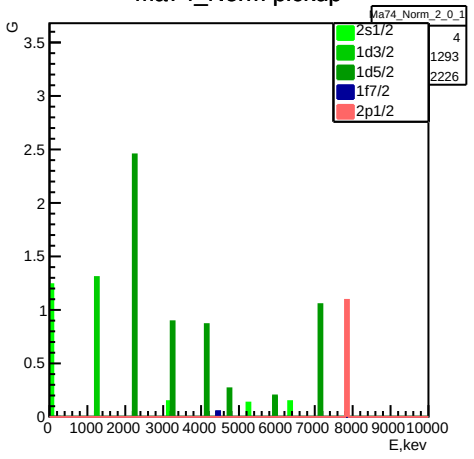
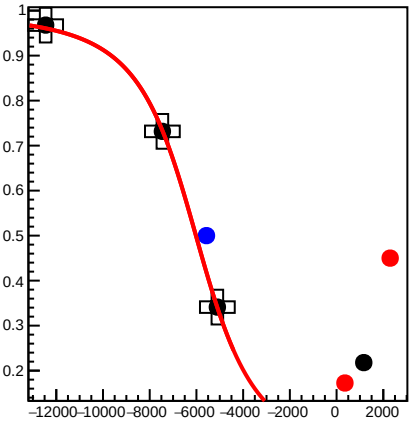
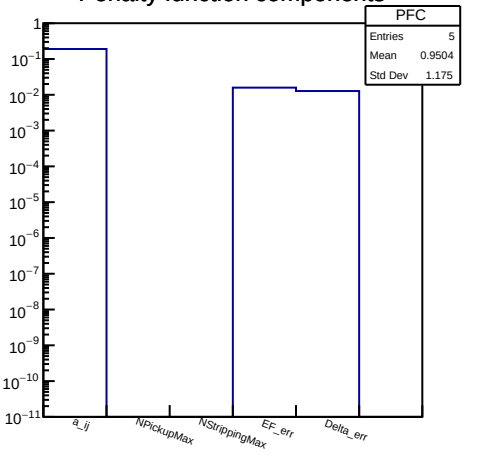
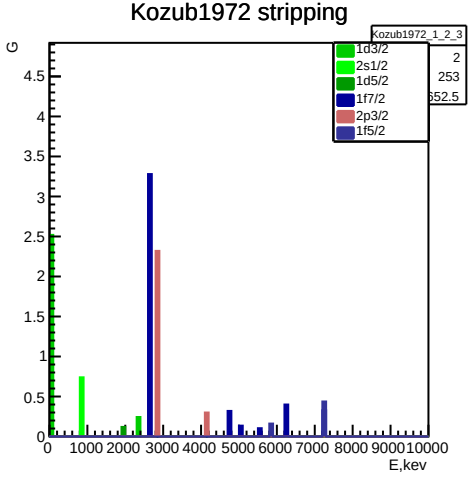
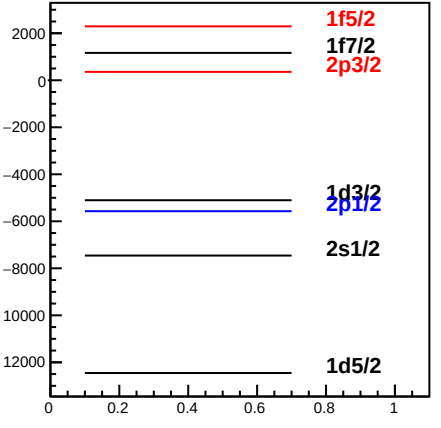





