

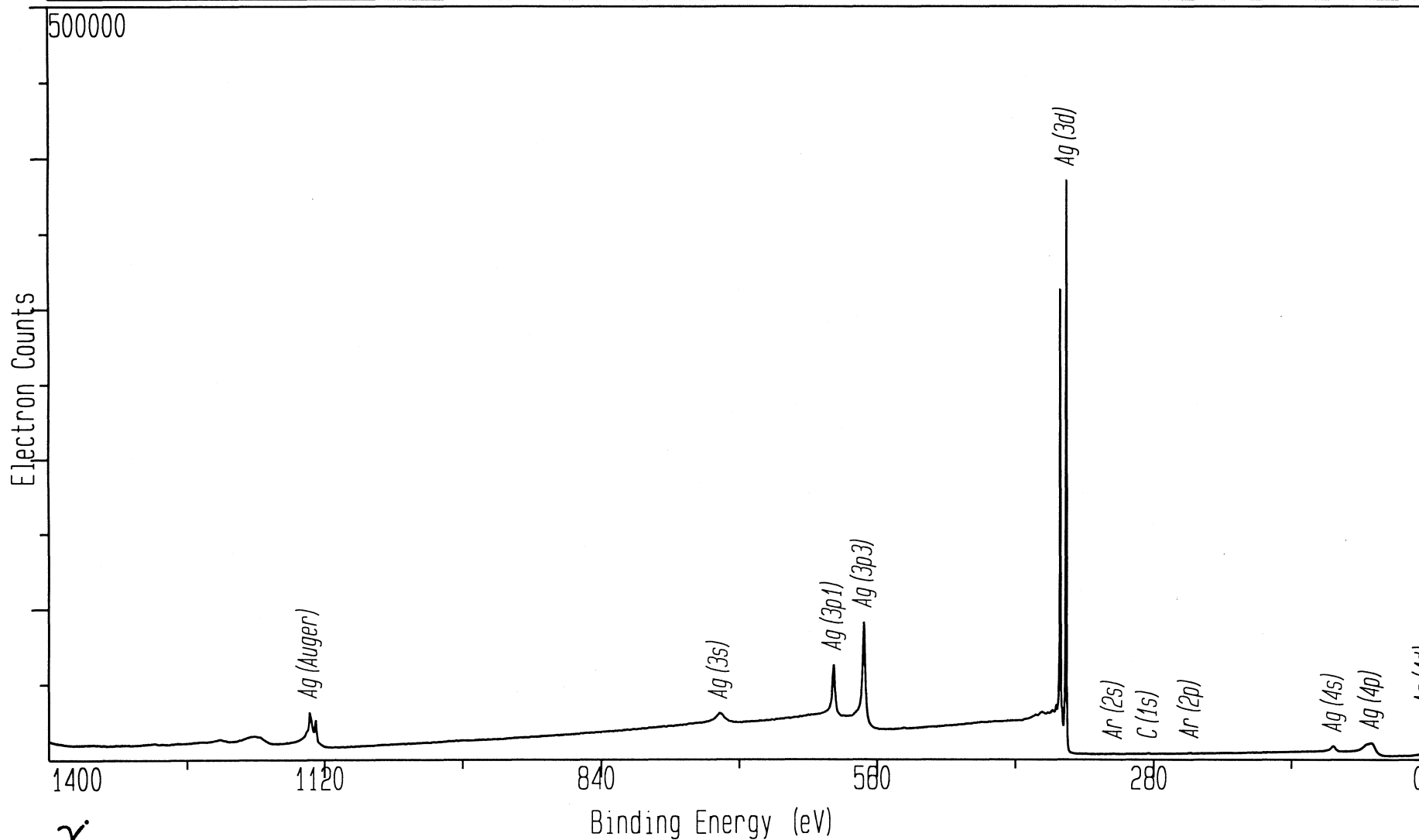
Detailed Surface Composition Table

File name: AG\_WS\_HQ.MRS  
 Region: 1  
 Description: Silver (Ag), 0.7 eV/step  
 Sum of 15 individual spectra from repetitive etch  
 Operator: V. Crist  
 Date: Tue Mar 1 00:11 1994

<u>Signal</u>	<u>Corrected</u> <u>BE</u>	<u>Exper.</u> <u>BE</u>	<u>Sens</u> <u>Factor</u>	<u>Norm</u> <u>Area</u>	<u>Relative</u> <u>Area</u>	<u>Atom %</u>
AgAuger	1134.9	1134.9	0.00	123548	0	
Ag3s	719.6	719.6	2.68	43435	16218	
Ag3p1	604.0	604.0	3.79	98589	26023	
Ag3p3	573.6	573.6	5.87	186287	31709	
Ag3d	368.4	368.4	17.78	294202	16546	
Ar2s	319.6	319.6	1.96	599	306	
C 1s	284.5	284.5	1.00	910	910	
Ar2p	241.7	241.7	3.06	1404	459	
Ag4s	97.0	97.0	0.66	14200	21419	
Ag4p	58.6	58.6	2.13	59667	27983	
Ag4d	4.5	4.5	1.62	63425	39240	

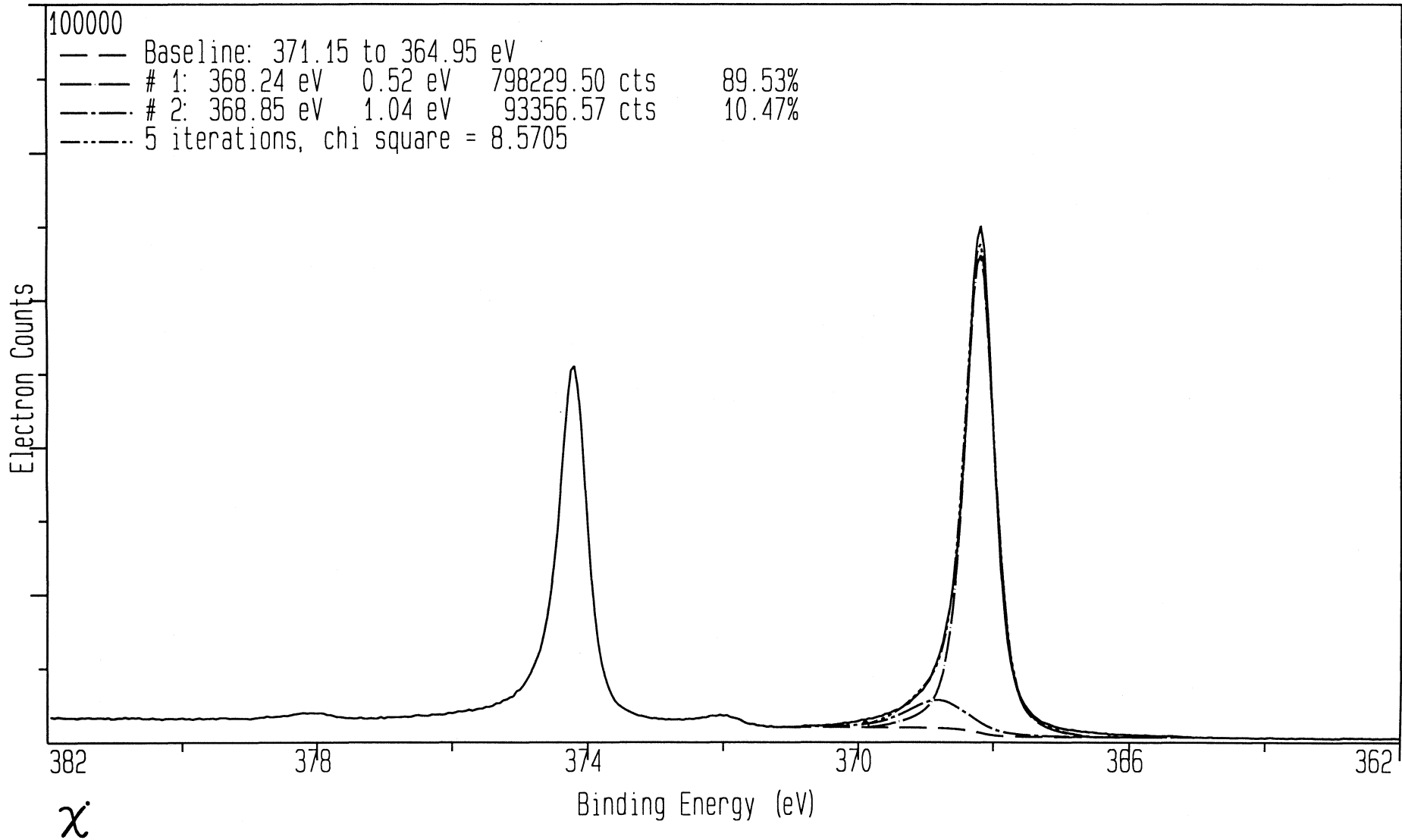
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File: AG_WS_HQ	Spot: 250x1000	Flood Gun: Off	Data Points: 2000	Date: Mar 01 1994
Region: 1	Resolution: 2	Scans, Time: 30	Time/Point: 50	Operator: V. Crist
Description: Silver (Ag), 0.7 eV/step Sum of 15 individual spectra from repetitive etch				



