Nonlinear Curve Fit (Voigt) (9/23/2020 15:29:05)

Parameters

		Value	Standard Error	t-Value	Prob>|t|	Dependency
Peak1(Smoothed Y2)	y0	-115.55476	8.92358	-12.94938	1.61137E-37	0.87644
	xc	752.98929	1.97986	380.3239	0	0.9934
	A	13196.60602	23404.87973	0.56384	0.5729	0.9998
	wG	10.71709	3.4614	3.09617	0.00198	0.99195
	wL	7.47922E-13	0.19148	3.90597E-12	1	0.34258
	FWHM	10.71709	3.45821			
Peak2(Smoothed Y2)	y0	-115.55476	8.92358	-12.94938	1.61137E-37	0.87644
	xc	763.78446	5.07596	150.47105	0	0.99962
	A	40406.51699	85700.98614	0.47148	0.63732	0.99998
	wG	16.35494	18.13936	0.90163	0.36732	0.99989
	wL	7.76411E-6	16.37575	4.74122E-7	1	0.99985
	FWHM	16.35494	17.70906			
Peak3(Smoothed Y2)	y0	-115.55476	8.92358	-12.94938	1.61137E-37	0.87644
	xc	777.86512	1.47179	528.51757	0	0.99583
	A	35639.41917	315494.28202	0.11296	0.91007	1
	wG	9.2456	38.36779	0.24097	0.80959	0.99996
	wL	5.53105	102.94392	0.05373	0.95715	1
	FWHM	12.55417	31.14197			
Peak4(Smoothed Y2)	y0	-115.55476	8.92358	-12.94938	1.61137E-37	0.87644
	xc	794.29255	0.07939	10004.51213	0	0.97373
	A	240421.56372	209612.18508	1.14698	0.25146	1
	wG	2.83066	3.49885	0.80902	0.41855	0.99954
	wL	9.15986	5.10371	1.79474	0.07278	0.99997
	FWHM	10.01409	2.80315			
Peak5(Smoothed Y2)	y0	-115.55476	8.92358	-12.94938	1.61137E-37	0.87644
	xc	808.84256	30.96456	26.12156	6.9866E-138	0.99999
	A	119675.21831	1.92868E7	0.00621	0.99505	1
	wG	15.18957	534.16559	0.02844	0.97732	1
	wL	18.07475	1621.6637	0.01115	0.99111	1
	FWHM	27.0261	860.40991			
Peak6(Smoothed Y2)	y0	-115.55476	8.92358	-12.94938	1.61137E-37	0.87644
	xc	817.29095	3072.0737	0.26604	0.79022	1
	A	191283.80493	4.05852E7	0.00471	0.99624	1
	wG	30.9256	2674.02867	0.01157	0.99077	1
	wL	8.21832	2851.81283	0.00288	0.9977	1
	FWHM	35.55474	1304.91027			
Peak7(Smoothed Y2)	y0	-115.55476	8.92358	-12.94938	1.61137E-37	0.87644
	xc	842.16678	45502.56904	0.01851	0.98523	1
	A	117938.02522	6.09506E8	1.93498E-4	0.99985	1
	wG	32.08979	38966.88397	8.23514E-4	0.99934	1
	wL	8.14059	3709.23726	0.00219	0.99825	1
	FWHM	36.66463	39451.77759			
Peak8(Smoothed Y2)	y0	-115.55476	8.92358	-12.94938	1.61137E-37	0.87644
	xc	855.30873	95508.75187	0.00896	0.99286	1
	A	18774.6587	5.73996E8	3.27087E-5	0.99997	1
	wG	27.76841	69948.48602	3.96984E-4	0.99968	1
	wL	9.34938	30000.68891	3.11639E-4	0.99975	1
	FWHM	33.10543	56314.43774			
Peak9(Smoothed Y2)	y0	-115.55476	8.92358	-12.94938	1.61137E-37	0.87644
	xc	863.75712	102.44979	8.43103	4.89223E-17	1
	A	56765.31068	3.50165E7	0.00162	0.99871	1
	wG	20.17469	1066.72233	0.01891	0.98491	1
	wL	3.84728	5913.48466	6.50595E-4	0.99948	1
	FWHM	22.31075	2531.94186			
Peak10(Smoothed Y2)	y0	-115.55476	8.92358	-12.94938	1.61137E-37	0.87644
	xc	882.06197	2472.59491	0.35674	0.72131	1
	A	38544.88192	1.86775E7	0.00206	0.99835	1
	wG	21.60501	2238.67895	0.00965	0.9923	1
	wL	9.96315E-25	--	--	--	--
	FWHM	21.60501	2238.67895			
Peak11(Smoothed Y2)	y0	-115.55476	8.92358	-12.94938	1.61137E-37	0.87644
	xc	890.04101	1263.68165	0.70432	0.48128	1
	A	21961.8252	1.73973E7	0.00126	0.99899	1
	wG	19.79531	580.17995	0.03412	0.97278	1
	wL	5.42106E-40	--	--	--	--
	FWHM	19.79531	580.17995			
Peak12(Smoothed Y2)	y0	-115.55476	8.92358	-12.94938	1.61137E-37	0.87644
	xc	896.61198	0.78288	1145.2787	0	0.97852
	A	17155.92187	24881.78672	0.6895	0.49055	0.99984
	wG	10.45074	2.98617	3.49971	4.71413E-4	0.9945
	wL	5.62243E-18	0	--	--	--
	FWHM	10.45074	2.98617			