**Experiment: Ma74_Norm (14) Kozub1972 (14**

**proton transfer**

**p separation energy A:8863.17, A+1: 2277.5**

**E_F: -6021.25 ± 37.3266 keV**

**Δ: 2718.08 ± 83.6194 keV**

**penalty: 0.0437393**

**SPE,keV nlj OCC** $\frac{G^{+}+G^{-}}{2J+1}$

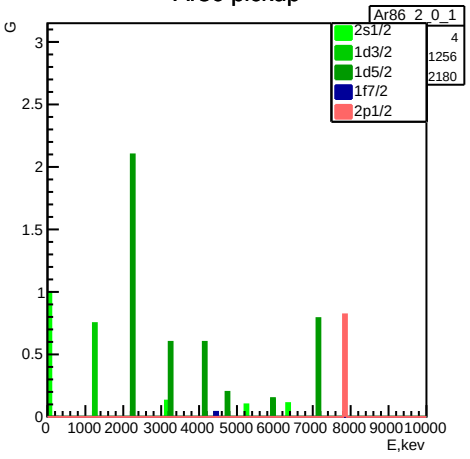
**-7457.39 2s1/2 0.731667 1.20333**

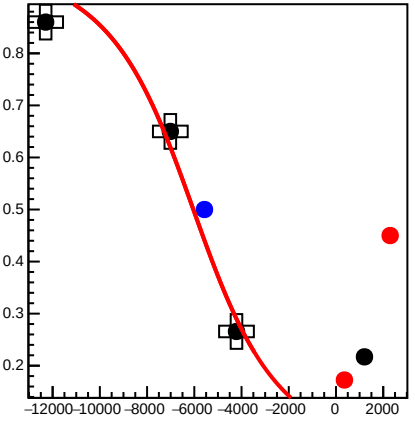
**-5103.89 1d3/2 0.341167 1.06433**

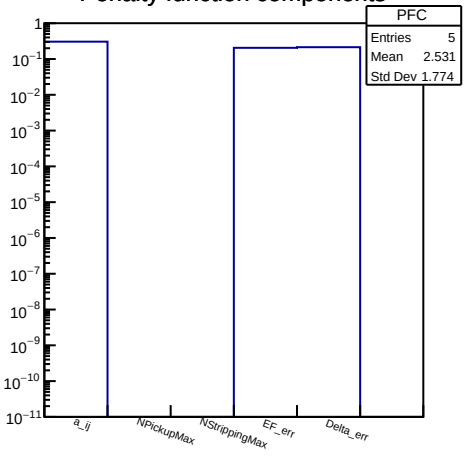
**-12455 1d5/2 0.967778 0.975556**

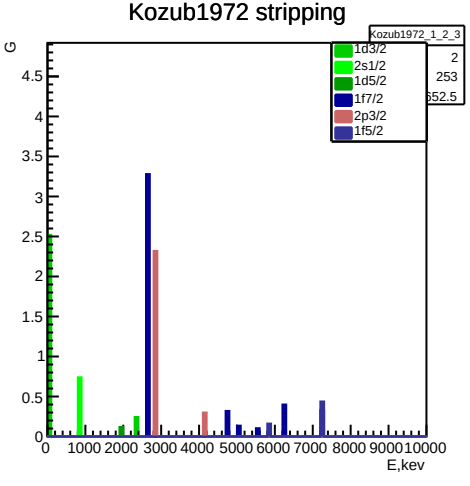
**1164.29 1f7/2 0.217833 0.577667**

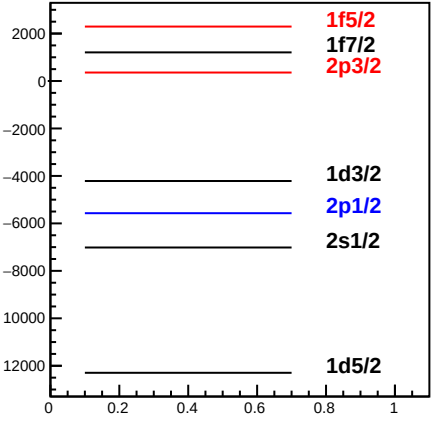
**-5570.33 2p1/2 0.5 1.09333**






**Experiment: Ar86 (14) Kozub1972 (14)**

**proton transfer**

**p separation energy A:8863.17, A+1: 2277.5**

**E_F: -6041.02 ± 483.741 keV**

**Δ: -3943.82 ± 1402.68 keV**

**penalty: 0.144827**

**SPE,keV nlj OCC** $\frac{G^{+}+G^{-}}{2J+1}$

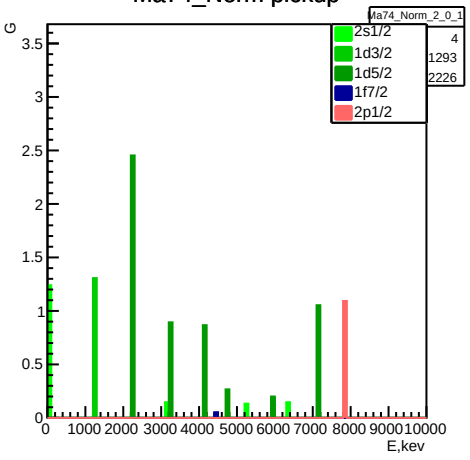
**-7015.55 2s1/2 0.65 1.04**

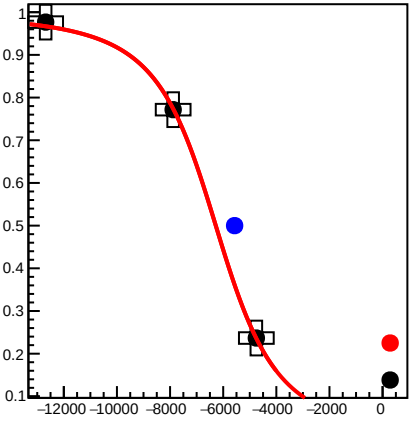
**-4213.81 1d3/2 0.26575 0.9135**

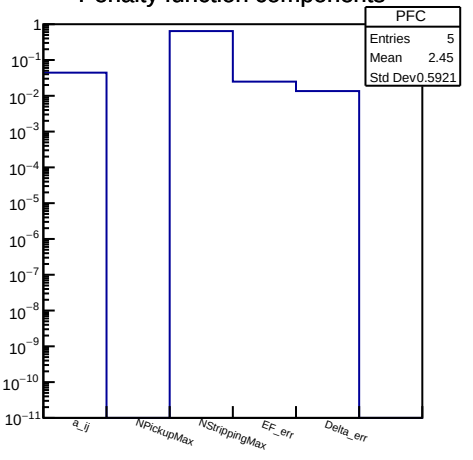
**-12295.5 1d5/2 0.86 0.76**

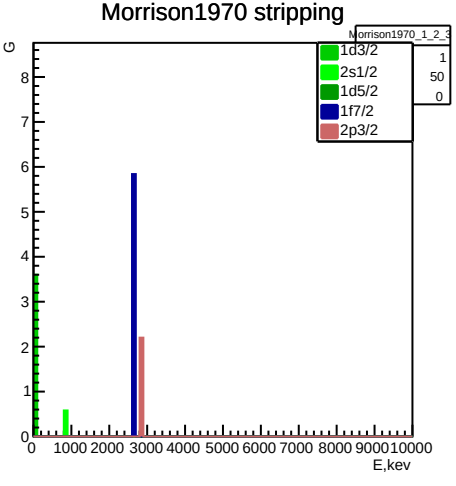
**1206.13 1f7/2 0.217 0.576**

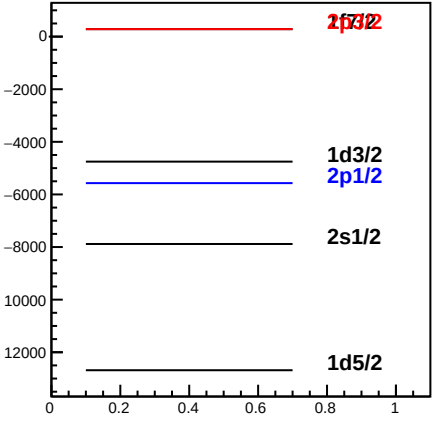
**-5570.33 2p1/2 0.5 0.82**






**Experiment: Ma74_Norm (14) Morrison1970**

**proton transfer**

**p separation energy A:8863.17, A+1: 2277.5**

**E_F: -6279.44 ± 58.5815 keV**

**Δ: -2451.9 ± 88.9301 keV**

**penalty: 0.145114**

**SPE,keV nlj OCC** $\frac{G^{+}+G^{-}}{2J+1}$

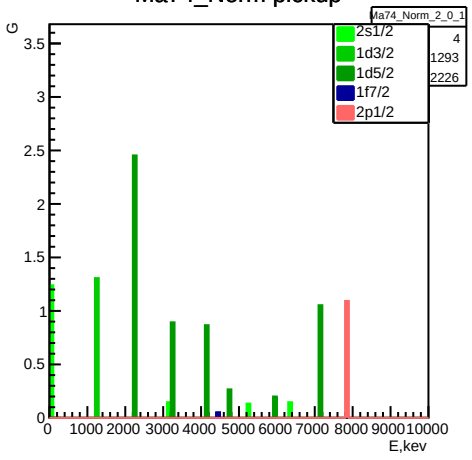
**-7884.01 2s1/2 0.771667 1.12333**

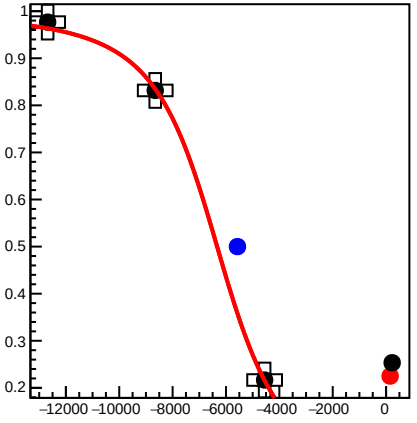
**-4752.65 1d3/2 0.236667 1.27333**

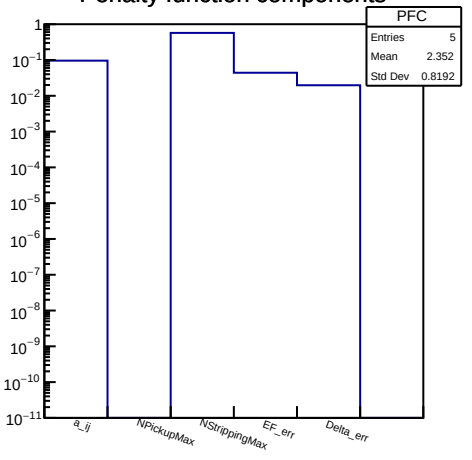
**-12683.6 1d5/2 0.976778 0.957556**

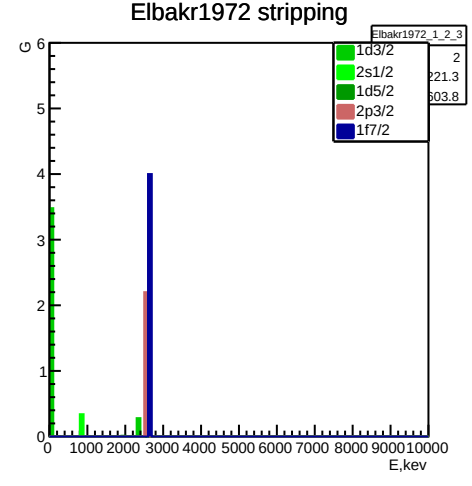
**283.895 1f7/2 0.138333 0.736667**

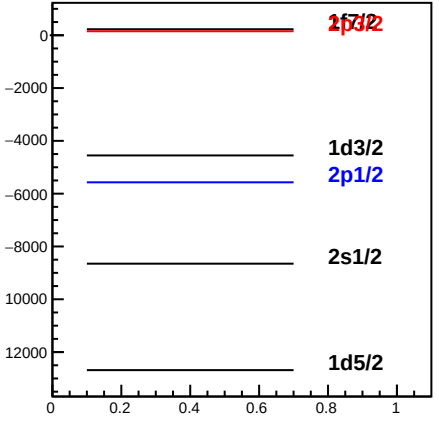
**-5570.33 2p1/2 0.5 1.09333**






**Experiment: Ma74_Norm (14) Elbakr1972 (6)**

**proton transfer**

**p separation energy A:8863.17, A+1: 2277.5**

**E_F: -6332.08 ± 103.739 keV**

**Δ: 2572.92 ± 129.361 keV**

**penalty: 0.146227**

**SPE,keV nlj OCC** $\frac{G^{+}+G^{-}}{2J+1}$

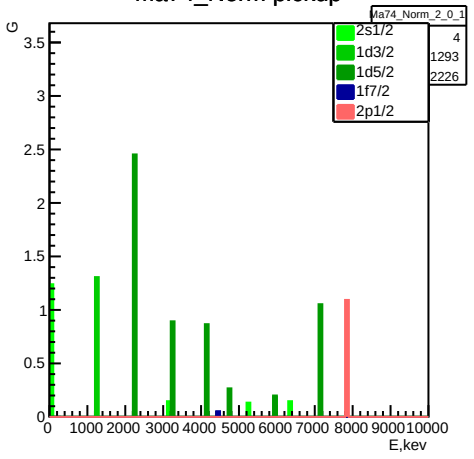
**-8651.5 2s1/2 0.831667 1.00333**

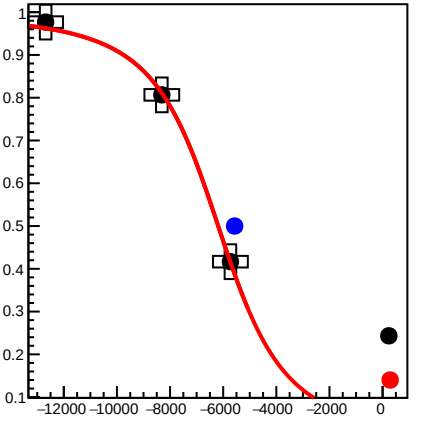
**-4551.9 1d3/2 0.216667 1.31333**

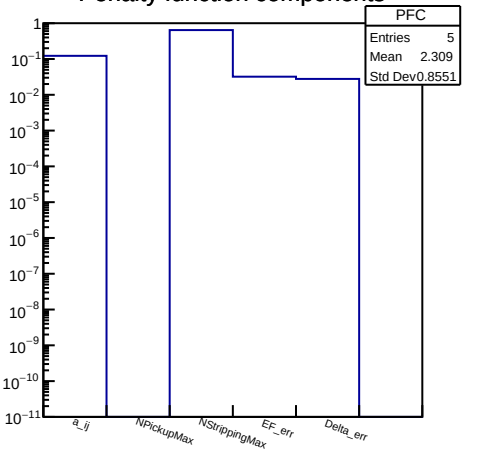
**-12683.6 1d5/2 0.976778 0.957556**

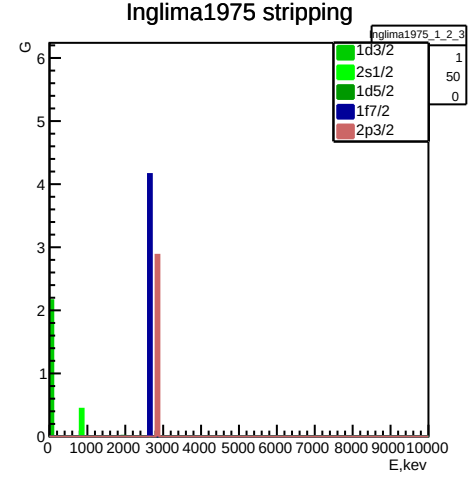
**227.604 1f7/2 0.253333 0.506667**

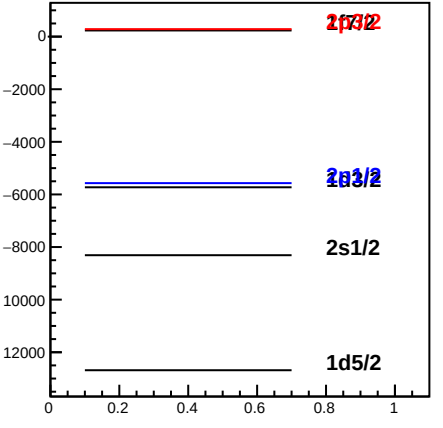
**-5570.33 2p1/2 0.5 1.09333**






**Experiment: Ma74_Norm (14) Inglima1975 (5**

**proton transfer**

**p separation energy A:8863.17, A+1: 2277.5**

**E_F: -6188.34 ± 75.5135 keV**

**Δ: -2671.76 ± 182.227 keV**

**penalty: 0.165061**

**SPE,keV nlj OCC** $\frac{G^{+}+G^{-}}{2J+1}$

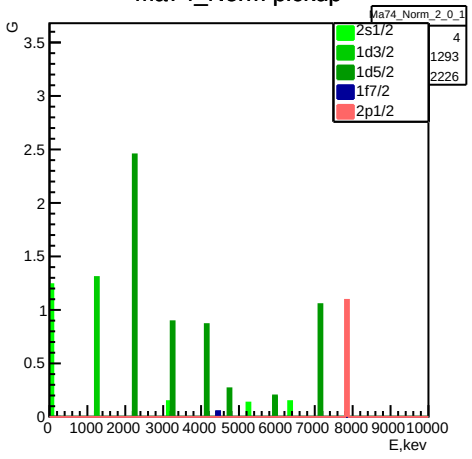
**-8310.46 2s1/2 0.806667 1.05333**

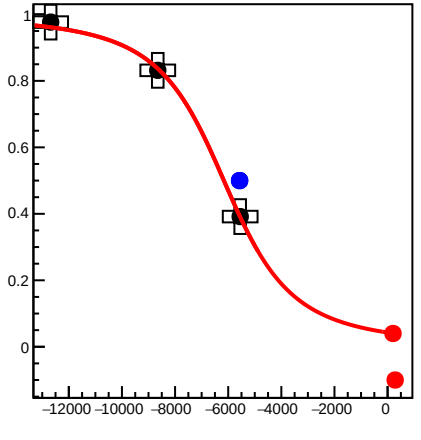
**-5728.25 1d3/2 0.416667 0.913333**

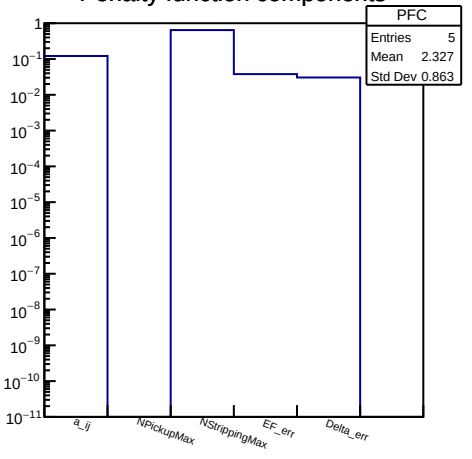
**-12683.6 1d5/2 0.976778 0.957556**

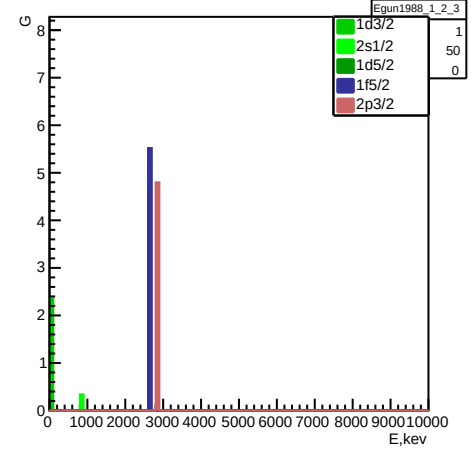
