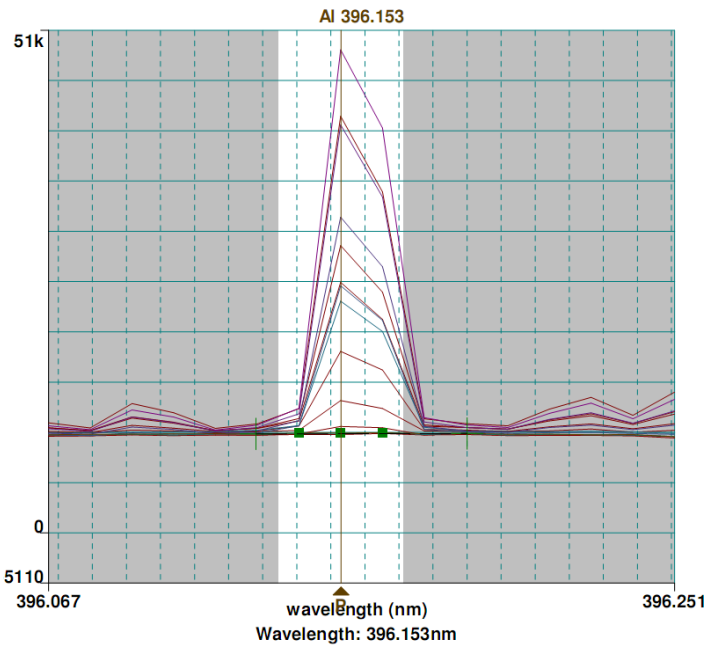
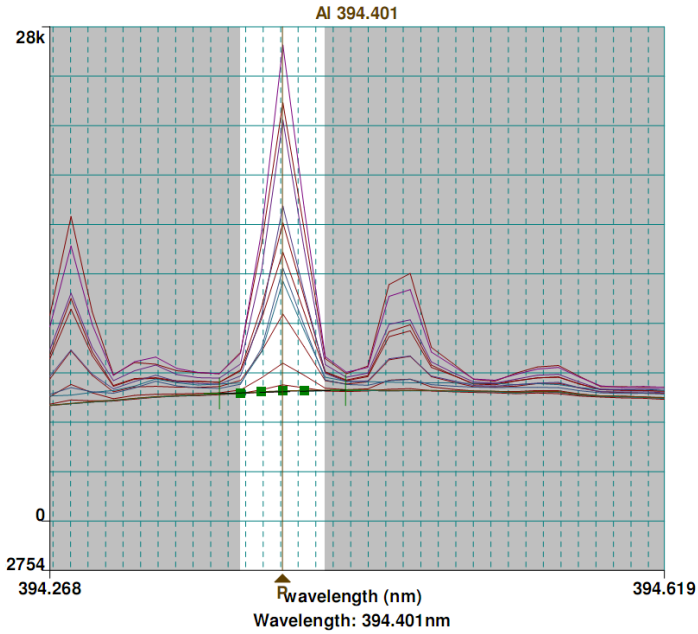
