

## Topic Page: [Bohrium](#)

Definition: **bohrium** from *Philip's Encyclopedia*

(symbol Bh) Synthetic, radioactive, element of the transactinide series. It is very unstable, and few atoms have ever been detected. Its discovery was made by German physicists Peter Armbruster and Gottfried Münzenberg and colleagues by bombarding bismuth-209 nuclei with chromium-54 nuclei. It is named after Danish physicist Niels Bohr. Properties: at.no. 107.

Summary Article: **bohrium**

From *The Columbia Encyclopedia*

(bôh'ēƏm), artificially produced radioactive chemical element; symbol Bh; at. no. 107; mass number of most stable isotope 270; m.p., b.p., sp. gr., and valence unknown. Situated in Group 7 of the periodic table, it is expected to have properties similar to those of the rare metal rhenium.

In 1976 a Soviet team led by Y. Oganessian at the Joint Institute for Nuclear Research at Dubna bombarded bismuth-209 atoms with chromium-54 ions to produce an isotope with mass number 261 and a half-life of 1–2 msec. In 1981 a German research team led by P. Armbruster and G. Münzenberg at the Institute for Heavy Ion Research at Darmstadt also bombarded bismuth-209 atoms with chromium-54 ions. By reducing the temperature of the target atoms, the Germans were able to produce and unambiguously identify an isotope of element 107 having mass number 262 and a half-life of 5 msec. The Germans suggested the name nielsbohrium, which the Soviets had suggested be given to element 105 (dubnium), to honor the Danish physicist Niels Bohr. The most stable isotope, bohrium-270, has a half-life of 61 sec.

In 1994 a committee of the International Union of Pure and Applied Chemistry (IUPAC), convened to resolve naming disputes for the transactinide elements, recommended that element 107 be named bohrium. While this conforms to the names of other elements honoring individuals, where only the surname is taken, it was opposed by many who were concerned that it could be confused with boron, the name for element 5. In 1997, however, the name bohrium was recognized internationally.

See also synthetic elements; transuranium elements.

**APA**

Chicago

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Bohrium. (2018). In P. Lagasse, & Columbia University, *The Columbia encyclopedia* (8th ed.). New York, NY: Columbia University Press. Retrieved from <https://search.credoreference.com/content/topic/bohrium>

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## APA

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## Chicago

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## Harvard

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## MLA

"bohrium." *The Columbia Encyclopedia*, Paul Lagasse, and Columbia University, Columbia University Press, 8th edition, 2018. *Credo Reference*, <https://search.credoreference.com/content/topic/bohrium>. Accessed 18 Sep. 2019.