

Abstract Submitted
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Corrected Diffusion Coefficient of Lithium in Helium and Helium in Lithium¹ MONCEF BOULEDROUA, KAMEL ALIOUA, Laboratoire de Physique des Rayonnements — The diffusion coefficients D_0 of ground and excited lithium atoms diffusing in a helium buffer gas are reviewed with new and reliable potentials. The calculations are performed quantum mechanically at low and moderate temperatures and the results are compared with published theoretical and experimental data. The diffusion coefficients of ground Li in He and ground He in Li are particularly considered by taking into account the first-order correction like $D = D_0(1 + \epsilon)$.

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