Black Panther, Vibranium, and the Periodic Table



Black Panther, which is based on the Marvel Comic series, is a blockbuster hit with moviegoers, surpassing \$1 billion in global sales. King T'Challa (Black Panther), played by the actor Chadwick Boseman, is a superhero with a body suit made from material that contains the fictional metal Vibranium. The fictional African nation, Wakanda, led by King T'Challa, has a thriving STEM economy based on the production and use of Vibranium, which has amazing chemical and physical properties. In fact, Vibranium is described as a metal that dissolves other metals, absorbs all sound, and is a strong mutagen.

In 2016, four elements were added to the periodic table to complete the seventh row, namely, Nihonium (Nh), Moscovium (Mc), Tennessine (Ts), and Oganesson (Og). Both Mendeleev and Moseley would likely be very pleased with the discovery new elements.

In the movie Black Panther, Wakanda's economy focuses on the production and use of a fictional metal known as Vibranium, which has amazing chemical and physical properties. If this metal actually existed, where do you think the metal would be placed on the periodic table, and why? What would the elemental symbol be? Describe its atomic radius, ionic radius, ionization energy, electronegativity, shielding, metallic properties, and chemical properties.

Collins, Sibrina N. and Appleby, LaVetta. (2018) <i>Black Panther, Vibranium, and the Periodic Table</i> . <u>Journal of Chemical Education</u> 95 (7), 1243-1244. Retrieved from https://pubs.acs.org/doi/10.1021/acs.jchemed.8b00206 .			