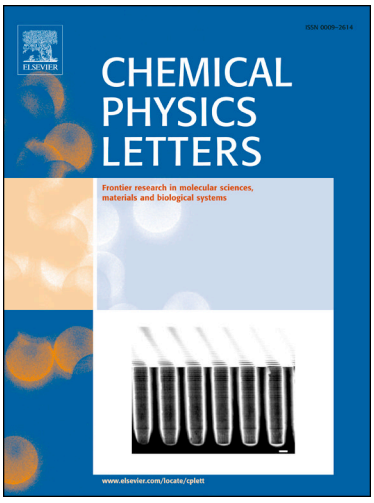

Research paper

Structures and interactions among globular proteins above the isoelectric point in the presence of divalent ions: A small angle neutron scattering and dynamic light scattering study

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Structures and interactions among globular proteins above the isoelectric point in the presence of divalent ions: A small angle neutron scattering and dynamic light scattering study

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Abstract

Small angle neutron scattering study reveals that at pD ≈ 7.0, above the isoelectric point of the globular protein Bovine Serum Albumin (BSA), in the presence of different divalent ions (Mg^{2+}, Ca^{2+}, Sr^{2+} and Ba^{2+}) the short-range attractive interaction remains nearly constant and the intermediate-range repulsive interaction decreases with increasing salt concentration up to a certain concentration value but after that remains unchanged. However, for the monovalent ion (Na^{+}), repulsive interaction decreases gradually up to 1M salt concentration. Dynamic