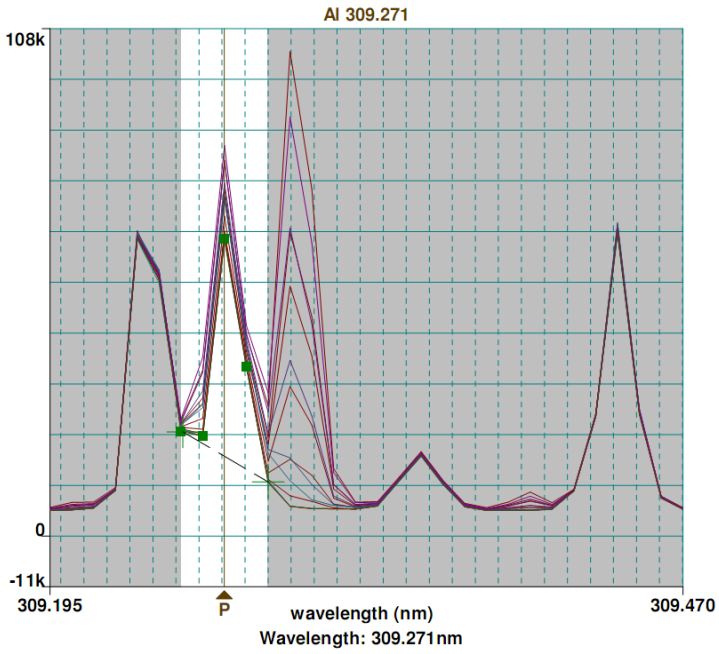
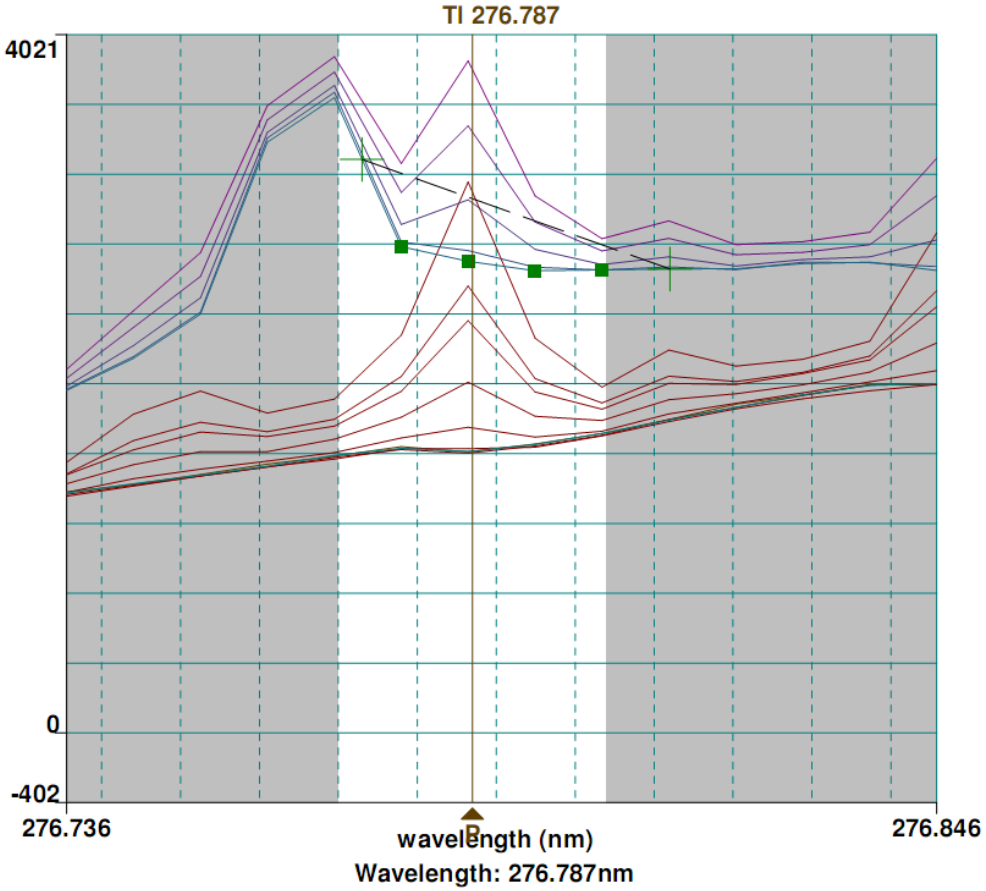




