SOLVATION FREE ENERGY OF ISOLATED IMPURITY IN SIMPLE LIQUID METAL

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S u m m a r y

The "liquid metal + negative impurity" system is discussed. The generalized microscopic Anderson model in the Hartree—Fock (HF) approximation is used to describe the charge and magnetic states of an impurity. The scattering of conduction electrons by the charged impurity are included in the model Hamiltonian. The solvation free energy of the charged impurity is obtained through the connection with two-time Green's functions and the thermodynamical averages.