12)*	*2.363082(97)*
			2.785572(74)	2.775992(74)	2.568249(74)	2.404386(89)*	2.06783(74)	2.20483(15)	2.36294(15)
57	La		*2.67563(64)*	*2.66607(60)*	*2.45941(57)*	*2.30307(24)*	*1.97705(28)*	*2.10317(10)*	*2.25958(20)*
			2.675383(60)	2.665740(74)	2.458947(74)	2.303312(98)*	1.97803(74)	2.10533(74)	2.2610(15)
58	Ce		*2.57122(59)*	*2.56108(56)*	*2.35598(53)*	*2.20843(21)*	*1.89320(71)*	*2.01084(14)*	*2.16586(39)*
			2.57059(18)	2.56163(17)	2.35580(18)	2.20900(17)*	1.89343(74)	2.01243(74)	2.1660(15)
59	Pr		*2.47329(55)*	*2.46280(52)*	*2.25890(49)*	*2.11936(20)*	*1.81477(33)*	*1.92607(36)*	*2.07945(22)*
			2.47294(44)	2.46304(30)	2.25883(44)	2.11943(59)*	1.81413(74)	1.92553(74)	2.07913(74)
60	Nd		*2.38081(51)*	*2.36999(48)*	*2.16724(45)*	*2.03554(18)*	*1.73904(18)*	*1.84373(16)*	*1.99616(19)*
			2.38079(52)	**2.370526(16)**	**2.167008(19)**	2.035448(88)*	1.73903(15)	1.84403(15)	1.99673(15)
61	Pm		*2.29340(48)*	*2.28227(45)*	*2.08060(42)*	*1.95675(18)*			
			2.29263(59)	2.28223(44)	2.07973(59)	1.95593(89)*	1.66743(74)	1.76763(74)	1.91913(15)
62	Sm		*2.21054(48)*	*2.19926(42)*	*1.99850(42)*	*1.88225(17)*	*1.60201(12)*	*1.69495(13)*	*1.84534(42)*
			2.210430(24)	**2.199873(13)**	**1.998432(30)**	1.882206(41)*	1.60022(15)	1.69533(15)	1.84573(15)
63	Eu		*2.13214(42)*	*2.12081(40)*	*1.92080(37)*	*1.81237(16)*	*1.54065(17)*	*1.62830(21)*	*1.77767(16)*
			2.13156(17)	2.120673(95)	1.92053(17)	1.81215(17)*	1.53812(15)	1.62712(15)	1.77613(15)
64	Gd		*2.05817(40)*	*2.04670(37)*	*1.84744(34)*	*1.74582(14)*	*1.47922(25)*	*1.56264(23)*	*1.71092(21)*
			2.05783(30)	2.04683(30)	1.84683(30)	1.74553(30)*	1.47842(15)	1.56322(15)	1.71173(15)
65	Tb		*1.98699(37)*	*1.97586(35)*	*1.77701(32)*	*1.68377(14)*	*1.42285(98)*	*1.50195(80)*	*1.65023(44)*
			1.98753(30)	1.97653(30)	1.77683(44)	1.68303(30)*	1.42232(15)	1.50232(15)	1.64972(15)
66	Dy		*1.91986(35)*	*1.90883(33)*	*1.71052(30)*	*1.62497(12)*	*1.37058(41)*	*1.44500(20)*	*1.59241(33)*
			1.919939(44)	1.908839(44)	1.71065(10)	1.62371(10)*	1.36922(15)	1.44452(15)	1.59162(15)
67	Ho		*1.85606(33)*	*1.84511(31)*	*1.64732(28)*	*1.56818(11)*	*1.31957(28)*	*1.39091(27)*	*1.53614(34)*
			1.856472(15)	**1.845092(17)**	**1.647484(32)**	1.567168(50)*	1.31902(15)	1.39052(15)	1.53682(15)
68	Er		*1.79537(31)*	*1.78449(29)*	*1.58720(26)*	*1.51486(10)*	*1.27145(14)*	*1.33792(26)*	*1.48318(27)*
			1.795701(45)	**1.784481(20)**	**1.587466(86)**	1.51401(13)*	1.27062(15)	1.33862(15)	1.48352(15)
69	Tm		*1.73758(29)*	*1.72677(27)*	*1.52995(24)*	*1.464210(95)*	*1.22612(28)*	*1.28942(27)*	*1.43366(27)*
			1.738003(19)	**1.7267720(70)**	**1.5302410(70)**	1.46402(30)*	1.22502(15)	1.28922(15)	1.43342(15)
