

Приложение 3

Списък на научните трудове на проф. дхн Николай Денков Денков за целия творчески период

Общ брой публикации – 182

Публикации в списания с известен импакт-фактор - 152

Общ импакт фактор на статиите – 815.454

Индивидуален импакт фактор – 189.272

Общ брой цитати - 10400

Среден брой цитати на статия – 57.1

***h*-индекс = 51**

51-те статии с над 51 цитата са:

№ 114 – 1154 цитата	№ 59 – 91 цитата	№ 97 – 63 цитата
№ 116 – 758 цитата	№ 100 – 90 цитата	№ 105 – 60 цитата
№ 1 – 624 цитата	№ 1200 – 87 цитата	№ 44 – 52 цитата
№ 160 – 262 цитата	№ 117 – 82 цитата	№ 3 – 54 цитата
№ 172 – 218 цитата	№ 65 – 79 цитата	№ 99 – 54 цитата
№ 64 – 205 цитата	№ 173 – 78 цитата	№ 10 – 56 цитата
№ 61 – 202 цитата	№ 23 – 76 цитата	№ 24 – 57 цитата
№ 80 – 201 цитата	№ 155 – 76 цитата	№ 89 – 57 цитата
№ 21 – 163 цитата	№ 9 – 74 цитата	№ 162 – 52 цитата
№ 119 – 152 цитата	№ 84 – 74 цитата	№ 33 – 51 цитата
№ 60 – 148 цитата	№ 65 – 79 цитата	№ 71 – 51 цитата
№ 70 – 137 цитата	№ 104 – 77 цитата	№ 78 – 51 цитата
№ 164 – 137 цитата	№ 126 – 75 цитата	№ 123 – 51 цитата
№ 30 – 131 цитата	№ 876 – 72 цитата	№ 134 – 51 цитата
№ 118 – 127 цитата	№ 66 – 71 цитата	
№ 138 – 126 цитата	№ 85 – 71 цитата	
№ 178 – 117 цитата	№ 180 – 70 цитата	
№ 25 – 116 цитата	№ 2 – 68 цитата	
№ 5 – 114 цитата	№ 19 – 67 цитата	
№ 96 – 109 цитата	№ 20 – 63 цитата	
№ 130 – 94 цитата	№ 22 – 63 цитата	

А. Механизми на антипенително действие.

1. K. G. Marinova, R. G. Alargova, N. D. Denkov, O. D. Velev, D. N. Petsev, I. B. Ivanov, R. P. Borwankar, "Charging of Oil-Water Interfaces due to Spontaneous Adsorption of Hydroxyl Ions", *Langmuir* **12** (1996) 2045. (Цитати - 624 бр.)
2. N. D. Denkov, P. Cooper, J.-Y. Martin, "Mechanisms of Action of Mixed Solid-Liquid Antifoams. 1. Dynamics of Foam Film Rupture", *Langmuir* **15** (1999) 8514. (Цитати - 68 бр.)
3. N. D. Denkov, "Mechanisms of Action of Mixed Solid-Liquid Antifoams. 2. Stability of Oil Bridges in Foam Films", *Langmuir* **15** (1999) 8530. (Цитати - 54 бр.)
4. N. D. Denkov, K. G. Marinova, Ch. Christova, A. Hadjiiski, P. Cooper, "Mechanisms of Action of Mixed Solid-Liquid Antifoams. 3. Exhaustion and Reactivation", *Langmuir* **16** (2000) 2515. (Цитати - 37 бр.)
5. E. S. Basheva, D. Ganchev, N. D. Denkov, K. Kasuga, N. Satoh, K. Tsujii, "Role of Betaine as Foam Booster in the Presence of Silicone Oil Drops", *Langmuir* **16** (2000) 1000. (Цитати - 114 бр.)
6. N. D. Denkov, K. G. Marinova, "Antifoaming Action of Oils", Proceedings 3rd Euroconference on Foams, Emulsions, and Their Applications, June, 2000, Delft, the Netherlands; Verlag MIT Publishing, Bremen, 2000, Pp. 199-206. (Цитати - 3 бр.)
7. E. S. Basheva, S. Stoyanov, N. D. Denkov, K. Kasuga, N. Satoh, K. Tsujii, "Foam Boosting by Amphiphilic Molecules in the Presence of Silicone Oil", *Langmuir* **17** (2001) 969-979. (Цитати - 49 бр.)
8. K. G. Marinova, N. D. Denkov, "Foam Destruction by Mixed Solid-Liquid Antifoams in Solutions of Alkyl Glucoside: Electrostatic Interactions and Dynamic Effects", *Langmuir* **17** (2001) 2426. (Цитати - 27 бр.)
9. L. Arnaudov, N. D. Denkov, I. Surcheva, P. Durbut, G. Broze, A. Mehreteab, "Effect of Oily Additives on Foamability and Foam Stability. 1. Role of Interfacial Properties.", *Langmuir* **17** (2001) 6999. (Цитати - 74 бр.)
10. A. Hadjiiski, S. Tcholakova, N. D. Denkov, P. Durbut, G. Broze, A. Mehreteab, "Effect of Oily Additives on Foamability and Foam Stability. 2. Entry Barriers." *Langmuir* **17** (2001) 7011. (Цитати - 56 бр.)
11. K. G. Marinova, N. D. Denkov, P. Branlard, Y. Giraud, M. Deruelle, "Optimal Hydrophobicity of Silica in Mixed Oil-Silica Antifoams", *Langmuir* **18** (2002) 3399. (Цитати - 22 бр.)
12. K. G. Marinova, N. D. Denkov, S. Tcholakova, M. Deruelle, "Model Studies of the Effect of Silica Hydrophobicity on the Efficiency of Mixed Oil-Silica Antifoams", *Langmuir* **18** (2002) 8761. (Цитати - 21 бр.)
13. N. D. Denkov, S. Tcholakova, K. G. Marinova, A. Hadjiiski, "Role of Oil Spreading for the Efficiency of Mixed Oil-Solid Antifoams", *Langmuir* **18** (2002) 5810. (Цитати - 43 бр.)
14. N. D. Denkov, K. G. Marinova, S. Tcholakova, M. Deruelle, "Mechanism of Foam Destruction by Emulsions of PDMS-Silica Mixtures", Proc. 3rd World Congress on Emulsions, 24-27 September, 2002, Lyon, France; Paper 1-D-199. (Цитати - 3 бр.)

15. K. G. Marinova, S. Tcholakova, N. D. Denkov, S. Roussev, M. Deruelle, "Model Studies on the Mechanism of Deactivation (Exhaustion) of Mixed Oil-Silica Antifoams", *Langmuir* **19** (2003) 3084. (Цитати - 18 бр.)
16. K. G. Marinova, D. Christova, S. Tcholakova, E. Efremov, N. D. Denkov, "Hydrophobization of Glass Surface by Adsorption of Poly(Dimethylsiloxane)", *Langmuir* **21** (2005) 11729. (Цитати - 41 бр.)
17. K.G. Marinova, L.M. Dimitrova, R.Y. Marinov, N.D. Denkov, A. Kingma, „Impact of the Surfactant Structure on the Foaming/Defoaming Performance of Nonionic Block Copolymers in Na Caseinate Solutions“, *Bulgarian J. Phys.* **39** (2012) 51. (Цитати - 5 бр.)
18. N. Politova-Brinkova, M. Hristova, V. Georgiev, S. Tcholakova, N. Denkov, M. Grandl, F. Achenbach, "Role of Surfactant Adsorption and Surface Properties for The Efficiency of PDMS-Silica Antifoams", *Colloids Surf. A* **610** (2021) 125747; doi: 10.1016/j.colsurfa.2020.125747. (Цитати – 1 бр.)

