The Origin of the Anomalous Expansion of the First Peak in the Radial Distribution

Function During the Rapid Solidification of Tantalum Metal

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Figure S1. Systemic potential energy $(a\sim b)$, volume $(c\sim d)$ and pressure (e) of Ta₁₁₆₆₄ as a function of the temperature at five different cooling rates, respectively. (b) and (d) is a partial enlarged view of (a) and (c), respectively. (f) is schematic diagram of atomic solidification in three-dimensional system.



Figure S2. Radial distribution function (RDF) curves of simulated Ta_{11664} system at 300 K under five different cooling rates, respectively. (b) is a partial enlarged view of (a).