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 $^{164}\text{Os}$   $\alpha$  decay

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| <u>Type</u>     | <u>Author</u> | <u>History<br/>Citation</u> | <u>Literature Cutoff Date</u> |
|-----------------|---------------|-----------------------------|-------------------------------|
| Full Evaluation | N. Nica       | NDS 176, 1 (2021)           | 1-May-2021                    |

Parent:  $^{164}\text{Os}$ :  $E=0.0$ ;  $J^\pi=0^+$ ;  $T_{1/2}=21$  ms *I*;  $Q(\alpha)=6479$  5;  $\% \alpha$  decay=96 5

$^{164}\text{Os}$ - $\% \alpha$  decay: from [2008Bi15](#).

[Additional information 1](#).

Data set based on the evaluation by [2021Si16](#).

$T_{1/2}(^{164}\text{Os})=21$  ms *I* ([1996Pa01](#)) is adopted here. Others: 41 ms *20* ([1981Ho10](#)); and 27 ms *4* ([1996Bi07](#)).

$Q(\alpha)(^{164}\text{Os})$  is from the evaluation by [2021Wa16](#).

 $^{160}\text{W}$  Levels

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| <u>E(level)</u> | <u><math>J^\pi</math></u> |
|-----------------|---------------------------|
| 0.0             | $0^+$                     |

 $\alpha$  radiations

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| <u><math>E_\alpha</math></u> | <u>E(level)</u> | <u><math>I\alpha^\ddagger</math></u> | <u>HF<math>^\dagger</math></u> | <u>Comments</u>                                                                                                                                                                                        |
|------------------------------|-----------------|--------------------------------------|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6321 7                       | 0.0             | 100                                  | 1.000                          | $E\alpha$ : from <a href="#">1996Pa01</a> . Others: 6320 <i>20</i> ( <a href="#">1981Ho10</a> ); and 6315 <i>10</i> ( <a href="#">1996Bi07</a> ).<br>$I\alpha$ : only one $\alpha$ group was observed. |

$^\dagger$  The nuclear radius parameter  $r_0(^{160}\text{W})=1.5504$  44 is deduced by assuming  $HF=1.0$  for the ground-state to ground-state alpha decay branch.

$^\ddagger$  For absolute intensity per 100 decays, multiply by 0.96 5.