# Quantum-statistical calculations of equation of state of refractory metals

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We use the Hartree–Fock–Slater model with taking into account the band structure to calculate the thermal contribution of electrons to the equation of state of refractory metals (Ti, Cr, Nb, Mo, Re) in a wide range of densities (from 0.1 to 100 g/cm$^3$) and temperatures (from 0 to 100 keV). The calculated dependences are used to construct the Hugoniots of solid samples of these metals in the pressure range from 1 to $10^7$ GPa. The comparison with the experimental data is given. This work is supportedby the Russian Science Foundation (grant No. 19-19-00713).