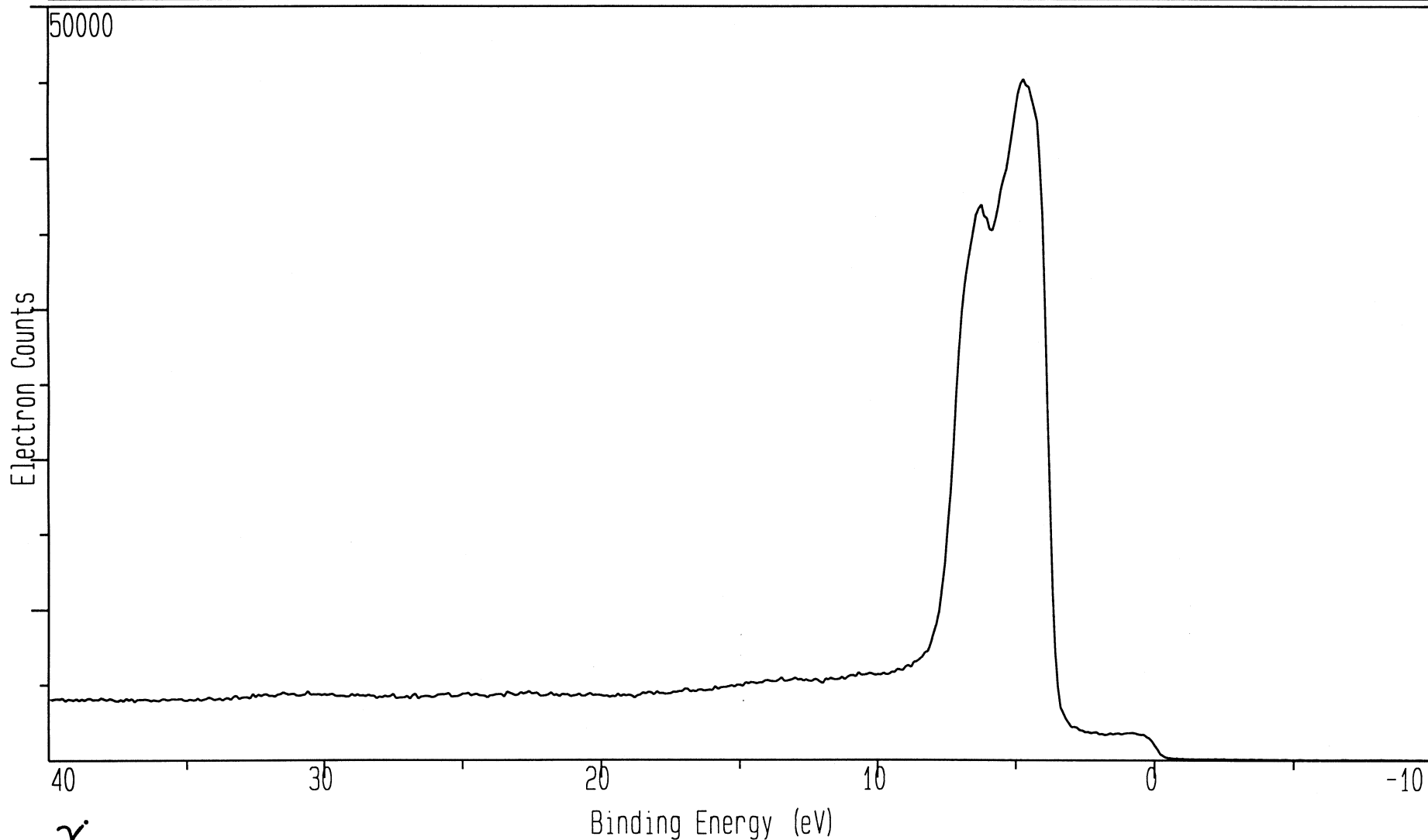
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File: AG_3D_HQ	Spot: 150x800	Flood Gun: Off	Data Points: 401	Date: Feb 28 1994
Region: 1	Resolution: 0	Scans, Time: 48	Time/Point: 100	Operator: V. Crist
Description: Silver: Ag (3d5) & Ag (3d3), BE Cu (2p3) = 932.67eV 0.05 eV/step, Sum of 15 repetitive etch/scans				



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File: AG_VB_HQ	Spot: 250x1000	Flood Gun: Off	Data Points: 501	Date: Feb 28 1994
Region: 1	Resolution: 2	Scans, Time: 40	Time/Point: 100	Operator: V. Crist
Description: Silver (Ag): Valence Bands, 0.05 eV/step Sum of 10 repetitive scan/etch cycles				



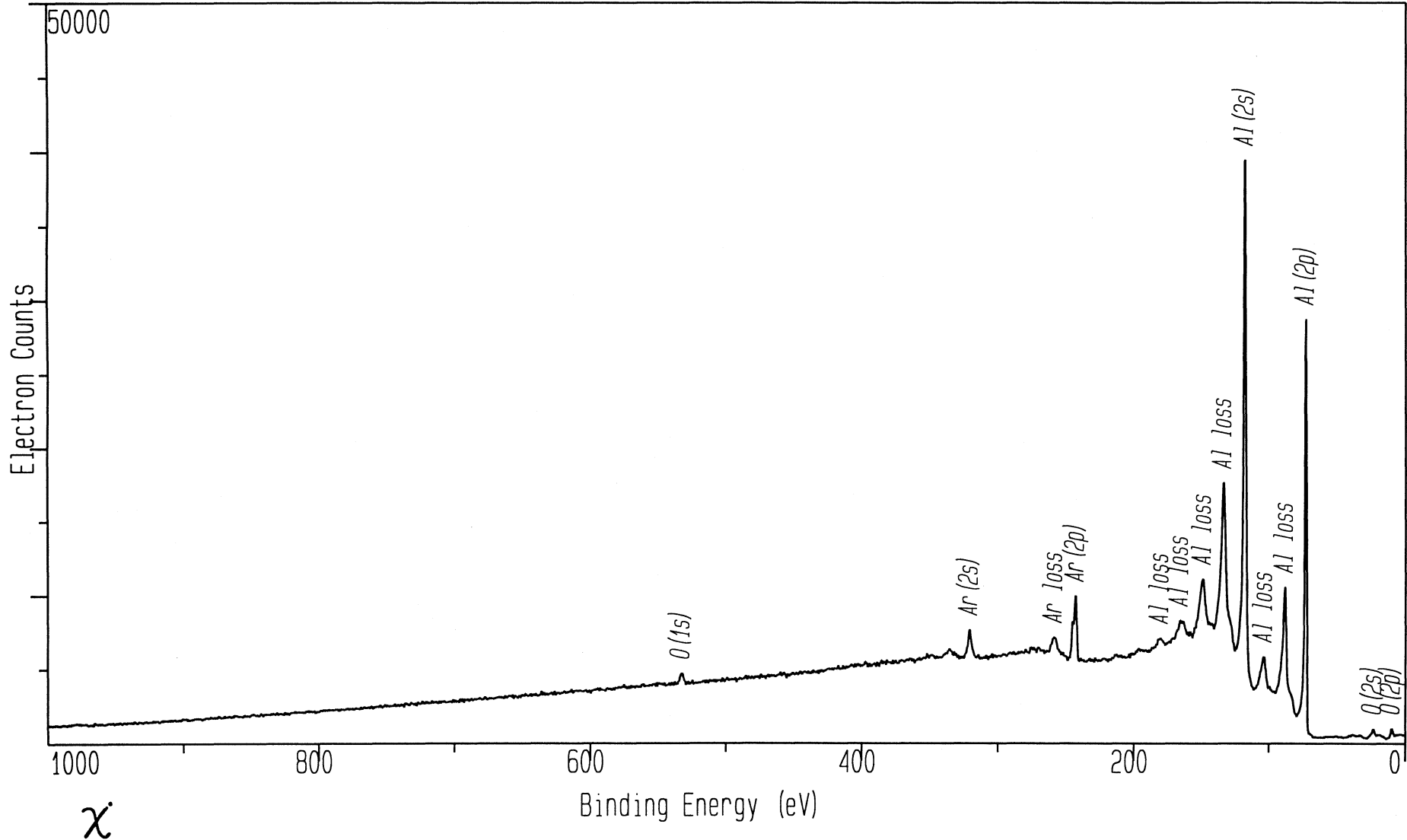
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Detailed Surface Composition Table

