

## <sup>174</sup>Os

The discovery of <sup>174</sup>Os was reported in 1971 in “Alpha decay of neutron-deficient osmium isotopes” by Borggreen and Hyde ([1971Bo06](#)). The Berkeley heavy-ion linear accelerator accelerated <sup>16</sup>O to 110–160 MeV and bombarded enriched <sup>164</sup>Er and <sup>166</sup>Er. The reaction products were positioned in front of a semiconducting silicon detector by a helium-jet transport system. “Three neutron-deficient isotopes of osmium have been produced by the interaction of <sup>16</sup>O ions with erbium targets and observed by their  $\alpha$ -decay. They are <sup>172</sup>Os,  $E_\alpha = 5.105$  MeV,  $t_{1/2} = 19$  s; <sup>173</sup>Os,  $E_\alpha = 4.94$  MeV,  $t_{1/2} = 16$  s; and <sup>174</sup>Os,  $E_\alpha = 4.76$  MeV,  $t_{1/2} = 45$  s.”

Adapted from reference ([2012Ro36](#))

[1971Bo06](#) J. Borggreen and E. K. Hyde, Nucl. Phys. A **162**, 407 (1971).  
[2012Ro36](#) R. Robinson and M. Thoennessen, At. Data Nucl. Data Tables **98**, 911 (2012).

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