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""Colloidal interactions: From effective potentials to structure"";
""Colloidal Soft Matter""; ""The coarse-graining strategy: effective
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""Steric stabilization""; ""Classical uniform fluids""; ""Nonuniform fluids:
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""Some useful results""; ""Accurate density functionals for soft
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""Back to the failure of mean-field""; ""Large distance behaviour"";
""Asymmetric plates generalisation""; ""Conclusion""; ""Elastic properties
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""Introduction to elasticity in the context of thermodynamics""""
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approaches""; ""Glasses""; ""Modified density functional approach"";
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""Non-equilibrium gels resulting from arrested phase separation""""
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glass transition""; ""Stochastic thermodynamics: A brief introduction"";
""Preliminaries""; ""Introduction""; ""Nutshell thermodynamics"";
""Nutshell equilibrium statistical mechanics""; ""Nutshell Master
equation""
""Ensemble stochastic thermodynamics""

Sommario/riassunto

Colloids are systems comprised of particles of mesoscopic size suspended in a liquid. They have recently been attracting increased attention from scientists and engineers due to the fact that they are nowadays present in many industrial products such as paints, oil additives, electronic ink displays and drugs. Colloids also serve as versatile model systems for phenomena and structures from solid-state physics, surface science and statistical mechanics, and can easily be studied using tabletop experiments to provide insight into processes not readily accessible in atomic systems. This book prese