

Списък на цитиранията на публикациите, в които проф. д-р
Изак М. Бивас е автор или съавтор

Influence of the Lengths and Conformation States of
Hydrocarbon Chains on the Stability of Lyotropic Phases.

A. Derzhanski and I. Bivas, Phys. Lett., 74A, 372 (1979).

- Ondrias K., BBA, 732, 627 (1983).
- Balgavy P., BBA, 772, 58 (1984).
- Ondrias K., Gen. Physiol. B, 3, 327 (1984).
- Ondrias K., Drug Exp. Cl., 12, 837 (1986).
- Ondrias K., Bioch. Pharm., 36, 3999 (1987).
- Devinski F., J. Pharmacy&Pharmacol., 42, 790 (1990).
- Gallova J., Pharmazie, 47, 444 (1992)
- Ondrias K., Chem.-Biological Interactions, 84, 143 (1992).

Molecular Asymmetry, Flexoelectricity and Elasticity of
Nematics

A. Derzhanski, A. G. Petrov and I. Bivas, in Advances in
Liquid Crystal Research and Application, edited by Lajos
Bata, Pergamon Press, Oxford - Académiai Kiadó -
Budapest (1980), p.505.

- Umanski B. A., Kristallogr., 27, 729 (1982).
- Hauk G., Cryst. Res. and Technol., 17, 865 (1982).
- Chigrinov V., Crystallogr., 27, 404 (1982).
- Fehrenbach W., MCLC, 128, 111 (1985).
- Kapanowski A., Phys. Rev. E, 77, 052702 (2008).

On the Quadrupole Mechanism of Flexoelectricity

I. Bivas and A. Derzhanski, in Advances in Liquid
Crystal Research and Application, edited by Lajos Bata,
Pergamon Press, Oxford - Académiai Kiadó - Budapest
(1980), p.505.

- Fehrenbach W., MCLC, 128, 111 (1985).

Statistical Mechanical Theory for Hydrophobic Core of
Lipid Bilayer.

I. Bivas and A. Derzhanski, Mol. Cryst. Liq.
Crystals, 74, 1771 (1981).

- Dimitrov D. S., BBA, 779, 437 (1984).
- Benshaul A., Ann. Rev. Phys. Chem., 36, 179 (1985).
- Fehrenbach W., MCLC, 128, 111 (1985).
- Uhrikova D., Biofizika, 31, 781 (1986).
- Perez E., Proust JE, and Ter-Minassian-Saraga L, in "Thin Liquid
films", ed. I. B. Ivanov, Marcel Dekker, 1988, p. 921
- Ben-Shaul A., Handbook of Biol. Phys., Elsev. p.359 (1995)
- Netz PR, Phys. Rev. E, 53, 3875 (1996)
- Petrov AG, The Lyotropic State of Matter, Gordon and Breach
Science Publishers, 1999

Flexoelectric and Steric Interactions between Two Bilayer
Lipid Membranes Resulting from their Curvature
Fluctuations

I. Bivas and A. G. Petrov, J. theor. Biol., 88, 459
(1980)

- Cevc G., Chem. Phys. Lett., 84, 209 (1981).

- Dimitrov D. S., Colloid PS, 260, 1137 (1982).
- Weaver J.G., Bioelectrochem. Bioenerg., 12, 393 (1984).
- Belaya M. L., Biol. Membr., 1, 170 (1984).
- Helfrich W., J. Phys., 46, 1263 (1985).
- Fehrenbach W., MCLC, 128, 111 (1985).
- Abidor I. G., Biol. Membr., 3, 627 (1986).
- Janke W., Phys. Rev. Lett., 58, 144 (1987).
- Janke W., Phys. Lett. A, 117, 353 (1987).
- Osipov M. A., Colloid. J., 50, 969 (1988).
- Servuss R. M., Z. Naturforsch., 43, 938 (1988).
- Sonin A.S., J. Struct. Chem., 32, 111 (1991).
- Spooner P.J.R., Biophys. J., 65, 106 (1993).
- Mecke K.R., J. Phys. Cond. Mat., 13, 4615 (2001).
- Kastening B., Phys. Rev. E, 66, 061102 (2002).
- Kastening B., Phys. Rev. E, 73, 011101 (2006).
- Yukalov V. I., Yukalova E.P., Gluzman S., J. Math. Chemistry, J. Math. Chem., 47, 959 (2010).