**234.451 1f7/2 0.243333 0.526667**

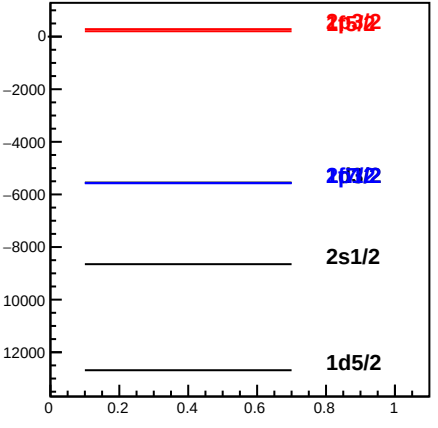
**-5570.33 2p1/2 0.5 1.09333**






**Experiment: Ma74_Norm (14) Egun1988 (5)**

**proton transfer**

**p separation energy A:8863.17, A+1: 2277.5**

**$E_F$: -6162.67 $\pm$ 89.1745 keV**

**$\Delta$: 2731.06 $\pm$ 199.901 keV**

**penalty: 0.166494**

**SPE,keV nlj OCC** $\frac{G^{+}+G^{-}}{2J+1}$

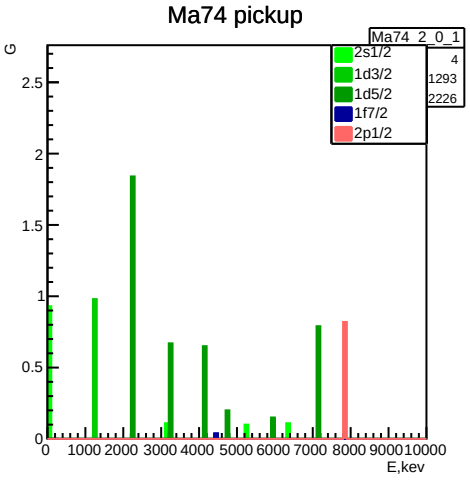
**-8651.5 2s1/2 0.831667 1.00333**

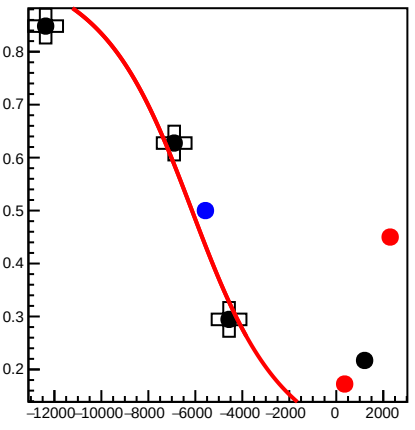
**-5549.15 1d3/2 0.391667 0.963333**

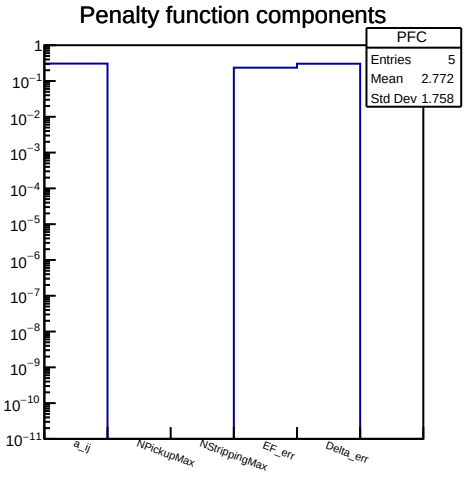
**-12683.6 1d5/2 0.976778 0.957556**

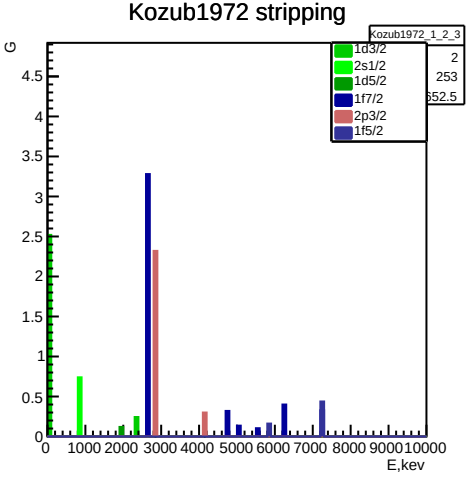
**-5570.33 1f7/2 0.5 0.0133333**

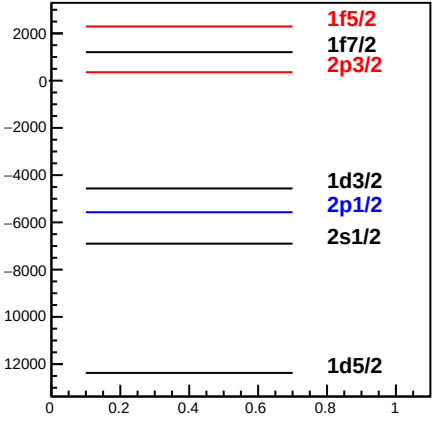
**-5570.33 2p1/2 0.5 1.09333**






**Experiment: Ma74 (14) Kozub1972 (14)**

**proton transfer**

**p separation energy A:8863.17, A+1: 2277.5**

**E_F: -6142.69 ± 555.473 keV**

**Δ: -4289.94 ± 1993.69 keV**

**penalty: 0.169237**

**SPE,keV nlj OCC** $\frac{G^{+}+G^{-}}{2J+1}$

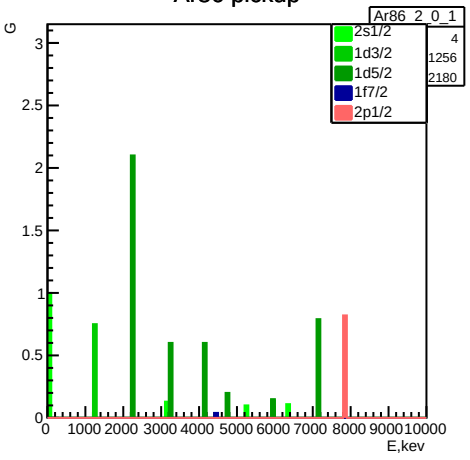
**-6900.49 2s1/2 0.6275 0.995**

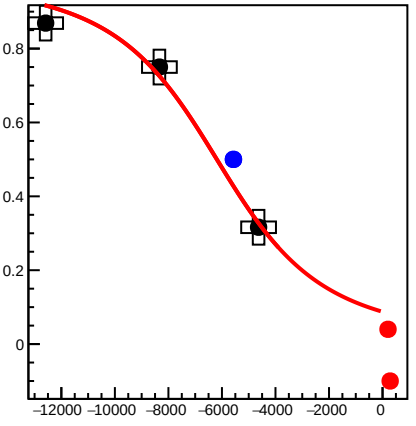
**-4564.11 1d3/2 0.2945 0.971**

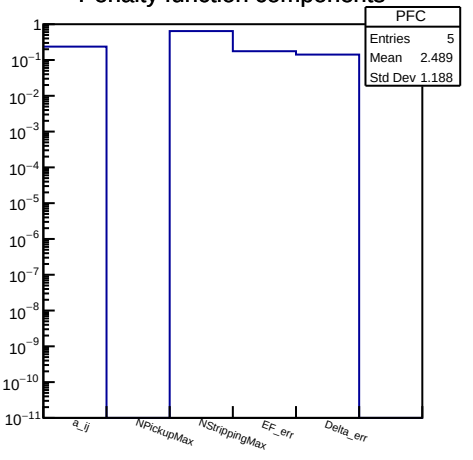
**-12372.4 1d5/2 0.848333 0.736667**

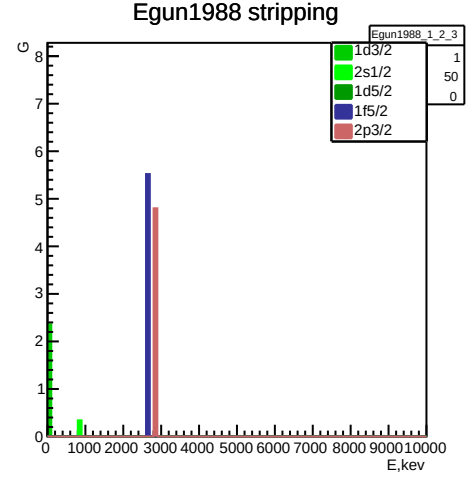
**1206.13 1f7/2 0.217 0.576**

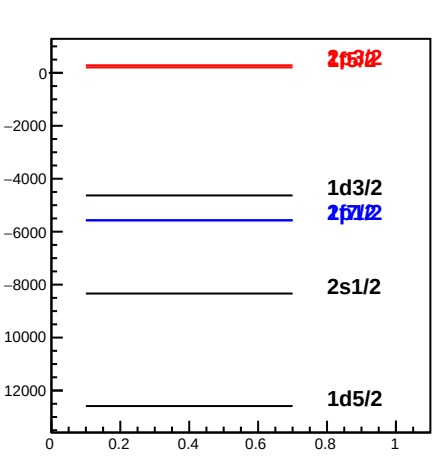
**-5570.33 2p1/2 0.5 0.82**






**Experiment: Ar86 (14) Egun1988 (5)**

**proton transfer**

**p separation energy A:8863.17, A+1: 2277.5**

**E_F: -6190.49 ± 414.654 keV**

**Δ: 4239.56 ± 930.062 keV**

**penalty: 0.239416**

**SPE,keV nlj OCC $\frac{G^{+}+G^{-}}{2J+1}$**

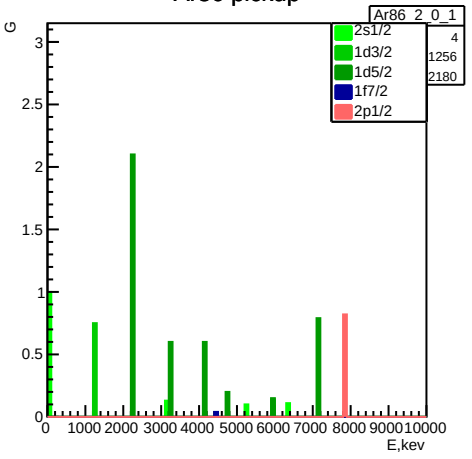
**-8336.65 2s1/2 0.75 0.84**

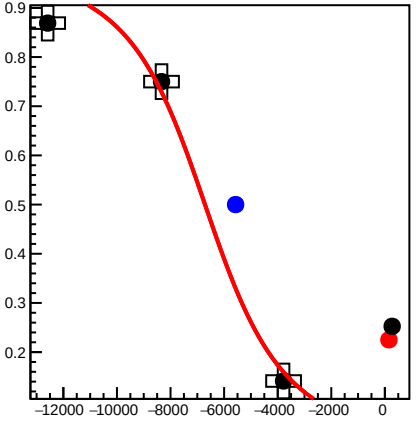
**-4631.09 1d3/2 0.31625 0.8125**

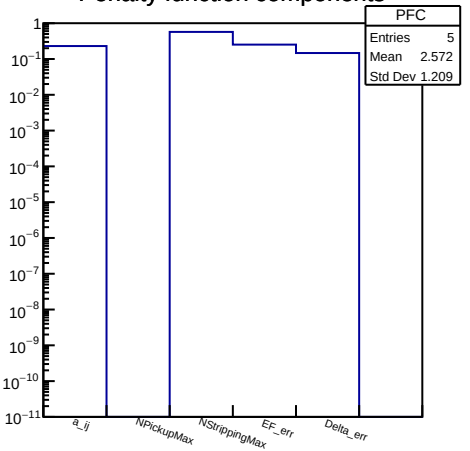
**-12586.7 1d5/2 0.869 0.742**

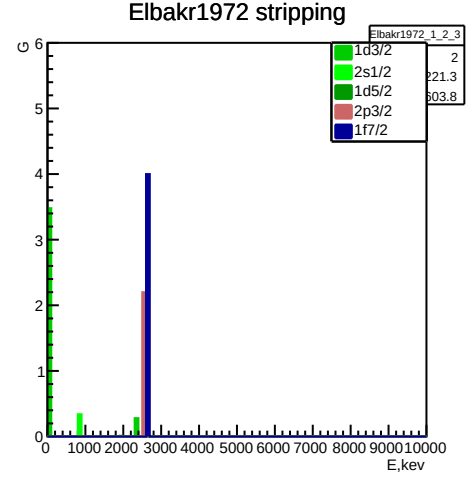
**-5570.33 1f7/2 0.5 0.01**

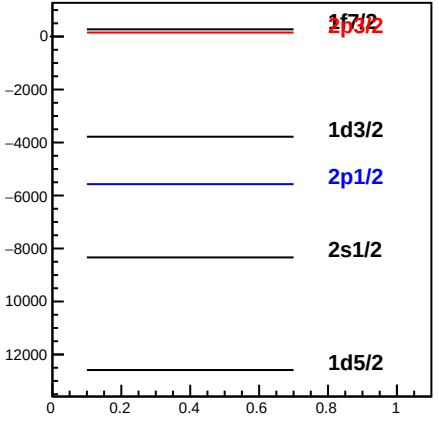
**-5570.33 2p1/2 0.5 0.82**






**Experiment: Ar86 (14) Elbakr1972 (6)**

**proton transfer**

**p separation energy A:8863.17, A+1: 2277.5**

**E_F: -6713.29 ± 594.472 keV**

**Δ: -3150.13 ± 963.926 keV**

**penalty: 0.240144**

**SPE,keV nlj OCC** $\frac{G^{+}+G^{-}}{2J+1}$

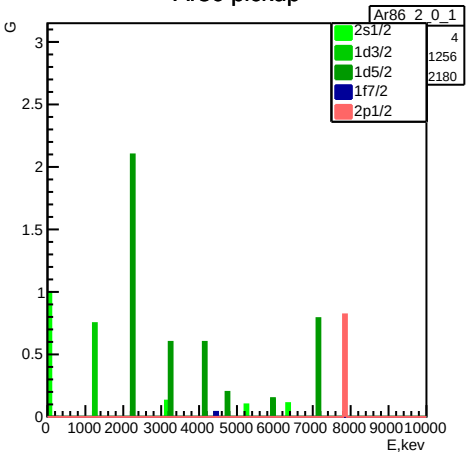
**-8336.65 2s1/2 0.75 0.84**

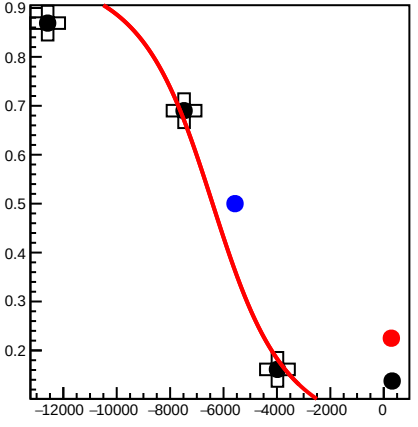
**-3780.85 1d3/2 0.14125 1.1625**

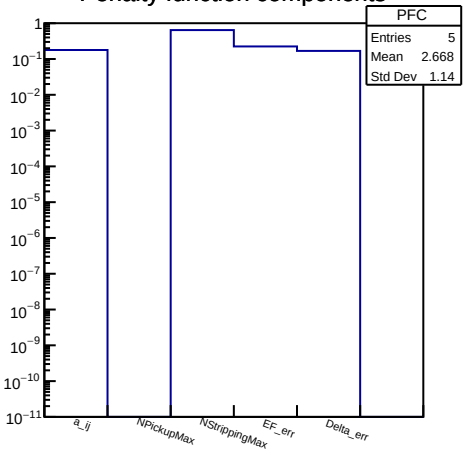
**-12586.7 1d5/2 0.869 0.742**

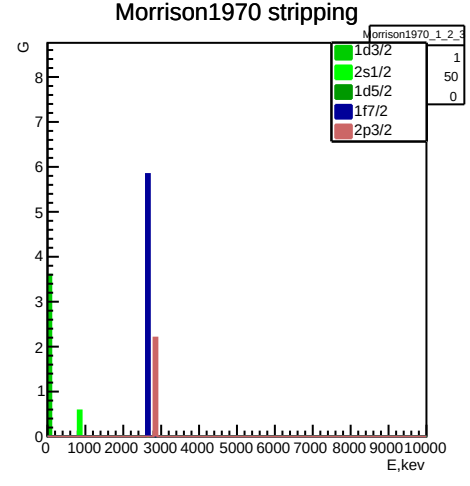
**272.231 1f7/2 0.2525 0.505**

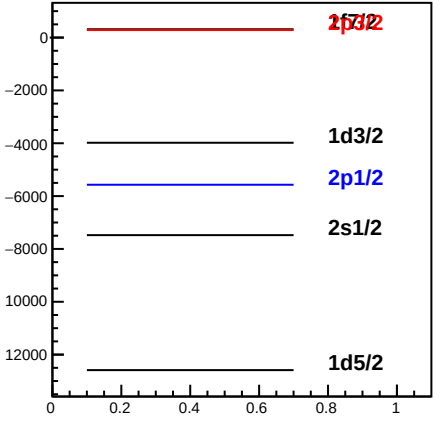
**-5570.33 2p1/2 0.5 0.82**






**Experiment: Ar86 (14) Morrison1970 (5)**

**proton transfer**

**p separation energy A:8863.17, A+1: 2277.5**

**E_F: -6410.38 ± 528.561 keV**

**Δ: 2946.31 ± 1104.59 keV**

**penalty: 0.242788**

**SPE,keV nlj OCC** $\frac{G^{+}+G^{-}}{2J+1}$

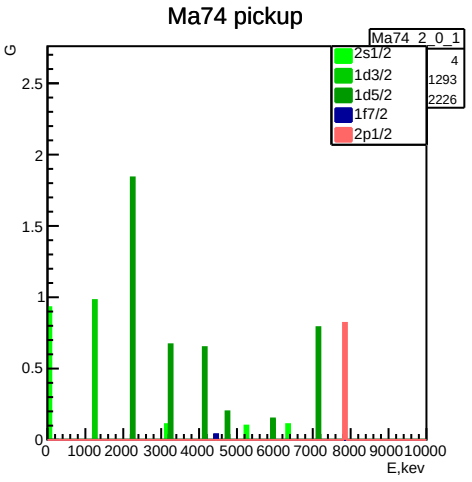
**-7477.94 2s1/2 0.69 0.96**

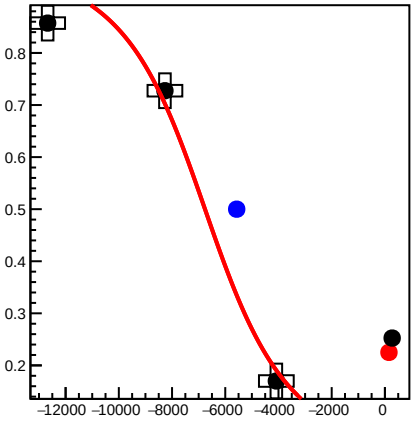
**-3981.1 1d3/2 0.16125 1.1225**

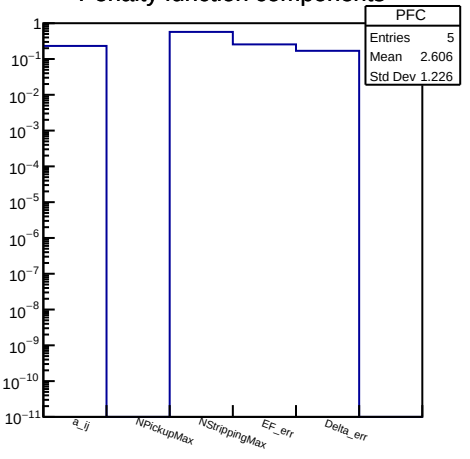
