

## Publication list

Name: G. Petekidis

Publications in refereed journals and proceedings of International Conferences:

### A. Until 2004

- Papers

1. G. Petekidis, G. Fytas and H. Witteler  
“Orientation fluctuations in concentrated solutions of hairy-rod polymers”  
Colloid & Polymer Science 272: 1457 (1994)
2. H. Furuya, S. Okamoto, A. Abe, G. Petekidis and G. Fytas  
“Dipole Moment and Optical Anisotropy studies of Mesogenic Twin Compounds,  $\alpha,\omega$ -Bis[(4,4'-cyanobiphenyl)oxy] alkanes”  
J. Phys. Chem. 99: 6483 (1995)
3. G. Voyatzis, G. Petekidis, D. Vlassopoulos, E. Kamitsos and A. Bruggeman  
“Molecular Orientation in Polyester Films using Polarized Laser Raman and Fourier Transform Infrared Spectroscopies and X-Ray Diffraction”  
Macromolecules 29: 2244 (1996)
4. U. Tiesler, M. Rehahn, M. Ballauff, G. Petekidis, D. Vlassopoulos, G. Maret and H. Kramer  
“Analysis of the conformation of a Stiff-Chain Polyester by Measurements of the Magnetic Birefringence in solution”  
Macromolecules 29: 6832 (1996)
5. G. Petekidis, D. Vlassopoulos, P. Galda, M. Rehahn and M. Ballauff  
“Determination of Chain conformation of Stiff Polymers by Depolarized Rayleigh Scattering in solution”  
Macromolecules 29: 8948 (1996)
6. G. Petekidis, D. Vlassopoulos, G. Fytas, N. Kountourakis and S. Kumar  
“Association Dynamics in solutions of Hairy-Rod polymers”  
Macromolecules 30: 919 (1997)
7. R. Seghrouchni, G. Petekidis, D. Vlassopoulos, G. Fytas, A.N. Semenov, J. Roovers and G. Fleischer  
“Controlling the dynamics of soft spheres: From polymeric to colloidal behaviour”  
Europhys. Lett. 42: 271 (1998)
8. G. Petekidis, D. Vlassopoulos, G. Fytas and G. Fleischer  
“Dynamics of Hairy-Rod Polymers: Semidilute Regime”  
Macromolecules 31: 1406 (1998)
9. G. Petekidis, D. Vlassopoulos, G. Fytas, R. Rulken and G. Wegner  
“Orientation Dynamics and Correlations in Hairy-Rod Polymers: Concentrated Regime”  
Macromolecules 31: 6129 (1998)
10. G. Petekidis\*, D. Vlassopoulos\*, G. Fytas, R. Rulken, G. Wegner and G. Fleischer  
“Diffusion Dynamics of Hairy-Rod Polymers in Concentrated Solutions”  
Macromolecules 31: 6139 (1998)
11. B. Loppinet, G. Petekidis, G. Fytas, R. Rulken, and G. Wegner “Dynamics of Adsorbed Hairy-Rod Polymer Solutions”  
Langmuir 14: 4958 (1998)
12. G. Petekidis, G. Fytas\*, U. Scherf, K. Mullen and G. Fleischer  
“Dynamics of Poly(p-phenylene) Ladder Polymers in Solution”

- J. Polym. Sci. Part B: Polymer Phys. 37: 2211 (1999)
13. G. Petekidis<sup>\*</sup>, D. Vlassopoulos, G. Fytas, G. Wegner and G. Fleischer  
“Dynamics of Wormlike Polymers in Solution: Self-Diffusion and Zero-Shear Viscosity”  
Macromolecules 33: 9630 (2000)
14. G. Petekidis, P.N. Pusey, A. Moussaïd, S. U. Egelhaaf and W. C. K. Poon  
“Shear-induced yielding and ordering in concentrated particle suspensions”  
Physica A 306, 334 (2002)
15. G. Petekidis<sup>\*</sup>, L. A. Galloway, S. U. Egelhaaf<sup>\*</sup>, M. E. Cates and W. C. K. Poon  
“Mixtures of Colloids and Wormlike Micelles: Phase Behaviour and Kinetics”  
Langmuir 18, 4248 (2002)
16. G. Petekidis<sup>\*</sup>, A. Moussaïd and P.N. Pusey  
“Rearrangements in Hard-Sphere Glasses under Oscillatory Shear Strain”  
Phys. Rev. E, 66, 051402, (2002)
17. B. Loppinet, G. Fytas, G. Petekidis, T. Sato, G. Wegner  
“On the origin of the heterogeneous orientation dynamics of semiflexible polymers in solutions”  
The European Physical Journal E, 8, 461 (2002)
18. G. Petekidis<sup>\*</sup>, D. Vlassopoulos and P.N. Pusey  
“Yielding and Flow of Colloidal Glasses”  
Faraday Discuss., 123, 287, (2003)
19. R. Penciu, H. Kriegs, G. Petekidis, G. Fytas and E.N. Economou  
“Phonons in Colloidal Systems”  
J. Chem. Phys. 118, 11, 5224, (2003)
20. G. Petekidis<sup>\*</sup>, J. Gapinski, P. Seymour, J.S. Van-Duijneveldt, D. Vlassopoulos and G. Fytas  
“Dynamics of core-shell colloids in concentrated suspensions”  
Phys. Rev. E, 69, 042401, (2004)
21. G. Petekidis, D. Vlassopoulos and P.N. Pusey  
“Yielding and Flow of Sheared Colloidal Glasses”  
J. Phys-Condens. Mat. 16, S3955 (2004)
22. H. Kriegs, G. Petekidis, G. Fytas, R. Penciu, E.N. Economou and A.B. Schoefield,  
“Phonons in colloidal suspensions: A volume fractions study”  
J. Chem. Phys. 121, 7849, (2004)