Intermolecular and Interaggregate Interactions in Lyotropic Systems

I. Bivas, Synopsis of PhD Thesis, Sofia, 1981.

- Petrov A. G., Zh. Vses. Khim., 43, 197 (1983).

Stress applied on Lipid Bilayer leads to Pore Formation
I. Bivas and M. D. Mitov, Comptes rendus de l'academie bulgare des sciences, 36, 775 (1983).

- Kleman M., Liquid Cryst., 3, 1335 (1988).
- Chizmadz Y. A., Biol. Membr., 6, 1013 (1989).
- Cevc G., BBA, 1031, 311 (1990).

The dependence of the Curvature Elasticity Moduli of a Lipid Bilayer on the Change of the Surface tension at a Curving Oil-Water Interface.

I. Bivas, Phys. Lett., 94A, 114 (1983).

- Rao N. P., Aeros. Sci. T, 13, 183 (1990).

Elastic and Flexoelectric Aspects of Out-of-Plane Fluctuations in Biological and Model Membranes.

A. G. Petrov and I. Bivas, Progr. Surf. Sci., 16(4), 389 (1984).

- Helfrich W., J. Phys., 46, 1263 (1985).
- Svetina S., studia biophys., 110, 177 (1985).
- Bebliv G., J. Phys., 46, 1173 (1985).
- Sornette D., J. Chem. Phys., 84, 4062 (1986).
- Liebler S., J. Phys., 47, 507 (1986).
- Lorenzen S., Biophys. J. 50, 565 (1986).
- Fricke K., Eur. Biophys. J., 14, 67 (1986).
- Foerster D., Europhys. Lett., 4, 65 (1987).
- Szleifer I., Phys. Rev. Lett., 60, 1966 (1988).
- Milner S. T., J. Phys., 49, 1951 (1988).
- Cornell B. A., Eur. Biophys. J., 16, 299 (1988).
- Wack D. C., Phys. Rev. Lett., 61, 1210 (1988).
- Kleman M., Liquid Cryst., 3, 1355 (1988).
- Kozlov M. M., Biol. Membr., 5, 752 (1988).
- Bender C. J., Chem Soc. R., 17, 317 (1988).
- Kozlov M. M., Biol. Membr., 5, 1013 (1988).
- Roux D., in "Random Fluctuations and Pattern Growth: Experiments and Models", ed. H. E. Stanley and