**-12586.7 1d5/2 0.869 0.742**

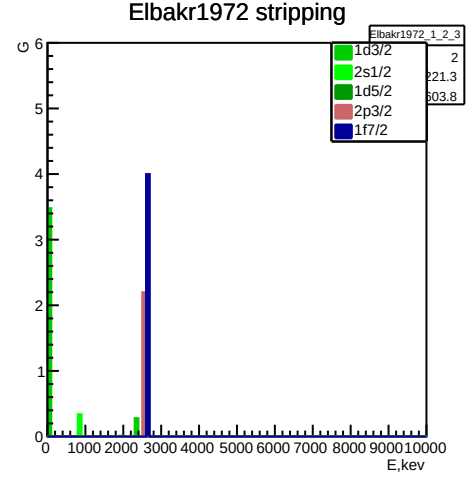
**314.684 1f7/2 0.1375 0.735**

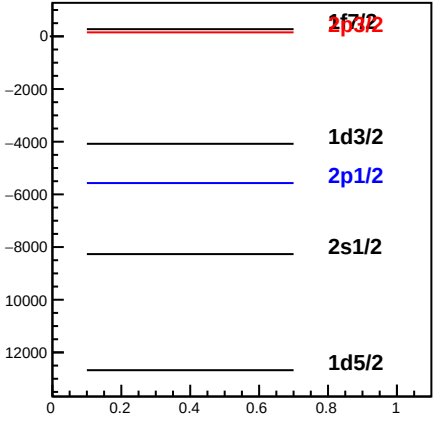
**-5570.33 2p1/2 0.5 0.82**






**Experiment: Ma74 (14) Elbakr1972 (6)**

**proton transfer**

**p separation energy A:8863.17, A+1: 2277.5**

**E_F: -6761.77 ± 602.989 keV**

**Δ: 3400.9 ± 1111.09 keV**

**penalty: 0.245713**

**SPE,keV nlj OCC** $\frac{G^{+}+G^{-}}{2J+1}$

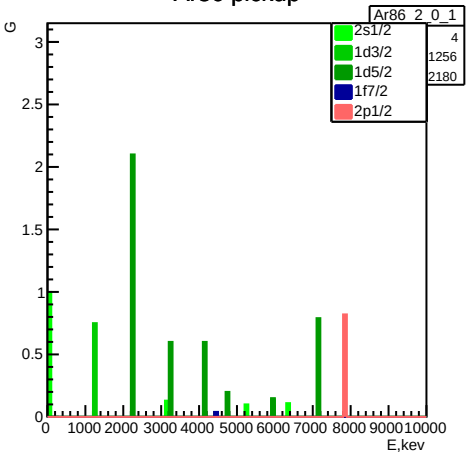
**-8267.42 2s1/2 0.7275 0.795**

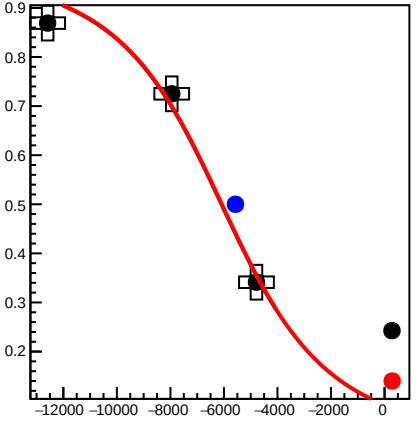
**-4080.06 1d3/2 0.17 1.22**

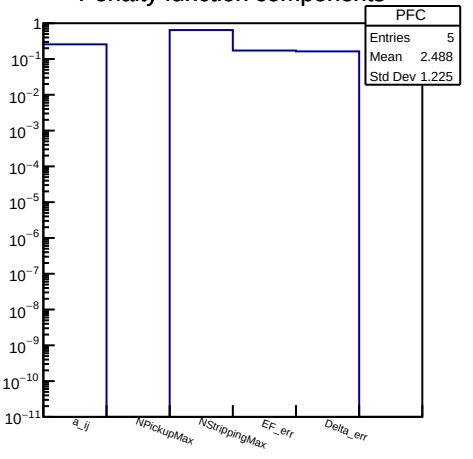
**-12675 1d5/2 0.857333 0.718667**

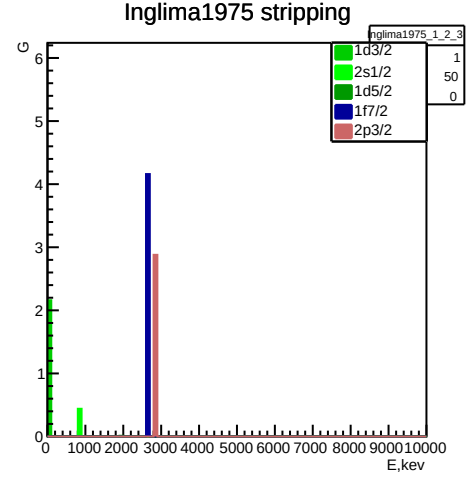
**272.231 1f7/2 0.2525 0.505**

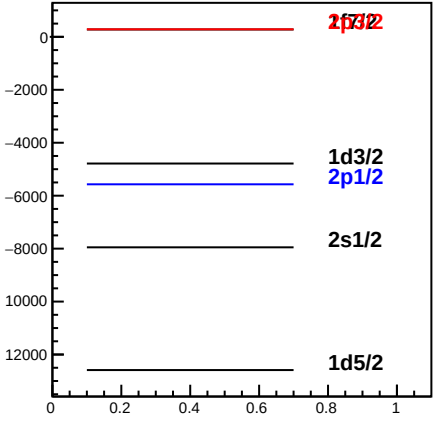
**-5570.33 2p1/2 0.5 0.82**






**Experiment: Ar86 (14) Inglima1975 (5)**

**proton transfer**

**p separation energy A:8863.17, A+1: 2277.5**

**E_F: -6086.86 ± 406.077 keV**

**Δ: -4292.83 ± 1071.63 keV**

**penalty: 0.247052**

**SPE,keV nlj OCC** $\frac{G^{+}+G^{-}}{2J+1}$

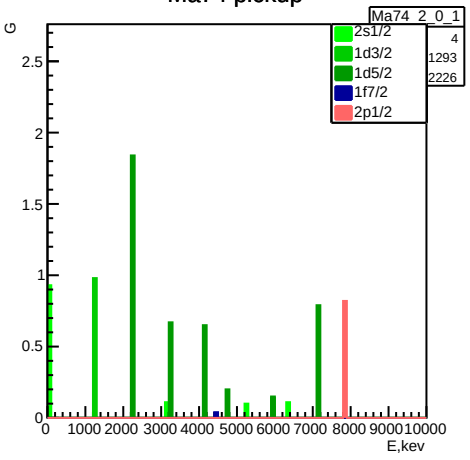
**-7950.71 2s1/2 0.725 0.89**

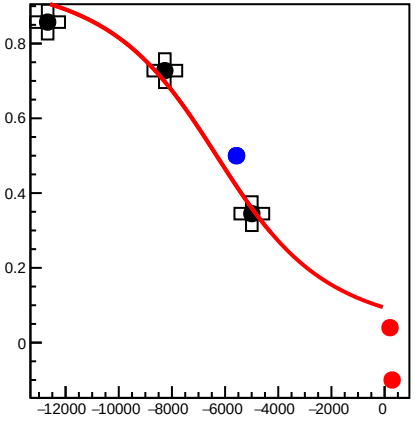
**-4785.42 1d3/2 0.34125 0.7625**

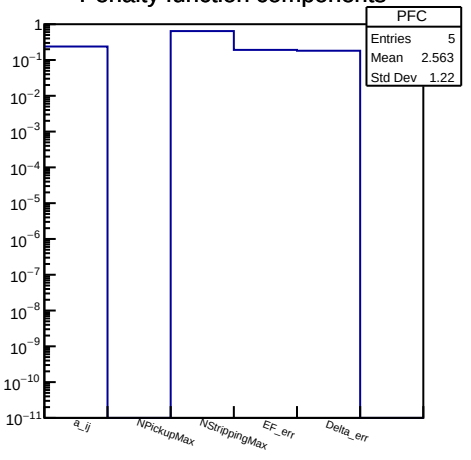
**-12586.7 1d5/2 0.869 0.742**

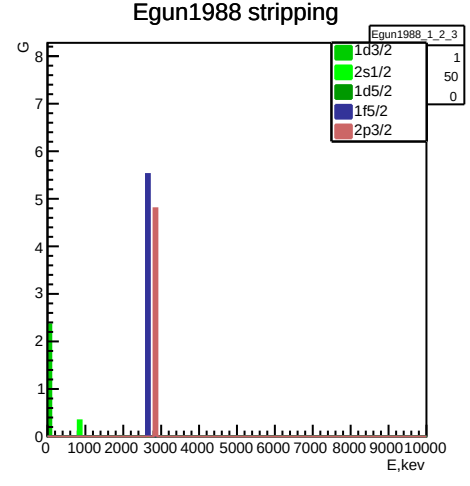
**277.399 1f7/2 0.2425 0.525**

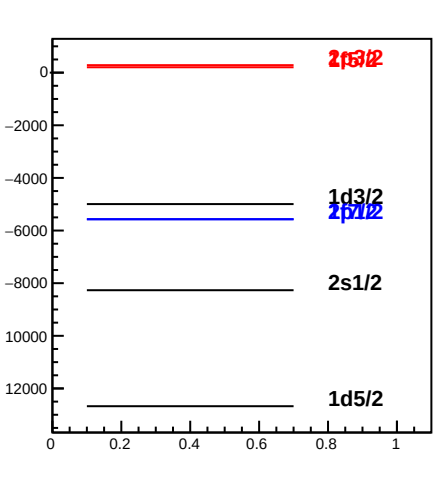
**-5570.33 2p1/2 0.5 0.82**






**Experiment: Ma74 (14) Egun1988 (5)**

**proton transfer**

**p separation energy A:8863.17, A+1: 2277.5**

**E_F: -6317.55 ± 451.235 keV**

**Δ: 4524.95 ± 1191.42 keV**

**penalty: 0.250796**

**SPE,keV nlj OCC** $\frac{G^{+}+G^{-}}{2J+1}$

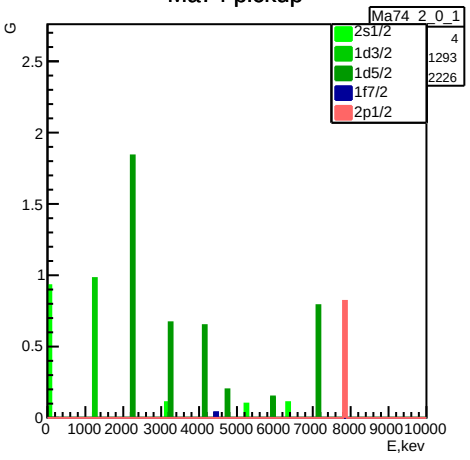
**-8267.42 2s1/2 0.7275 0.795**

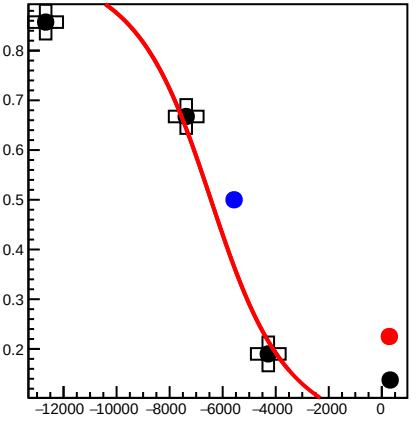
**-4994.47 1d3/2 0.345 0.87**

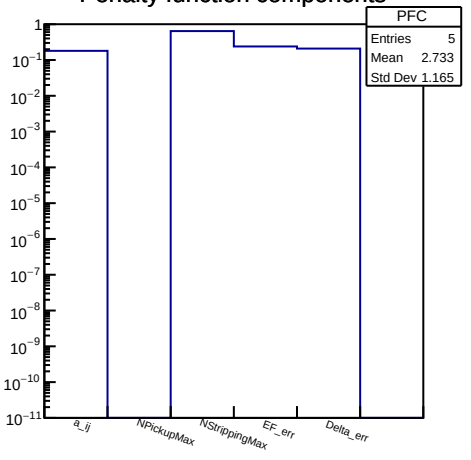
**-12675 1d5/2 0.857333 0.718667**

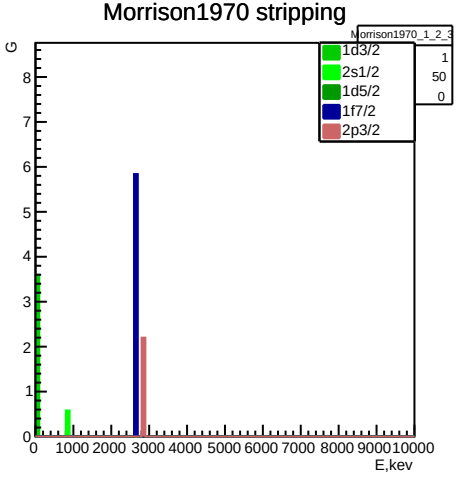
**-5570.33 1f7/2 0.5 0.01**

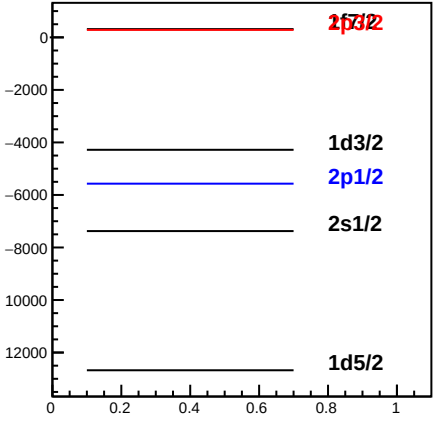
**-5570.33 2p1/2 0.5 0.82**






**Experiment: Ma74 (14) Morrison1970 (5)**

**proton transfer**

**p separation energy A:8863.17, A+1: 2277.5**

**E_F: -6442.89 ± 562.681 keV**

**Δ: 3124.13 ± 1368.94 keV**

**penalty: 0.254102**

**SPE,keV nlj OCC** $\frac{G^{+}+G^{-}}{2J+1}$

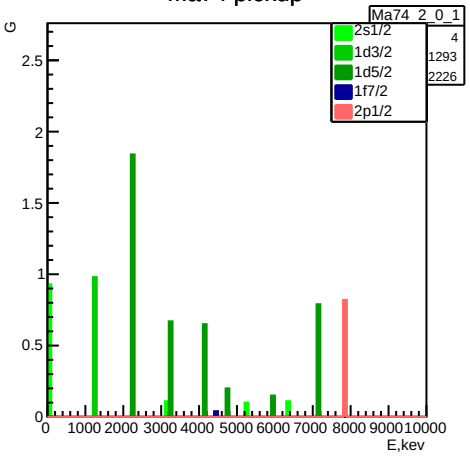
**-7375.56 2s1/2 0.6675 0.915**

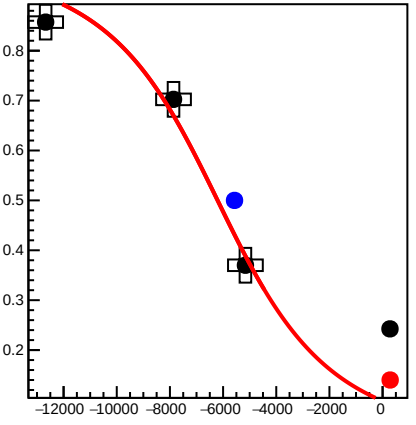
**-4280.69 1d3/2 0.19 1.18**

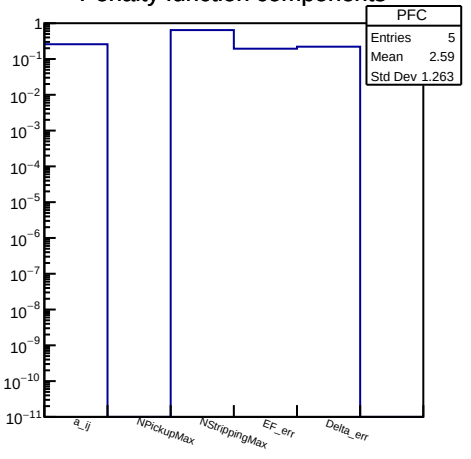
**-12675 1d5/2 0.857333 0.718667**

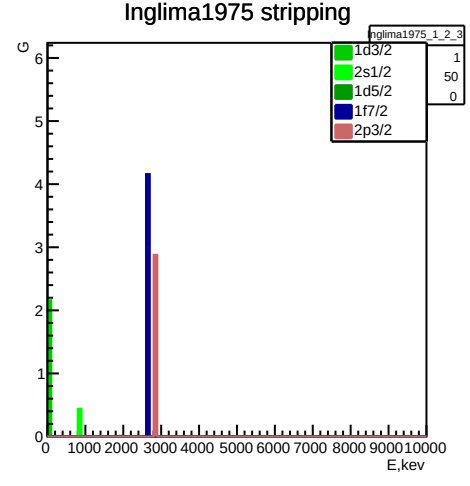
**314.684 1f7/2 0.1375 0.735**

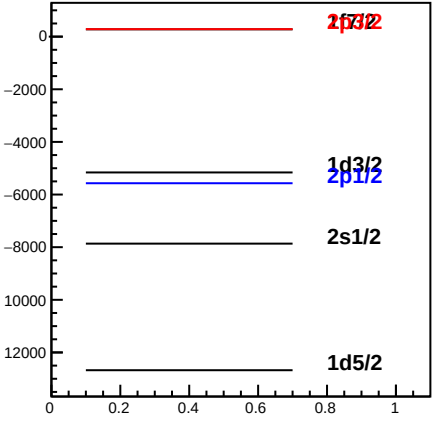
**-5570.33 2p1/2 0.5 0.82**






**Experiment: Ma74 (14) Inglima1975 (5)**

**proton transfer**

**p separation energy A:8863.17, A+1: 2277.5**

**E_F: -6207.37 ± 457.285 keV**

**Δ: -4585.91 ± 1449.13 keV**

**penalty: 0.263264**

**SPE,keV nlj OCC** $\frac{G^{+}+G^{-}}{2J+1}$

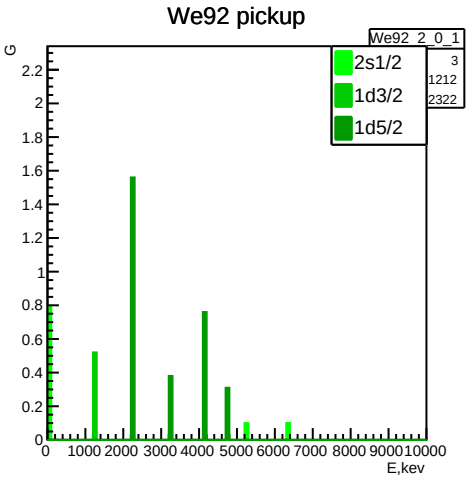
**-7865.03 2s1/2 0.7025 0.845**

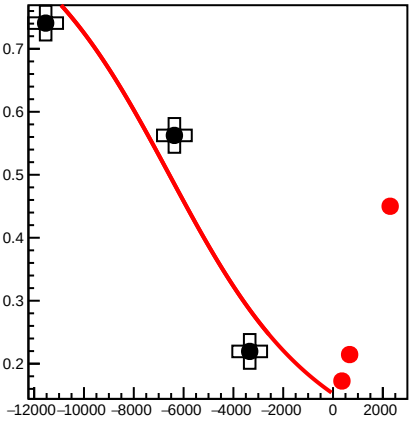
**-5160.14 1d3/2 0.37 0.82**

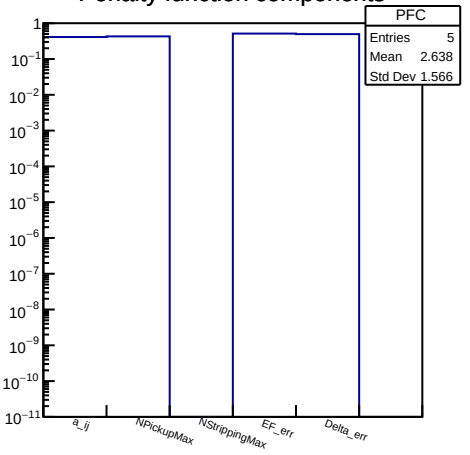
