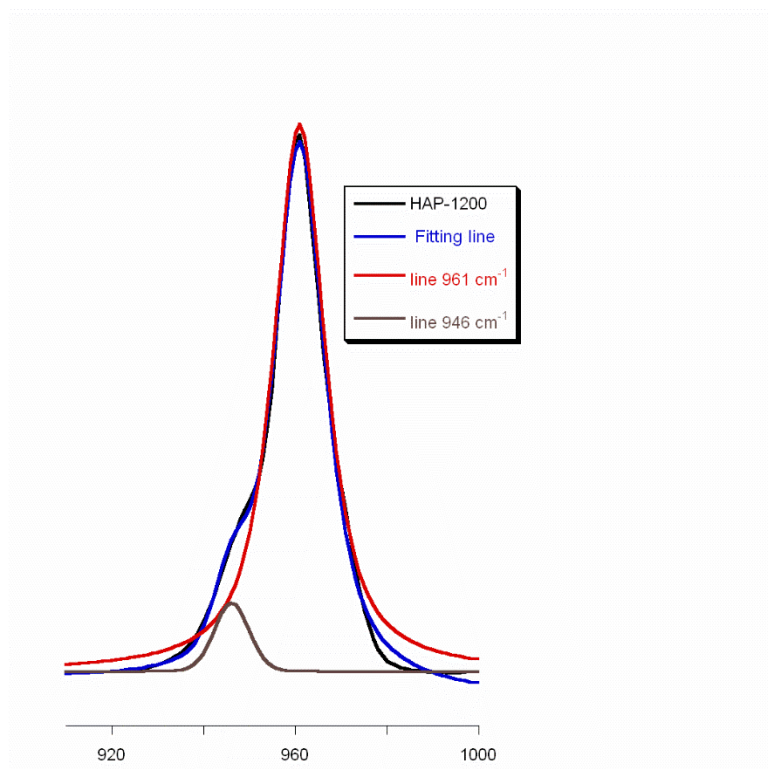
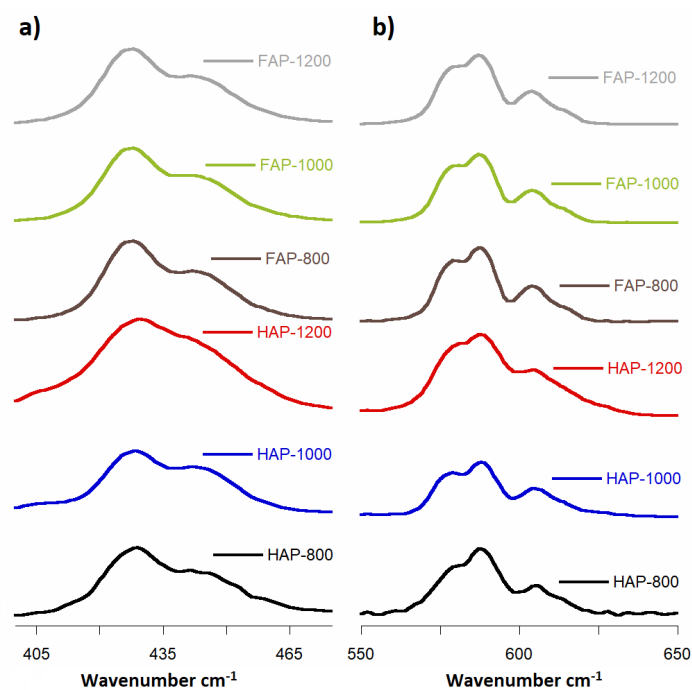


## Supplementary materials

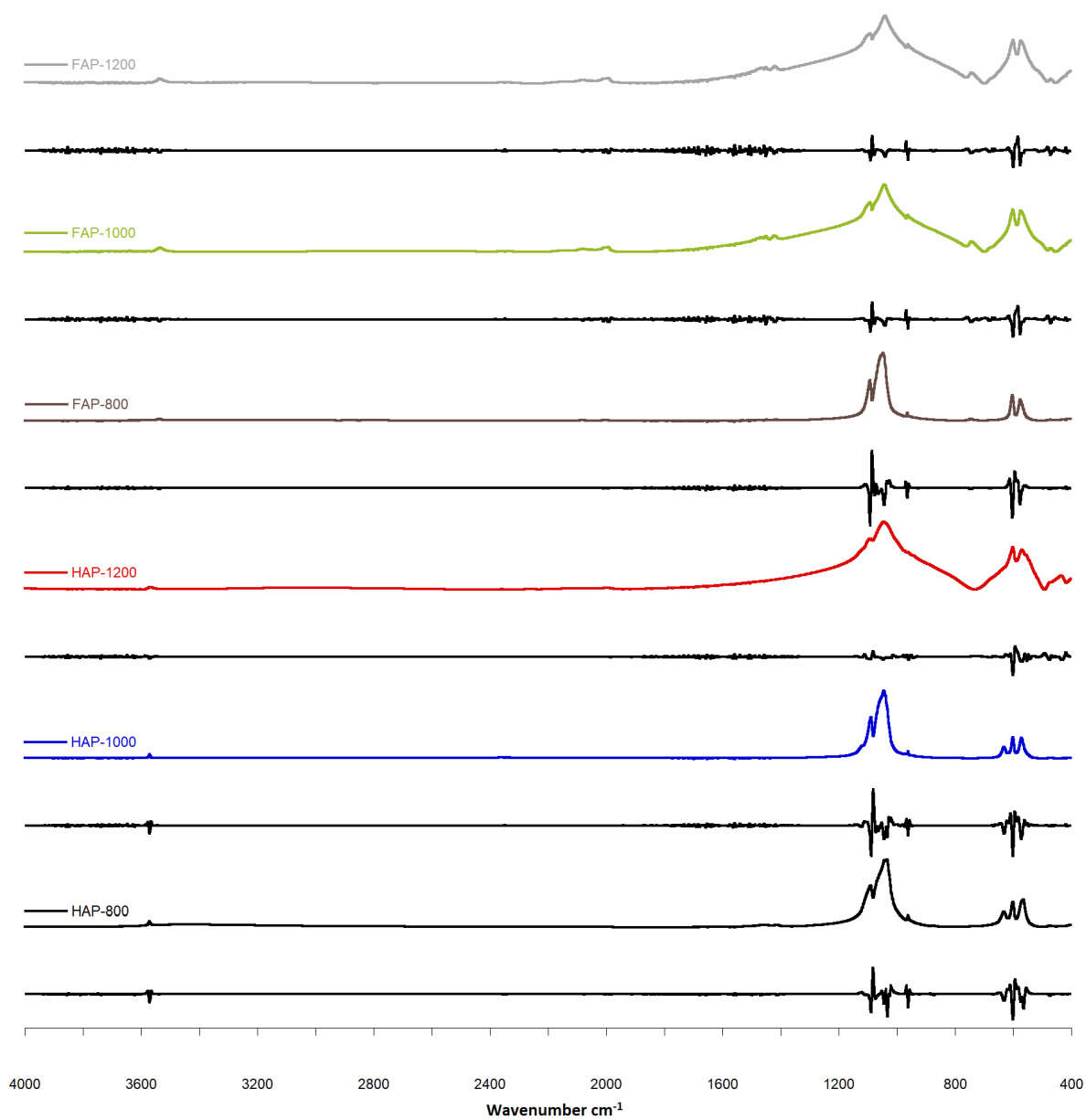
article title: **Solid-state NMR and Raman spectroscopic investigation of fluoride-substituted apatites obtained in various thermal conditions**



