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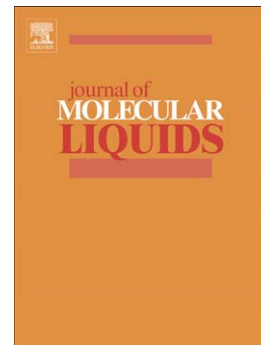
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M. Badia, S. El-Moudny, M. Benhamou, M. El Ossmani

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Study of cage effect and subdiffusion in Pickering emulsions from Molecular Dynamics simulations

M. Badia¹, S. El-Moudny², M. Benhamou^{3*}, M. El Ossmani²

¹ Ecole Royale de l'Air, Département de Mécanique

P.O. Box 40002, Menara, Marrakech, Morocco

²ENSAM, Moulay Ismail University

P.O. Box 15290, Al Mansour, Meknes, Morocco

³Physics Department, Faculty of Sciences

P.O. Box 11201, Moulay Ismail University, Meknes, Morocco

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Abstract

In this work, we study the diffusion laws of oil-droplets dispersed in water onto which are strongly adsorbed charged point-like particles (Pickering emulsions). This diffusion that originates from multiple collisions with the molecules of water, is *anomalous*, due to the presence of relatively strong correlations between the moving oil-droplets. Using Molecular Dynamic simulation, with a pair-potential of Sogami-Ise type, we first observe that the random walkers execute a normal diffusion, at intermediate time, followed by

*Author for correspondence : m.benhamou@ensam-umi.ac.ma

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