**-12675 1d5/2 0.857333 0.718667**

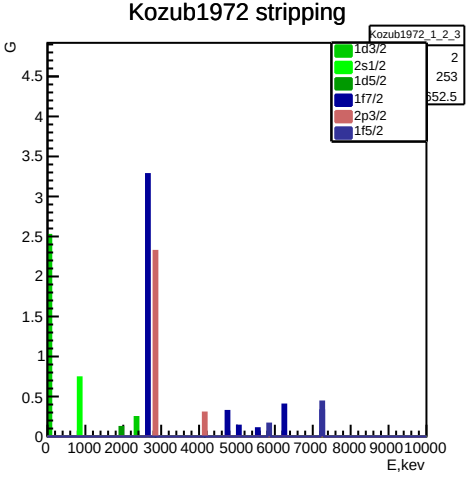
**277.399 1f7/2 0.2425 0.525**

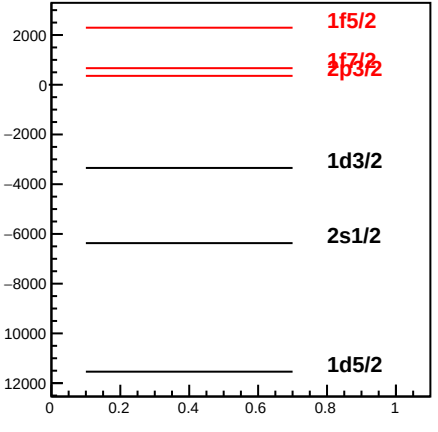
**-5570.33 2p1/2 0.5 0.82**






**Experiment: We92 (8) Kozub1972 (14)**

**proton transfer**

**p separation energy A:8863.17, A+1: 2277.5**

**E_F: -6571.81 ± 1208.86 keV**

**Δ: 6796.55 ± 3254.67 keV**

**penalty: 0.369734**

**SPE,keV nlj OCC** $\frac{G^{+}+G^{-}}{2J+1}$

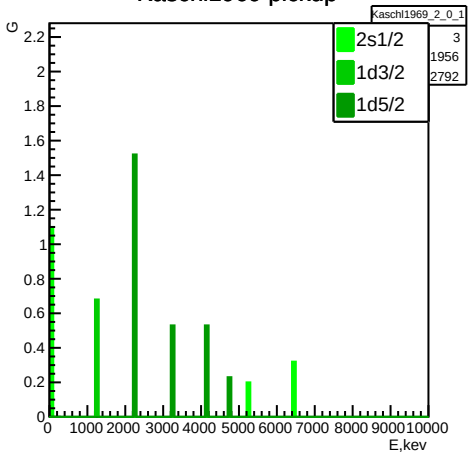
**-6369.61 2s1/2 0.5625 0.865**

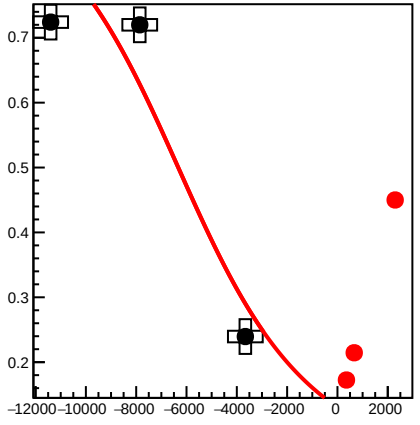
**-3346.03 1d3/2 0.2195 0.821**

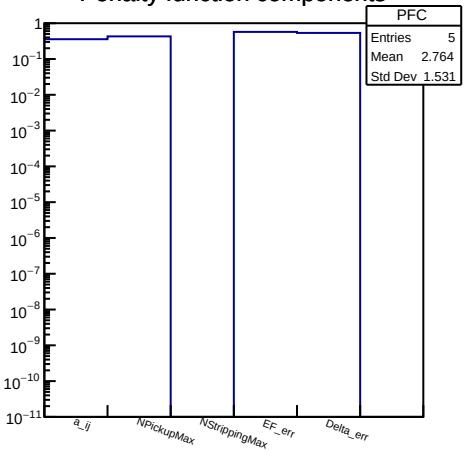
**-11539.1 1d5/2 0.740833 0.521667**

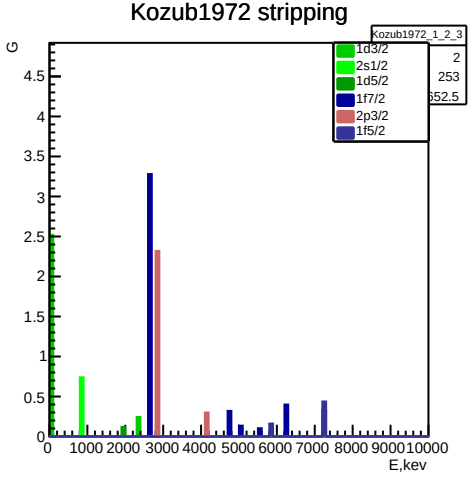
**666.55 1f7/2 0.2145 0.571**

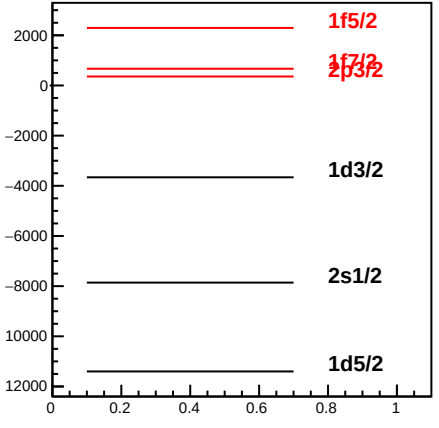
**357.177 2p3/2 0.1725 0.655**






**Experiment: Kaschl1969 (8) Kozub1972 (14)**

**proton transfer**

**p separation energy A:8863.17, A+1: 2277.5**

**E_F: -6327.47 ± 1347.08 keV**

**Δ: -5766.93 ± 3514.27 keV**

**penalty: 0.378657**

**SPE,keV nlj OCC** $\frac{G^{+}+G^{-}}{2J+1}$

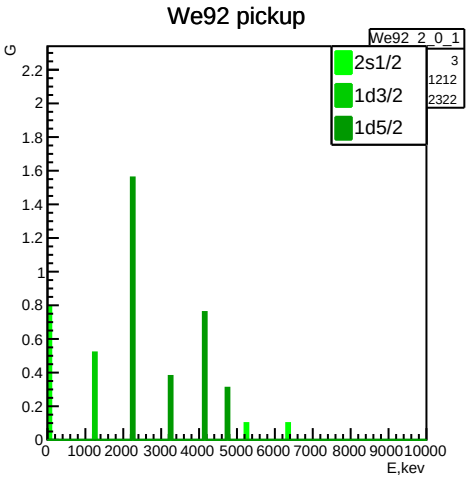
**-7858.66 2s1/2 0.72 1.18**

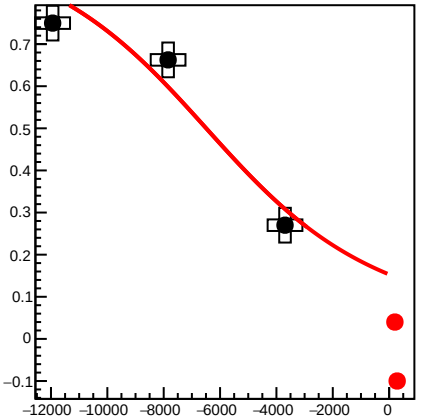
**-3661.16 1d3/2 0.2395 0.861**

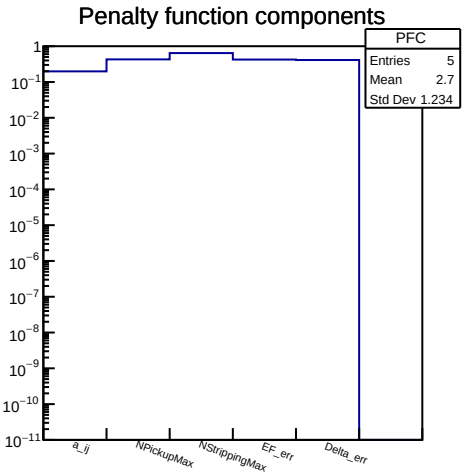
**-11400.4 1d5/2 0.724167 0.488333**

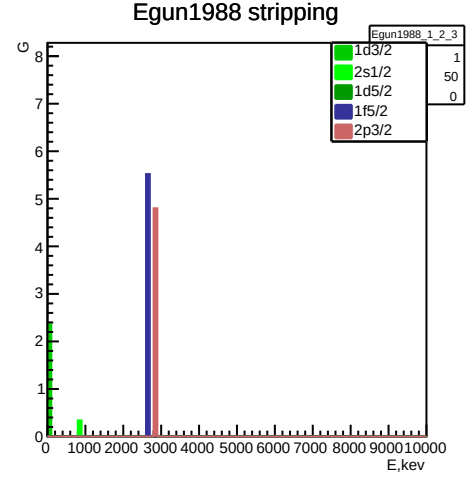
**666.55 1f7/2 0.2145 0.571**

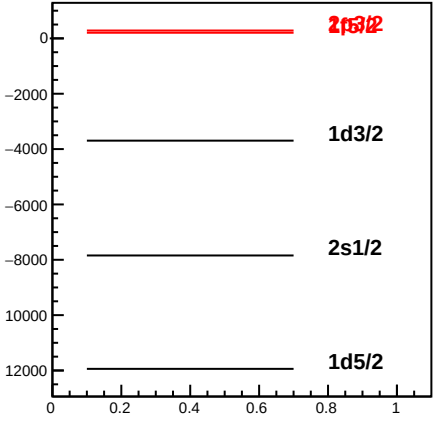
**357.177 2p3/2 0.1725 0.655**






**Experiment: We92 (8) Egun1988 (5)**

**proton transfer**

**p separation energy A:8863.17, A+1: 2277.5**

**E_F: -6491.78 ± 998.77 keV**

**Δ: 6734.37 ± 2700.77 keV**

**penalty: 0.421033**

**SPE,keV nlj OCC** $\frac{G^{+}+G^{-}}{2J+1}$

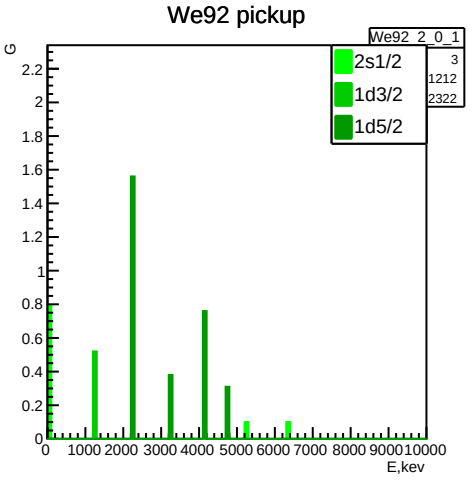
**-7844.09 2s1/2 0.6625 0.665**

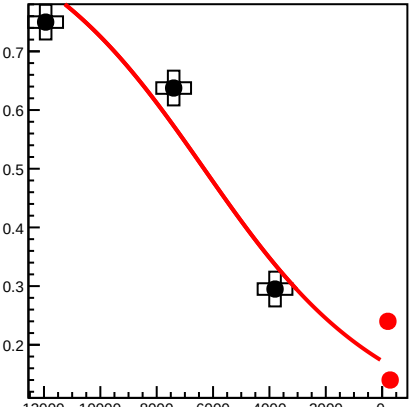
**-3695.19 1d3/2 0.27 0.72**

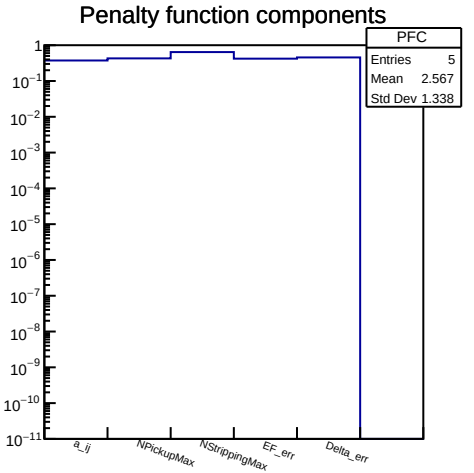
**-11941.1 1d5/2 0.749833 0.503667**

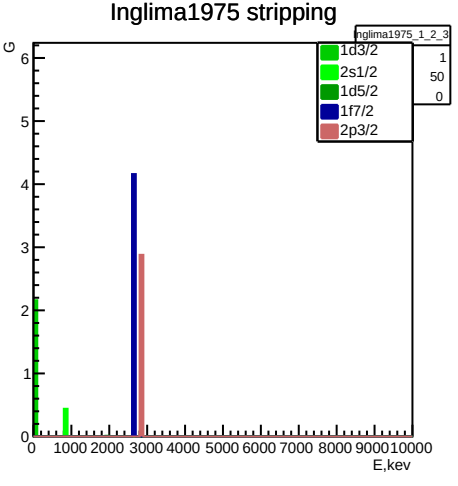
**203.948 1f5/2 0.04 0.92**

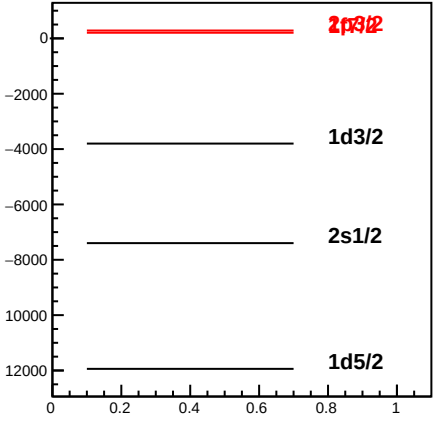
**284.398 2p3/2 -0.1 1.2**






**Experiment: We92 (8) Inglima1975 (5)**

**proton transfer**

**p separation energy A:8863.17, A+1: 2277.5**

**E_F: -6322 ± 991.898 keV**

**Δ: 7291.26 ± 2989.2 keV**

**penalty: 0.464439**

**SPE,keV nlj OCC** $\frac{G^{+}+G^{-}}{2J+1}$

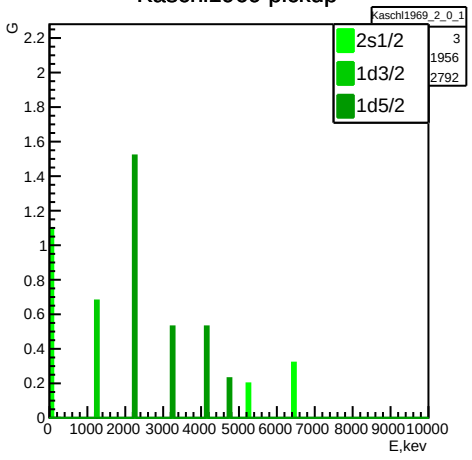
**-7398.14 2s1/2 0.6375 0.715**

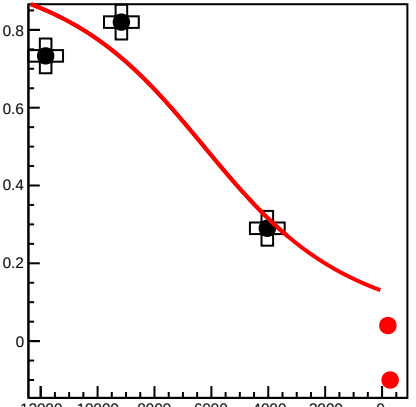
**-3800.99 1d3/2 0.295 0.67**

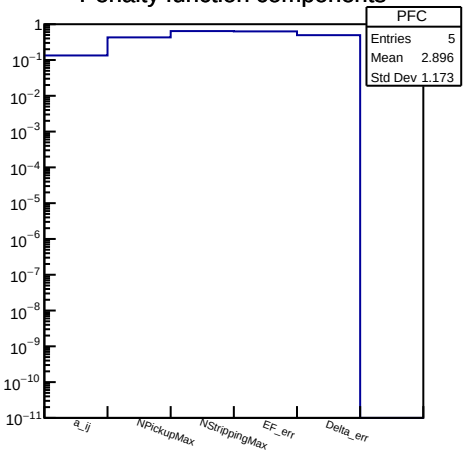
**-11941.1 1d5/2 0.749833 0.503667**

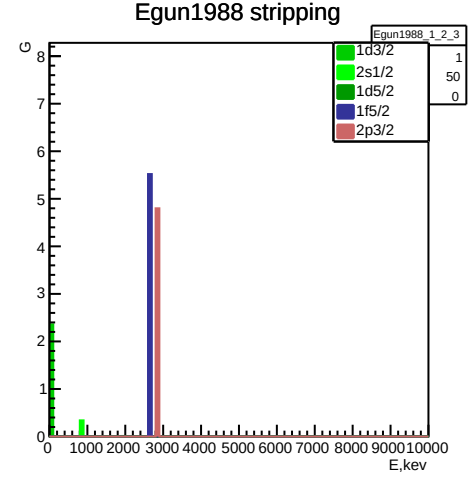
**203.948 1f7/2 0.24 0.52**

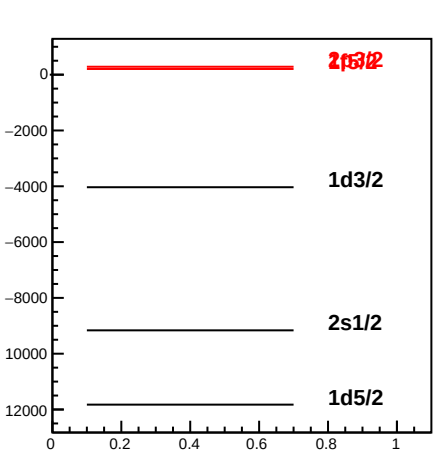
**284.398 2p3/2 0.14 0.72**






**Experiment: Kaschl1969 (8) Egun1988 (5)**

**proton transfer**

**p separation energy A:8863.17, A+1: 2277.5**

**E_F: -6256.52 ± 1483.67 keV**

**Δ: 5665.2 ± 3244.81 keV**

**penalty: 0.465911**

**SPE,keV nlj OCC $\frac{G^{+}+G^{-}}{2J+1}$**

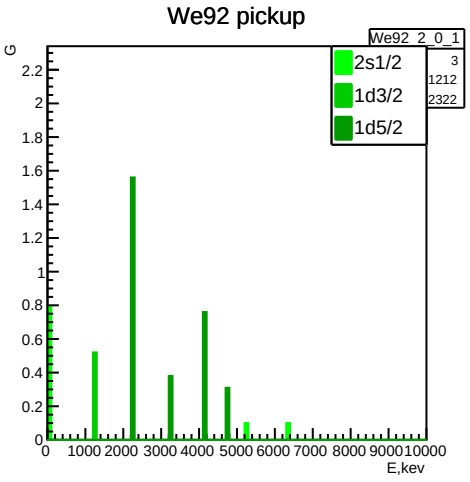
**-9163.09 2s1/2 0.82 0.98**

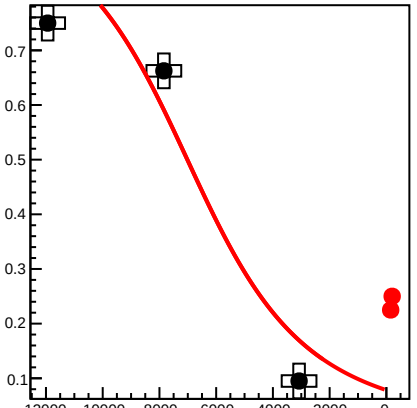
**-4033.83 1d3/2 0.29 0.76**

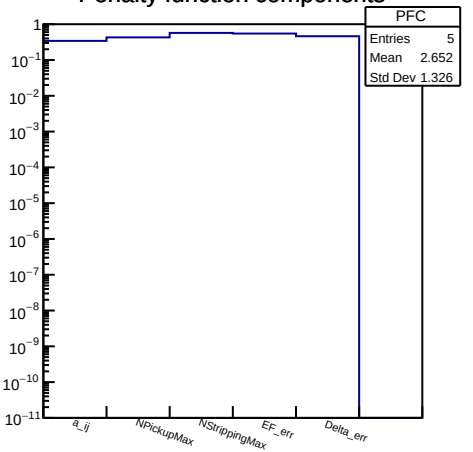