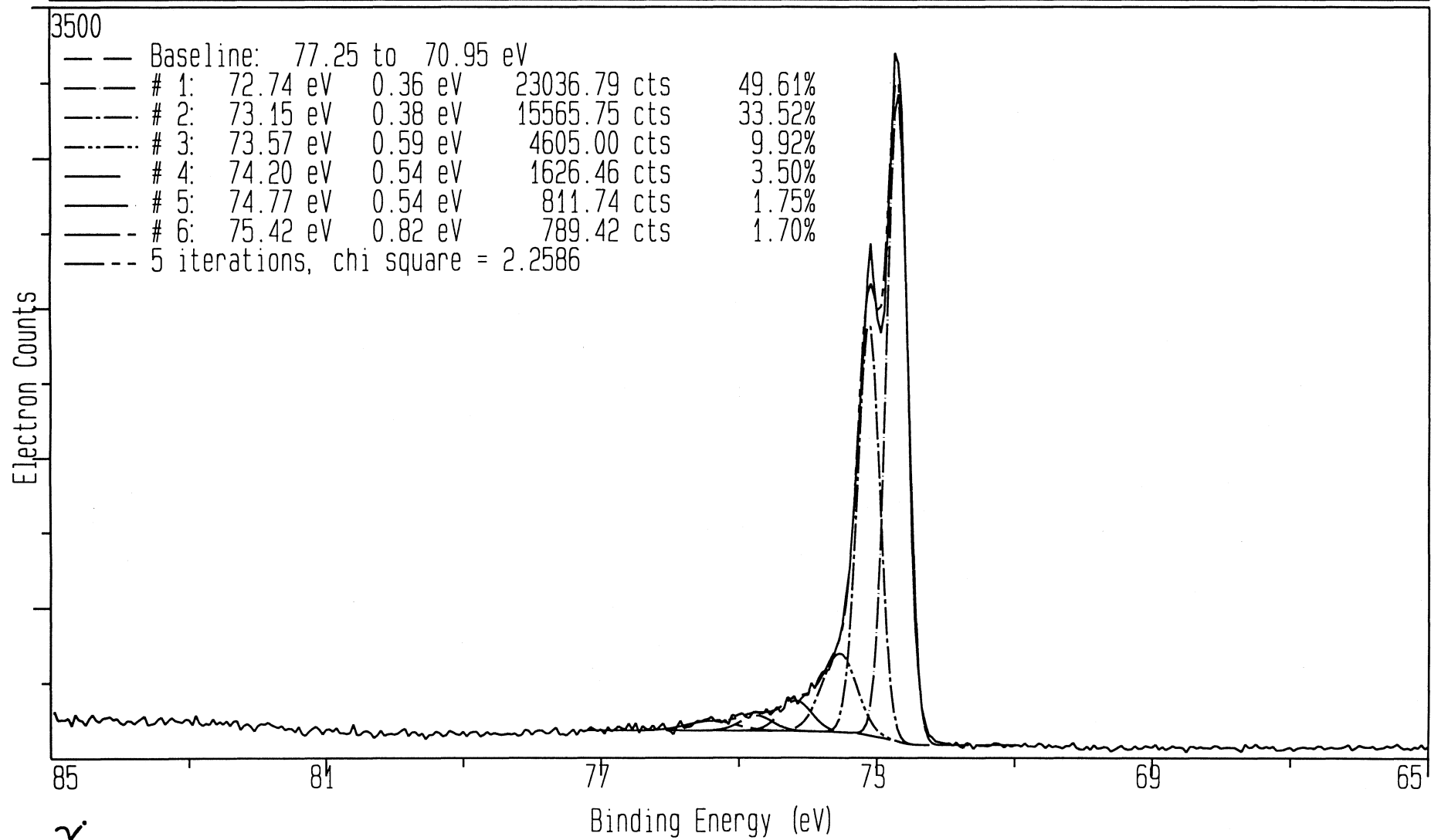
File name: AL\_WS\_HQ.MRS  
 Region: 1  
 Description: Aluminium (Al): 0.5 eV/step, 90 deg TOA  
 Sum of 10 spectra from repetitive etch/scans  
 Operator: V. Crist  
 Date: Thu Mar 3 06:15 1994

<u>Signal</u>	<u>Corrected</u> <u>BE</u>	<u>Exper.</u> <u>BE</u>	<u>Sens</u> <u>Factor</u>	<u>Norm</u> <u>Area</u>	<u>Relative</u> <u>Area</u>	<u>Atom %</u>
O 1s	532.3	532.3	2.12	2859	1348	
Ar2s	320.5	320.5	1.89	6880	3644	
Ar loss	258.3	258.3	6.89	7355	1068	
Ar2p	242.5	242.5	3.19	13927	4366	
Al loss	180.1	180.1	0.00	3099	0	
Al loss	165.4	165.4	0.00	8634	1021	
Al loss	148.8	148.8	0.00	19410	0	
Al loss	133.4	133.4	0.00	49247	0	
Al2s	117.9	117.9	0.90	87391	96758	
Al loss	103.7	103.7	0.00	10757	0	
Al loss	88.2	88.2	0.00	31383	0	
Al2p	72.7	72.7	0.67	51411	76273	
Ar3p	9.5	9.5	0.32	1678	5196	

File: AL_WS_HQ Region: 1	Spot: 250x1000 Resolution: 4	Flood Gun: Off Scans, Time: 20	Data Points: 2000 Time/Point: 50	Date: Mar 3 1994 Operator: V. Crist
Description: Aluminium (Al): 0.5 eV/step, 90 deg TOA Sum of 10 spectra from repetitive etch/scans				

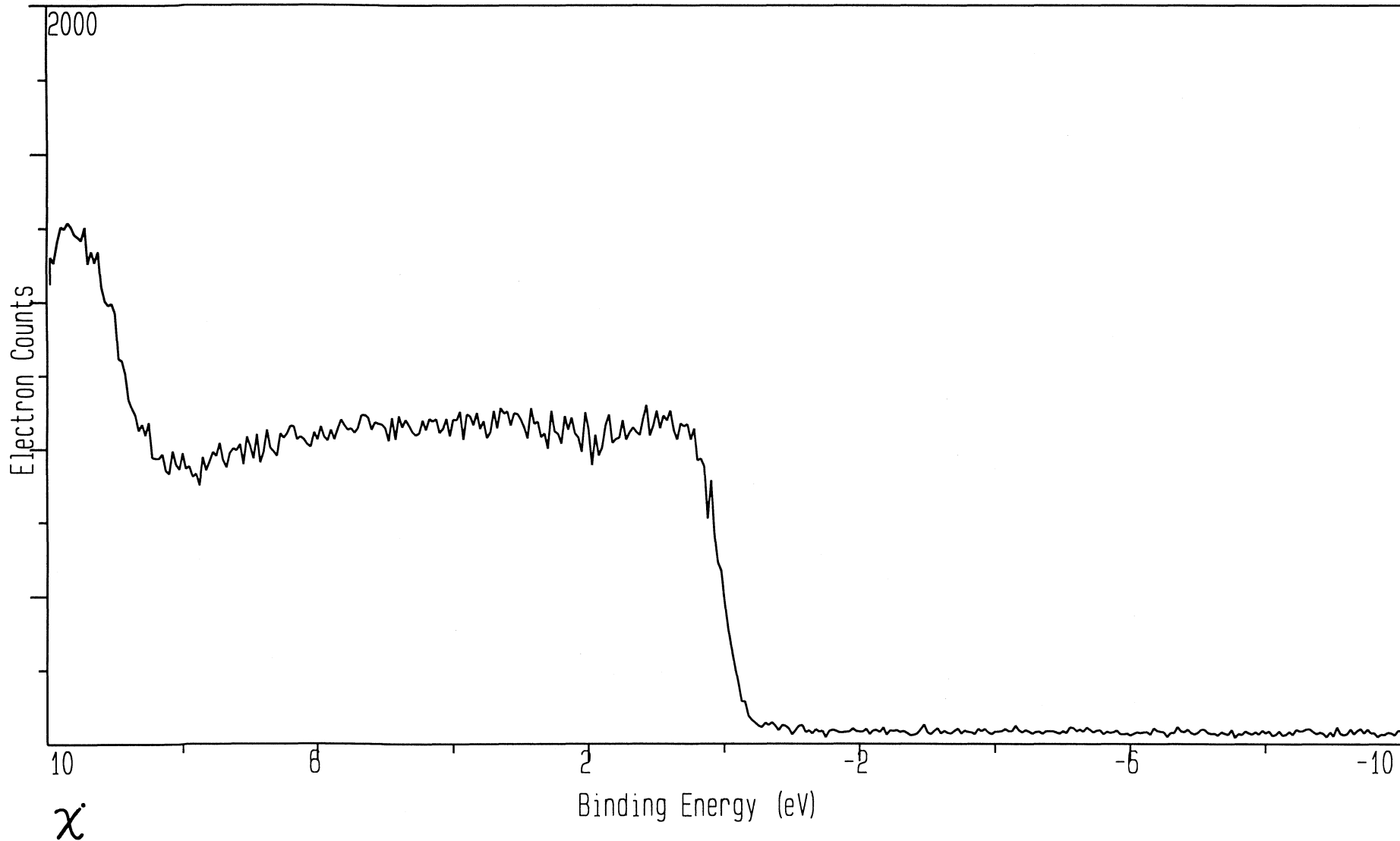


File: AL_2P_HQ	Spot: 150x800	Flood Gun: Off	Data Points: 401	Date: Mar 02 1994
Region: 1	Resolution: 0	Scans, Time: 44	Time/Point: 100	Operator: V. Crist
Description: Aluminium: Al (2p3) & Al (2p1), BE Cu (2p3) =932.64eV 0.05 eV/step, Sum of 11 repetitive etch/scans				



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File: AL_VB_HQ	Spot: 250x1000	Flood Gun: Off	Data Points: 401	Date: Mar 03 1994
Region: 1	Resolution: 2	Scans, Time: 40	Time/Point: 200	Operator: V. Crist
Description: Aluminium (Al): Valence Bands, 0.05 eV/step				



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# Implanted Argon Ions (Z=18)