- Proceedings

#### B. 2005-2012

- Papers

23. F. Bossard, C. Tsitsilianis<sup>\*</sup>, S. N. Yannopoulos, G. Petekidis and V. Sfika  
“A Novel Thermo-thickening Phenomenon Exhibited by a Triblock Polyampholyte in Aqueous Salt-free Solutions”  
Macromolecules 38, 2883, (2005)
24. E. Stiakakis, G. Petekidis, D. Vlassopoulos, C. N. Likos, H. Iatrou, N. Hadjichristidis and J. Roovers,  
“Depletion and cluster formation in soft colloid-polymer mixtures”  
Europhys. Lett. 72, 664, (2005)
25. C. N. Likos<sup>\*</sup>, C. Mayer, E. Stiakakis and G. Petekidis,  
“Clustering of soft colloids due to polymer additives”  
J. Phys-Condens. Mat. 17, S3363 (2005)
26. L. Xie, M. J. Biggs<sup>\*</sup>, D. Glass, A. S. McLeod, S. U. Egelhaaf and G. Petekidis

*“Granular temperature distribution in a gas fluidized bed of hollow microparticles prior to onset of bubbling”*

Europhys. Lett. 74, 268 (2006)

27. K. Pham, G. Petekidis, D. Vlassopoulos, S.U. Egelhaaf, P.N. Pusey, and W.C.K Poon  
*“Yielding of colloidal glasses”*

Europhys. Lett. 75, 624, (2006)

28. F. Ozon, G. Petekidis and D. Vlassopoulos\*  
*“Signatures of nonergodicity transition in a soft colloidal system”*

Industrial and Engineering Chemistry - Research, 45, 6946 (2006)

29. J. Tommaseo, G. Petekidis, W. Steffen, G.Fytas, A.B. Schoefield and N. Stefanou,  
*“Hypersonic Acoustic Excitations in Binary Colloidal Crystals: Big versus Small Hard Sphere Control”*

J. Chem. Phys. 126, 014707 (2007)

30. E. Glynos, A. Chremos, G. Petekidis, P. Camp and V. Koutsos\*  
*“Polymer-like to Soft Colloid-like Behavior of Regular Star Polymers Adsorbed on Surfaces”*

Macromolecules, 40, 6947 (2007)

31. P. Smith, G. Petekidis\*, S. U. Egelhaaf and W. C. K. Poon\*  
*“Yielding and crystallisation of Colloidal Gels under oscillatory shear”*

Phys. Rev. E, 76, 041402 (2007)

32. A. Le Grand and G. Petekidis\* *“Effects of particle softness on the rheology and yielding of colloidal glasses”*

Rheologica Acta, 47, 579 (2008)

33. K. Pham, G. Petekidis\*, D. Vlassopoulos, S.U. Egelhaaf, W.C.K Poon\* and P.N. Pusey  
*“Yielding behaviour of repulsion- and attraction-dominated colloidal glasses”*

J. Rheology, 52, 649 (2008)

34. P. Voudouris, B. Loppinet\* and G. Petekidis\*  
*“Particle Dynamics within a Wetting Layer in a Colloid-Polymer Mixture”*

Phys. Rev. E, 77, 051402 (2008)

35. N. Koumakis, A.B. Schofield and G. Petekidis\*  
*“Effects of shear induced crystallization on the rheology of Hard sphere colloids”*

Soft Matter 4, 2008-2018 (2008)

36. P. Ballesta, R. Besseling, L. Isa, G. Petekidis and W.C.K Poon  
*“Slip and flow of glassy hard sphere colloidal suspensions”*

Phys. Rev. Lett. 101, 258301 (2008)