70	Yb		*1.68248(29)*	*1.67177(26)*	*1.47538(24)*	*1.416041(89)*	*1.18266(60)*	*1.243391(70)*	*1.3858(10)*
			1.682875(74)	1.671915(59)	1.475672(74)	1.415521(74)*	1.18182(15)	1.24282(15)	1.38622(15)
71	Lu		*1.63031(26)*	*1.61949(24)*	*1.42361(21)*	*1.370061(85)*	*1.14043(22)*	*1.197954(60)*	*1.341053(93)*
			1.630314(74)	1.619534(44)	1.423611(44)	1.370141(44)	1.14022(15)	1.19852(15)	1.34052(15)
72	Hf		*1.58049(25)*	*1.56959(23)*	*1.37419(20)*	*1.326241(78)*	*1.10009(24)*	*1.1550(10)*	*1.2972(14)*
			1.580484(74)	1.569604(74)	1.374121(74)	1.326410(74)	1.1002640(49)	1.1548587(22)	1.2971383(68)
73	Ta		*1.53290(23)*	*1.52194(22)*	*1.32697(19)*	*1.282314(74)*	*1.06152(30)*	*1.11368(14)*	*1.25506(34)*
			1.532953(30)	1.521993(30)	1.327000(44)	1.284559(30)	1.06132(15)	1.11372(15)	1.25532(15)
74	W		*1.48748(22)*	*1.47642(21)*	*1.28188(18)*	*1.244447(70)*	*0.91604(28)*	*1.07431(38)*	*1.21543(99)*
			1.487452(30)	1.4763112(95)	1.281812(13)	1.2443048(98)	1.024685(74)	1.07452(15)	1.21552(15)
75	Re		*1.44399(21)*	*1.43288(19)*	*1.23872(17)*	*1.206487(67)*	*0.98968(21)*	*1.03670(20)*	*1.17673(27)*
			1.443982(74)	1.432922(59)	1.238599(30)	1.206618(59)	0.98941(15)	1.03712(15)	1.17732(15)
76	Os		*1.40238(20)*	*1.39121(18)*	*1.19742(16)*	*1.170095(62)*	*0.95583(36)*	*1.000786(57)*	*1.14002(23)*
			1.402361(74)	1.391231(74)	1.197288(74)	1.16981(12)	0.95581(15)	1.00142(15)	1.14082(15)
77	Ir		*1.36252(19)*	*1.35130(19)*	*1.15786(15)*	*1.135812(72)*	*0.9240(12)*	*0.96675(18)*	*1.10535(22)*
			1.362520(74)	1.351300(44)	1.157827(44)	1.135337(44)	0.92361(15)	0.96711(15)	1.10582(15)
78	Pt		*1.32434(18)*	*1.31308(17)*	*1.11995(14)*	*1.102006(63)*	*0.8933(14)*	*0.93395(27)*	*1.07200(36)*
			1.324340(30)	1.313060(44)	1.119917(30)	1.102017(44)	0.893213(19)	0.9341861(21)	1.0722721(19)
79	Au		*1.28773(17)*	*1.27643(16)*	*1.08359(13)*	*1.070479(53)*	*0.86383(45)*	*0.90263(12)*	*1.04009(27)*
			1.287739(44)	1.276419(44)	1.083546(44)	1.070236(44)	0.863683(30)	0.9027409(46)	1.0401625(52)
80	Hg		*1.25261(16)*	*1.24126(15)*	*1.04869(13)*	*1.039584(51)*	*0.83546(43)*	*0.87238(26)*	*1.00919(30)*
			1.25266(10)	1.241219(74)	1.048696(74)	1.03977(10)	0.83531(15)	0.87221(15)	1.00912(15)
81	Tl		*1.21890(15)*	*1.20750(14)*	*1.01519(12)*	*1.01029(20)*	*0.80795(15)*	*0.843512(77)*	*0.97953(25)*
			1.218768(44)	1.207408(59)	1.015145(59)	1.010325(44)	0.80811(15)	0.84341(15)	0.97931(15)
82	Pb		*1.18651(15)*	*1.17507(14)*	*0.98298(11)*	*0.98221(19)*	*0.78172(24)*	*0.81575(18)*	*0.95113(22)*
			1.186498(74)	1.175028(30)	0.982925(44)	0.98222(10)	0.7818404(49)	0.8157395(16)	0.9511590(22)

