Prediction of Transport Properties of Pure Inert Gas and Binary Mixtures Argon-Krypton, Argon-Xenon, Helium-Argon and Neon-Argon by Ab Initio Calculations

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Ab initio calculations of transport properties of gas have been of great interest in recent decades. Many accurate ab initio potentials were presented. We compared parameters of different potentials and the calculated viscosity and thermal conductivity of pure helium, neon, argon, krypton, xenon and binary mixtures argon-krypton, argon-xenon, helium-argon, neon-argon. The results are found to be in good agreement with experimental data.