Б. Динамика на пени и емулсии: роля на повърхностно-активните вещества.

Б1. Обемна и междупазова (повърхностна) реология:

19. J. T. Petkov, N. D. Denkov, K. D. Danov, O. D. Veleev, R. Aust, F. Durst, "Measurement of the Drag Coefficient of Spherical Particles Attached to Fluid Interfaces", *J. Colloid Interface Sci.* **172** (1995) 147. (Цитати - 67 бр.)
20. J. T. Petkov, K. D. Danov, N. D. Denkov, R. Aust, F. Durst, "Precise Method for Measuring the Shear Surface Viscosity of Surfactant Monolayers", *Langmuir* **12** (1996) 2650. (Цитати - 63 бр.)
21. N. D. Denkov, V. Subramanian, D. Gurovich, A. Lips "Wall Slip and Viscous Dissipation in Sheared Foams: Effect of Surface Mobility", *Colloids Surfaces A* **263** (2005) 129. (Цитати - 163 бр.)
22. N. D. Denkov, S. Tcholakova, K. Golemanov, V. Subramanian, A. Lips "Foam-Wall Friction: Effect of Air Volume Fraction for Tangentially Immobile Bubble Surface", *Colloids Surfaces A* **282-283** (2006) 329. (Цитати: 59 бр.)
23. (a) N. D. Denkov, S. Tcholakova, K. Golemanov, K.P. Ananthapadmanabhan, A. Lips, "Viscous friction in foams and concentrated emulsions under steady shear", *Phys. Rev. Letters*, **100** (2008) 138301. (Цитати -76 бр.)
 (b) N. D. Denkov, S. Tcholakova, K. Golemanov, T. Hu, A. Lips, "Theoretical model of viscous friction inside steadily sheared foams and concentrated emulsions", *Amer. Inst. Physics Conference Proceedings* **2008**, 1027, 902-904. (Цитати – 3 бр.)
24. S. Tcholakova, N. D. Denkov, K. Golemanov, K.P. Ananthapadmanabhan, A. Lips, "Theoretical model of viscous friction inside steadily sheared foams and concentrated emulsions", *Phys. Rev. E*, **78** (2008) 011405. (Цитати - 57 бр.)
25. K. Golemanov, N. D. Denkov, S. Tcholakova, M. Vethamuthu, A. Lips, "Surfactant mixtures for control of bubble surface mobility in foam studies" *Langmuir*, **24** (2008) 9956-9961. (Цитати - 116 бр.)

26. K. Golemanov, S. Tcholakova, N. D. Denkov, K.P. Ananthapadmanabhan, A. Lips, "Breakup of bubbles and drops in steadily sheared foams and concentrated emulsions" *Phys. Rev. E*, **78** (2008) 051405. (Цитати - 45 бр.)
27. S. C. Russev, N. Alexandrov, K. G. Marinova, K. D. Danov, N. D. Denkov, L. Lyutov, V. Vulchev, and C. Bilke-Krause, "Instrument and Methods for Surface Dilatational Rheology Measurements", *Review of Scientific Instruments*, **79** (2008) 79, 104102. (Цитати - 37 бр.)
28. N. D. Denkov, S. Tcholakova, K. Golemanov, A. Lips, "Jamming in Sheared Foams and Emulsions, Explained by Critical Instability of the Films between Neighboring Bubbles and Drops", *Phys. Rev. Letters*, **103** (2009) 118302. (Цитати - 38 бр.)
29. N. D. Denkov, S. Tcholakova, K. Golemanov, A. Lips, "Viscous friction in sheared concentrated emulsions and foams" *5th World Congress on Emulsions*, Lyon **2010**, Reference 1.3-69.
30. R. Stanimirova, K. Marinova, S. Tcholakova, N. D. Denkov, S. Stoyanov, E. Pelan, "Surface Rheology of Saponin Adsorption Layers" *Langmuir*, **27** (2011) 12486–12498. (Цитати - 131 бр.)
31. N. Politova, S. Tcholakova, K. Golemov, N.D. Denkov, M. Vethamuthu, K.P. Ananthapadmanabhan, "Effect of Cationic Polymers on Foam Rheological Properties", *Langmuir*, **28** (2012) 1115–1126. (Цитати - 18 бр.)
32. K. Golemanov, S. Tcholakova, N. Denkov, E. Pelan, S. Stoyanov, "Surface Shear Rheology of Saponin Adsorption Layers", *Langmuir* **2012**, 28, 12071–12084. (Цитати - 47 бр.)
33. K. Golemanov, S. Tcholakova, N. Denkov, E. Pelan, S. D. Stoyanov, "Remarkably high surface visco-elasticity of adsorption layers of triterpenoid saponins", *Soft Matter* **2013**, 9, 5738–5752. (Цитати - 51 бр.)
34. Z. Mitrinova, S. Tcholakova, J. Popova, N. Denkov, B. Dasgupta, K.P. Ananthapadmanabhan, "Efficient Control of the Rheological and Surface Properties of Surfactant Solutions Containing C8–C18 Fatty Acids as Cosurfactants", *Langmuir*, **29** (2013) 8255–8265. (Цитати - 19 бр.)
35. K. Golemanov, S. Tcholakova, N. Denkov, E. Pelan, S. Stoyanov, "The Role of the Hydrophobic Phase in the Unique Rheological Properties of Saponin Adsorption", *Soft Matter*, **10** (2014) 7034–7044. (Цитати - 35 бр.)
36. N. Pagureva, S. Tcholakova, K. Golemanov, N. Denkov, E. Pelan, S. D. Stoyanov, "Surface Properties of Adsorption Layers Formed from Triterpenoid and Steroid Saponins", *Colloids and Surfaces A: Physicochem. Eng. Aspects*, **491** (2016) 18–28. (Цитати - 29 бр.)
37. S. Tsibranska, A. Ivanova, S. Tcholakova, N. Denkov, "Self-Assembly of Escin Molecules at the Air–Water Interface as Studied by Molecular Dynamics", *Langmuir*, **33** (2017) 8330–8341; doi: 10.1021/acs.langmuir.7b01719. (Цитати - 18 бр.)
38. Z. Mitrinova, S. Tcholakova, N. Denkov, "Control of Surfactant Solution Rheology Using Medium-Chain Cosurfactants", *Colloids and Surfaces A*, **537** (2018) 173–184; doi: 10.1016/j.colsurfa.2017.10.018. (Цитати - 20 бр.)
39. J. Penfold, R. K. Thomas, I. Tucker, J. T. Petkov, S. D. Stoyanov, N. Denkov, K. Golemanov, S. Tcholakova, and J. R. P. Webster, „Saponin Adsorption at the

Air–Water Interface Neutron Reflectivity and Surface Tension Study“. *Langmuir* **34** (2018) 9540–9547; doi: 10.1021/acs.langmuir.8b02158. (Цитати - 14 бр.)

