Work with a unique isotope of hydrogen generates attention in the scientific community

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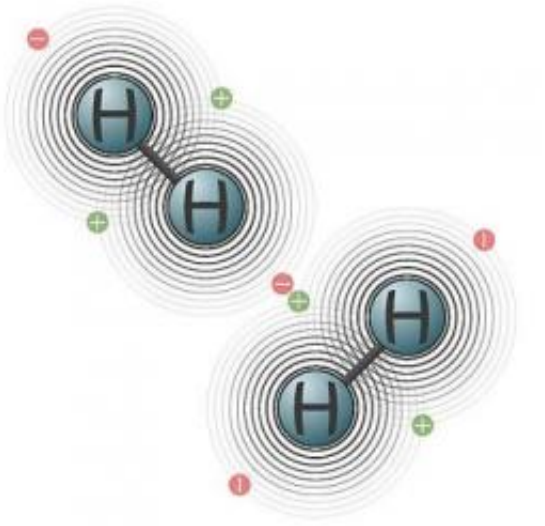

By delving into the interactions between a hydrogen molecule and muonic hydrogen, the heaviest hydrogen isotope to date, a team of researchers from academia and Pacific Northwest National Laboratory created a popular paper.

The article describes the kinetic isotope effects for muonic hydrogen and deuterium, which differ in mass by a factor of 36.

The article was one of the 20 most accessed articles in the November 2011 on *The Journal of Chemical Physics.*

The article's popularity, in part, is because it provides a more detailed account of work published in the prestigious journal, *Science*.

More information: Fleming, DJ, et al. 2011. "Kinetics of the reaction of the heaviest hydrogen atom with H2, the 4Heμ + H2 → 4HeμH + H reaction: Experiments, accurate quantal calculations, and variational transition state theory, including kinetic isotope effects for a factor of 36.1 in isotopic mass."The Journal of Chemical Physics 135(18): 184310-184327.

Provided by Pacific Northwest National Laboratory