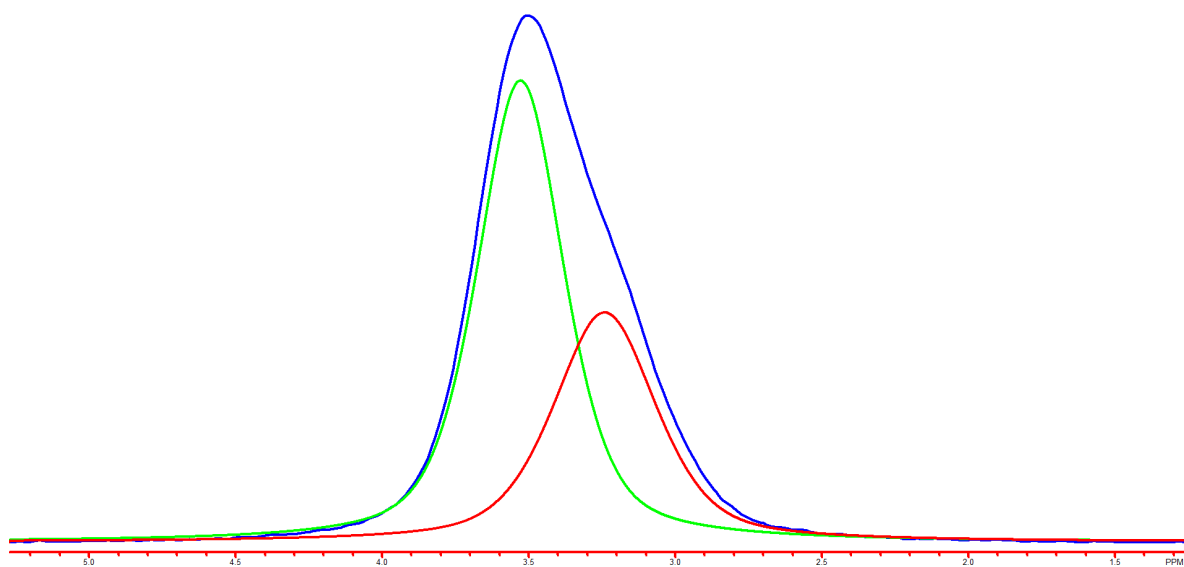
**Figure S1.** Raman spectra of curve fitting HAP-1200 range 900 cm<sup>-1</sup> and 1000 cm<sup>-1</sup>.



**Figure S2.** Raman spectra a) range 400 cm<sup>-1</sup> and 475 cm<sup>-1</sup> b) ) range 550 cm<sup>-1</sup> and 650 cm<sup>-1</sup>



**Figure S3.** FT-IR spectra with the corresponding second derivative.



**Figure S4.**  $^{19}\text{F}$  MAS NMR spectra of curve fitting FAP-800 sample.

**Table S1.** Raman vibration modes of phosphate and hydroxyl in the apatitic samples.

Vibration mode	Vibration frequency (cm <sup>-1</sup> )		
	<i>Penel et al., 1997 *</i>	Present work	
		HAP	FAP
PO <sub>4</sub> v1	965	961	964
PO <sub>4</sub> v2	432	430	430
	449	450	450
PO <sub>4</sub> v3	-	1028	-
	1034	1034	1033
	1042	1047	1043
	1053	1057	1053
	1061	1063	1063
	1081	1075	1078
PO <sub>4</sub> v4	581	578	578
	592	587	587
	608	606	606
	617	616	616
PO <sub>4</sub> v1	3573-HAP	3573	-
	3537-FAP	-	3537

\* Penel, G.; Leroy, G.; Rey, C.; Sombret, B.; Huvenne, J.P.; Bres, E. *Infrared and Raman microspectrometry study of fluor- fluor-hydroxy and hydroxy-apatite powders. Journal of Materials Science: Materials in Medicine* **1997**, 8, 271-276, doi:10.1023/A:1018504126866.