40. S. Tsibranska, A. Ivanova, S. Tcholakova, N. Denkov, “Structure of Dense Adsorption Layers of Escin at the Air–Water Interface Studied by Molecular Dynamics Simulations.”, *Langmuir* **35** (2019); doi: 10.1021/acs.langmuir.9b02260. (Цитати - 6 бр.)
41. D. Gazolu-Rusanova, F. Mustan, Z. Vinarov, S. Tcholakova, N. Denkov, S. Stoyanov, J. W.J. de Folter. “Role of Lysophospholipids on the Interfacial and Liquid Film Properties of Enzymatically Modified Egg Yolk Solutions.” *Food Hydrocolloids* **99** (2020) 105319; doi: 10.1016/j.foodhyd.2019.105319. (Цитати - 2 бр.)
42. S. Tsibranska, S. Tcholakova, K. Golemanov, N. Denkov, E. Pelan, S. Stoyanov, “Role of Interfacial Elasticity for the Rheological Properties of Saponin-stabilized Emulsions.”, *J. Colloid Interface Sci.* **564** (2020) 264; doi: <https://doi.org/10.1016/j.jcis.2019.12.108>. (Цитати - 5 бр.)
43. S. Tsibranska, S. Tcholakova, K. Golemanov, N. Denkov, L. Arnaudov, E. Pelan, S. Stoyanov, “Origin of the extremely high elasticity of bulk emulsions, stabilized by Yucca Schidigera saponins”, *Food Chem.* **316** (2020) 126365; doi: <https://doi.org/10.1016/j.foodchem.2020.126365>. . (Цитати – 3 бр.)

Б2. Спонтанна промяна във формата на капки и самоемулгиране при охлаждане на емулсии:

44. N. Denkov, S. Tcholakova, I. Lesov, D. Cholakova, S. K. Smoukov, “Self-Shaping of Oil Droplets via the Formation of Intermediate Rotator Phases upon Cooling”, *Nature* **528** (2015) 392–395. (Цитати - 52 бр.)
45. N. Denkov, D. Cholakova, S. Tcholakova, S. Smoukov, “On the Mechanism of Drop Self-Shaping in Cooled Emulsions”, *Langmuir*, **32** (2016) 7985–7991. (Цитати: 12 бр.)
46. D. Cholakova, N. Denkov, S. Tcholakova, I. Lesov, S. K. Smoukov, “Control of Drop Shape Transformations in Cooled Emulsions”, *Adv. Colloid Interface Sci.*, **235** (2016) 90–107. (Цитати - 12 бр.)
47. S. Tcholakova, Z. Valkova, D. Cholakova, Z. Vinarov, I. Lesov, N. D. Denkov, K. Smoukov, “Efficient Self-Emulsification via Cooling-Heating Cycles”, *Nature Comm.*, **8** (2017) 15012; doi: 10.1038/ncomms15012. (Цитати - 10 бр.)
48. P. A. Haas, R. E. Goldstein, S. K. Smoukov, D. Cholakova, N. Denkov, „Theory of Shape-Shifting Droplets“, *Phys. Rev. Lett.*, **118** (2017) 088001; doi: 10.1103/PhysRevLett.118.088001. (Цитати - 7 бр.)
49. D. Cholakova, Zh. Valkova, S. Tcholakova, N. Denkov, S. K. Smoukov, „Self-Shaping" of Multicomponent Drops“, *Langmuir*, **33** (2017) 5696–5706. doi: 10.1021/acs.langmuir.7b01153. (Цитати - 7 бр.)
50. Zh. Valkova, D. Cholakova, S. Tcholakova, N. Denkov, S. K. Smoukov., „Mechanisms and Control of Self-Emulsification upon Freezing and Melting of Dispersed Alkane Drops“, *Langmuir*, **33** (2017) 12155–12170; doi: 10.1021/acs.langmuir.7b02048. (Цитати - 2 бр.)

51. R. Gordon, M. M. Hanczyc, N. D. Denkov, M. A. Tiffany, S. K. Smoukov, „Emergence of polygonal shapes in oil droplets and living cells: the potential role of tensegrity in the origin of life“, in: *Habitability of the Universe Before Earth*, R. Gordon & A. Sharov eds., Academic Press, 2018, pp. 427-490. (Цитати - 4 бр.)
52. I. Lesov, Z. Valkova, E. Vassileva, G. Georgiev, K. Ruseva, M. Simeonov, S. Tcholakova, N. Denkov, S. Smoukov. “Bottom-Up Synthesis of Polymeric Micro- and Nanoparticles with Regular Anisotropic Shapes” *Macromolecules* **51** (2018) 7456–7462; doi: 10.1021/acs.macromol.8b00529. (Цитати - 10 бр.)
53. D. Cholakova, N. Denkov, S. Tcholakova, Zh. Valkova, S. Smoukov. „Multilayer Formation in Self-Shaping Emulsion Droplets.“ *Langmuir* **35** (2019) 5484–5495; doi: 10.1021/acs.langmuir.8b02771. (Цитати - 5 бр.)
54. P. A. Haas, D. Cholakova, N. Denkov, R. E. Goldstein, S. K. Smoukov, Shape-Shifting Polyhedral Droplets. *Phys. Rev. Research* **1** (2019); doi: 10.1103/PhysRevResearch.1.023017. (Цитати - 1 бр.)
55. D. Cholakova, Zh. Valkova, S. Tcholakova, N. Denkov, B. P. Binks. “Spontaneous Particle Desorption and "Gorgon" Drop Formation From Particle-Armored Oil Drops Upon Cooling”, *Soft Matter* **16** (2020) 2480–2496; doi: 10.1039/c9sm02354b3. (Цитати - 3 бр.)
56. D. Cholakova, D. Glushkova, S. Tcholakova, N. Denkov, “Nanopore and Nanoparticle Formation With Lipids Undergoing Polymorphic Phase Transitions.”, *ACS Nano* **14** (2020) 8594–8604; doi: 10.1021/acsnano.0c02946
57. D. Cholakova, D. Glushkova, S. Tcholakova, N. Denkov, “Cold-Burst Method for Nanoparticle Formation with Natural Triglyceride Oils”, *Langmuir* 2021, <https://doi.org/10.1021/acs.langmuir.0c02967>
58. D. Cholakova, M. Lisicki, S. K. Smoukov, S. Tcholakova, E. Emily Lin, J. Chen, G. De Canio, E. Lauga, N. Denkov, Rechargeable self-assembled droplet microswimmers driven by surface phase transitions. *Nature Physics*, приета за печат с мейл от редактора на дата 09/05/2021;

Б3. Емулгиране и пенообразуване:

59. N. C. Christov, D. N. Ganchev, N. D. Vassileva, N. D. Denkov, K. D. Danov, P. A. Kralchevsky, “Capillary Mechanisms in Membrane Emulsification: Oil-in-Water Emulsions Stabilized by Tween 20 and Milk Proteins”, *Colloids & Surfaces A*, **209** (2002) 83. (Цитати - 91 бр.)
60. S. Tcholakova, N. D. Denkov, D. Sidzhakova, I. B. Ivanov, B. Campbell, “Interrelation between Drop Size and Protein Adsorption at various Emulsification Conditions”, *Langmuir*, **19** (2003) 5640. (Цитати - 148 бр.)
61. S. Tcholakova, N. D. Denkov, T. Danner, “Role of Surfactant Type and Concentration for the Mean Drop Size during Emulsification in Turbulent Flow”, *Langmuir* **20** (2004) 7444. (Цитати - 202 бр.)
62. H. Steiner, R. Teppner, G. Brenn, N. Vankova, S. Tcholakova, N. Denkov, “Numerical Simulation and Experimental Study of Emulsification in A Narrow-Gap Homogenizer”, *Chem. Eng. Sci.*, **61** (2006) 5841. (Цитати - 35 бр.)

