Dynamics of photo-excited Ba+ cations in helium nanodroplets

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Within TDDFT, we have addressed the dynamics of Ba⁺ cations in helium nanodroplets. The absorption spectra from S to P and D states, as well as the emission spectra from P to S and D states of the cation are discussed. The appearance of exciplexes is discussed and the dynamics of the excited Ba⁺ cation in the P state has been investigated.