Torricelli __ The friendly X-Ray Standing Wave data analysis software __ ver3.8.472

Directory in which a single XSW data set is stored: home/francois/Lab/Programming/XSW progs/PGI3_Torricelli/branches/Published_version/Example data sets/N1s_hBN on Cu(111) angluarResolved ...

Theoretical reflectivity and phase | Import experimental data | Fit reflectivity | Fit photoelectron yield | Argand diagram | Geometry, About, License

(1) Dipole + Quadrupole approximation Element: N (2) Z = 7 Subshell: 1s1/2 (3) (only s is defined)

δp = 0.87467 (4) δd = 0.63846 Δ = -0.23621 E_{Bragg} = 2975.85 eV E_{Kin} = 2572.85 eV (5)

(6) Dipole approximation (γ=0) π-polarization φ^e_j = 74.600 ° (7) P= 0.95898

Reset (8)

	Initial values		Fit result ± statistical errors
Fit F_c=	0.90000 (9) (10)	(11)	0.86070 ± 0.02543 (12)
Fit P_c=	0.60000		0.52353 ± 0.00525
Fit N_Y=	9.19291		8.37834 ± 0.11660
Fit γ=	Theo. 1.10620 (13) Man. 0.00000		0.00000 ± 0.00000
S_R= 1.16272	$\|S_I\|$ = 1.08614	Ψ = -0.02809	Q_0= 0.09792 Q_H= 0.14051
S_R= 0.00000	$\|S_I\|$ = 1.00000	Ψ = 0.00000	Q_0= 0.00000 Q_H= 0.00000
Fit S_R=	Man. 1.00000 (14)		0.00000 ± 0.00000

(15) Ignore Monte Carlo analysis

Fit yield (16)

(17) Show initial values curve (red): χ^2_{red} = 0.59718

R^2 = 0.98572 χ^2_{red} = 0.059

Fit results as initial values (18) Save and plot in Argand (19)

Tabulated γ: Export

CoreLevel	BindingEnergy[eV]
N1s1/2	403
E_kin[eV]	gamma
100	0.106
200	0.209
500	0.413
1000	0.643
1500	0.819

(20)

Yield fit log:

Successful fit: "Tolerance seems to be too small."
Reduced chi squared = 0.059030154819803796
R_squared = 0.9857242781185043
Correlations (unreported correlations are < 0.100):
--> Fc with {'Pc': -0.3093346425849989, 'N': -0.5874083242516451}
--> Pc with {'Fc': -0.3093346425849988, 'N': 0.6537377743106864}

(21)

(22)