63. S. Tcholakova, N. Vankova, N. D. Denkov, I. B. Ivanov, T. Danner, "Kinetics of Drop Breakup during Emulsification in Turbulent Flow", *Proc. 4th World Congress on Emulsions*, Lyon, France, 3-6 October, 2006, Paper 2.2-304.
64. N. Vankova, S. Tcholakova, N.D. Denkov, I.B. Ivanov, V. Vulchev, T. Danner, "Emulsification in Turbulent Flow: 1. Mean and Maximum Drop Diameters in Inertial and Viscous Regimes", *J. Colloid Interface Sci.*, **312** (2007) 363. (Цитати - 205 бр.)
65. N. Vankova, S. Tcholakova, N.D. Denkov, V. Vulchev, T. Danner, "Emulsification in Turbulent Flow: 2. Breakage Rate Constants", *J. Colloid Interface Sci.*, **313** (2007) 612. (Цитати - 79 бр.)
66. S. Tcholakova, N. Vankova, N.D. Denkov, T. Danner, "Emulsification in Turbulent Flow: 3. Daughter Drop-Size Distribution", *J. Colloid Interface Sci.*, **310** (2007) 570. (Цитати - 71 бр.)
67. S. Tcholakova, I. Lesov, K. Golemanov, N. D. Denkov, S. Judat, "Drop size in concentrated emulsions, obtained by rotor-stator homogenization", *5th World Congress on Emulsions*, Lyon **2010**, Reference 1.1-50.
68. S. Tcholakova, N. D. Denkov, D. Hristova, M. Deruelle, "Emulsification and emulsion stability of silica-charged silicone oils", *5th World Congress on Emulsions*, Lyon **2010**, Reference 4.1-53.
69. S. Tcholakova, I. Lesov, K. Golemanov, N. D. Denkov, S. Judat, R. Engel, T. Danner "Efficient Emulsification of Viscous Oils at High Drop Volume Fraction" *Langmuir* **27** (2011) 14783. (Цитати - 51 бр.)
70. R. Petkova, S. Tcholakova, N. D. Denkov, "Foaming and foam stability for mixed polymer-surfactant solutions: Effects of surfactant type and polymer charge", *Langmuir*, **28** (2012) 4996–5009. (Цитати - 137 бр.)
71. R. Petkova, S. Tcholakova, N.D. Denkov, "Role of Polymer–Surfactant Interactions in Foams: Effects of pH and Surfactant Head Group for Cationic Polyvinylamine and Anionic Surfactants", *Colloids Surf. A*, **438** (2013) 174-185. (Цитати - 51 бр.)
72. Z. Mitrinova, S. Tcholakova, K. Golemanov, N. Denkov, M. Vethamuthu, K.P. Ananthapadmanabhan. "Surface and Foam Properties of SLES + CAPB + Fatty Acid Mixtures: Effect of pH for C12–C16 Acids", *Colloids Surf. A*, **438** (2013) 186-198. (Цитати - 9 бр.)
73. S. Tcholakova, N. Politova, N. Denkov, „Kinetics of Drop Breakage and Drop-Drop Coalescence in Turbulent Flow“, *Biomath Communications* **3** (2016) 1–163.
74. N. Politova, S. Tcholakova, Zh. Valkova, K. Golemanov, N. D. Denkov, „Self-regulation of Foam Volume and Bubble Size during Foaming via Shear Mixing“, *Colloids and Surfaces A*, **539** (2018) 18–28; doi: 10.1016/j.colsurfa.2017.12.006. (Цитати - 6 бр.)
75. Z. Mitrinova, S. Tcholakova, N. Denkov, K. P. Ananthapadmanabhan, "Role of Interactions between Cationic Polymers and Surfactants for Foam Properties", *Colloids and Surfaces A*, **489** (2016) 378–391. (Цитати - 14 бр.)
76. D. Gazolu-Rusanova, I. Lesov, S. Tcholakova, N. Denkov, B. Ahtchi, "Food Grade Nanoemulsions Preparation by Rotor-Stator Homogenization", *Food Hydrocolloids* **102** (2020) 105579; doi: 10.1016/j.foodhyd.2019.105579.

77. N. Politova-Brinkova, S. Tsibranska-Gyoreva, S. Tcholakova, N. Denkov, T. Danner. "Preparation of TiO₂ Nanoparticle Aggregates and Capsules by the 'Two-Emulsion Method'", *Colloids Interfaces* **4** (2020) 57; doi: 10.3390/colloids4040057. (Цитати - 3 бр.)

В. Стабилност на емулсии и пени:

78. A. D. Nikolov, D. T. Wasan, N. D. Denkov, P. A. Kralchevsky, I. B. Ivanov, "Drainage of Foam Films in the Presence of Nonionic Micelles", *Progress Colloid Polymer Sci.*, **82** (1990) 87. (Цитати - 51 бр.)
79. N. D. Denkov, P. A. Kralchevsky, I. B. Ivanov, C. S. Vassilieff, "Effect of Droplet Deformation on the Interactions in Microemulsions", *J. Colloid Interface Sci.*, **143** (1991) 157. (Цитати - 30 бр.)
80. N. D. Denkov, I. B. Ivanov, P. A. Kralchevsky, D. T. Wasan, "A Possible Mechanism of Stabilization of Emulsions by Solid Particles", *J. Colloid Interface Sci.*, **150** (1992) 589. (Цитати - 201 бр.)
81. I. B. Ivanov, A. S. Dimitrov, A. D. Nikolov, N. D. Denkov, P. A. Kralchevsky, "Contact Angle, Film, and Line Tension of Foam Films. I. Stationary and Dynamic Contact Angle Measurements", *J. Colloid Interface Sci.*, **151** (1992) 446. (Цитати - 24 бр.)
82. M. Morita, M. Matsumoto, S. Usui, T. Abe, N. Denkov, O. D. Velev, I. B. Ivanov, "Interfacial Properties and Emulsion Stability in Fluorinated Oil-Non-Fluorinated Oil-Surfactant(S) Systems", *Colloids Surfaces* **67** (1992) 81. (Цитати - 12 бр.)
83. N. D. Denkov, D. N. Petsev, K. D. Danov, "Interaction between Deformable Brownian Droplets", *Phys. Rev. Lett.*, **71** (1993) 3226. (Цитати - 33 бр.)
84. K. D. Danov, D. N. Petsev, N. D. Denkov, R. Borwankar, "Pair Interaction Energy between Deformable Drops and Bubbles", *J. Chem. Phys.*, **99** (1993) 7179. ((Цитати - 74 бр.)
85. K. D. Danov, N. D. Denkov, D. N. Petsev, I. B. Ivanov, R. Borwankar, "Coalescence Dynamics of Deformable Brownian Emulsion Drops", *Langmuir*, **9** (1993) 1731. (Цитати - 71 бр.)
86. O. D. Velev, A. D. Nikolov, N. D. Denkov, G. Doxastakis, V. Kiosseoglu, G. Stalidis "Investigation of the Mechanisms of Stabilization of Food Emulsions by Vegetable Proteins", *Food Hydrocolloids*, **7** (1993) 55. (Цитати - 24 бр.)
87. P. A. Kralchevsky, N. D. Denkov, "Analytical Expression for the Oscillatory Structural Surface Force", *Chem. Phys. Lett.* **240** (1995) 385 (Цитати (а) - 12 бр.); N. D. Denkov, P. A. Kralchevsky, "Colloid Structural Forces in Thin Liquid Films", *Progress Colloid Polymer Sci.*, **98** (1995) 18. . (Цитати (б) - 72 бр.)
88. N. D. Denkov, D. N. Petsev, K. D. Danov, "Flocculation of Deformable Emulsion Droplets. I. Droplet Shape and Line Tension Effects", *J. Colloid Interface Sci.*, **176** (1995) 189. (Цитати - 39 бр.)
89. D. N. Petsev, N. D. Denkov, P. A. Kralchevsky, "Flocculation of Deformable Emulsion Droplets. II. Interaction Energy", *J. Colloid Interface Sci.*, **176** (1995) 201. (Цитати - 57 бр.)

