

List of Publications Remco Tuinier

in refereed Journals:

1. Fler, G.J., Skvortsov, A.M., Tuinier, R., Mean-field equation for the depletion layer thickness, accepted for publication in *Macromolecules*, **36** (2003) xx.
2. Tuinier, R., Aarts, D.G.A.L., Wensink, H.H., Lekkerkerker, H.N.W., Pair interaction and phase separation in mixtures of colloids and excluded volume polymers, accepted for publication in: *Phys. Chem. Chem. Phys.*, **5** (2003) xx.
3. Tuinier, R., Sphere-segment size ratio influence on the stability of a polymer-colloid mixture, *Eur. Phys. J. E*, **10** (2003) 123-128.
4. Tuinier, R., Rieger, J., de Kruif, C.G., Depletion-induced phase separation in colloid-polymer mixtures (Review), *Adv. Colloid Interface Sci.* **103** (2003) 1-31.
5. Ten Grotenhuis, E., Tuinier, R., de Kruif, C.G., Phase behaviour of oil-in-water emulsion with added casein micelles, *J. Dairy Sci.* **86** (2003) 764-769.
6. Tuinier, R., Approximate solutions to the Poisson-Boltzmann equation in spherical and cylindrical geometry, *Journal of Colloid and Interface Science*, **258** (2003) 45-49.
7. Holt, C., de Kruif, C.G., Tuinier, R., Timmins, P.A., Substructure of Bovine Casein Micelles by Small-Angle X-Ray and Neutron Scattering, *Colloids and Surfaces A* **213** (2003) 275-284.
8. Koenderink, G.H., Aarts, D.G.A.L., de Villeneuve, V.W.A., Philipse, A.P., Tuinier, R., Lekkerkerker, H.N.W., Morphology and kinetics of depletion-induced phase separation in mixtures of xanthan and low refractive index PFA, *Biomacromolecules* **4** (2003) 129-136.
9. Tuinier, R., Brûlet, A., On the long-range attraction between proteins due to non-adsorbing polysaccharide, *Biomacromolecules* **4** (2003) 28-31.
10. Tuinier, R., Petukhov, A.V., Polymer polydispersity effect on depletion interaction between colloidal particles, *Macromolecular Theory and Simulations* **11** (2002) 975-984.

11. Aarts, D.G.A.L., Tuinier, R., Lekkerkerker, H.N.W., Phase behaviour of mixtures of colloidal spheres and excluded volume polymer chains, *J. Phys: Condens. Matter* **14** (2002) 7551-7561.
12. Ruas-Madiedo, P., Tuinier, R., Kanning, M., Zoon, P., Role of exopolysaccharides produced *Lactococcus lactis* subsp. *cremoris* on the viscosity of fermented milks, *Int. Dairy J.* **12** (2002) 689-695.
13. Tuinier, R., de Kruif, C.G., Stability of casein micelles in milk, *J. Chem. Phys.* **117** (2002) 1290-1295.
14. Tuinier, R., Lekkerkerker, H.N.W., Aarts, D.G.A.L., Interaction potential between two spheres mediated by excluded volume polymers, *Phys. Rev. E* **65** (2002) 060801(R).
15. de Kruif, C.G., Tuinier, R., Holt, C. Timmins, P.A., Rollema, H.S., Physico-chemical study of κ - and β -casein dispersions and the effect of cross-linking by transglutaminase, *Langmuir* **18** (2002) 4885-4891.
16. Tuinier, R., Lekkerkerker, H.N.W., Polymer density around a sphere, *Macromolecules* **35** (2002) 3312-3313.
17. Tuinier, R., Rolin, C., de Kruif, C.G., Electrosorption of pectin onto casein micelles, *Biomacromolecules* **3** (2002) 632-638.
18. Scholten, E., Tuinier, R., Tromp, R.H., Lekkerkerker, H.N.W. Interfacial tension of a decomposed biopolymer mixture, *Langmuir* **18** (2002) 2234-2238.
19. Tuinier, R., Lekkerkerker, H.N.W., Excluded-volume polymer-induced depletion interaction between parallel flat plates, *Eur. Phys. J. E* **6** (2001) 129-132.
20. de Kruif, C.G., Tuinier, R., Polysaccharide-protein interactions, *Food Hydrocolloids* **15** (2001) 555-563.
21. Tuinier, R., Vliegthart, G.A., Lekkerkerker, H.N.W., Polymer-mediated interaction between a sphere and a plate, *Macromolecules* **34** (2001) 4636-4641.
22. Tuinier, R., van Casteren, W.H.M., Looijesteijn, P.J., Schols, H.A., Voragen, A.G.J., Zoon, P., Effects of structural modifications on some physical characteristics of exo-polysaccharides from *Lactococcus lactis*, *Biopolymers* **59** (2001) 160-166.

