

Table S4. Fitting parameters for Ca 2p_{3/2}.

sample	HC				CaWO ₄			
	BE		FWHM	%	BE		FWHM	%
	Ca2p 1/2	Ca2p 3/2			Ca2p 1/2	Ca2p 3/2		
HC	350.5	346.97	1.51	100				
W1S	350.67	347.15	1.41	66.7	350.17	346.64	1.54	33.3
W2S	350.73	347.21	1.41	60.2	350.2	346.64	1.5	39.8
W30S					350.18	346.61	1.59	100

(HC: pristine hydrocalumite)