90. I. B. Ivanov, K. G. Marinova, R. G. Alargova, N. D. Denkov, R. P. Borwankar, "Charge of Emulsion Droplets Covered with Nonionic Surfactants", *Proc. 2nd World Congress on Emulsion*, 23-26 September, 1997, Bordeaux, France; EDS: Paris, 1997; Paper 2-2-149.
91. P. A. Kralchevsky, N. D. Denkov, K. D. Danov, D. N. Petsev, "Effect of Droplet Deformability and Surface Forces on Flocculation", *Proc. 2nd World Congress on Emulsion*, 23-26 September, 1997, Bordeaux, France; EDS: Paris, 1997; Paper 2-2-150.
92. S. D. Stoyanov, N. D. Denkov, "Role of Surface Diffusion for the Drainage and Hydrodynamic Stability of Thin Liquid Films", *Langmuir*, **17** (2001) 1150. **(Цитати - 27 бр.)**
93. S. Tcholakova, N. D. Denkov, R. Borwankar, B. Campbell, "Van Der Waals Interaction between Two Truncated Spheres Covered by a Uniform Layer (Deformed Drops, Vesicles, Or Bubbles)", *Langmuir*, **17** (2001) 2357. **(Цитати - 7 бр.)**
94. S. Tcholakova, N. D. Denkov, I. B. Ivanov, B. Campbell, "Coalescence in Protein Stabilized Emulsions", *Proc. 3rd World Congress on Emulsions*, 24-27 September, 2002, Lyon, France, Paper 3-B-200. **(Цитати - 3 бр.)**
95. N. D. Denkov, S. Tcholakova, I. B. Ivanov, B. Campbell, "Methods for Evaluation of Emulsion Stability at A Single Drop Level", *Proc. 3rd World Congress on Emulsions*, 24-27 September, 2002, Lyon, France, Paper 3-B-198. **(Цитати - 2 бр.)**
96. S. Tcholakova, N. D. Denkov, I. B. Ivanov, B. Campbell, "Coalescence in β -Lactoglobulin-Stabilized Emulsions: Effects of Protein Adsorption and Drop Size", *Langmuir*, **18** (2002) 8960. **(Цитати - 109 бр.)**
97. P. S. Denkova, S. Tcholakova, N. D. Denkov, K. D. Danov, B. Campbell, C. Shawl, D. Kim, "Evaluation of the Precision of Drop-Size Determination in Oil/Water Emulsions by Low Resolution NMR Spectroscopy", *Langmuir*, **20** (2004) 11402. **(Цитати - 63 бр.)**
98. S. Tcholakova, N. D. Denkov, I. B. Ivanov, R. Marinov, "Evaluation of Short-Term and Long-Term Stability of Emulsions by Centrifugation and NMR", *Bulgarian J. Phys.*, **31** (2004) 96. **(Цитати - 19 бр.)**
99. S. Tcholakova, N. D. Denkov, D. Sidzhakova, I. B. Ivanov, B. Campbell, "Effects of Electrolyte Concentration and pH on the Coalescence Stability of β -Lactoglobulin Emulsions: Experiment and Interpretation", *Langmuir*, **21** (2005) 4842. **(Цитати - 54 бр.)**
100. K. Golemanov, S. Tcholakova, N. D. Denkov, T. Gurkov, „Selection of Surfactants for Stable Paraffin-in-Water Dispersions, undergoing Solid-Liquid Transition of the Dispersed Particles", *Langmuir*, **22** (2006) 3560. **(Цитати - 90 бр.)**
101. S. Tcholakova, N. D. Denkov, D. Sidzhakova, B. Campbell, "Effect of Thermal Treatment, Ionic Strength, and pH on the Short-Term and Long-Term Coalescence Stability of β -Lactoglobulin Emulsions", *Langmuir*, **22** (2006) 6042. **(Цитати - 45 бр.)**
102. P.A. Wierenga, E.S. Basheva, N.D. Denkov, „Modified Capillary Cell for Foam Film Studies Allowing Exchange of the Film-Forming Liquid“, *Langmuir*, **25** (2009) 6035-6039. **(Цитати - 8 бр.)**

103. S. Dorbolo, D. Terwagne, R. Delhalle, J. Dujardin, N. Huet, N. Vandewalle, N. Denkov, "Antibubble Lifetime: Influence of the Bulk Viscosity and of the Surface Modulus of the Mixture". *Colloids and Surfaces A*, **365** (2010) 43-45. (Цитати - 17 бр.)
104. S. Tcholakova, Z. Mitrinova, K. Golemanov, N. D. Denkov, M. Vethamuthu, K.P. Ananthapadmanabhan, "Control of Ostwald Ripening by Using Surfactants with High Surface Modulus" *Langmuir*, **27** (2011) 14807–14819. (Цитати - 77 бр.)
105. I. Lesov, S. Tcholakova, N. Denkov, "Factors Controlling the Formation and Stability of Foams Used as Precursors of Porous Materials", *J. Colloid Interface Sci.*, **426** (2014) 9-21. (Цитати - 60 бр.)
106. I. Lesov, S. Tcholakova, N. Denkov, "Drying of particle-loaded foams for production of porous materials: mechanism and theoretical modeling", *RSC Adv.*, **4** (2014) 811-823. (Цитати - 27 бр.)
107. N. Pagureva, S. Tcholakova, K. Rusanova, N. Denkov, T. Dimitrova, "Factors Affecting the Coalescence Stability of Microbubbles", *Colloids and Surfaces A*, **508** (2016) 21–26. (Цитати - 12 бр.)
108. S. Tcholakova, F. Mustan, N. Pagureva, K. Golemanov, N. D. Denkov, E. G. Pelan, S. D. Stoyanov, "Role of Surface Properties for the Kinetics of Bubble Ostwald Ripening in Saponin-stabilized Foams", *Colloids and Surfaces A*, **534** (2017) 16–25; doi: 10.1016/j.colsurfa.2017.04.055. (Цитати - 17 бр.)
109. N. Politova, S. Tcholakova, N. D. Denkov, "Factors Affecting the Stability of Water-oil-water Emulsion Films", *Colloids and Surfaces A*, **522** (2017) 608–620; doi: 10.1016/j.colsurfa.2017.03.055. (Цитати - 16 бр.)
110. N. Politova, S. Tcholakova, S. Tsibranska, N. D. Denkov, K. Muelheims, "Coalescence Stability of Water-in-Oil drops: Effects of Drop Size and Surfactant Concentration", *Colloids and Surfaces A*, **531** (2017) 32–39; doi: 10.1016/j.colsurfa.2017.07.085. (Цитати - 20 бр.)
111. I. Lesov, S. Tcholakova, M. Kovadjieva, T. Saison, M. Lamblet, N. Denkov, "Role of Pickering Stabilization and Bulk Gelation for the Preparation and Properties of Solid Silica Foams", *J. Colloid Interface Sci.*, **504** (2017) 48–57; doi:10.1016/j.jcis.2017.05.036. (Цитати - 14 бр.)
112. M. Hristova, I. Lesov, S. Tcholakova, V. Goletto, N. Denkov, "From Pickering Foams to Porous Carbonate Materials: Crack-free Structuring in Drying Ceramics", *Colloids and Surfaces A* **552** (2018) 142–152. (Цитати - 2 бр.)

