$^{195}_{79}$Au (Continued)

1404.60 *6*, 13/2⁻,15/2⁻, *[CD]* γ_{879}***525.75*** *4* (†$_\gamma$100 *6*) M1 γ_{706}***698.06*** *15* (†$_\gamma$13.1 *13*) M1 γ_{319}***1086.20*** *20* (†$_\gamma$9.7 *14*)

1406.17 *15*, 9/2⁻,11/2,13/2⁻, *[C]* γ_{1068}***338.17*** *10* (†$_\gamma$100)

1425.0 *10*, 19/2⁻, *[D]* γ_{706}***718.5*** (†$_\gamma$100) E2

1433.0 *3*(?), 1/2,3/2,5/2⁺, *[B]* γ_{61}***1372.0*** *4* (†$_\gamma$100 *27*) γ_0***1432.6*** *4* (†$_\gamma$46 *15*)

1443.17 *25*, 1/2,3/2, *[B]* γ_{1083}***360.2*** *3* (†$_\gamma$100 *22*) γ_0***1443.2*** *4* (†$_\gamma$7.8 *22*)

1487.01 *12*, 9/2⁻,11/2⁻, *[C]* γ_{1397}***90.42*** *23* (†$_\gamma$1.0 *4*) γ_{1068}***419.00*** *5* (†$_\gamma$100 *8*) E2+M1: δ≈2.4 γ_{955}***531.72*** *35* (†$_\gamma$1.5 *6*) γ_{947}***540.32*** *27* (†$_\gamma$3.1 *9*)

1490.2 *7*, (13/2⁺), *[D]* γ_{819}***671.7*** *6* (†$_\gamma$100)

1503 *4*, 1/2⁺, *[E]*

1559.60 *6*, 13/2⁻, *[C]* γ_{1281}***279.25*** *10* (†$_\gamma$22 *6*) M1 γ_{894}***665.42*** *12* (†$_\gamma$8.7 *8*) γ_{879}***680.68*** *5* (†$_\gamma$35 *4*) M1 γ_{706}***853.05*** *10* (†$_\gamma$42 *5*) M1 γ_{319}***1241.17*** *10* (†$_\gamma$100 *1*) M1

1585 *4*, 5/2⁻,7/2⁻, *[E]*

1605.57 *14*, 11/2⁻,13/2⁻,15/2⁻, *[CF]* γ_{1281}***324.55*** *25* (†$_\gamma$16 *6*) γ_{947}***658.7*** *3* (†$_\gamma$12 *5*) γ_{879}***727.20*** *25* (†$_\gamma$100 *10*) M1 γ_{706}***899.5*** *3* (†$_\gamma$82 *15*) (E2) γ_{319}***1286.4*** *4* (†$_\gamma$13 *3*)

1781 *4*, 5/2⁻,7/2⁻, *[E]*

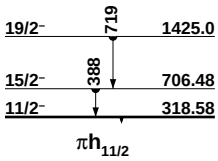
1813.0 *15*, (21/2⁺), 8 *2* ns, *[D]* γ_{1425}***388.1*** (†$_\gamma$100)

1983 *4*, 9/2⁻,11/2⁻, *[E]*

2350 *4*, 11/2⁺,13/2⁺, *[E]*

γ from ^{195}Au (30.5 s) IT decay *< for Iγ% multiply by 0.680 6 >*
56.80 *3* (†$_\gamma$0.0435 *14*) E3, ***61.46*** *3* (†$_\gamma$0.246 *12*) M1+E2: δ=0.45 *1*, ***200.38*** *4* (†$_\gamma$2.41 *9*) E2, ***261.75*** *4* (†$_\gamma$100) M1+E2: δ=0.51 *1*, ***318.60*** *10* (†$_\gamma$0.062 *3*) M4.

γ(^{195}*Pt*) from ^{195}Au (186.09 d) EC decay *< for Iγ% multiply by 0.109 6 >*
30.876 *6* (†$_\gamma$6.9 *3*) M1+E2: δ=−0.021 *4*, ***98.880*** *20* (†$_\gamma$100 *5*) M1+E2: δ=−0.130 *4*, ***129.757*** *20* (†$_\gamma$7.5 *2*) E2, ***199.46*** *4* (†$_\gamma$0.079 *6*) M1+E2: δ=+1.2 *2*, ***211.36*** *3* (†$_\gamma$0.10 *1*) M1+E2: δ=+0.38 *3*.