- N. Ostrowski, Springer, 1988, p. 246
- Kozlov M. M., J. Chem. Soc. F2, 85, 277 (1989).
 - Lekkerkerker . N., Physika A, 159, 319 (1989).
 - Kozlov M. M., Eur. Biophys. J., 17, 121 (1989).
 - Wack D. C., Phys. Rev. A, 40, 2712 (1989).
 - Ou-Yang Zhong-can, Phys. Rev A., 41, 3381 (1990).
 - Seddon J. M., BBA, 1031, 1, (1990).
 - Charvolin J., Cont. Phys., 31, 1 (1990).
 - Mutz M., J. Phys., 51, 991 (1990).
 - Szleifer I., J. Chem. Phys., 92, 6800 (1990).
 - Kozlov M. M., J. Coll. I. Sci., 138, 332 (1990).
 - Lekkerke. H. N., Physica A, 167, 384 (1990).
 - Cevc G., BBA, 1031, 311 (1990).
 - Helfrich W., J. Phys. (Paris), 51, 7189 (1990)
 - Seifert U., Phys. Rev. A, 44, 1182 (1991)
 - Daillant J., J. Phys. (Paris) II, 1, 149 (1991)
 - Gruner S.M., Ann. NY Acad. Sci., 625, 685 (1991)
 - Tate M.W., Chem. Phys. Lipids, 57, 147 (1991)
 - Fogden A., J.Chem.Soc.Faraday Trans.,87,949(1991)
 - Kozlow M.M., J. Phys. (Paris) II, 1, 1077 (1991)
 - Kozlow M.M., J. Phys. (Paris) II, 1, 1085 (1991)
 - Yoge D., J. Phys. Chem., 95, 3892 (1991)
 - Ennis J., J. Chem. Phys., 97, 663 (1992)
 - Pyatnitsky A.M., Biologicheskie Membrany, 9, 655 (1992)
 - Simons B.D., J. Phys (Paris) II, 2, 1141 (1992)
 - Wiese W., J.Phys.-Condensed Matter, 4, 1647 (1992)
 - Cantor R.S., J. Chem. Phys., 99, 7124 (1993)
 - Cevc G and Seddon JM, in "Phospholipids Handbook", Marcel Dekker, 1993, p. 351
 - Quist P.O., Phys. Rev. E, 47, 3374 (1993)
 - Seddon J.M., Phil.Trans.R.Soc.Lond.A, 344, 377 (1993)
 - Helfrich W., J. Phys.-Cond.Matter, 6, A79 (1994)
 - Fendler J.H., Adv. Polym. Sci., 113, 1 (1994)
 - Lewis RNAH, Biophys. J., 66, 1088 (1994)
 - Chowdhury D., J.Phys.A-Mat.Gen., 27, 257 (1994)
 - Morikawa R., J. Phys. (Paris) II, 4, 145 (1994)
 - Raudino A., J. theor. Biol., 167, 307 (1994)
 - Gruner S.M., Adv. in Chem. Series, 235, 129 (1994)
 - Helfrich W., Prog.Colloid Polym.Sci., 95, 7 (1994)
 - Baumgartner A., J. Phys. Chem., 98, 10665 (1994)
 - Baumgartner A., J. Chem. Phys., 101, 9060 (1994)
 - Baumgartner A., Phys. Rev. Lett., 74, 2142 (1995)
 - Ben-Shaul A., in: Structure and Dynamics of Membranes. From Cells to Vesicles, (Eds. R.Lipowsky & E.Sackmann) Elsevier, Amsterdam, Chapter 7, p.359 (1995)
 - Ben-Shaul S., in "Micelles, Membranes...", Springer, p.1 (1995)
 - Cantor RS, J. Chem. Phys., 103, 4765 (1995)
 - Cevc G, in: Structure and Dynamics of Membranes. From Cells to Vesicles, (Eds. R.Lipowsky & E.Sackmann) Elsevier, Amsterdam, Chapter 9, pp. 467-490 (1995).
 - Chou T, Phys. Fluids, 7, 1872 (1995)
 - Fattal DR, Physica A, 220, 192 (1995)
 - Fattal DR, Langmuir, 11, 1154 (1995)
 - Hristova K., MACROMOLECULES, 28, 991 (1995)
 - Hristova K., LIQUID CRYSTALS, 18, 423 (1995)
 - Kralchevsky P.A., J CHEM SOC-FARADAY TRANS, 91, 3415 (1995)
 - Kralchevsky PA, J.Fluid Mechanics, 299, 105 (1995)
 - Morikawa R, J.Phys.Soc.Japan, 64, 3562 (1995)

