## $^{166}$Ir p decay (15.1 ms) 1997Da07

History

| Type | Author | Citation | Literature Cutoff Date |
|---|---|---|---|
| Full Evaluation | Balraj Singh and Jun Chen | NDS 194,460 (2024) | 31-Oct-2022 |

Parent: $^{166}$Ir: E=172 *6*; $J^{\pi}=(9^+)$; $T_{1/2}$=15.1 ms *9*; Q(p)=1152 *8*; %p decay=1.8 *6*

$^{166}$Ir-E,$J^{\pi}$,$T_{1/2}$: From $^{166}$Ir Adopted Levels in ENSDF database as of March 2008, based on measurements by 1997Da07.

$^{166}$Ir-Q(p): From 2021Wa16, based on proton energy measured by 1997Da07.

$^{166}$Ir-%p decay: From 1997Da07. %$\alpha$=98.2 *6*.

1997Da07: $^{166}$Ir produced (1997Da07) by $^{92}$Mo($^{78}$Kr,p3n) reaction at E($^{78}$Kr)=384 MeV from the ATLAS accerator at ANL. The recoil products were analyzed by Fragment Mass Analyzer and prompt protons were identified by position, time and energy correlations between the residual nucleus, observation of decay proton and decay $\alpha$ particle.

Additional information 1.

### $^{165}$Os Levels

| E(level) | $J^{\pi}$ |
|---|---|
| 0.0 | $(7/2^-)$ |

### Protons ($^{165}$Os)

| E(p) | E($^{165}$Os) | I(p) | Comments |
|---|---|---|---|
| 1316 *8* | 0.0 | 100 | I(p): only one proton branch, interpreted as L=5, is reported. |