Ar<sup>0</sup>  
[CAS# 7440-37-1]

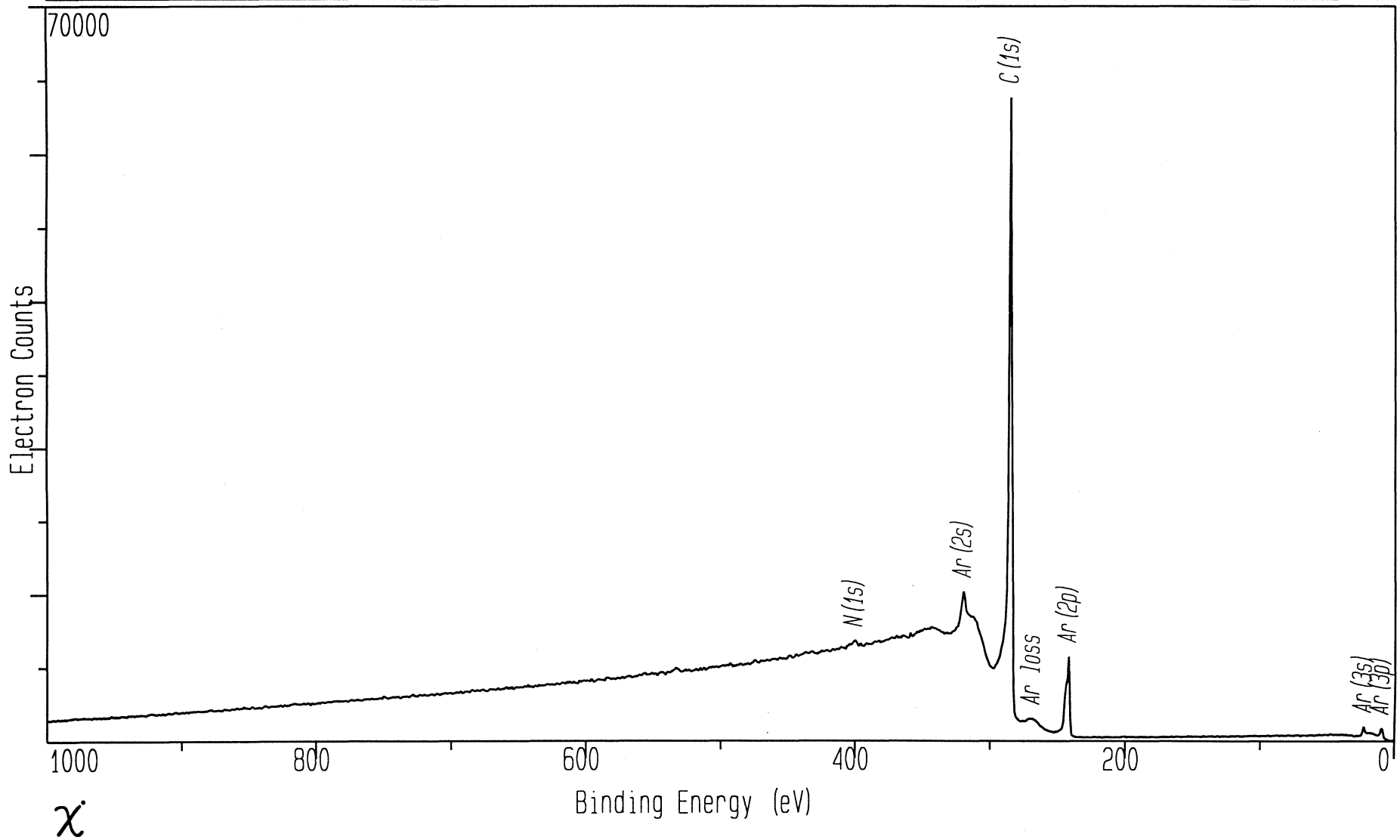
## Detailed Surface Composition Table

File name: AR\_WS.MRS  
Region: 1  
Description: Argon Ions/Natural Graphite Crystal (90 TOA)  
  
Operator: V. Crist  
Date: Tue Jan 12 15:46 1993

<u>Signal</u>	<u>Corrected</u> <u>BE</u>	<u>Exper.</u> <u>BE</u>	<u>Sens</u> <u>Factor</u>	<u>Norm</u> <u>Area</u>	<u>Relative</u> <u>Area</u>	<u>Atom %</u>
N 1s	399.8	399.4	1.60	4332	2706	
Ar2s	319.5	319.2	1.90	30888	16239	
* C 1s	284.8	284.5	1.00	233917	233887	95.88
Ar loss	268.8	268.5	0.00	7032	0	
* Ar2p	241.8	241.5	3.17	31861	10046	4.12
Ar3s	22.3	21.9	0.29	3946	13713	
Ar3p	8.9	8.6	0.31	2352	7584	

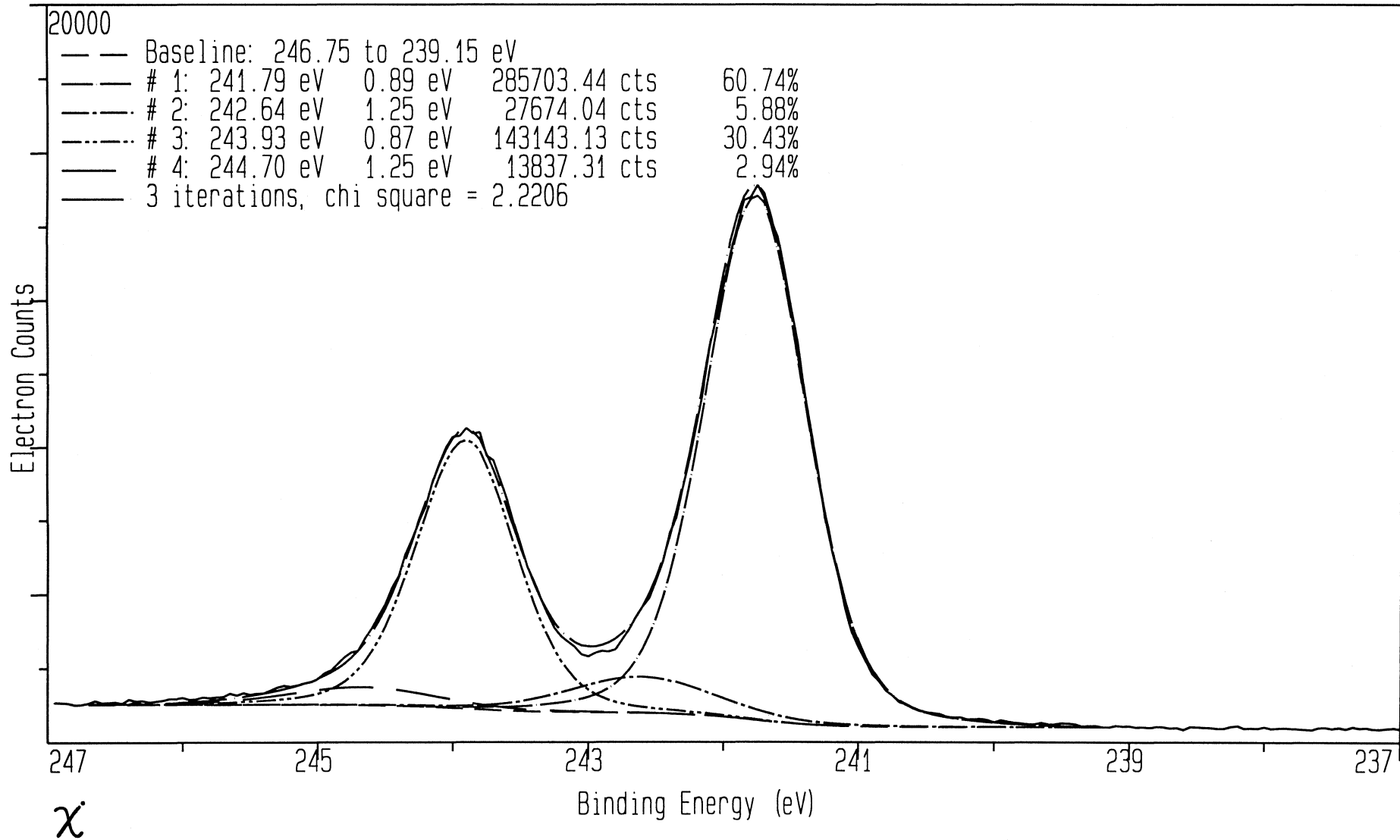
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File: AR_WS	Spot: 250x1000	Flood Gun: Off	Data Points: 1001	Date: Jan 12 1993
Region: 1	Resolution: 4	Scans, Time: 4	Time/Point: 200	Operator: V. Crist
Description: Argon Ions/Natural Graphite Crystal (90 TOA)				