Г. Подредени структури от частици.

113. P. A. Kralchevsky, N. D. Denkov, I. B. Ivanov, A. D. Nikolov, "Attraction between Brownian Particles of Identical Charge in Colloid Crystals", *Chem. Phys. Lett.*, **166** (1990) 452. (Цитати - 2 бр.)
114. N. D. Denkov, O. D. Velez, P. A. Kralchevsky, I. B. Ivanov, H. Yoshimura, K. Nagayama, "Mechanism of Formation of Two-Dimensional Crystals from Latex Particles on Substrates", *Langmuir*, **8** (1992) 3183. (Цитати - 1154 бр.)

115. V. N. Paunov, P. A. Kralchevsky, N. D. Denkov, I. B. Ivanov, K. Nagayama, "Capillary Meniscus Interaction between a Microparticle and a Wall", *Colloids Surfaces*, **67** (1992) 119. (Цитати - 28 бр.)
116. N. D. Denkov, O. D. Velev, P. A. Kralchevsky, I. B. Ivanov, H. Yoshimura, K. Nagayama, "Two-Dimensional Crystallization", *Nature* (London), **361** (1993) 26. (Цитати - 758 бр.)
117. O. D. Velev, N. D. Denkov, V. N. Paunov, P. A. Kralchevsky, K. Nagayama, "Direct Measurement of Lateral Capillary Forces", *Langmuir*, **9** (1993) 3702. (Цитати - 82 бр.)
118. P. A. Kralchevsky, V. N. Paunov, N. D. Denkov, I. B. Ivanov, K. Nagayama, "Energetical and Force Approaches to the Capillary Interactions between Particles Attached to a Liquid-Fluid Interface", *J. Colloid Interface Sci.*, **155** (1993) 420. (Цитати - 127 бр.)
119. V. N. Paunov, P. A. Kralchevsky, N. D. Denkov, K. Nagayama, "Lateral Capillary Forces between Floating Submillimeter Particles", *J. Colloid Interface Sci.*, **157** (1993) 100. (Цитати - 152 бр.)
120. G. S. Lazarov, N. D. Denkov, O. D. Velev, P. A. Kralchevsky, K. Nagayama, "Formation of Two-Dimensional Structures from Colloidal Particles on Fluorinated Oil Substrate", *J. Chem. Soc. Faraday Trans.*, **90** (1994) 2077. (Цитати - 87 бр.)
121. P. A. Kralchevsky, V. N. Paunov, N. D. Denkov, K. Nagayama, "Capillary Image Forces. I. Theory", *J. Colloid Interface Sci.* **167** (1994) 47. (Цитати - 36 бр.)
122. O. D. Velev, N. D. Denkov, V. N. Paunov, P. A. Kralchevsky, K. Nagayama, "Capillary Image Forces. II. Experiment", *J. Colloid Interface Sci.*, **167** (1994) 66. (Цитати - 26 бр.)
123. P. A. Kralchevsky, V. N. Paunov, N. D. Denkov, K. Nagayama, "Stresses in Lipid Membranes and Interactions between Inclusions", *J. Chem. Soc.: Faraday Trans.*, **91** (1995) 3415. (Цитати - 51 бр.)
124. N. D. Denkov, H. Yoshimura, K. Nagayama, T. Kouyama, "Nanoparticle Arrays in Freely Suspended Vitrified Films", *Phys. Rev. Lett.*, **76** (1996) 2354. (Цитати - 38 бр.)
125. N. D. Denkov, H. Yoshimura, K. Nagayama, "Method for Controlled Formation of Vitrified Films for Cryo-Electron Microscopy", *Ultramicroscopy*, **65** (1996) 147. (Цитати - 24 бр.)
126. A. Hadjiiski, R. Dimova, N. D. Denkov, I. B. Ivanov and R. Borwankar, "Film Trapping Technique: Precise Method for Three-Phase Contact Angle Determination of Solid and Fluid Particles of Micrometer Size", *Langmuir*, **12** (1996) 6665. (Цитати - 75 бр.)
127. I. B. Ivanov, A. Hadjiiski, N. D. Denkov, T. D. Gurkov, P. A. Kralchevsky, S. Koyasu, "Energy of Adhesion of Human T Cells to Adsorption Layers of Monoclonal Antibodies Measured by a Film Trapping Technique", *Biophys. J.*, **75** (1998) 545. (Цитати - 8 бр.)
128. R. G. Alargova, J. T. Petkov, N. D. Denkov, D. N. Petsev, I. B. Ivanov, "Modification of Ultrafiltration Membranes by Deposition of Colloid Particles", *Colloids and Surfaces A*, **134** (1998) 331. (Цитати - 4 бр.)

129. N. D. Denkov, H. Yoshimura, T. Kouyama, J. Walz, K. Nagayama, "Electron Cryomicroscopy of Bacteriorhodopsin Vesicles: Mechanism of Vesicle Formation", *Biophys. J.*, **74** (1998) 1409. (Цитати - 34 бр.)
130. P. A. Kralchevsky, N. D. Denkov, K. D. Danov, "Particles with an Undulated Contact Line at A Fluid Interface: Interaction between Capillary Quadrupoles and Rheology of Particulate Monolayers", *Langmuir*, **17** (2001) 7694. (Цитати - 94 бр.)
131. S.E. Anachkov, I. Lesov, M. Zanini, P.A. Kralchevsky, N.D. Denkov, L. Isa, „Particle Detachment from Fluid Interfaces: Theory vs. Experiments“, *Soft Matter*, **12** (2016) 7632–7643; doi: 10.1039/C6SM01716A. (Цитати - 25 бр.)

Д. Адсорбция и мицелообразуване в разтвори на ПАВ, солюбилизация, бионаличност

132. C. S. Vassilieff, N. D. Denkov, I. B. Ivanov, “Mixed Surface Films at A Hydrocarbon-Water Interface”, *Materials Sci. Forum*, **25-26** (1988) 363.
133. P. A. Kralchevsky, Y. S. Radkov, N. D. Denkov, "Adsorption from Surfactant Solutions under Diffusion Control", *J. Colloid Interface Sci.*, **161** (1993) 361. (Цитати - 12 бр.)
134. P. D. Todorov, P. A. Kralchevsky, N. D. Denkov, G. Broze, A. Mehreteab, "Kinetics of Solubilization of *N*-Decane and Benzene by Micellar Solutions of Sodium Dodecyl Sulfate", *J. Colloid Interface Sci.*, **245** (2002) 371. (Цитати - 51 бр.)
135. N. C. Christov, N. D. Denkov, P. A. Kralchevsky, G. Broze, A. Mehreteab, "Kinetics of Triglyceride Solubilization by Micellar Solutions of Nonionic Surfactant and Triblock Copolymer. 1. Empty and Swollen Micelles", *Langmuir*, **18** (2002) 7880. (Цитати - 35 бр.)
136. P. A. Kralchevsky, N. D. Denkov, P. D. Todorov, G. S. Marinov, G. Broze, A. Mehreteab, "Kinetics of Triglyceride Solubilization by Micellar Solutions of Nonionic Surfactant and Triblock Copolymer. 2. Theoretical Model", *Langmuir*, **18** (2002) 7887. (Цитати - 25 бр.)
137. P. D. Todorov, G. S. Marinov, P. A. Kralchevsky, N. D. Denkov, P. Durbut, G. Broze, A. Mehreteab, "Kinetics of Triglyceride Solubilization by Micellar Solutions of Nonionic Surfactant and Triblock Copolymer. 3. Experiments with Single Drops", *Langmuir*, **18** (2002) 7896. (Цитати - 18 бр.)
138. N. C. Christov, N. D. Denkov, P. A. Kralchevsky, K. P. Ananthapadmanabhan, A. Lips, “Synergistic Sphere-To-Rod Micelle Transition in Mixed Solutions of Sodium Dodecyl Sulfate and Cocoamidopropyl Betaine”, *Langmuir*, **20** (2004) 565. (Цитати - 126 бр.)
139. J.K. Angarska, K. D. Tachev, N. D. Denkov, “Composition of Mixed Adsorption Layers and Micelles in Solutions of Sodium Dodecyl Sulfate and Dodecyl Acid Diethanol Amide”, *Colloids Surfaces A*, **233** (2004) 193. (Цитати - 20 бр.)
140. K.D. Danov, P.A. Kralchevsky, N.D. Denkov, K.P. Ananthapadmanabhan, A. Lips “Mass Transport in Micellar Surfactant Solutions: 1. Relaxation of Micelle Concentration, Aggregation Number and Polydispersity”, *Adv. Colloid Interface Sci.*, **119** (2006) 1. (Цитати - 30 бр.)
141. K.D. Danov, P.A. Kralchevsky, N.D. Denkov, K.P. Ananthapadmanabhan, A. Lips “Mass Transport in Micellar Surfactant Solutions: 2. Theoretical Modeling of