Reduced Chi-sqr = 35893.4184161
COD(R^2) = 0.9957972177165
Iterations Performed = 21
Total Iterations in Session = 21
Fit converged. Chi-Sqr tolerance value of 1E-9 was reached.
Standard Error was scaled with square root of reduced Chi-Sqr.
FWHM are derived parameter(s).

Statistics

	Smoothed Y2
Number of Points	3648
Degrees of Freedom	3599
Reduced Chi-Sqr	35893.41842
Residual Sum of Squares	1.2918E8
R-Square (COD)	0.9958
Adj. R-Square	0.99574
Fit Status	Succeeded(100)

Fit Status Code :
100 : Fit converged. Chi-Sqr tolerance value of 1E-9 was reached.

Summary

	y0		xc		A		wG		wL		FWHM		Statistics	
	Value	Standard Error	Value	Standard Error	Value	Standard Error	Value	Standard Error	Value	Standard Error	Value	Standard Error	Reduced Chi-Sqr	Adj. R-Square
Peak1(Smoothed Y2)	-115.55476	8.92358	752.98929	1.97986	13196.60602	23404.87973	10.71709	3.4614	7.47922E-13	0.19148	10.71709	3.45821	35893.41842	0.99574
Peak2(Smoothed Y2)	-115.55476	8.92358	763.78446	5.07596	40406.51699	85700.98614	16.35494	18.13936	7.76411E-6	16.37575	16.35494	17.70906		
Peak3(Smoothed Y2)	-115.55476	8.92358	777.86512	1.47179	35639.41917	315494.28202	9.2456	38.36779	5.53105	102.94392	12.55417	31.14197		
Peak4(Smoothed Y2)	-115.55476	8.92358	794.29255	0.07939	240421.56372	209612.18508	2.83066	3.49885	9.15986	5.10371	10.01409	2.80315		
Peak5(Smoothed Y2)	-115.55476	8.92358	808.84256	30.96456	119675.21831	1.92868E7	15.18957	534.16559	18.07475	1621.6637	27.0261	860.40991		
Peak6(Smoothed Y2)	-115.55476	8.92358	817.29095	3072.0737	191283.80493	4.05852E7	30.9256	2674.02867	8.21832	2851.81283	35.55474	1304.91027		
Peak7(Smoothed Y2)	-115.55476	8.92358	842.16678	45502.56904	117938.02522	6.09506E8	32.08979	38966.88397	8.14059	3709.23726	36.66463	39451.77759		
Peak8(Smoothed Y2)	-115.55476	8.92358	855.30873	95508.75187	18774.6587	5.73996E8	27.76841	69948.48602	9.34938	30000.68891	33.10543	56314.43774		
Peak9(Smoothed Y2)	-115.55476	8.92358	863.75712	102.44979	56765.31068	3.50165E7	20.17469	1066.72233	3.84728	5913.48466	22.31075	2531.94186		
Peak10(Smoothed Y2)	-115.55476	8.92358	882.06197	2472.59491	38544.88192	1.86775E7	21.60501	2238.67895	9.96315E-25	--	21.60501	2238.67895		
Peak11(Smoothed Y2)	-115.55476	8.92358	890.04101	1263.68165	21961.8252	1.73973E7	19.79531	580.17995	5.42106E-40	--	19.79531	580.17995		
Peak12(Smoothed Y2)	-115.55476	8.92358	896.61198	0.78288	17155.92187	24881.78672	10.45074	2.98617	5.62243E-18	0	10.45074	2.98617		

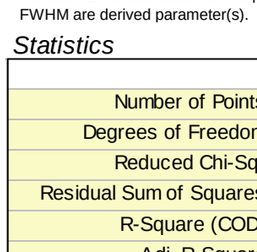
ANOVA

		DF	Sum of Squares	Mean Square	F Value	Prob>F
Smoothed Y2	Regression	48	3.06077E10	6.3766E8	17765.38505	0
	Residual	3599	1.2918E8	35893.41842		
	Uncorrected Total	3648	3.64038E10			
	Corrected Total	3647	3.07369E10			

At the 0.05 level, the fitting function is significantly better than the function y=constant.

Fitted Curves

Smoothed Y2



Residual Plots

Smoothed Y2