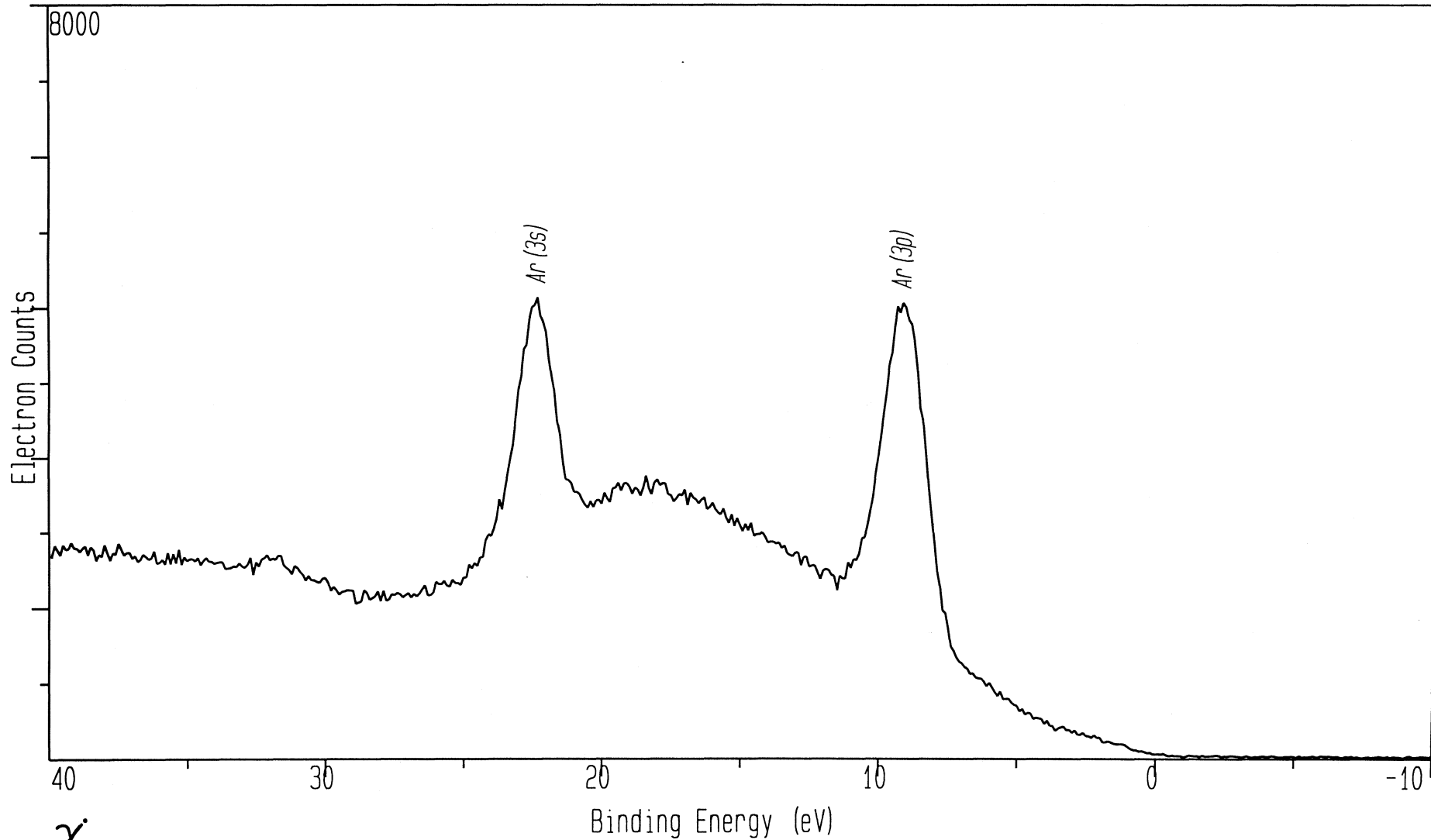


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File: AR_2P_01	Spot: 250x1000	Flood Gun: Off	Data Points: 201	Date: Jan 12 1993
Region: 3	Resolution: 2	Scans, Time: 20	Time/Point: 200	Operator: V. Crist
Description: Argon Ions/Natural Graphite Crystal (90 TOA)				



File: AR_VB	Spot: 250x1000	Flood Gun: Off	Data Points: 501	Date: Jan 12 1993
Region: 1	Resolution: 4	Scans, Time: 15	Time/Point: 200	Operator: V. Crist
Description: Argon Ions/Natural Graphite Crystal (90 TOA)				



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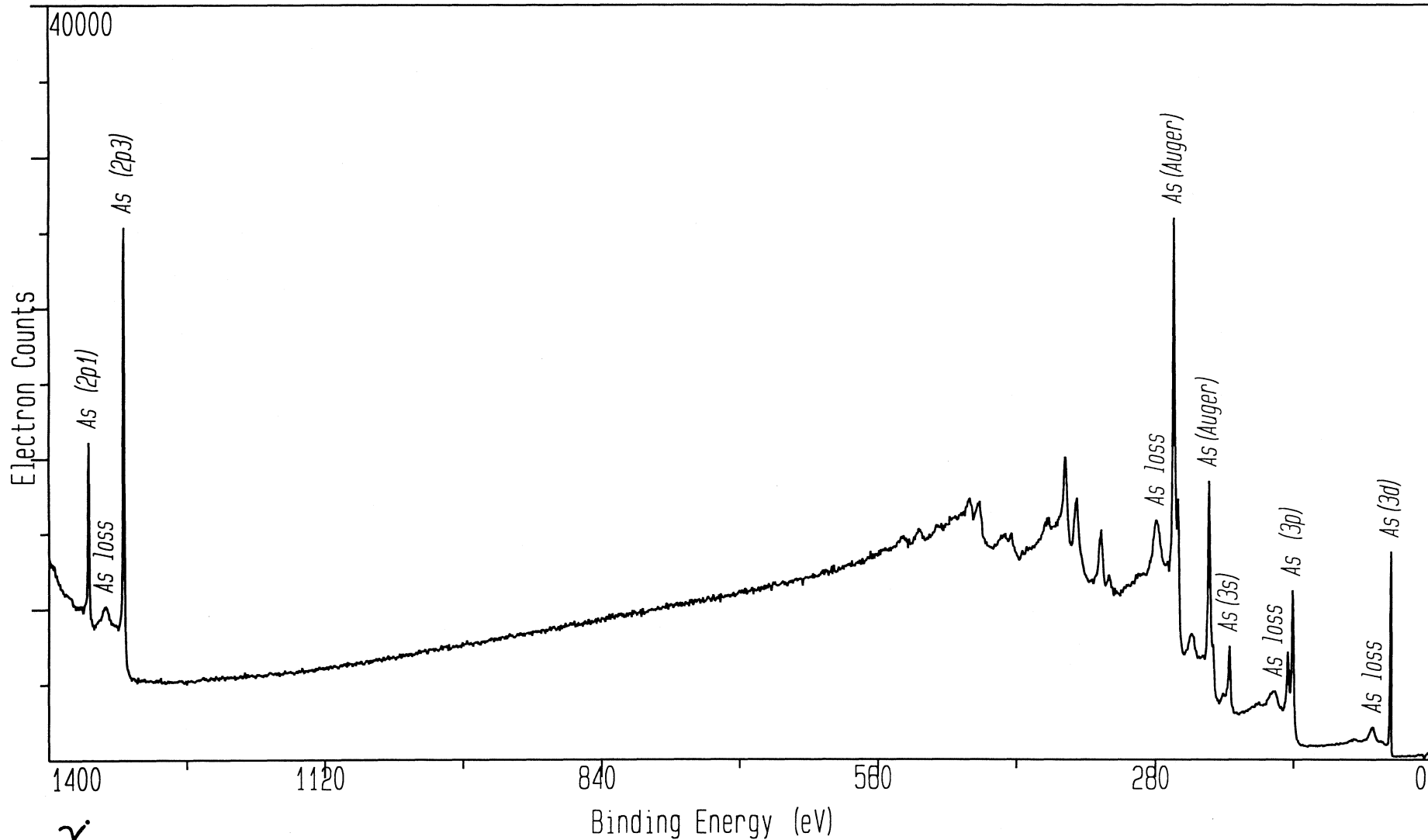
Detailed Surface Composition Table

File name: AS\_WS\_HQ.MRS  
 Region: 2  
 Description: Arsenic (As): 0.70 eV/step  
  
 Operator: V. Crist  
 Date: Thu Mar 10 01:52 1994

<u>Signal</u>	<u>Corrected</u> <u>BE</u>	<u>Exper.</u> <u>BE</u>	<u>Sens</u> <u>Factor</u>	<u>Norm</u> <u>Area</u>	<u>Relative</u> <u>Area</u>	<u>Atom %</u>
As (2p1)	1359.5	1359.5	0.00	6333	7131	
As loss	1342.3	1342.3	0.00	2270	0	
As (2p3)	1323.9	1323.9	0.00	16085	0	
AsAuger	519.0	519.0	0.12	1225	10573	
AsAuger	467.8	467.8	0.12	1584	13531	
AsAuger	457.7	457.7	0.12	2299	19600	
AsAuger	425.5	425.5	0.12	720	6101	
AsAuger	387.5	387.5	0.12	870	7320	
AsAuger	371.2	371.2	0.00	7374	0	
AsAuger	359.6	359.6	0.00	5447	0	
AsAuger	335.0	335.0	0.00	4237	0	
AsAuger	327.0	327.0	0.00	792	0	
As loss	279.1	279.1	1.00	7177	7178	
AsAuger	261.4	261.4	0.00	27159	0	
As loss	243.4	243.4	0.12	2653	22144	
As3s	225.7	225.7	0.12	13349	109271	
AsAuger	204.7	204.7	1.34	2677	2002	
As loss	159.1	159.1	0.12	1201	9978	
As (3p)	140.7	140.7	1.42	10842	7637	
As loss	59.2	59.2	0.13	1677	12860	
As3d	41.5	41.5	1.89	5514	2920	
As4p	9.1	9.1	0.13	225	1784	