- Adsorption at a Quiescent Interface”, *Adv. Colloid Interface Sci.*, **119** (2006) 17. (Цитати - 24 бр.)
142. Z. Vinarov, Y. Petkova, S. Tcholakova, N. Denkov, S. Stoyanov, E. Pelan, A. Lips, “Effects of emulsifier charge and concentration on pancreatic lipolysis: 1. In absence of bile salts” *Langmuir*, **28** (2012) 8127-8139. (Цитати - 13 бр.)
 143. Z. Vinarov, S. Tcholakova, B. Damyanova, Y. Atanasov, N. Denkov, S. Stoyanov, E. Pelan, A. Lips, “Effects of emulsifier charge and concentration on pancreatic lipolysis: 2. Interplay of emulsifiers and biles” *Langmuir*, **28** (2012) 12140-12150. (Цитати - 37 бр.)
 144. Z. Vinarov, L. Petrova, S. Tcholakova, N. Denkov, S. Stoyanov, A. Lips, “In vitro study of triglyceride lipolysis and phase distribution of the reaction products and cholesterol: effects of calcium and bicarbonate”, *Food & Function*, **3** (2012) 1206-1220. (Цитати - 7 бр.)
 145. L. Vinarova, Z. Vinarov, V. Atanasov, I. Pantcheva, S. Tcholakova, N. Denkov, S. Stoyanov, „Lowering of Cholesterol Bioaccessibility and Serum Concentrations by Saponins: in Vitro and in Vivo Studies“, *Food & Function* **6** (2015) 501–512. (Цитати - 32 бр.)
 146. L. Vinarova, Z. Vinarov, B. Damyanova, S. Tcholakova, N. Denkov, S. Stoyanov, „Mechanisms of Cholesterol and Saturated Fatty Acid Lowering by Quillaja saponaria Extract, Studied by in vitro Digestion Model“, *Food & Function*, **6** (2015) 1319–1330. (Цитати - 11 бр.)
 147. F. Mustan, A. Ivanova, G. Madjarova, S. Tcholakova, N. Denkov, „Molecular Dynamics Simulation of the Aggregation Patterns in Aqueous Solutions of Bile Salts at Physiological Conditions“, *J. Phys. Chem. B*, **119** (2015) 15631–15643. (Цитати - 22 бр.)
 148. S. E. Anachkov, S. Tcholakova, D. T. Dimitrova, N. D. Denkov, N. Subrahmaniam, P. Bhunia , „Adsorption of Linear Alkyl Benzene Sulfonates on Oil–Water Interface: Effects of Na⁺, Mg²⁺ and Ca²⁺ ions“, *Colloids and Surfaces A*, **466** (2015) 18–27. (Цитати - 17 бр.)
 149. L. Vinarova, Z. Vinarov, S. Tcholakova, N. D. Denkov, S. Stoyanov, A. Lips, „Mechanism of Lowering Cholesterol Absorption by Calcium Studied by In Vitro Digestion Model“, *Food & Function*, **7** (2016) 151–163. (Цитати - 16 бр.)
 150. Z. Vinarov, V. Katev, D. Radeva, S. Tcholakova, N. Denkov, „Micellar Solubilization of Poorly Water-soluble Drugs: Effect of Surfactant and Solubilizate Molecular Structure“, *Drug. Dev. Ind. Pharm.*, **44** (2018) 677–686 doi: 10.1080/03639045.2017.1408642. (Цитати - 39 бр.)
 151. Z. Vinarov, D. Radeva, V. Katev, S. Tcholakova, N. Denkov. “Solubilisation of Hydrophobic Drugs by Saponins” *Ind. J. Pharm. Sci.* **80** (2018) 709–718. (Цитати - 4 бр.)
 152. Z. Vinarov, V. Katev, N. Burdzhiev, S. Tcholakova, N. Denkov, “Effect of Surfactant–Bile Interactions on the Solubility of Hydrophobic Drugs in Biorelevant Dissolution Media” *Mol. Pharm.* **15** (2018) 5741–5753 doi: 10.1021/acs.molpharmaceut.8b00884. (Цитати - 8 бр.)

153. F. Mustan, A. Ivanova, S. Tcholakova, N. Denkov, "Revealing the Origin of the Specificity of Calcium and Sodium Cations Binding to Adsorption Monolayers of Two Anionic Surfactants", *J. Phys. Chem. B* **124** (2020) 10514–10528. doi: 10.1021/acs.jpcc.0c06649

Д1. Други

154. D. Zheglova, N. Denkov, A. I. Koltsov, "Influence of Intramolecular Hydrogen Bonds on the Tautomeric Equilibrium of 1,3-Diketones", *J. Molec. Structure*, **115** (1984) 371. (Цитати - 12 бр.)
155. D. N. Petsev, N. D. Denkov, "Diffusion of Charged Colloidal Particles at Low Volume Fraction: Theoretical Model and Light Scattering Experiments", *J. Colloid Interface Sci.*, **149** (1992) 329. (Цитати - 76 бр.)
156. N. D. Denkov, D. N. Petsev, "Light Scattering and Diffusion in Suspensions of Strongly Charged Particles at Low Volume Fractions", *Physica A*, **183** (1992) 462. (Цитати - 29 бр.)
157. D. N. Petsev, N. D. Denkov, K. Nagayama, "Diffusion and Light Scattering in Dispersions of Charged Particles with Thin Electrical Double Layers", *Chemical Physics*, **175** (1993) 265. (Цитати - 11 бр.)

Е. Обзорни статии.