- Nastishin J, Compt.rand.Acad.Sci.Ser.II Fasc. B, 321, 205 (1995).
- Petsev DN, J.Colloid Interface Sci., 176, 201 (1995).
- Suezaki Y, J. Phys.I France, 5, 1469 (1995)
- Fattal DR and Ben-Shaul A., in "Handbook of Nonmedical Applications of Liposomes, ed. D. D. Lasic and Y. Barenholz, CRC Press, 1996, p. 129
- J. B. Fournier, Phys. Rev.Lett. 76, 4436 (1996)
- K. Gawrisch, L.L.Holte, Chem.Phys.Lipids, 81, 105 (1996)
- J. Gaydos, Colloids Surfaces A 114, 1 (1996)
- Hianik T., Ottova-Leitmannova A., and H. Ti Tien, in "Vesicles", ed. M. Rosoff, Marsel Dekker, 1996, p. 49
- M. M. Kozlov, Curr.Opinion Coll. & Interface Sci. 1, 362 (1996)
- R. Marinov, J. Disp. Sci. Technol., 17, 591 (1996)
- P. K. Maiti, , Phys.Rev.E 54, 2670 (1996)
- Y.A. Nastishin, Langmuir, 12, 5011 (1996)
- S. A. Safran, Ber. Bunsenges. Phys.Chem.Chem.Phys. 100, 252 (1996)
- J. M. Seddon, Ber.Bunsenges.Phys.Chem.Chem.Phys. 100, 380 (1996)
- Y.Suezaki, H.Ichinose, Thin Solid Films 285, 373 (1996)
- R.N.A.H. Lewis, Current Topics in Membranes, 44, 25 (1997)
- T. Chou, M.V. Jaric, E.D. Siggia, Biophys.J. 72, 2042 (1997)
- B. Bassetti, Europ. Phys. J. B, 1, 359 (1998)
- Fradin C, Langmuir, 14, 7327 (1998)
- Gaydos J., Studies in Interface Science, Volume 6, Issue C, Pages 1-59 (1998).
- Meleard P, Biochimie, 80, 401 (1998).
- Bouligand Y., Liquid Crystals, 26, 501 (1999).
- Cocera M., Langmuir, 15, 2230 (1999).
- Discher BM, Science, 284, 1143 (1999).
- Discher, DE, United States Patent 6835394, Polymersomes and related encapsulating membranes (1999).
- Goetz R, Phys.Rev.Lett.,83,221 (1999).
- Ou-Yang Zhong-can, Lin Ji-Xing, Xie Yu-Zhang, Geometric methods in the elastic theory of membranes in liquid crystal phases, chapter 2, p. 69, World Scientific, 1999.
- Safran S. A., Advances in Physics, 48, 395 (1999).
- Helfrich W, in Giant Vesicles, P. L. Luisi and P. Walde eds., John Wiley & Sons, Ltd, Chichester (2000), p.51.
- Meleard P et al, in Giant Vesicles, P.L. Luisi and P.Walde eds., John Wiley & Sons, Ltd, Chichester (2000), p.185.
- Nielsen C., Biophys. J., 79, 2583 (2000).
- Paunov V. N., Langmuir, 16, 8917 (2000).
- Borelli M. E. S., Europhys. Lett., 53, 551 (2001).
- Kleman M., and Lavrentovich O. D., Soft Matter Physics: An Introduction, Springer, 2002.
- Stoyanov S, Theory and Simulation of Interfacial Effects and Phase Behavior of Nonionic Surfactants, PhD thesis, University of Essen (Germany), 2002.
- Zhivkov AM, Colloids and Surfaces A, 209, 327 (2002).
- Humpert C, Molecular Membrane Biology, 20, 155 (2003).
- Hyde ST, Current Opinion in Colloid & Interface Sci., 8, 5 (2003).
- Stoyanov SD, Macromolecules, 36, 5032 (2003).
- Farago O., J. Chem. Phys., 120, 2934 (2004).
- Hader DP, Hemmersbach R, and Lebert M, Gravity and Behavior of Unicellular Organisms, Cambridge University Press, 2004
- Kuiper JM, PhD thesis, University of Groningen (The Netherlands), (2005).
- Baumgart T., Das S., Webb W.W., et al., Biophys. J., 89, 1067 (2005).
- Chvanov M., J. Phys. Chem., 45, 22903 (2006).