**-11825.6 1d5/2 0.733167 0.470333**

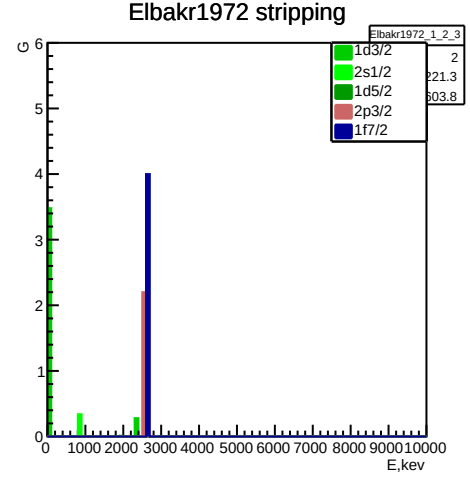
**203.948 1f5/2 0.04 0.92**

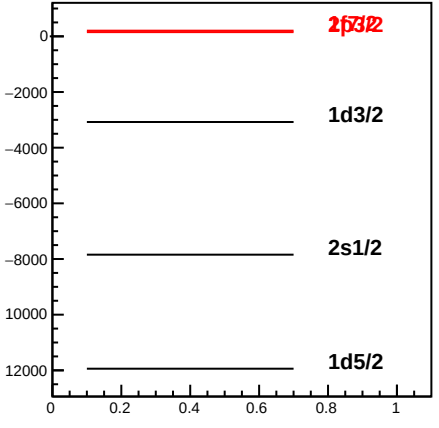
**284.398 2p3/2 -0.1 1.2**






**Experiment: We92 (8) Elbakr1972 (6)**

**proton transfer**

**p separation energy A:8863.17, A+1: 2277.5**

**E_F: -7016.9 ± 1291.37 keV**

**Δ: 4469.85 ± 3028.41 keV**

**penalty: 0.470372**

**SPE,keV nlj OCC** $\frac{G^{+}+G^{-}}{2J+1}$

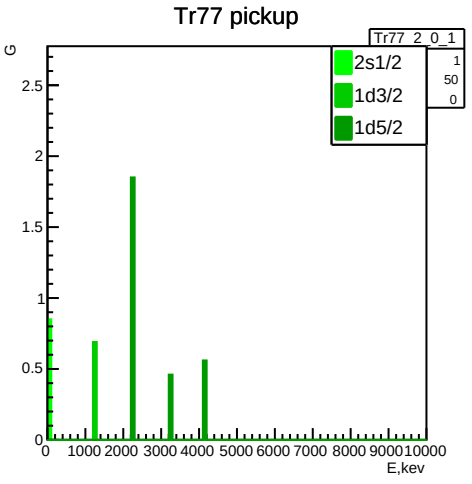
**-7844.09 2s1/2 0.6625 0.665**

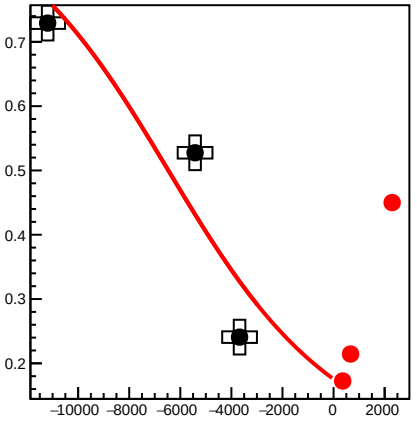
**-3077.59 1d3/2 0.095 1.07**

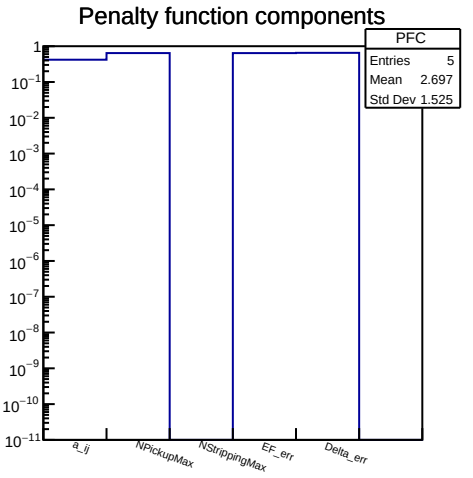
**-11941.1 1d5/2 0.749833 0.503667**

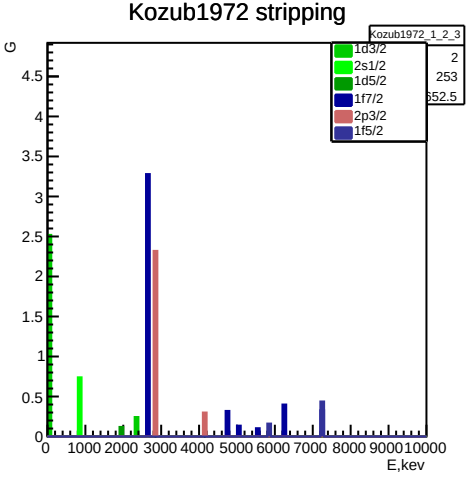
**151.748 2p3/2 0.225 0.55**

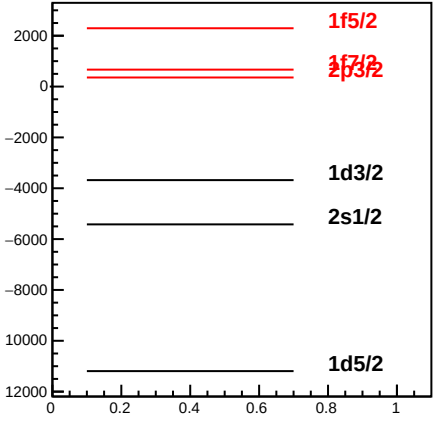
**203.948 1f7/2 0.25 0.5**






**Experiment: Tr77 (5) Kozub1972 (14)**

**proton transfer**

**p separation energy A:8863.17, A+1: 2277.5**

**E_F: -6467.7 ± 1512.72 keV**

**Δ: 7578.99 ± 4282.4 keV**

**penalty: 0.471401**

**SPE,keV nlj OCC** $\frac{G^{+}+G^{-}}{2J+1}$

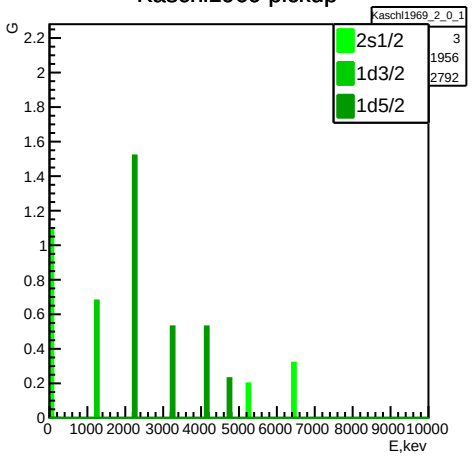
**-5420.9 2s1/2 0.5275 0.795**

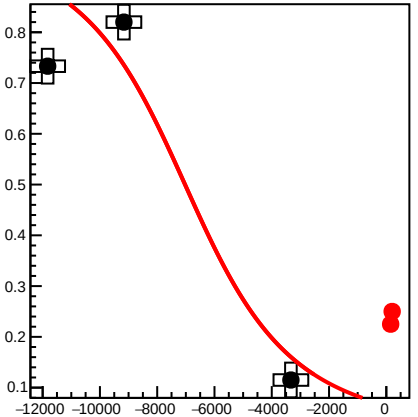
**-3679.89 1d3/2 0.24075 0.8635**

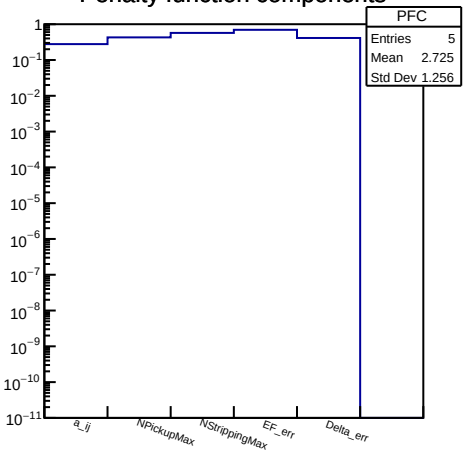
**-11193 1d5/2 0.729167 0.498333**

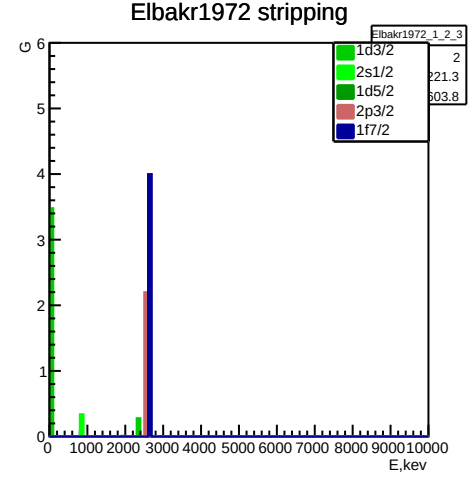
**666.55 1f7/2 0.2145 0.571**

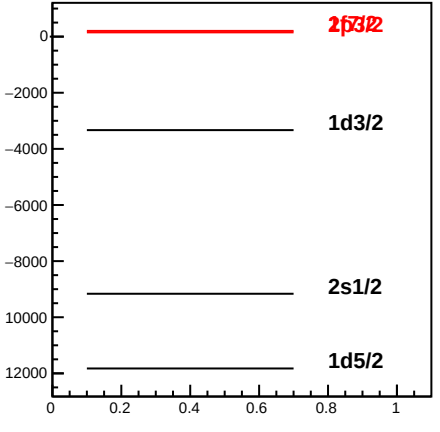
**357.177 2p3/2 0.1725 0.655**






**Experiment: Kaschl1969 (8) Elbakr1972 (6)**

**proton transfer**

**p separation energy A:8863.17, A+1: 2277.5**

**E_F: -7028.39 ± 1642.88 keV**

**Δ: -3993.38 ± 2706.27 keV**

**penalty: 0.477529**

**SPE,keV nlj OCC** $\frac{G^{+}+G^{-}}{2J+1}$

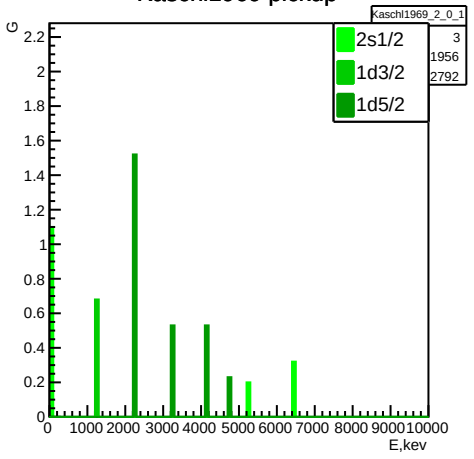
**-9163.09 2s1/2 0.82 0.98**

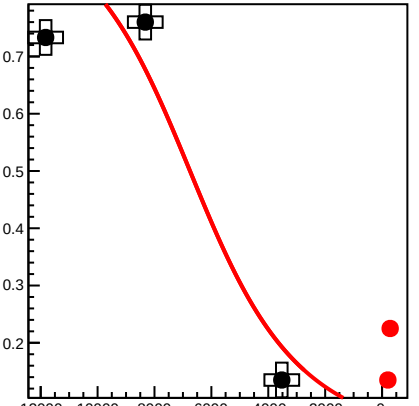
**-3331.71 1d3/2 0.115 1.11**

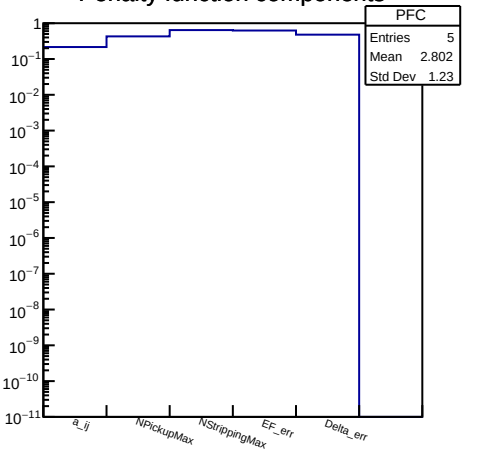
**-11825.6 1d5/2 0.733167 0.470333**

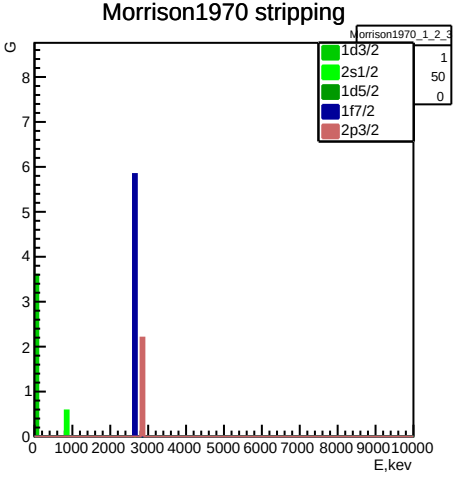
**151.748 2p3/2 0.225 0.55**

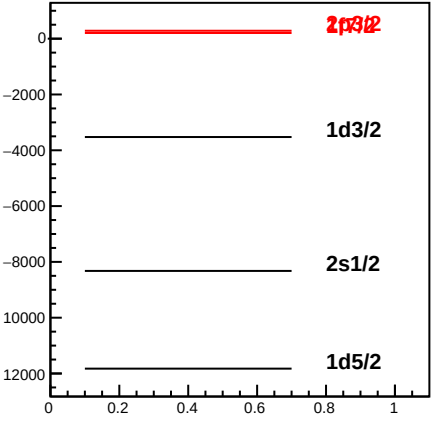
**203.948 1f7/2 0.25 0.5**






**Experiment: Kaschl1969 (8) Morrison1970 (5**

**proton transfer**

**p separation energy A:8863.17, A+1: 2277.5**

**E_F: -6750.99 ± 1472.04 keV**

**Δ: 4144.49 ± 3142.74 keV**

**penalty: 0.478213**

**SPE,keV nlj OCC** $\frac{G^{+}+G^{-}}{2J+1}$

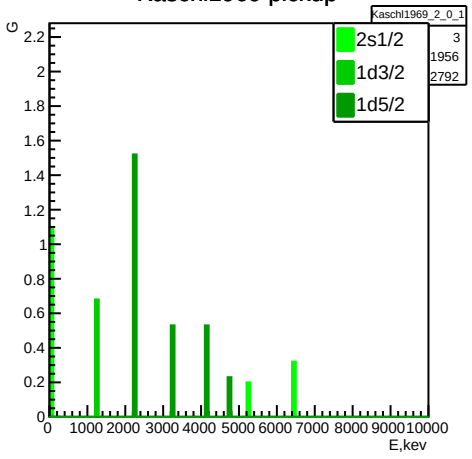
**-8323.51 2s1/2 0.76 1.1**

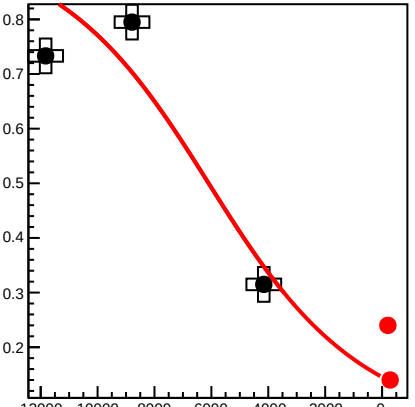
**-3524.98 1d3/2 0.135 1.07**

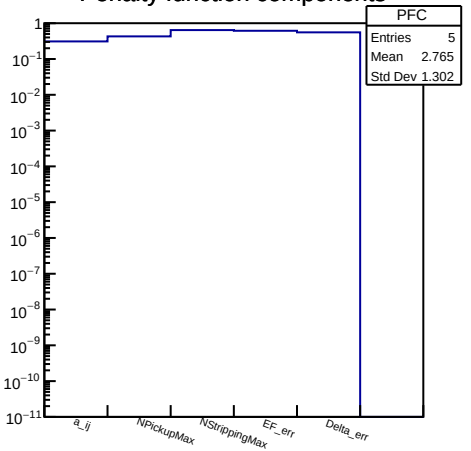
**-11825.6 1d5/2 0.733167 0.470333**

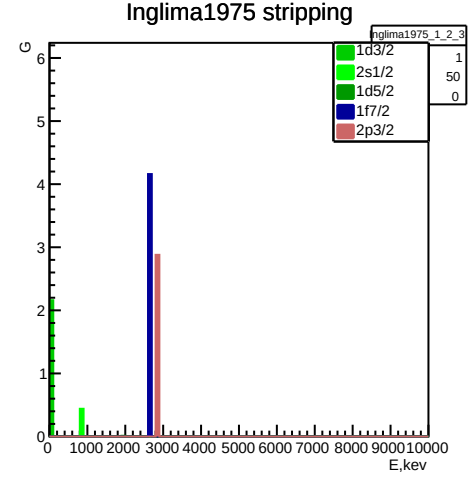
**203.948 1f7/2 0.135 0.73**

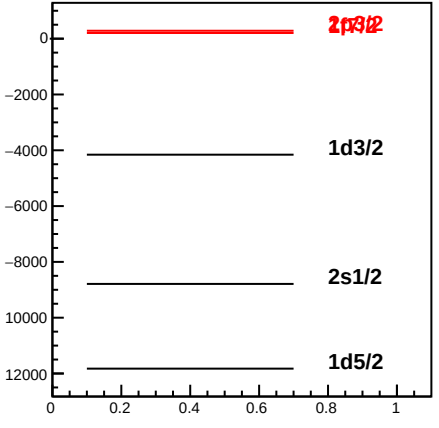
**284.398 2p3/2 0.225 0.55**






**Experiment: Kaschl1969 (8) Inglima1975 (5)**

**proton transfer**

**p separation energy A:8863.17, A+1: 2277.5**

**E_F: -6095.74 ± 1448.1 keV**

**Δ: -6056.12 ± 3645.92 keV**

**penalty: 0.510315**

**SPE,keV nlj OCC $\frac{G^{+}+G^{-}}{2J+1}$**

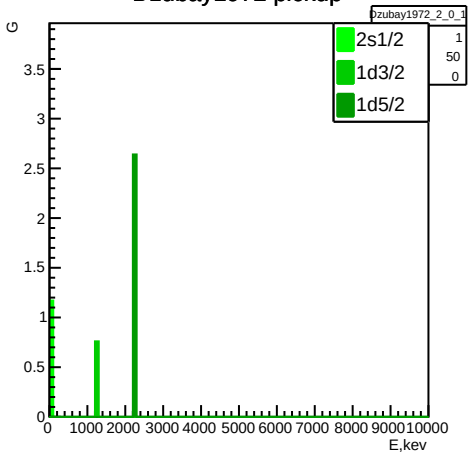
**-8789.49 2s1/2 0.795 1.03**

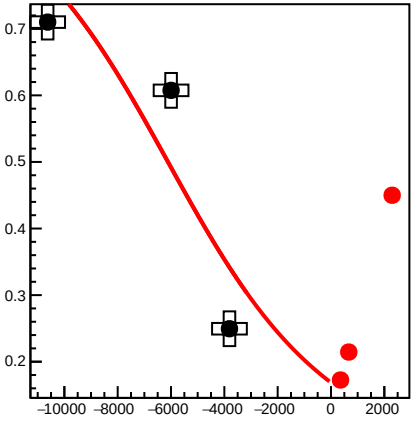
**-4157.51 1d3/2 0.315 0.71**

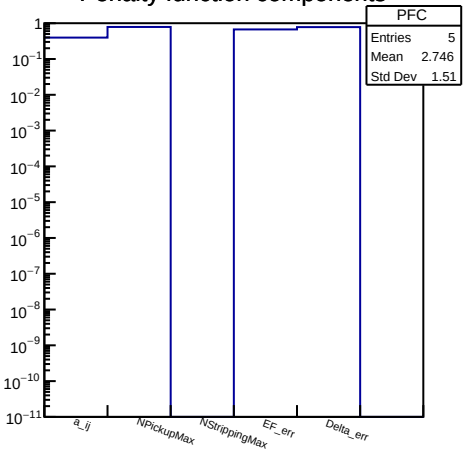