37. V. Carrier and G. Petekidis\*  
*“Non-linear rheology of colloidal glasses of soft core-shell particles”*

J. of Rheology 53, 245-273, (2009)

38. V. N. Michailidou, G. Petekidis\*, J. W. Swan, J. Brady

*“Dynamics of Hard sphere colloidal particles near a wall”*

Phys. Rev. Lett. 102, 068302 (2009)

39. G. Brambilla, D. El Masri, M. Pierno, L. Berthier, L. Cipelletti\*, G. Petekidis, A. B. Schofield  
*“Probing the Equilibrium Dynamics of Colloidal Hard Spheres above the Mode-Coupling Glass Transition”*

Phys. Rev. Lett. 102, 085703 (2009)

40. M. Laurati, G. Petekidis, N. Koumakis, A. B. Schofield, J. Brader, M. Fuchs and S. U. Egelhaaf  
*“Structure, Dynamics and Rheology, of Colloid-Polymer mixtures: from Liquids to Gels”*

J. Chem. Phys. 130, 134907 (2009)

41. D. El Masri, G. Brambilla, M. Pierno, G. Petekidis, A. B. Schofield, L. Berthier and L. Cipelletti  
*“Dynamic Light Scattering measurements in the activated regime of dense colloidal hard spheres”*

J. Stat. Mech. P07015, (2009)

42. C. Christopoulou, G. Petekidis, B. Erwin, M. Cloitre and D. Vlassopoulos  
*“Aging and yield behaviour in model soft colloidal glasses”*

Phil. Trans. R. Soc. A 367, 5051-5071, (2009)

43. S. Rogers, P. T. Callaghan, G. Petekidis and D. Vlassopoulos  
*“Time-dependent rheology of colloidal star glasses”*

J. Rheology, 54, 133-158, (2010)

44. E. Stiakakis, A. Wilk, J. Kohlbrecher, D. Vlassopoulos and G. Petekidis\*  
*“Slow Dynamics, Aging and Crystallization of multiarm star glasses”*

Phys Rev. E, 81, 020402, (rapid communication), (2010)

45. E. van Ruymbeke, A. Pamvouxoglou, D. Vlassopoulos, G. Petekidis, G. Mountrichas, S. Pispas  
*“Rheological behaviour of stable, responsive diblock copolymer micelles”*

Soft Matter, 6, 881, (2010)

46. F. Renou, J. Stellbrink and G. Petekidis\*,  
*“Yielding processes in a soft colloidal glass under large amplitude oscillatory shear (LAOS)”*

J. Rheology 54(6), 1219-1242, (2010)

47. Wilk, S. Huißmann, E. Stiakakis, J. Kohlbrecher, D. Vlassopoulos, C. N. Likos, G. Meier, J. K. G. Dhont, G. Petekidis, R. Vavrin  
*“Osmotic shrinkage in star-linear polymer mixtures”*

European Physical Journal E, 32, 127 (2010)

48. G. Brambilla, D. El Masri, M. Pierno, L. Berthier, L. Cipelletti, G. Petekidis, A. B. Schofield  
Phys. Rev. Lett. *Comment reply* 104, 169602, (2010)

49. R. Besseling, L. Isa, P. Ballesta, G. Petekidis, M. E. Cates and W. C. K. Poon  
“*Shear banding and flow-concentration coupling in colloidal glasses*”  
Phys. Rev. Lett., 105, 268301, (2010)
50. N. Koumakis and G. Petekidis\*  
“*Two step yielding in attractive colloids: Transition from gels to attractive glasses*”  
Soft Matter, 7, 2456, (2011)
51. M. Laurati, S.U. Egelhaaf and G. Petekidis\*,  
“*Non-linear rheology of colloid-polymer gels*”  
J. Rheology, 55, 673 (2011)
52. P. Ballesta, G. Petekidis, L. Isa, W. C. K. Poon and R. Besseling  
“*Wall Slip and Flow of concentrated Hard-sphere colloidal suspensions*”  
J. Rheology 56(5), 1005-1037 (2012)
53. N. Koumakis, A. Pamvouxoglou, A. Poulos, and G. Petekidis\*  
“*Direct comparison of the rheology of hard and soft particle glasses*”  
Soft Matter 8, 4271-4284 (2012)
54. N. Koumakis, M. Laurati, S.U. Egelhaaf, J. F. Brady and G. Petekidis\*  
“*Yielding of hard sphere glasses during start-up shear*”  
Phys Rev. Lett. 108, 098303 (2012) *Editors choice*
55. M. Laurati, K. J. Mutch, N. Koumakis, J. Zausch, C.P. Amann, A.B. Schofield, G. Petekidis, J.F. Brady, J. Horbach, M. Fuchs and S. U. Egelhaaf  
“*Transient dynamics in dense colloidal suspensions under shear: Shear rate dependence*”  
J. Phys. Cond. Matt. 24, 464104 (2012)