- Kozlov MM, J. Phys.: Condensed Matter, 18, S1177 (2006).
- Marsh D., Chem. and Phys. Lipids, 144, 146 (2006)
- Liu H., Bachand G.D., Kim H., et al. Langmuir, 24, 3686 (2008).
- Hale J., The thermal fluctuations of red blood cells, submitted by John Hale, to the University of Exeter as a thesis for the degree of Doctor of Philosophy in Physics, September 2009.
- Sagar G. H., Bellare, J.R., J. Phys. Chem B, 113, 13805 (2009).
- Campelo F., Fabrikant G., McMahon H.T., et al., FEBS Letters, 584, 1830 (2010).
- Danov K. D., Kralchevsky P.A., Stoyanov S.D., Langmuir, 26, 143 (2010).
- Taheri-Araghi S., Membrane-Disrupting Activity of Antimicrobial Peptides and the Electrostatic Bending of Membranes, A thesis presented to the University of Waterloo in fulfillment of the thesis requirement for the degree of Doctor of Philosophy in Physics, Waterloo, Ontario, Canada, 2010.
- Bitbol A.F., Peliti L., Fournier J.B., EUR PHYS JOURNAL E, 34 (2011).
- Meleard P., Pott T., Bouvrais H., Ipsen JH., EUROPEAN PHYSICAL JOURNAL E, 34 116 (2011).
- Bouvrais H., Advances in Planar Lipid Bilayers and Liposomes, 15, 1-75 (2012).
- Dimova R., Advances in Planar Lipid Bilayers and Liposomes, 16, 1-50 (2012).
- Li, Jianfeng; Pastor, Kyle A.; Shi, An-Chang; et al. PHYSICAL REVIEW E 88, Article Number: 012718 (2013).
- Seddon; Wennerstroem; Tiddy; et al. FARADAY DISCUSSIONS Volume: 161 Pages: 273-303 (2013).
- Felix Campelo, Clement Arnarez, Siewert J. Marrink, Michael M. Kozlov, Advances in Colloid and Interface Science 208, 25-33, (2014).
- Tanja Pott, Claire Gerbeaud, Nina Barbiera, Philippe Méléard, Chemistry and Physics of Lipids (in press).

Pores and Their Number in Bilayer Lipid Membranes.

I. Bivas, J. Physique Lett., 46, L-513 (1985).

- Chizmadz Y. A., Biol. Membr., 6, 1013 (1989).
- Cevc G., BBA, 1031, 311 (1990).
- Cevc G., CHEM. PHYS. LIPIDS, 57, 293 (1991).
- Winterhalter M., Klotz K.-H., and Benz, R., in "Electromanipulation of Cells", Ed. U. Zimmermann and G.A.Neil, CRC Press, Boca Raton, 1996, p. 137
- Petrov AG, The Lyotropic State of Matter, Gordon and Breach Science Publishers, 1999
- Krustev R, Langmuir, 15, 2134 (1999).
- Farajzadeh R., Krastev R., Zitha P.L.J., Adv. Colloid Interface Sci., 137, 27 (2008).
- M. Winterhalter, Advances in Colloid and Interface Science 208, 121-128 (2014).

Influence of Dissolved Additives on the Critical Micellar Concentration of Surfactants

A. Derzhanski, S. Panayotova, G. Popov, and I. Bivas, in Surfactants in Solution, vol. 4, edited by K. L. Mittal and P. Bothorel, Plenum Press, NY and London, 1986, p.333.

- Treiner C., in "Solubilization in Surfactant Aggregates", ed. S. D. Christian and J. F. Scamehorn, Marcel Dekker, 1995, p. 383

An Application of the Optical Microscopy to the Determination of the Curvature Elastic Modulus of

Biological and Model Membranes.

I. Bivas, P. Hanusse, P. Bothorel, J. Lalanne, O.

Aguerre-Chariol, J. Physique 48, 855 (1987).