* These values are for the unresolved $L\beta_2$ and $L\beta_{15}$ emission lines.

Table 4.2.2.5. *Wavelengths of L-emission lines and L-absorption edges in Å (cont.)*

Z	Symbol	A	$L\alpha_2$	$L\alpha_1$	$L\beta_1$	$L\beta_2$	$L_{\rm I}$ abs. edge	$L_{\rm II}$ abs. edge	$L_{\rm III}$ abs. edge
83	Bi	209	*1.15540(14)*	*1.14390(13)*	*0.95205(11)*	*0.95526(18)*	*0.75649(58)*	*0.789102(88)*	*0.92387(11)*
			1.155377(15)	1.143877(30)	0.951992(13)	0.955194(59)	0.75711(15)	0.78871(15)	0.92341(15)
84	Po	209	*1.12549(13)*	*1.11393(12)*	*0.92228(10)*	*0.92932(18)*	*0.7332(13)*	*0.76325(13)*	*0.897554(85)*
			1.125497(74)	1.113877(59)	0.92201(30)	0.929384(74)			
85	At	210	*1.09670(13)*	*1.08510(12)*	*0.893639(96)*	*0.90444(17)*		*0.73868(13)*	
			1.096726(74)	1.085016(74)	0.89350(13)				
86	Rn	222	*1.06900(12)*	*1.05735(11)*	*0.866054(91)*	*0.88055(15)*		*0.71511(13)*	
			1.069006(74)	1.057246(74)	0.86606(13)				
87	Fr	223	*1.04232(11)*	*1.03063(11)*	*0.839482(86)*	*0.85751(15)*		*0.69240(13)*	*0.8251(27)*
			1.042316(74)	1.030505(74)	0.83941(13)	0.8580(30)			
88	Ra	226	*1.01662(11)*	*1.00489(10)*	*0.813866(82)*	*0.83533(16)*	*0.64449(15)*	*0.67077(12)*	*0.802768(44)*
			1.016575(74)	1.004745(74)	0.813762(74)	0.835383(74)	0.64451(15)	0.67071(15)	0.80281(15)
89	Ac	227	*0.99185(11)*	*0.980070(98)*	*0.789163(78)*	*0.81406(14)*		*0.64970(13)*	
			0.991795(74)	0.979945(74)	0.78904(13)				
90	Th	232	*0.96798(10)*	*0.956154(94)*	*0.765343(75)*	*0.79354(13)*	*0.60569(11)*	*0.62966(11)*	*0.760637(99)*
			0.9679082(23)	0.9560826(15)	0.7652610(14)	0.7935516(15)	0.60591(15)	0.62991(15)	0.76071(15)
91	Pa	231	*0.944896(96)*	*0.933002(90)*	*0.742301(71)*	*0.77321(12)*	*0.58759(12)*	*0.610354(92)*	*0.740958(97)*
			0.944834(74)	0.932854(74)	0.742331(74)	0.77371(15)			
92	U	238	*0.922622(93)*	*0.910674(86)*	*0.720056(68)*	*0.75462(12)*	*0.569885(39)*	*0.591930(66)*	*0.722319(52)*
			0.922572(13)	0.910653(13)	0.719995(12)	0.754692(13)	0.56951(15)	0.59191(15)	0.72231(15)
93	Np	237	*0.901230(88)*	*0.889223(83)*	*0.698624(65)*	*0.73623(11)*			
			0.901059(13)	0.889141(13)	0.698488(13)	0.736241(13)	0.55239(34)	0.57368(37)	0.704136(20)
94	Pu	244	*0.880355(85)*	*0.868290(79)*	*0.677776(60)*	*0.71848(11)*			
							0.53651(15)	0.55721(15)	0.68671(15)
95	Am	243	*0.860288(84)*	*0.848190(81)*	*0.657686(59)*	*0.70134(10)*			
96	Cm	248	*0.840918(80)*	*0.828776(78)*	*0.638265(56)*	*0.684815(98)*			
97	Bk	249	*0.822159(76)*	*0.809987(69)*	*0.619449(53)*	*0.668638(94)*			
							0.49060(49)	0.50851(52)	0.63748(98)
98	Cf	250	*0.803608(73)*	*0.791421(66)*	*0.601005(50)*	*0.652873(89)*			
							0.476569(92)	0.493804(98)	0.62300(19)
99	Es	251	*0.786043(70)*	*0.773837(63)*	*0.583354(49)*	*0.638227(82)*			
100	Fm	254	*0.769077(67)*	*0.756843(60)*	*0.566272(47)*	*0.623826(82)*			
			0.76904(62)	0.75674(60)	0.56619(34)	0.62369(41)	0.44966(13)	0.46534(12)	0.59414(20)

