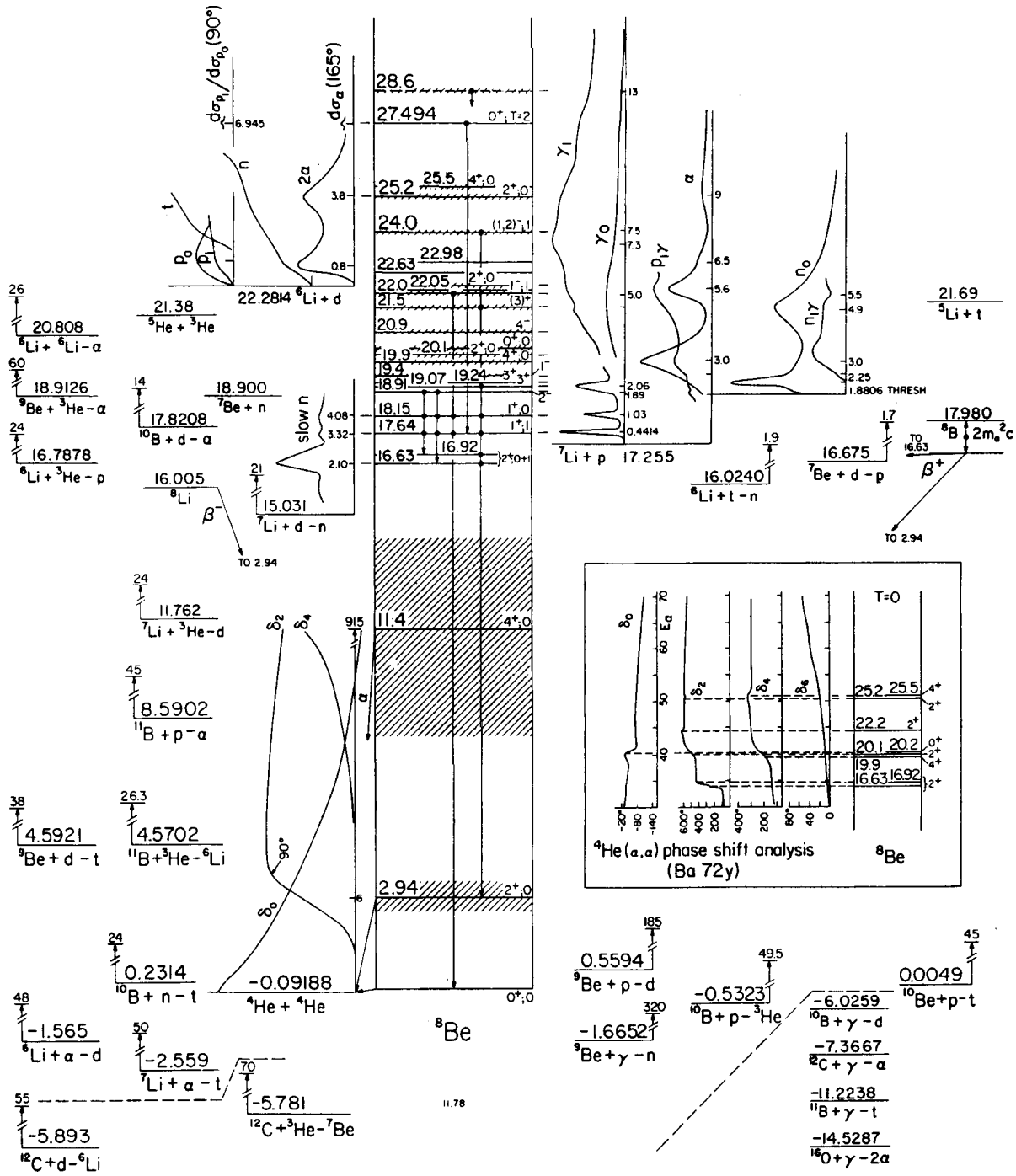
$d\sigma_{p_1}/d\sigma_{p_0}(90°)$
$d\sigma_\alpha(165°)$
6.945
n
2α
t
p_0
p_1
3.8
0.8
22.2814 ^{6}Li + d
21.38
^{5}He + ^{3}He
26
20.808
^{6}Li + ^{6}Li − α
60
18.9126
^{9}Be + ^{3}He − α
14
18.900
^{7}Be + n
17.8208
^{10}B + d − α
24
16.7878
^{6}Li + ^{3}He − p
16.005
^{8}Li
β⁻
TO 2.94
21
15.031
^{7}Li + d − n
slow n
4.08
3.32
2.10
24
11.762
^{7}Li + ^{3}He − d
45
8.5902
^{11}B + p − α
38
4.5921
^{9}Be + d − t
26.3
4.5702
^{11}B + ^{3}He − ^{6}Li
24
0.2314
^{10}B + n − t
48
−1.565
^{6}Li + α − d
50
−2.559
^{7}Li + α − t
55
−5.893
^{12}C + d − ^{6}Li
70
−5.781
^{12}C + ^{3}He − ^{7}Be
δ_2
δ_4
δ_0
90°
α
915
−0.09188
^{4}He + ^{4}He
28.6
27.494
0^+; T=2
25.2
25.5
4^+;0
2^+;0
24.0
$(1,2)^-$;1
22.63
22.98
22.0
22.05
2^+;0
1^-;1
21.5
$(3)^+$
20.9
4^-
19.9
20.1
0^+;0
2^+;0
4^+;0
19.4
18.91
19.07
19.24
3^+
18.15
1^+;0
17.64
1^+;1
16.63
16.92
2^+;0+1
11.4
4^+;0
2.94
2^+;0
0^+;0
^{8}Be
11.78
γ_1
γ_0
$p_1\gamma$
13
7.5
7.3
5.0
2.06
1.89
1.03
0.4414
^{7}Li + p
17.255
α
9
6.5
5.6
3.0
n_0
$n_1\gamma$
5.5
4.9
3.0
2.25
1.8806 THRESH
21.69
^{5}Li + t
1.9
16.0240
^{6}Li + t − n
1.7
16.675
^{7}Be + d − p
17.980
^{8}B
$2m_e{}^2c$
TO 16.63
β^+
TO 2.94
T=0
δ_0
E_α
70
60
50
40
δ_2
δ_4
δ_6
25.2
25.5
4^+
2^+
22.2
2^+
20.1
20.2
0^+
2^+
19.9
4^+
16.63
16.92
2^+
^{4}He(α,α) phase shift analysis
(Ba 72y)
^{8}Be
185
0.5594
^{9}Be + p − d
320
−1.6652
^{9}Be + γ − n
49.5
−0.5323
^{10}B + p − ^{3}He
45
0.0049
^{10}Be + p − t
−6.0259
^{10}B + γ − d
−7.3667
^{12}C + γ − α
−11.2238
^{11}B + γ − t
−14.5287
^{16}O + γ − 2α