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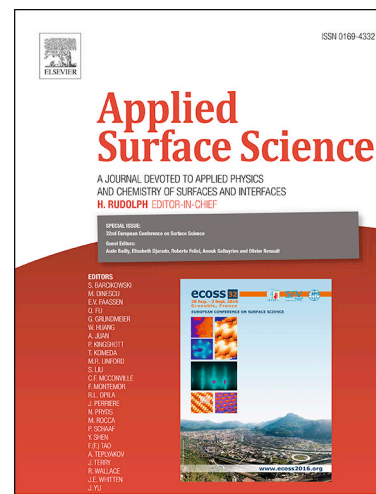
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Surface enthalpy driven size focussing trends: predictive modelling for digestive ripening of spherical particles

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Abstract:

Through digestive ripening (DR), a polydispersed colloid can be processed to obtain a monodispersed system. Recent advances in DR have rendered the process prospectively scalable, soft-chemical and green. This in turn makes it relevant for industrial-scale manufacturing of nanoparticles (NPs) and quantum dots (QDs); a crucial step forward from a technological standpoint. However predictive models and associated results that offer chemical insights for experimental design for DR are largely missing. Currently two attempts to explain DR are notable: (i) Lee's theory (essentially accounts for surface electrostatic

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