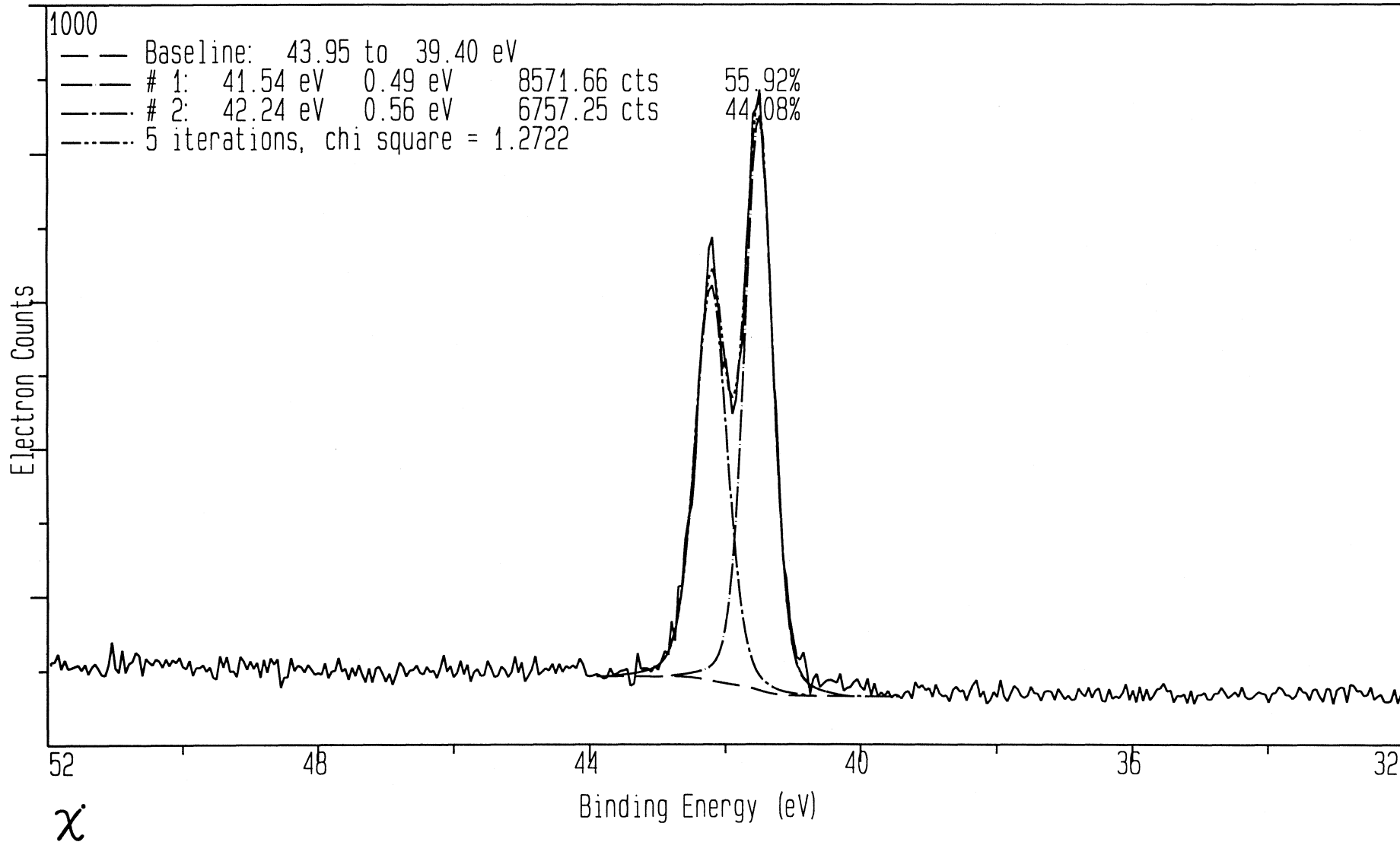
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File: AS_WS_HQ	Spot: 250x1000	Flood Gun: Off	Data Points: 2000	Date: Mar 10 1994
Region: 2	Resolution: 2	Scans, Time: 15	Time/Point: 200	Operator: V. Crist
Description: Arsenic (As): 0.70 eV/step (null)				

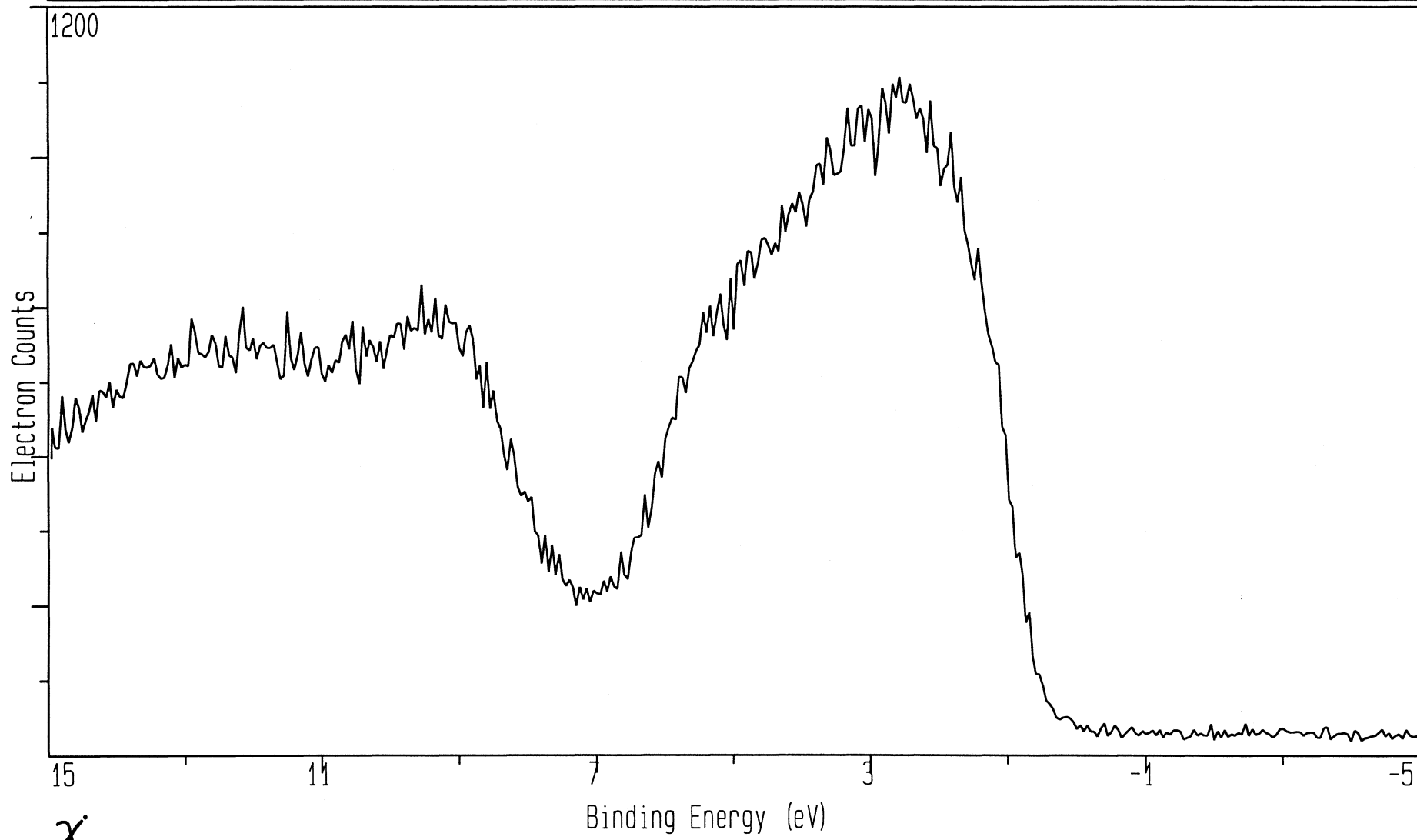


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File: AS_3D_HQ	Spot: 150x800	Flood Gun: Off	Data Points: 401	Date: Mar 09 1994
Region: 1	Resolution: 0	Scans, Time: 40	Time/Point: 200	Operator: V. Crist
Description: Arsenic: As (3d5) & As (3d3), BE Cu (2p3) = 932.67eV Ion gun AOI was ca. 70 deg				



File: AS_VB_HQ	Spot: 250x1000	Flood Gun: Off	Data Points: 401	Date: Mar 09 1994
Region: 1	Resolution: 2	Scans, Time: 40	Time/Point: 200	Operator: V. Crist
Description: Arsenic (As): Valenc Bands, 0.05 eV/step Ion gun AOI was ca. 70 deg				