23. Tuinier, R., Vliegthart, G.A., Lekkerkerker, H.N.W., Depletion interaction between spheres immersed in a solution of ideal polymer chains, *J. Chem. Phys.* **113** (2000) 10768-10775.
24. Looijesteijn, P.J., van Casteren, W.H.M., Tuinier, R., Doeswijk-Voragen, C.H.L., Hugenholtz, J., Influence of different substrate limitations on the yield, composition and molecular mass of exopolysaccharides produced by *Lactococcus lactis* subsp. *cremoris* in continuous cultures, *Journal of Applied Microbiology* **89** (2000) 116-122.
25. Tuinier, R., Oomen, C.J., Zoon, P., Cohen Stuart, M.A., de Kruif, C.G., Viscoelastic properties of a polysaccharide produced by a *Lactococcus lactis*, *Biomacromolecules* **1** (2000) 219-223.
26. Tuinier, R., Holt, C., Timmins, P.A., de Kruif, C.G., Small-angle neutron scattering of aggregated whey protein colloids with an exocellular polysaccharide, *J. Appl. Cryst.* **33** (2000) 540-543.
27. Tuinier, R., ten Grotenhuis, E., de Kruif, C.G., The effect of depolymerised guar gum on the stability of skim milk, *Food Hydrocolloids* **14** (2000) 1-7.
28. Tuinier, R., Dhont, J.K.G., de Kruif, C.G., Depletion-induced phase separation of aggregated whey protein colloids by an exocellular polysaccharide, *Langmuir* **16** (2000) 1497-1507.
29. de Kruif, C.G., Tuinier, R., Whey protein aggregates and their interaction with exopolysaccharides, *Int. J. Food Sci. Techn.* **34** (1999) 487.
30. Kleerebezem, M., van Kranenburg, R., Tuinier, R., Boels, I.C., Zoon, P., Looijesteijn, E., Hugenholtz, J., de Vos, W.M., Exopolysaccharides produced by *Lactococcus lactis*: from genetic engineering to improved rheological properties?, *Antonie van Leeuwenhoek* **76** (1999) 357.
31. Tuinier, R., de Kruif, C.G., Phase separation, creaming, and network formation of oil-in-water emulsions induced by an exocellular polysaccharide, *J. Colloid Interface Sci.* **218** (1999) 201.
32. Tuinier, R., de Kruif, C.G., Phase behavior of casein micelles/exocellular polysaccharide mixtures; experiment and theory, *J. Chem. Phys.* **110** (1999) 9296.

33. Tuinier, R., ten Grotenhuis, E., Holt, C., Timmins, P.A., de Kruif, C.G., Depletion interaction of casein micelles and an exocellular polysaccharide, *Phys. Rev. E* **60** (1999) 848.
34. Tuinier, R., Zoon, P., Cohen Stuart, M.A., Fler, G.J., de Kruif, C.G., Concentration and shear-rate dependence of an exocellular polysaccharide, *Biopolymers* **50** (1999) 641.
35. Tuinier, R., Zoon, P., Olieman, C., Cohen Stuart, M.A., Fler, G.J., de Kruif, C.G., Isolation and physical characterization of an exocellular polysaccharide, *Biopolymers* **49** (1999) 1.
36. Hoogendam, C.W., Peters, J., Tuinier, R., de Keizer, A., Cohen Stuart, M.A., Bijsterbosch, B.H., Effective viscosity of polymer solutions: relation to the determination of the depletion thickness of the adsorbed layer of cellulose derivatives, *J. Colloid Interface Sci.* **207** (1998) 309.
37. Tuinier, R., Bisperink, C.G.J., van den Berg, C., Prins, A., Transient foaming behavior of aqueous alcohol solutions as related to their dilational surface properties, *J. Colloid Interface Sci.* **179** (1996) 327.
38. Hoogeveen, N.H., Hoogendam, C.W., Tuinier, R., Cohen Stuart, M.A., Adsorption of weak polyelectrolytes on amphoteric oxide surfaces, *Int. J. Pol. Anal. Char.* **1** (1995) 315.

other publications:

1. Tuinier, R., Lekkerkerker, H.N.W., Preface special issue on occasion of the 60th birthday of Kees de Kruif, *Colloids and Surfaces A* **213** (2003) 105.
2. de Kruif, C.G., Tuinier, R., Colloidal stability of casein micelles in milk, chapter D.3, In: 'Soft Matter: complex materials on mesoscopic scale,' 33rd IFF winter school, J.K.G. Dhont, G. Gompper, D. Richter, Eds. (ISBN 3-89336-297-5) 2002.
3. Weinbreck, F., Tuinier, R., de Ruiter, G.A., de Kruif, C.G., Turning biopolymers into commercial value: EPS of lactic acid bacteria, in: *Polymerix 2000 Proceedings*, 175-185, 2000.
4. de Kruif, C.G., Tuinier, R., Casein micelles and their interaction with exopolysaccharides; turbidity and viscosity, In: "Gums and Stabilisers for the Food Industry, vol. 10", P.A. Williams, G.O. Phillips, Ed., 2000, p. 196-202.
5. Tuinier, R., de Kruif, C.G. Depletion flocculation of casein micelles induced by the EPS of a lactic acid bacterium, In: "Gums and Stabilisers for the Food Industry, vol. 9", P.A. Williams, G.O. Phillips, Ed., 1998, p. 222-228.
6. PhD thesis: Tuinier, R., "An exocellular polysaccharide and its interactions with proteins," Wageningen University/NIZO food research, The Netherlands, ISBN 9058080498, 1999.