**-11825.6 1d5/2 0.733167 0.470333**

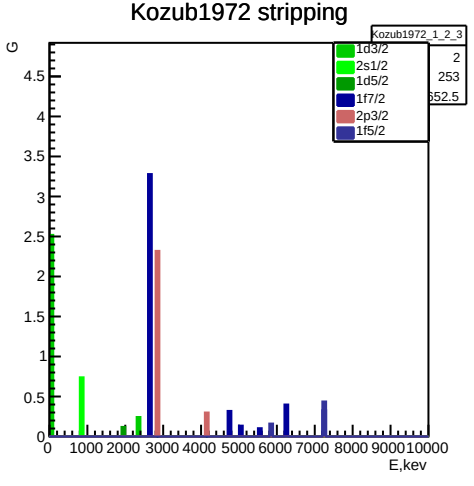
**203.948 1f7/2 0.24 0.52**

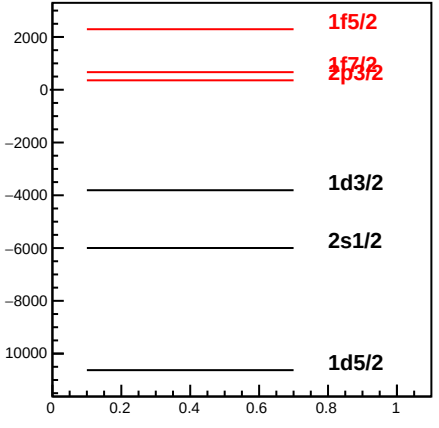
**284.398 2p3/2 0.14 0.72**






**Experiment: Dzubay1972 (3) Kozub1972 (14)**

**proton transfer**

**p separation energy A:8863.17, A+1: 2277.5**

**E_F: -6114.3 ± 1578.57 keV**

**Δ: -6908.25 ± 5106.74 keV**

**penalty: 0.526045**

**SPE,keV nlj OCC** $\frac{G^{+}+G^{-}}{2J+1}$

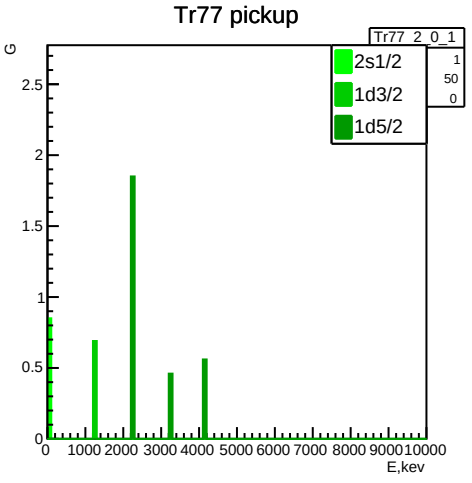
**-5997.62 2s1/2 0.6075 0.955**

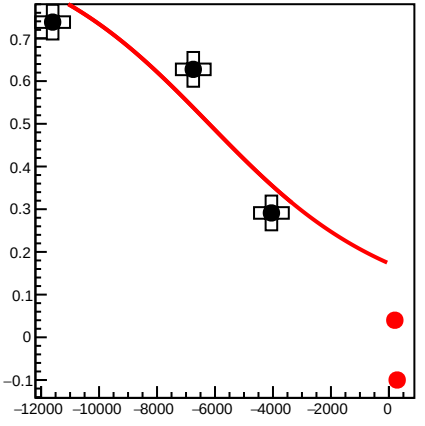
**-3808 1d3/2 0.2495 0.881**

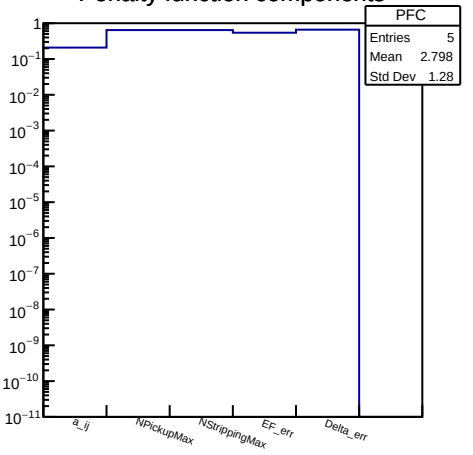
**-10627 1d5/2 0.71 0.46**

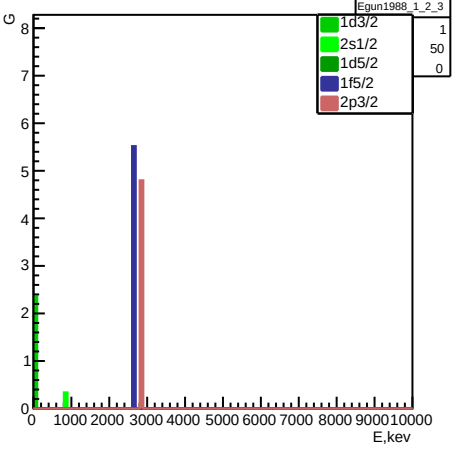
**666.55 1f7/2 0.2145 0.571**

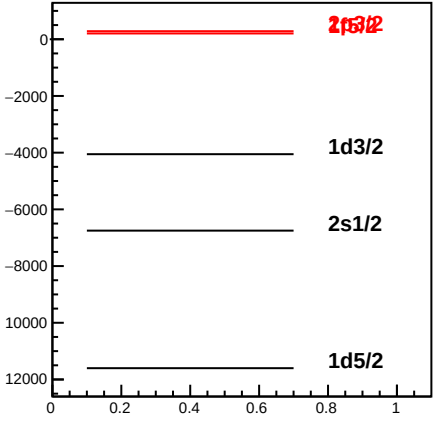
**357.177 2p3/2 0.1725 0.655**






**Experiment: Tr77 (5) Egun1988 (5)**

**proton transfer**

**p separation energy A:8863.17, A+1: 2277.5**

**E_F: -6203.71 ± 1277.49 keV**

**Δ: 7181.52 ± 4332.79 keV**

**penalty: 0.53932**

**SPE,keV nlj OCC** $\frac{G^{+}+G^{-}}{2J+1}$

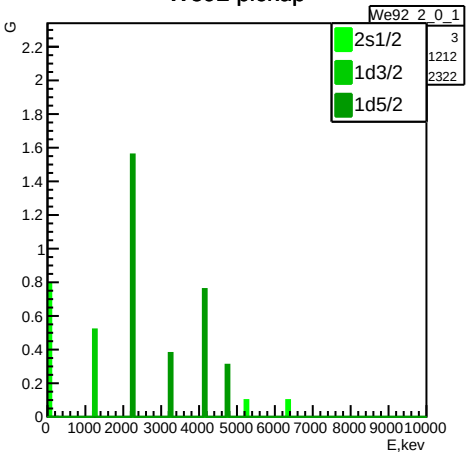
**-6749.96 2s1/2 0.6275 0.595**

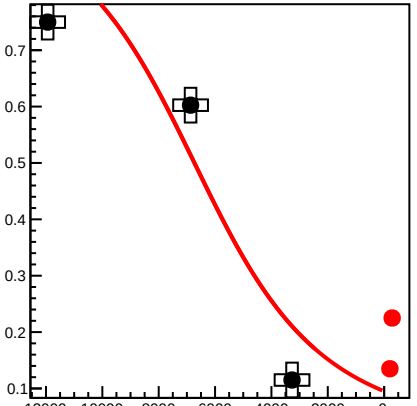
**-4053.81 1d3/2 0.29125 0.7625**

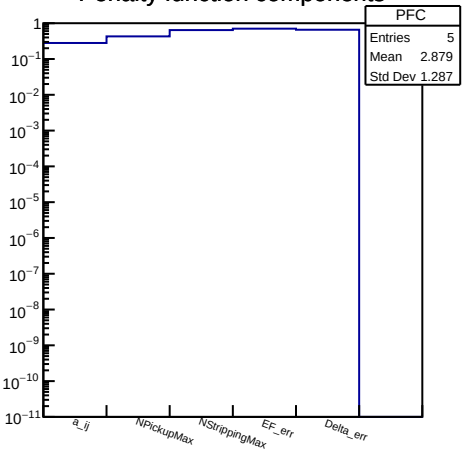
**-11601.5 1d5/2 0.738167 0.480333**

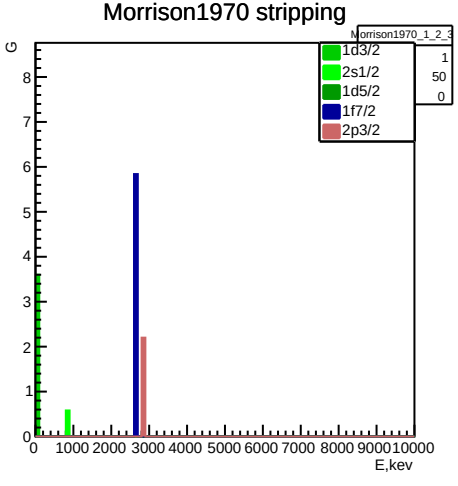
**203.948 1f5/2 0.04 0.92**

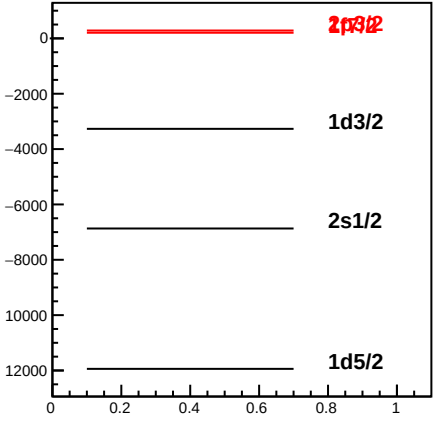
**284.398 2p3/2 -0.1 1.2**






**Experiment: We92 (8) Morrison1970 (5)**

**proton transfer**

**p separation energy A:8863.17, A+1: 2277.5**

**E_F: -6731.85 ± 1658.58 keV**

**Δ: -4875.87 ± 4312.24 keV**

**penalty: 0.542555**

**SPE,keV nlj OCC** $\frac{G^{+}+G^{-}}{2J+1}$

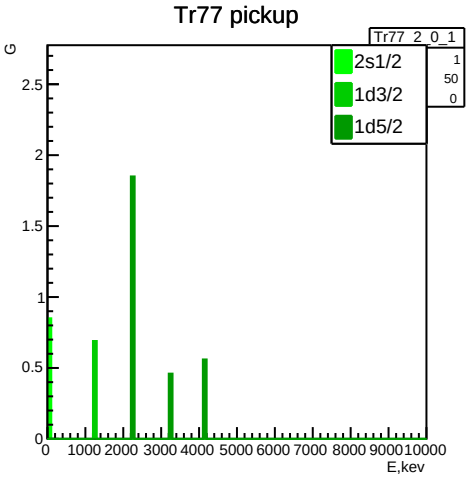
**-6869.24 2s1/2 0.6025 0.785**

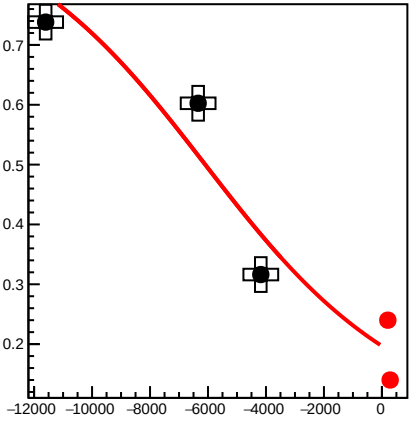
**-3268.51 1d3/2 0.115 1.03**

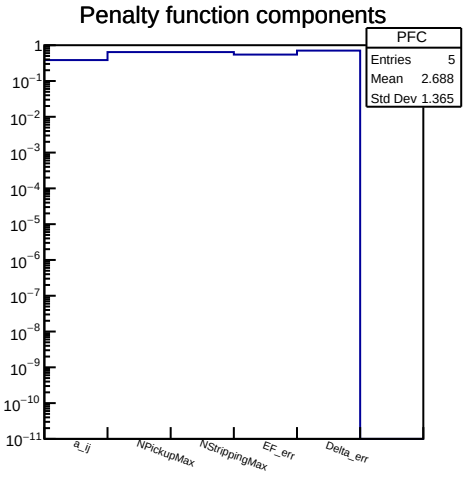
**-11941.1 1d5/2 0.749833 0.503667**

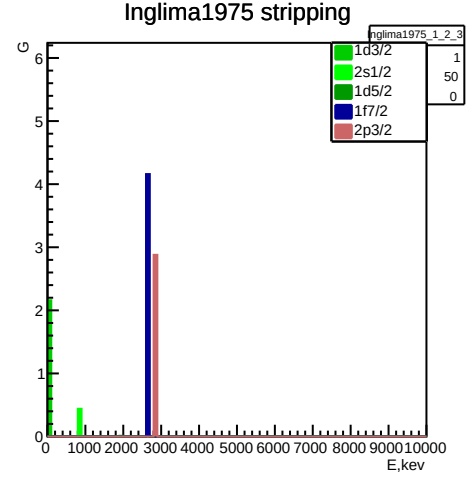
**203.948 1f7/2 0.135 0.73**

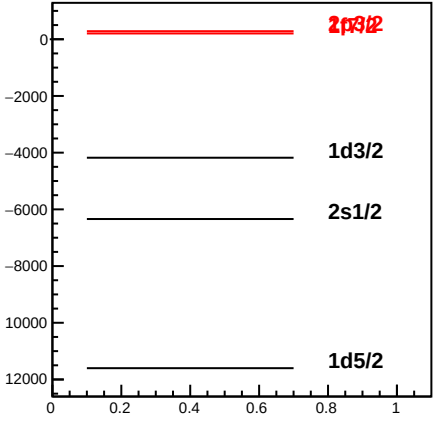
**284.398 2p3/2 0.225 0.55**






**Experiment: Tr77 (5) Inglima1975 (5)**

**proton transfer**

**p separation energy A:8863.17, A+1: 2277.5**

**E_F: -6096.03 ± 1289.56 keV**

**Δ: -7995.18 ± 4639.5 keV**

**penalty: 0.584891**

**SPE,keV nlj OCC** $\frac{G^{+}+G^{-}}{2J+1}$

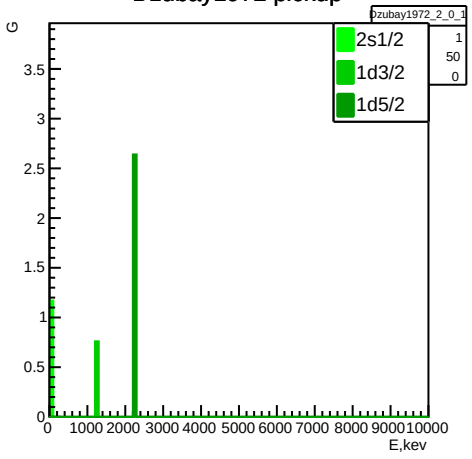
**-6340.43 2s1/2 0.6025 0.645**

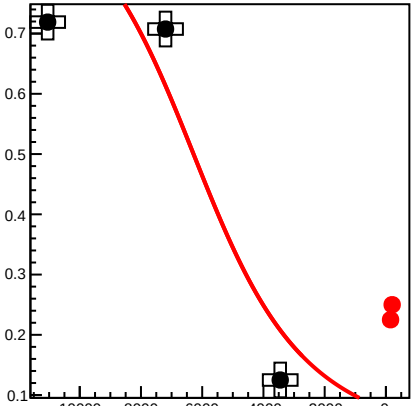
**-4178.46 1d3/2 0.31625 0.7125**

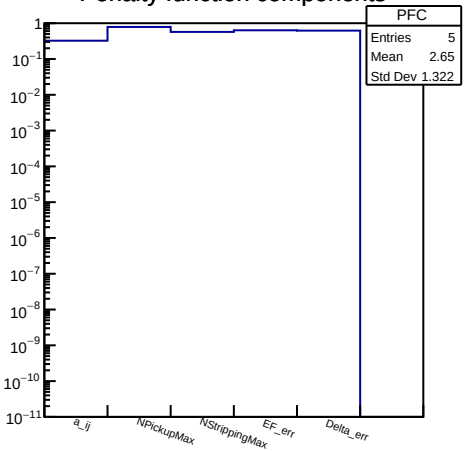
**-11601.5 1d5/2 0.738167 0.480333**

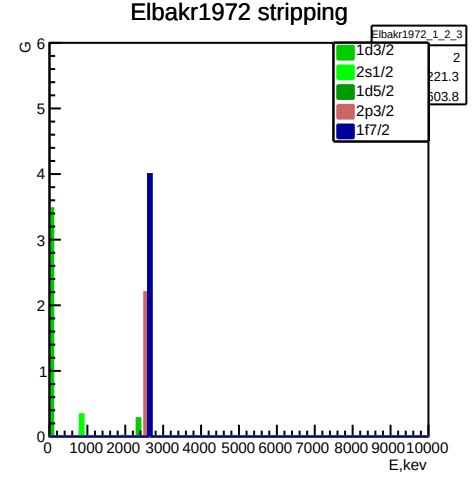
**203.948 1f7/2 0.24 0.52**

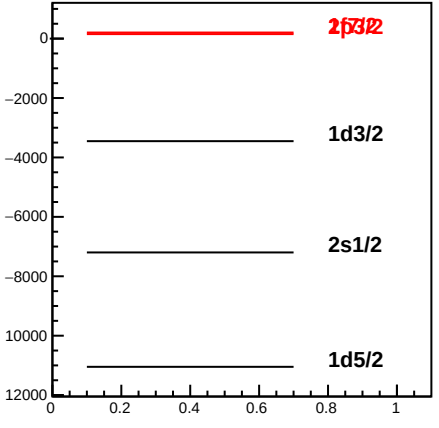
**284.398 2p3/2 0.14 0.72**






**Experiment: Dzubay1972 (3) Elbakr1972 (6)**

**proton transfer**

**p separation energy A:8863.17, A+1: 2277.5**

**E_F: -6283.35 ± 1494.22 keV**

**Δ: -3930.65 ± 4076.25 keV**

**penalty: 0.58742**

**SPE,keV nlj OCC** $\frac{G^{+}+G^{-}}{2J+1}$

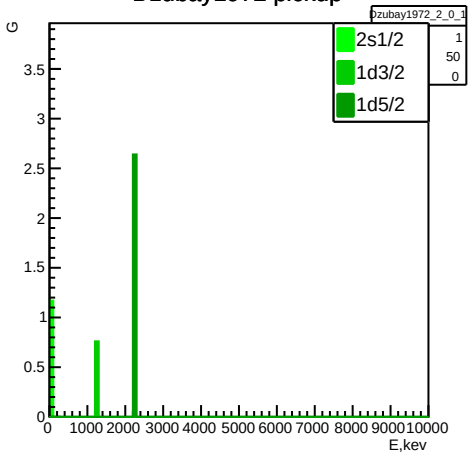
**-7197.79 2s1/2 0.7075 0.755**

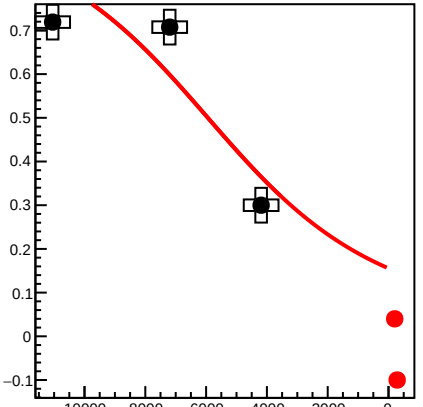
**-3452.02 1d3/2 0.125 1.13**

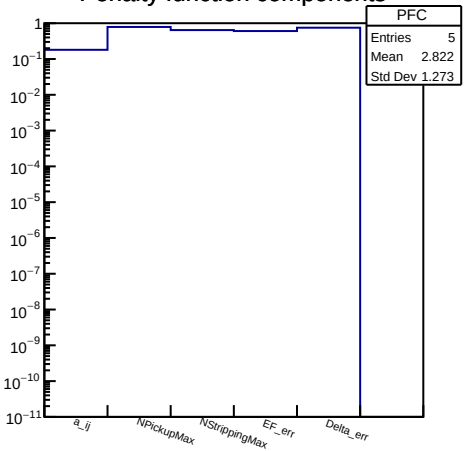