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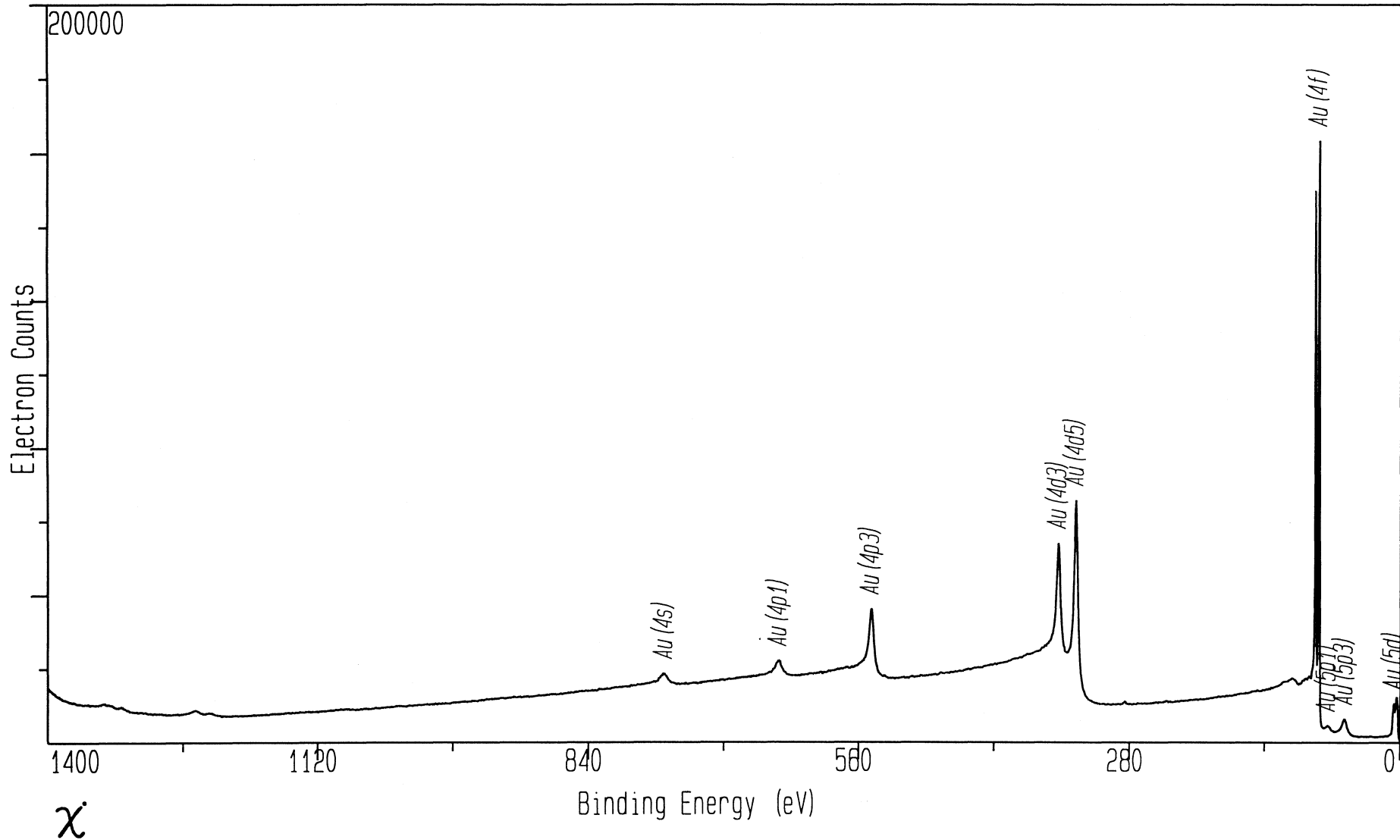
Detailed Surface Composition Table

File name: AU\_WS\_HQ.MRS  
 Region: 1  
 Description: Gold (Au): 0.7 eV/step, 90 deg TOA  
 Sum of 15 repetitive etch/scans  
 Operator: V. Crist  
 Date: Fri Feb 25 02:57 1994

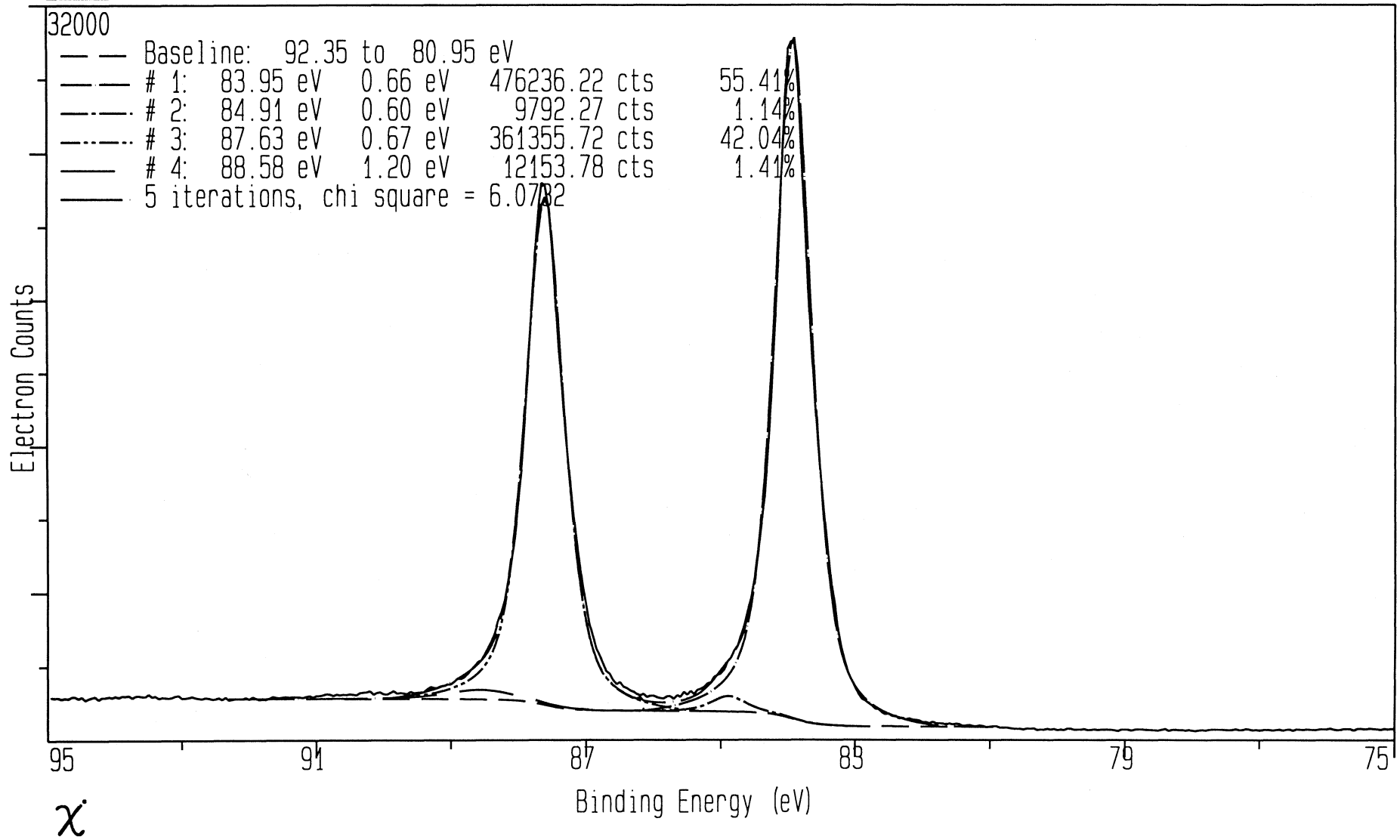
<u>Signal</u>	<u>Corrected</u> <u>BE</u>	<u>Exper.</u> <u>BE</u>	<u>Sens</u> <u>Factor</u>	<u>Norm</u> <u>Area</u>	<u>Relative</u> <u>Area</u>	<u>Atom %</u>
Au4s	761.2	761.2	1.74	9904	5706	
Au4p1	642.4	642.4	1.99	14742	7393	
Au4p3	546.3	546.3	5.61	51765	9231	
Au4d3	353.0	353.0	7.97	76555	9610	
Au4d5	335.0	335.0	11.64	103982	8933	
Au4f	83.6	83.6	17.66	208355	11797	
Au5p1	74.0	74.0	0.48	1956	4090	
Au5p3	56.8	56.8	1.14	11411	10020	
Au5d	5.8	5.8	1.89	24461	12977	