$^{195}_{79}$Au

$^{195}_{80}$Hg

Δ: −31080 *50* **S$_n$**: 6900 *60* **S$_p$**: 6080 *50* **Q$_{EC}$**: 1510 *50* **Q$_\alpha$**: 2190 *50*

Populating Reactions and Decay Modes

A ^{195}Hg IT decay (41.6 h) (51Mo55, 53Hu44, 54Br56, 57An53, 61Ju06, 61Re12, 63Ti02, 66Ha47, 67Fr05, 69Ba42, 70Ca07, 71Fr03, 73Vi09)

B ^{195}Tl EC decay (1.16 h) (55Kn34, 60Gu08, 61Ju06, 61Re12, 69Ba42, 73Va27, 73Vi09, 74Ma14, 74St04, 75Fe09, 77GoZQ, 77GoZW, 77WeZM, 78Go15)

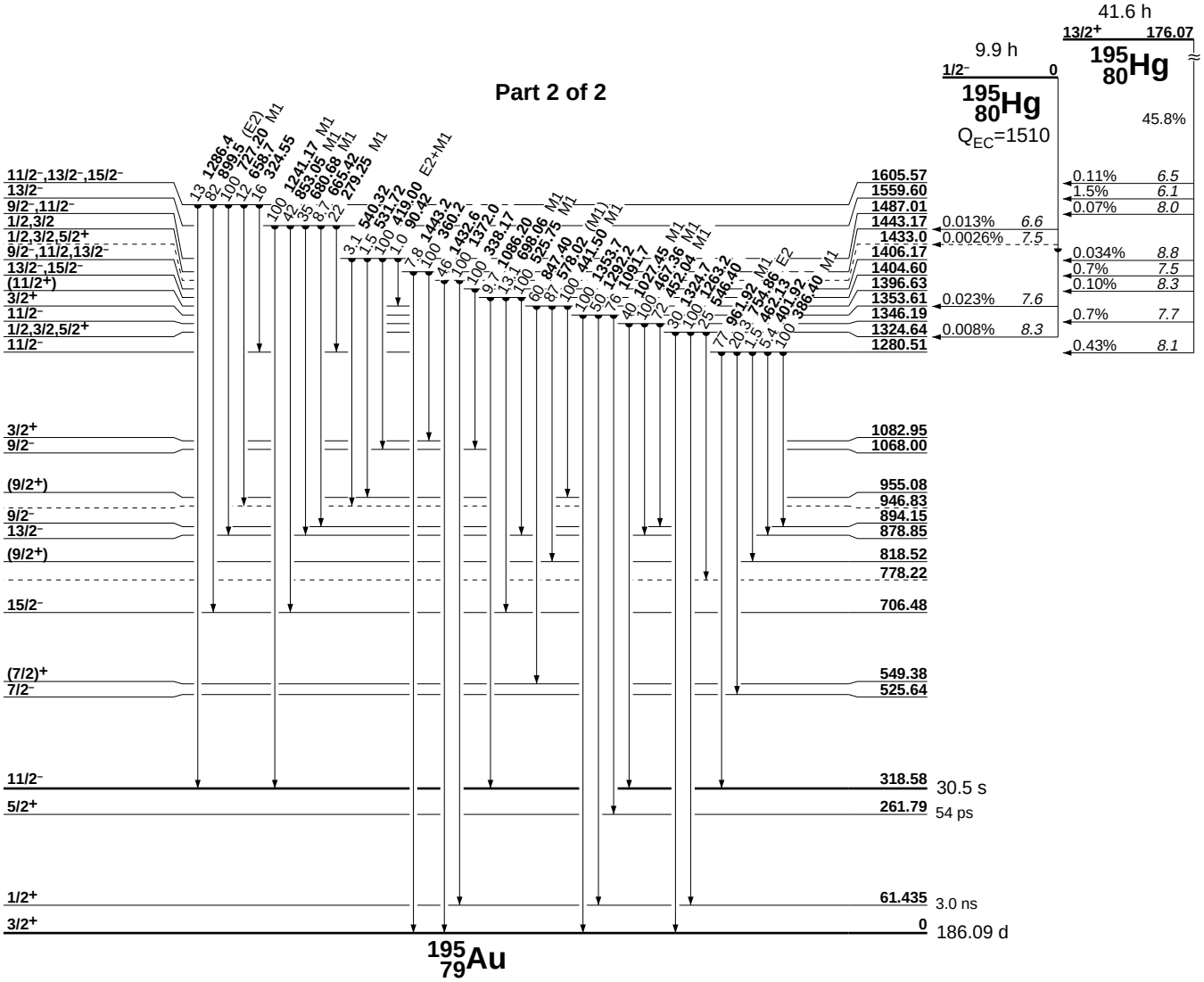
C ^{196}Hg(p,d) (85Ve05, 86VeZY)

D (HI,xnγ) (73PrZV, 74Pr09, 75PrZU, 78Me11, 86AgZZ, 91Me06)

Levels and γ-ray branchings:

0, 1/2⁻, 9.9 *5* h, *[ABC]*, %EC+%β⁺=100, μ=+0.5414749 *14*

37.085 *19*, 3/2⁻, <50 ps, *[ABC]* γ_0***37.09*** *3* (†$_\gamma$100) M1+E2: δ=0.032 *5*

53.290 *20*, 5/2⁻, 0.72 *3* ns, *[ABC]* γ_{37}***16.21*** *3* (†$_\gamma$100 *11*) M1+E2: δ=0.024 *6* γ_0***53.29*** *3* (†$_\gamma$5.1 *4*) E2

176.07 *4*, 13/2⁺, 41.6 *8* h, *[ABCD]*, %IT=54.2 *20*, %EC+%β⁺=45.8 *20*, μ=−1.0446473 *26*, Q=+1.08 *11* γ_{53}***122.78*** *3* (†$_\gamma$100) M4