**-11047.9 1d5/2 0.719 0.442**

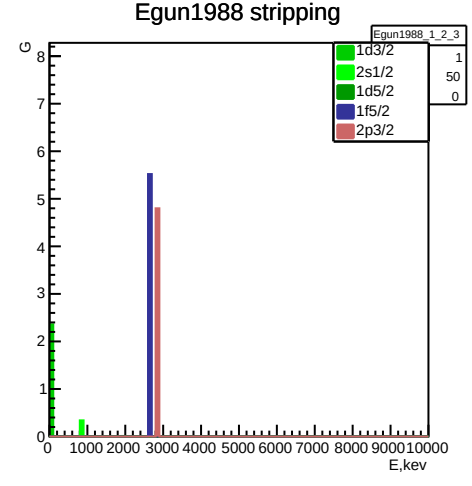
**151.748 2p3/2 0.225 0.55**

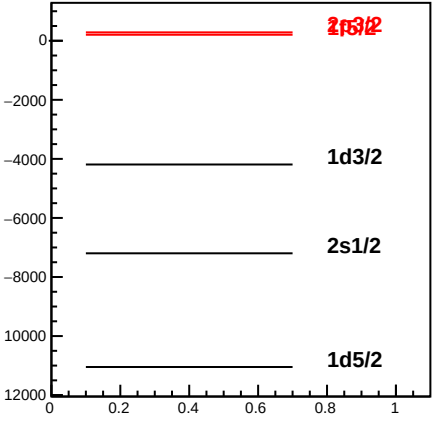
**203.948 1f7/2 0.25 0.5**






**Experiment: Dzubay1972 (3) Egun1988 (5)**

**proton transfer**

**p separation energy A:8863.17, A+1: 2277.5**

**E_F: -5942.51 ± 1423.08 keV**

**Δ: 6250.8 ± 4915.99 keV**

**penalty: 0.592457**

**SPE,keV nlj OCC** $\frac{G^{+}+G^{-}}{2J+1}$

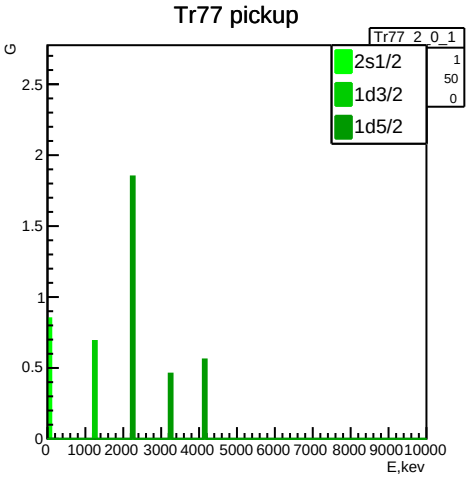
**-7197.79 2s1/2 0.7075 0.755**

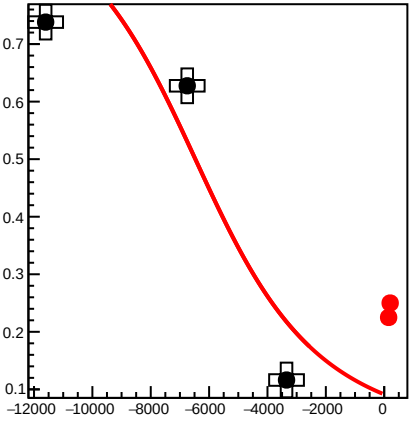
**-4190.12 1d3/2 0.3 0.78**

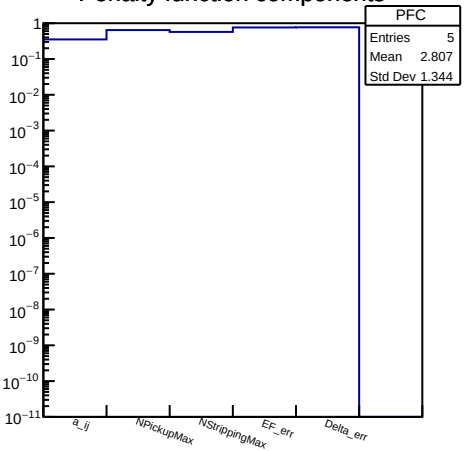
**-11047.9 1d5/2 0.719 0.442**

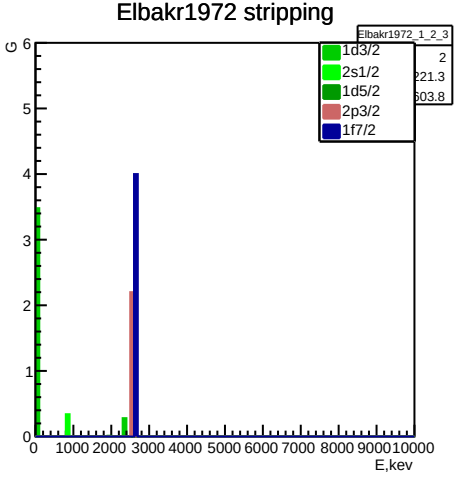
**203.948 1f5/2 0.04 0.92**

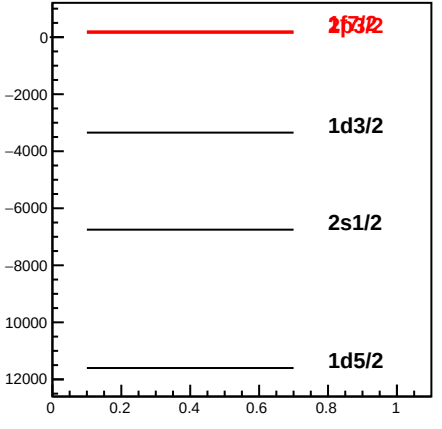
**284.398 2p3/2 -0.1 1.2**






**Experiment: Tr77 (5) Elbakr1972 (6)**

**proton transfer**

**p separation energy A:8863.17, A+1: 2277.5**

**E_F: -6471.3 ± 1792.27 keV**

**Δ: 4559.31 ± 5045.01 keV**

**penalty: 0.61924**

**SPE,keV nlj OCC** $\frac{G^{+}+G^{-}}{2J+1}$

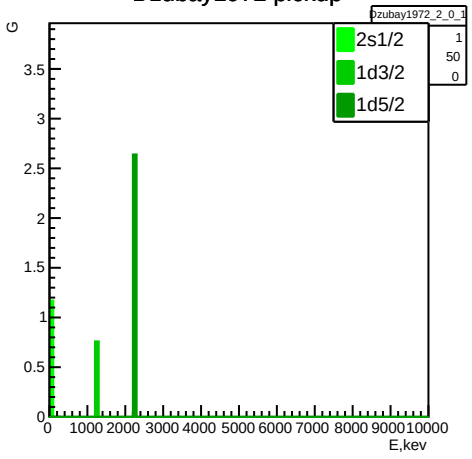
**-6749.96 2s1/2 0.6275 0.595**

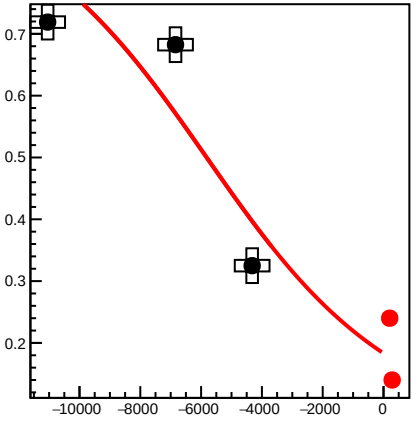
**-3346.98 1d3/2 0.11625 1.1125**

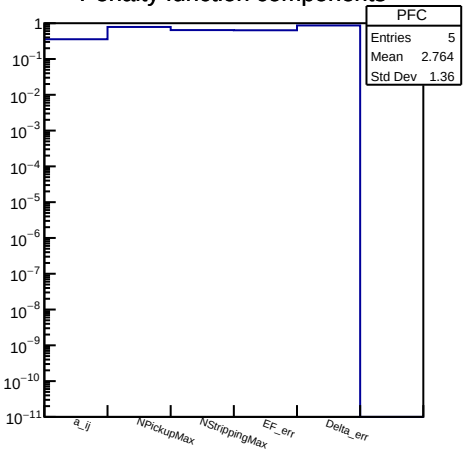
**-11601.5 1d5/2 0.738167 0.480333**

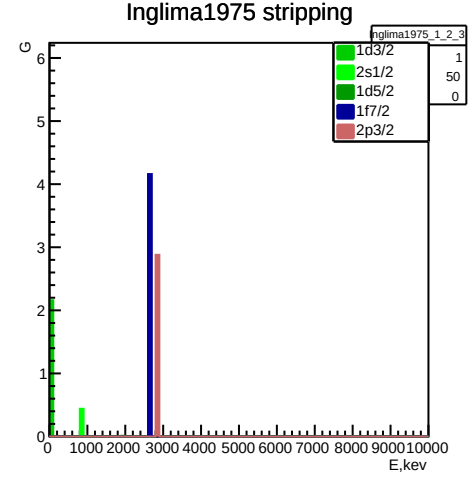
**151.748 2p3/2 0.225 0.55**

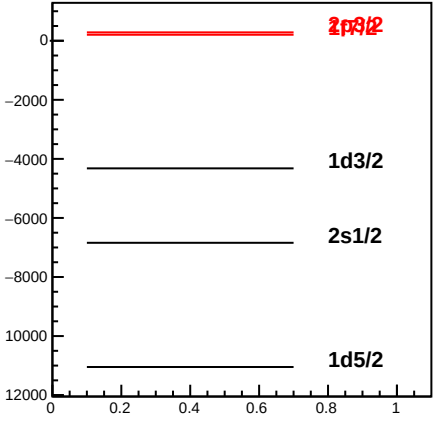
**203.948 1f7/2 0.25 0.5**






**Experiment: Dzubay1972 (3) Inglima1975 (5)**

**proton transfer**

**p separation energy A:8863.17, A+1: 2277.5**

**E_F: -5818.05 ± 1496.46 keV**

**Δ: -7106.46 ± 5679.08 keV**

**penalty: 0.657141**

**SPE,keV nlj OCC** $\frac{G^{+}+G^{-}}{2J+1}$

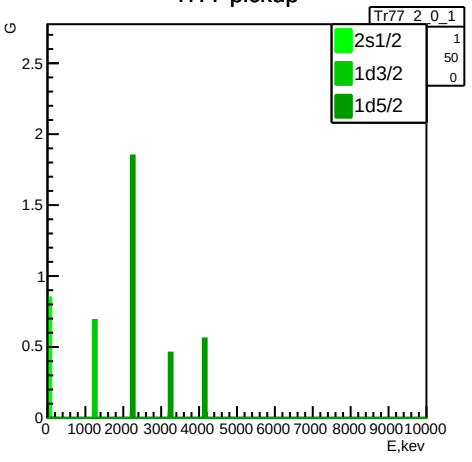
**-6841.84 2s1/2 0.6825 0.805**

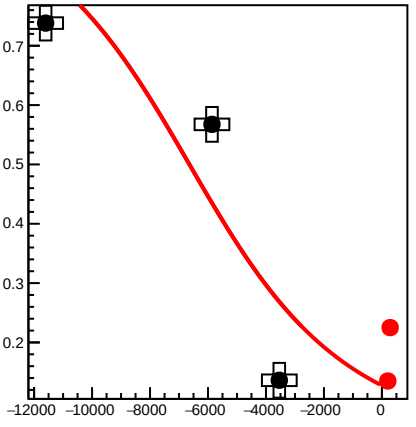
**-4321.12 1d3/2 0.325 0.73**

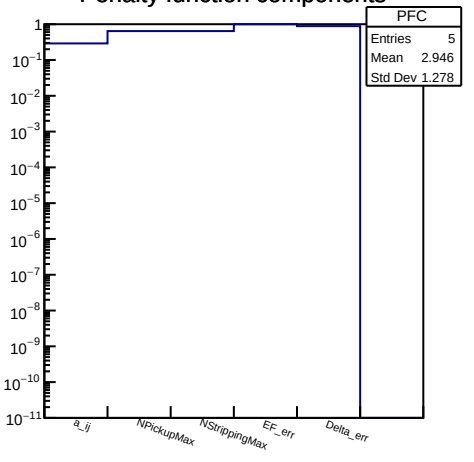
**-11047.9 1d5/2 0.719 0.442**

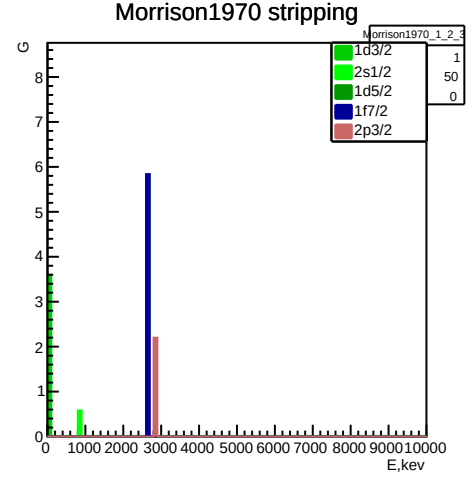
**203.948 1f7/2 0.24 0.52**

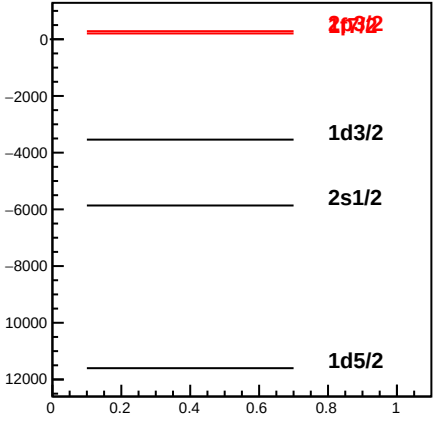
**284.398 2p3/2 0.14 0.72**






**Experiment: Tr77 (5) Morrison1970 (5)**

**proton transfer**

**p separation energy A:8863.17, A+1: 2277.5**

**E_F: -6641.28 ± 2355.88 keV**

**Δ: -5942.35 ± 5795.94 keV**

**penalty: 0.691857**

**SPE,keV nlj OCC $\frac{G^{+}+G^{-}}{2J+1}$**

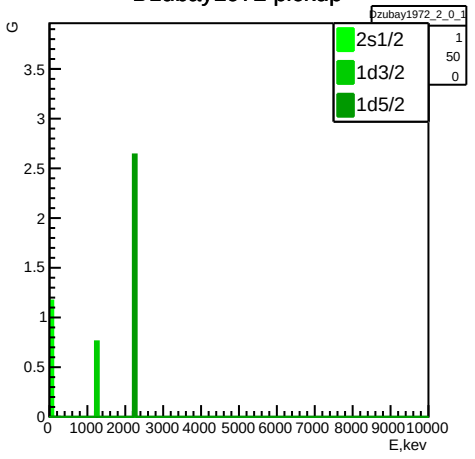
**-5863.3 2s1/2 0.5675 0.715**

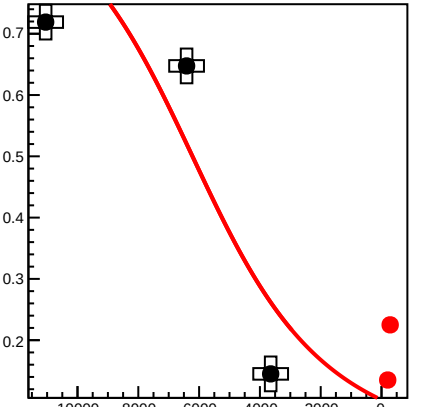
**-3540.38 1d3/2 0.13625 1.0725**

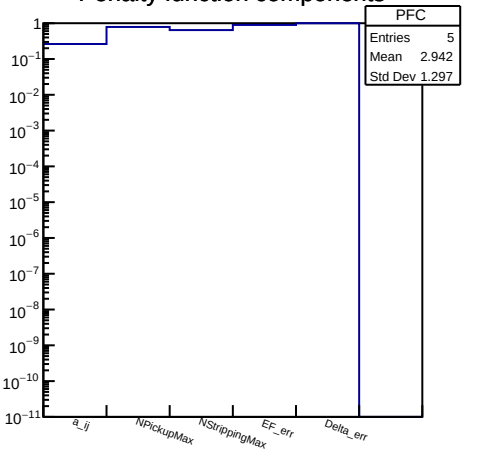
**-11601.5 1d5/2 0.738167 0.480333**

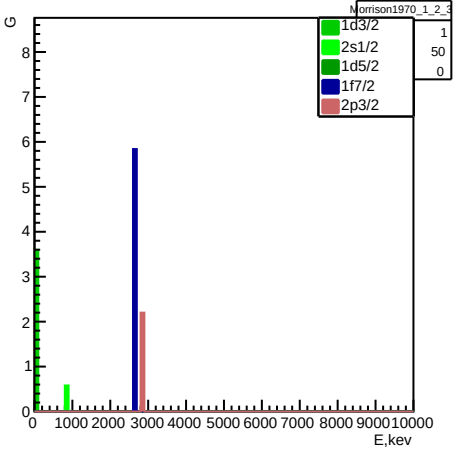
**203.948 1f7/2 0.135 0.73**

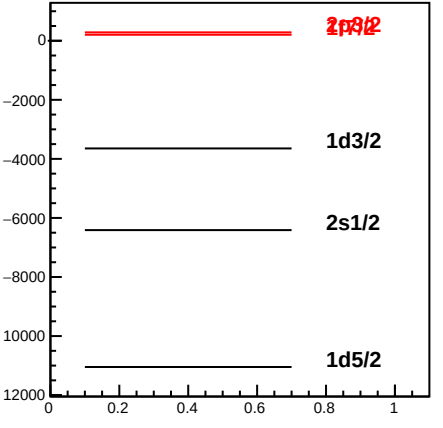
**284.398 2p3/2 0.225 0.55**






**Experiment: Dzubay1972 (3) Morrison1970 (5**

**proton transfer**

**p separation energy A:8863.17, A+1: 2277.5**

**E_F: -6217.91 ± 2107.62 keV**

**Δ: -4746.55 ± 6562.89 keV**

**penalty: 0.717159**

**SPE,keV nlj OCC** $\frac{G^{+}+G^{-}}{2J+1}$

**-6411.85 2s1/2 0.6475 0.875**

**-3646.16 1d3/2 0.145 1.09**

**-11047.9 1d5/2 0.719 0.442**

**203.948 1f7/2 0.135 0.73**

**284.398 2p3/2 0.225 0.55**