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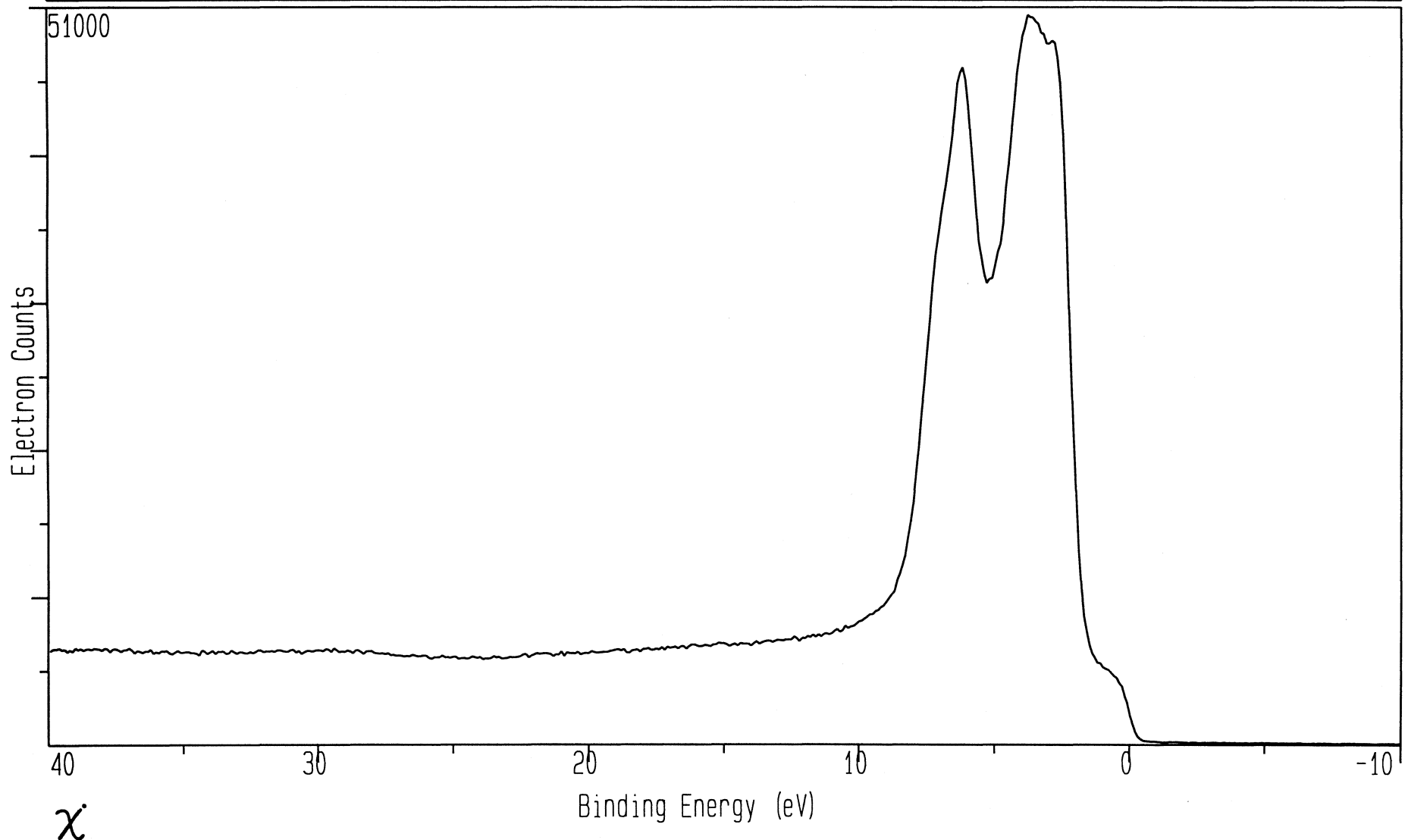
File: AU_WS_HQ	Spot: 250x1000	Flood Gun: Off	Data Points: 2000	Date: Feb 25 1994
Region: 1	Resolution: 2	Scans, Time: 45	Time/Point: 50	Operator: V. Crist
Description: Gold (Au): 0.7 eV/step, 90 deg TOA Sum of 15 repetitive etch/scans				



File: AU_4F_HQ	Spot: 150x800	Flood Gun: Off	Data Points: 401	Date: Feb 24 1994
Region: 1	Resolution: 0	Scans, Time: 3	Time/Point: 100	Operator: V. Crist
Description: Gold: Au(4f7) & Au(4f5), Cu(2p3) BE= 932.65eV 0.05 eV/step, 90 deg TOA, 15 repetitive etch/scans				

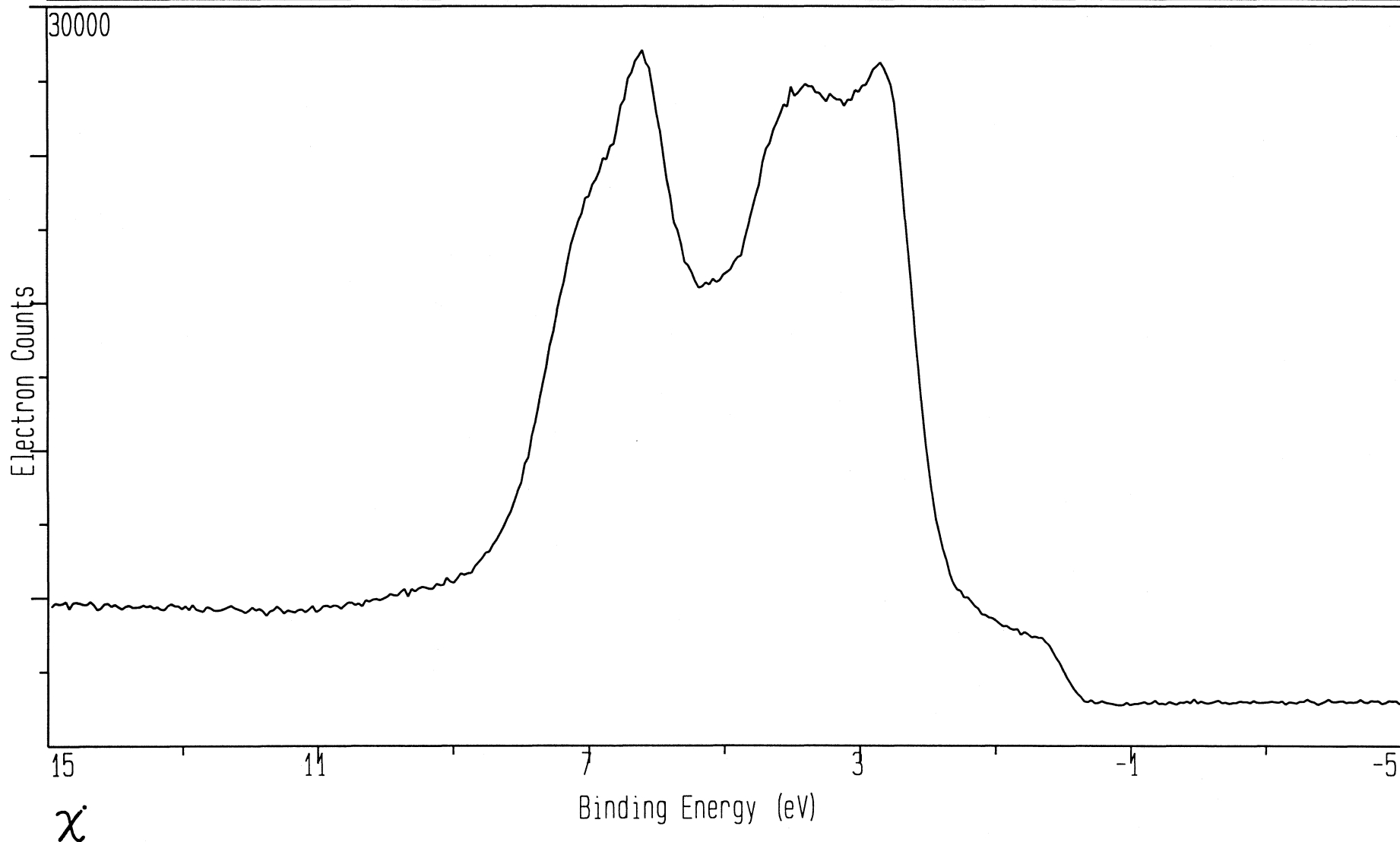


File: AU_VB_LO	Spot: 250x1000	Flood Gun: Off	Data Points: 501	Date: Feb 25 1994
Region: 1	Resolution: 2	Scans, Time: 50	Time/Point: 200	Operator: V. Crist
Description: Gold (Au): Valence Bands, low res, 0.10 eV/step				



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File: AU_VB_HQ	Spot: 300	Flood Gun: Off	Data Points: 384	Date: 7/28/1986
Region: 1	Resolution: 1	Scans, Time: 200	Time/Point: 200	Operator: BVC
Description: Gold (Au) on Mylar: Valence Bands, 0.05 eV/step (null)				



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Detailed Surface Composition Table

File name: B\_WS\_HQ.MRS  
Region: 2  
Description: Boron (B) after B\_ns.dpr 90 TOA  
  
Operator: V. Crist  
Date: Thu Feb 24 21:13 1994

<u>Signal</u>	<u>Corrected</u> <u>BE</u>	<u>Exper.</u> <u>BE</u>	<u>Sens</u> <u>Factor</u>	<u>Norm</u> <u>Area</u>	<u>Relative</u> <u>Area</u>	<u>Atom %</u>
N 1s	398.2	398.2	1.76	583	331	
Ar2s	319.4	319.4	1.96	4312	2202	
C 1s	283.4	283.4	1.00	1302	1302	
Ar loss	266.9	266.9	0.00	1506	0	
Ar2p	241.6	241.6	3.06	8690	2839	
B loss	212.6	212.6	0.00	12364	0	
B 1s	187.7	187.7	0.49	27345	55744	
Ar3s	22.0	22.0	0.24	476	2016	
Ar3p	8.5	8.5	0.25	1338	5305	

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