* These values are for the unresolved $L\beta_2$ and $L\beta_{15}$ emission lines.

4.2.2.12. *Structure and format of the summary tables*

Table 4.2.2.4 summarizes the theoretical and experimental results for prominent *K*-series lines and the *K*-absorption edge. For the emission lines, the upper number (in italics) is the theoretical estimate for this line and the lower number is the experimentally measured value (1) from Table 4.2.2.1 or (2) from the Bearden database or a reference that appeared after the Bearden database corrected to the optically based scale. For the *K* absorption edge, the upper number (also in italics) was obtained by combining emission lines and photoelectron spectroscopy (see Subsection 4.2.2.7), and the lower number is the experimentally measured value (1) from Table 4.2.2.3 or (2) from the Bearden database or a reference that appeared after the Bearden database corrected to an optically based scale. For the experimental emission and absorption entries, bold type is used for wavelengths directly measured on an optically based scale. The numerical values for wavelengths in angstrom units (1 Å = 0.1 nm) are given to a number of significant figures commensurate with their estimated uncertainties, which appear in parentheses after each theoretical and experimental value.

Figure 4.2.2.1 shows plots of the relative deviation between theoretical and experimental values for the *K*-series lines and the *K*-absorption edge as a function of *Z*. The error bars shown in the figure are the experimental uncertainties. In general, these plots show good agreement between theory and experiment except in the low-*Z* and high-*Z* regions. At the low-*Z* end of the table, the particular calculational approach used is not optimum, and the experimental data are suprisingly weak. At the high end, experimental data have rather large uncertainties, and thus do not provide an accurate test of the theory.

Table 4.2.2.5 summarizes the theoretical and experimental results for prominent *L*-series lines and the *L*-absorption edges. The experimental database of high-accuracy emission data is much more limited than was the case for the *K* series, and there have been very few high-accuracy edge-location measurements. The format of this table is similar to that of Table 4.2.2.4. For the emission lines, the upper number (in italics) is the theoretical estimate for this line, and the lower number is the experimentally measured value. Numbers in bold type were directly measured on the optical scale (see Table 4.2.2.2), and numbers in normal type are from the Bearden database or a reference that appeared after the Bearden database corrected to an optically based scale. For the *L*-absorption edges, the upper number (also in italics) is obtained by combining emission lines and photoelectron spectroscopy (see Subsection 4.2.2.7) and the lower number is the experimentally measured value. The numbers in bold type