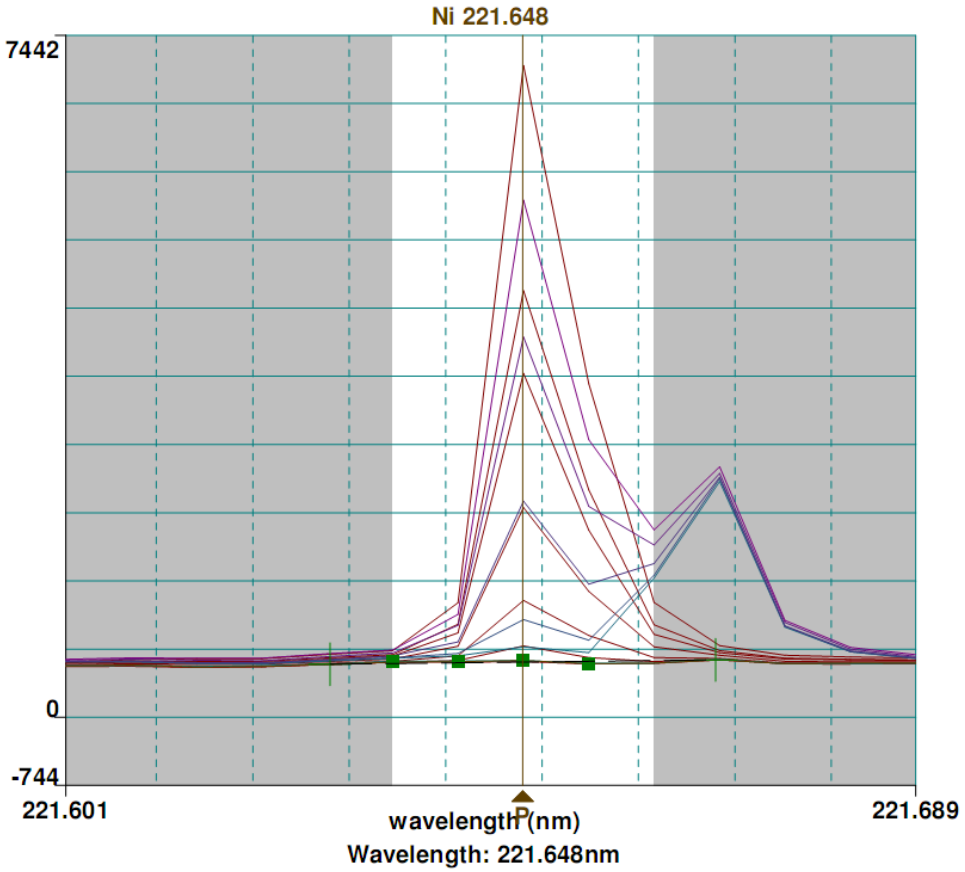


Supplementary material
Figure S1. Peak profile for Al

Supplementary material
Figure S2. Peak profile for Tl



Supplementary material
Figure S3. Peak profile for Ni



Supplementary material

Table. Analytical lines studied. Effect of the calibration modes on analytes sensitivity

Elements (λ nm)	Standard calibration curve slope	Standard addition curve slope	% deviation
Al 394.401	34835	36398	4.5
Al 396.153	62771	63814	1.7
As 188.979	1434	1313	-8.4
As 193.696	788	783	-0.6
As 197.197	659	665	0.8
As 228.812	29312	27699	-5.5
B 249.677	30970	27669	-10.7
B 249.772	46846	45595	-2.7
Ba 233.527	14733	14021	-4.8
Ba 493.408	1779752	1871331	5.1
Be 313.042	2551877	2526977	-1.0
Be 313.107	1503611	1373869	-8.6
Bi 223.061	4052	3673	-9.4
Cd 214.440	37910	36197	-4.5
Cd 228.02	36147	31944	-11.6
Ce 413.764	51131	55220	8.0
Co 228.16	23086	20964	-9.2
Co 238.892	46266	46356	0.2
Cr 205.560	14374	14288	-0.6
Cr 267.716	59734	55268	-7.5
Cr 283.563	67749	68048	0.4
Cu 324.752	243839	259780	6.5
Cu 327.393	152077	150553	-1.0
Dy 353.170	52465	59622	13.6
Er 337.271	254491	266713	4.8
Er 349.910	20630	22682	9.9
Eu 381.967	147221	162666	10.5
Eu 412.970	167044	180013	7.8
Fe 238.204	54167	47408	-12.5
Fe 239.562	52393	50107	-4.4
Gd 342.247	8808	9230	4.8
Ho 339.898	16813	18541	10.3
Ho 345.600	42085	47369	12.6
La 379.478	154412	168809	9.3
La 408.672	253018	275491	8.9
Li 610.362	133360	128860	-3.4
Li 670.784	4595572	5382448	17.1
Lu 261.42	80203	89490	11.6
Lu 291.39	16268	17786	9.3
Mn 257.610	357944	323663	-9.6
Mn 259.372	69355	80595	16.2
Mo 202.031	12361	11873	-4.0
Mo 203.845	4400	4518	2.7
Nd 406.109	82502	90061	9.2
Ni 221.648	11102	11013	-0.8
Ni 231.604	19068	17287	-9.3

Ni 232.003	10399	10081	-3.1
Pb 217.000	1087	1028	-5.4
Pb 220.353	3964	3546	-10.6
Pr 390.844	49768	55356	11.2
Pr 414.311	81483	88804	9.0
Sc 361.383	176079	195880	11.2
Se 196.026	712	609	-14.4
Se 203.985	771	726	-5.8
Sm 359.260	9615	10562	9.9
Sm 442.434	6846	7888	15.2
Sr 407.771	12802750	12993712	1.5
Sr 421.552	6215808	6090431	-2.0
Tb 350.917	18287	20414	11.6
Ti 334.940	461336	438461	-5.0
Ti 336.121	338819	351396	3.7
Tl 190.801	426	344	-19.2
Tl 276.787	1566	1664	6.3
Tm 313.126	1191096	1177500	-1.1
V 290.880	67053	63735	-4.9
V 310.230	-139724	-155544	11.3
Y 324.227	79219	84310	6.4
Y 371.029	147763	163024	10.3
Yb 328.937	302552	335770	11.0
Zn 202.548	27352	24224	-11.4
Zn 206.200	3179	2762	-13.1
Zn 213.857	49012	44393	-9.4