

Review of: "Dynamic structure factors and equation of state of fluid iron under Earth's core condition"

Yong Hou¹

¹ National University of Defense Technology

Potential competing interests: No potential competing interests to declare.

In their manuscript "Dynamic Structure Factors and 1 Equation of State of Fluid Iron Under Earth's Core Conditions," Wei-jie Li, et al. compared the sound velocities of Fe calculated by dynamic structure factors and the equations of state methods under the Earth's core conditions, which were calculated by ab initio molecular dynamics simulations. The authors also analyzed the numerical differences between these two methods, although these two methods are physically identical. The results validate the sound velocity under Earth's core conditions, and I think it would be a valuable addition to the literature on the calculation of sound velocity.