Обзори по механизми на антипенително действие:

158. A. D. Hadjiiski, N. D. Denkov, S. Tcholakova, I. B. Ivanov, "Role of Entry Barriers in Foam Destruction by Oil Drops", in *Adsorption and Aggregation of Surfactants in Solution*, K. Mittal, D. Shah, Eds.; Marcel Dekker: New York, 2002; Chapter 23, pp. 465-500. (Цитати - 14 бр.)
159. P. A. Kralchevsky, K. D. Danov N. D. Denkov. "Chemical Physics of Colloid Systems and Interfaces", in *Handbook of Surface and Colloid Chemistry*, (Second Expanded and Updated Edition; K. S. Birdi, Ed.); CRC Press, New York, 2002; Chapter 5, p. 137 (Section 5.7). (Цитати - 48 бр.)
160. N. D. Denkov, "Mechanisms of Foam Destruction by Oil-Based Antifoams", Feature Article *Langmuir*, **20** (2004) 9463. (Цитати - 262 бр.)
161. N. D. Denkov, K. G. Marinova, "Antifoam Effects of Solid Particles, Oil Drops and Oil-Solid Compounds in Aqueous Foams", in *Colloidal Particles at Liquid Interfaces*, B. P. Binks and T. S. Horozov Eds., Cambridge University Press, 2006, Chapter 10, pp. 383-444. (Цитати - 34 бр.)
162. N.D. Denkov, K.G. Marinova, S.S. Tcholakova. "Mechanistic Understanding of the Modes of Action of Foam Control Agents", *Adv. Colloid Interface Sci.*, **206** (2014) 57-67. (Цитати - 52 бр.)

Обзори по динамика на пени и емулсии: роля на повърхностно-активните вещества:

163. S. Tcholakova, N. Denkov, A. Lips, "Comparison of solid particles, globular proteins and surfactants as emulsifiers" *Phys. Chem. Chem. Phys.* **2008**, *10*, 1608-1627. (Цитати - 331 бр.)
164. N. Denkov, S. Tcholakova, K. Golemanov, K. P. Ananthpadmanabhan A. Lips, "Role of surfactant type and bubble surface mobility in foam rheology" *Soft Matter*, **7** (2009) 3389-3408. (Цитати - 137 бр.)
165. N. Denkov, S. Tcholakova, R. Hohler, S. Cohen-Addad, "Foam Rheology", In "*Foam Engineering*", Stevenson, P., Ed.: Marcel Dekker: New York, **2012**, Chapter 6, pp 91-120. (Цитати - 12 бр.)
166. D. Cholakova, N. Denkov. „Rotator Phases in Alkane Systems: In Bulk, Surface Layers and Micro/nano-confinements“, *Adv. Colloid Interface Sci.* **269** (2019) 7–42; doi: 10.1016/j.cis.2019.04.001. (Цитати - 22 бр.)
167. N. Denkov, S. Tcholakova, D. Cholakova, "Surface Phase Transitions in Foams and Emulsions", *Curr. Opin. Colloid Interface Sci.* **44** (2019) 32–42; doi: 10.1016/j.cocis.2019.09.005. (Цитати - 6 бр.)
168. B. Petkova, S. Tcholakova, M. Chenkova, K. Golemanov, N. Denkov, D. Thorley, S. Stoyanov, "Foamability of Aqueous Solutions: Role of Surfactant Type and Concentration.", *Adv. Colloid Interface Sci.* **276** (2020) 102084; doi: 10.1016/j.cis.2019.102084. (Цитати - 14 бр.)
169. N. Denkov, S. Tcholakova, N. Politova-Brinkova, "Physicochemical Control of Foam Properties", *Curr. Opin. Colloid Interface Sci.* **50** (2020) 101376; doi: 10.1016/j.cocis.2020.08.001. (Цитати - 2 бр.)

Обзори по стабилност на емулсии и пени:

170. D. N. Petsev, N. D. Denkov, P. A. Kralchevsky, "DLVO and Non-DLVO Surface Forces and Interactions in Colloidal Dispersions", *J. Dispersion Science Technology* **18** (1997) 647. (Цитати - 8 бр.)
171. N. D. Denkov, S. Tcholakova. I. B. Ivanov, "Globular Proteins As Emulsion Stabilizers – Similarities and Differences with Surfactants and Solid Particles", Review Article (Based on Plenary Lecture) in Proc. 4th World Congress on Emulsions, Lyon, France, 3-6 October, 2006. (Цитати - 4 бр.)
172. S. Tcholakova, N. D. Denkov, I. B. Ivanov, B. Campbell, "Coalescence Stability of Emulsions containing Globular Milk Proteins", *Adv. Colloid Interface Sci.*, **123-126** (2006) 259. (Цитати - 218 бр.)

Обзори по подредени структури от частици:

173. P. A. Kralchevsky, N. D. Denkov, V. N. Paunov, O. D. Velev, I. B. Ivanov, H. Yoshimura, K. Nagayama, "Formation of Two-Dimensional Colloid Crystals in Liquid Films under the Action of Capillary Forces", *J. Phys. Cond. Matter.*, **6** (1994) A395. (Цитати - 78 бр.)

174. P. A. Kralchevsky, C. D. Dushkin, V. N. Paunov, N. D. Denkov, K. Nagayama, "Lateral Capillary Forces between Colloidal Particles Incorporated in Liquid Films or Lipid Bilayers", *Progress Colloid Polymer Sci.*, **98** (1995) 12. (Цитати - 9 бр.)
175. N. D. Denkov, P. A. Kralchevsky, I. B. Ivanov, "Lateral Capillary Forces and Two-Dimensional Arrays of Colloid Particles and Protein Molecules", *J. Dispersion Sci. Techn.*, **18** (1997) 577. (Цитати - 14 бр.)
176. P. A. Kralchevsky, N. D. Denkov, "Capillary Forces and Structuring in Layers of Colloid Particles", *Current Opinion Colloid Interface Sci.*, **6** (2001) 383. (Цитати - 469 бр.)
177. J. T. Petkov, N. D. Denkov, "Dynamics of Particles on Interfaces and in Thin Liquid Films", in *Encyclopedia of Surface and Colloid Science*, A. Hubbard, Ed.; Marcel Dekker, New York, 2002, pp. 1529-1545; Second Edition; Taylor & Francis: New York, 2006; 6, pp. 4467-4483. (Цитати - 5 бр.)

Обзори по светоразсейване, мицеларни разтвори, солюбилизация, адсорбция на ПАВ:

178. P. A. Kralchevsky, K. D. Danov, N. D. Denkov, "Chemical Physics of Colloid Systems and Interfaces", in *Handbook of Surface and Colloid Chemistry*, (K. S. Birdi, Ed.); CRC Press, New York, 1997; pp. 333-494; Chapter 11. (Цитати - 117 бр.)
179. P. A. Kralchevsky, N. D. Denkov, "Triblock Copolymers As Promoters of Solubilization of Oils in Aqueous Surfactant Solutions", in *Molecular Interfacial Phenomena of Polymers and Biopolymers*, P. Chen Ed., Woodhead Publishing Ltd., 2005, Chapter 11, pp. 538-579. (Цитати - 2 бр.)
180. P. A. Kralchevsky, K. D. Danov and N. D. Denkov. "*Chemical Physics of Colloid Systems and Interfaces*", Chapter 7 in "*Handbook of Surface and Colloid Chemistry*", (Third Expanded and Updated Edition; K. S. Birdi, Ed.). CRC Press, Boca Raton, 2008; pp. 197-377. (Цитати - 70 бр.)

Дисертации:

181. Н. Д. Денков, "Междучастичкови взаимодействия и агрегиране в колоидни системи", Дисертация за получаване на научната степен "Кандидат на химическите науки"; Научни ръководители проф. дхн Иван Б. Иванов и ст.н.с. кфн П. Кралчевски; защитена на 14.10.1993 г. (СНС по Физикохимия, ВАК).
182. Н. Д. Денков, "Течни филми в присъствие на колоидни частици – стабилност и образуване на подредени структури", Дисертация за получаване на научната степен "Доктор на химическите науки", защитена на 28.06.2007 г. (СНС по Физикохимия, ВАК).