- Milner S. T., Phys. Rev. A, 36, 4371 (1987).
- Duwe H. P., MCLC., 152, 1 (1987).
- Huse D. A., J. Phys., 49, 605 (1988).
- Kats E. I., Zn.Exp.Theor.Phys., 94, 134 (1988).
- Roux D., in "Random Fluctuations and Pattern Growth: Experiments and Models", ed. H. E. Stanley and N. Ostrowski, Springer, 1988, p. 246
- Szleifer I., Phys. Rev. Lett., 60, 1966 (1988).
- Lekkerkerker . N., Physika A, 159, 319 (1989).
- Lebedev V.V., Phys. Scripta, (1989).
- Leermake. F. A., J. Phys. Chem., 93, 7417 (1989).
- Servuss R. M., J. Phys., 50, 809 (1989).
- Harbich W., J. Phys., 51, 1027 (1990).
- Duwe H. P., Physika A, 163, 410 (1990).
- Bensimon D., J. Phys., 51, 689 (1990).
- Meleard P., Europhys. Lett., 11, 355 (1990).
- Duwe H. P., J. Phys., 51, 945 (1990).
- Evans E., Phys. Rev. Lett., 64, 2094 (1990).
- Mutz M., J. Phys., 51, 991 (1990).
- Szeifer I., J. Chem. Phys., 92, 6800 (1990).
- Leibler S., Proc Natl Acad Sci(USA), 87, 6433 (1990).
- Smeulder J. B., Phys. Rev., A, 42, 3483 (1990).
- Bincs B.P., Adv.Colloid Interface Sci., 34, 343 (1991)
- Bloom M., QUART. REV. BIOPHYS., 24, 293 (1991)
- Drouffe JM., SCIENCE, 254, 1353 (1991)
- Ennis J., J. Chem. Phys., 97, 663 (1992)
- Evans E., ELECTROCHIM. ACTA, 36, 1735 (1991)
- Evans E., LANGMUIR, 7, 1900 (1991)
- Prost J., Nature, 350, 11 (1991)
- Seifert U., Phys. Rev. A, 44, 1182 (1991)
- Roux D., Europhys. Lett., 17, 575 (1992)
- Kats E. I. and Lebedev V. V., Fluctuational effects in the dynamics of liquid crystals, Springer, 1993, p.133
- Spooner P.J.R., Biophys. J., 65, 106 (1993)
- Pfeffer W., Europhys. Lett., 23, 457 (1993)
- Seifert U., Europhys. Lett., 23, 71 (1993)
- FendlerJ.H., ADV POLYMER SCI, 113, 1+ (1994)
- Kraus M., J. Phys. (Paris) II, 4, 1117 (1994)
- Kellay H., Adv.Colloid Interface Sci., 49, 85 (1994)
- Seifert U., Ber.Bunsen Ges.Phys.Chem., 98, 457 (1994)
- Seifert U., Biophys. Chem., 49, 13 (1994)
- Douglas C.B., J.Chem.Soc.Farad Trans., 90, 471 (1994)
- Hristova K., J.Colloid Interface Sci., 168, 302 (1994)
- Palmer K.M., J. Phys. (Paris) II, 4, 805 (1994)
- Seifert U., PHYS REV E, 49, 3124 (1994)
- Ben-Shaul A., Handbook of Biol. Phys., Elsev. p.359 (1995)
- Ben-Shaul S., in "Micelles, Membranes...", Springer, p.1 (1995)
- Hristova K., MACROMOLECULES, 28, 991 (1995)
- Hristova K., LIQUID CRYSTALS, 18, 423 (1995)
- Hristova K. and Needham D., in "Stealth Liposomes", ed. D. Lasic and F.J.Martin, CRC Press, 1995, p.35
- Seifert U., Zetschrift fur Physic B, B-97, 299 (1995)
- Seki K., Physica A, 219, 253 (1995)
- Quist P.O., LANGMUIR, 11, 2201 (1995)
- Yeung A., J PHYSIQUE II, 5, 1501 (1995)

- Arteca G. A., *Reviews in Comput. Chem.*, 9, 191 (1995)
- Pieruschka P., *PHYS REV E*, 53, 2693 (1996)
- Doberener HG, *Phys.Rev.E*, 55, 4458 (1997)
- Hackl W, *J. Physique II*, 7, 1141 (1997)
- Seifert U, *Mol. Cryst. Liquid Cryst.*, 292, 213 (1997)
- Seifert U, *Advances in Physics*, 46, 13 (1997)
- Seifert U., in "Dynamics and Defects in Liquid Crystals", ed. P.E. Cladis and P. Palffy-Muhoray, Taylor and Francis, 1998, p.241
- Wang R, *Colloids and Surfaces A*, 131, 257 (1998).
- Seifert U, *Europ. Phys. J. B*, 8, 405 (1999).
- Petrov AG, *The Lyotropic State of Matter*, Gordon and Breach Science Publishers, 1999
- Bruckner E, *J. Phys. Chem. B*, 104, 2311 (2000).
- Bruckner E, *Langmuir*, 17, 2308 (2001).
- Vilfan M., *Phys. Rev. E*, 64, 022902 (2001).
- Althoff G, *J. Phys. Chem. B*, 106, 5506 (2002).
- Althoff G, *J. Phys. Chem. B*, 106, 5517 (2002).
- Henriksen JR, *Eur. Phys. J.*, 9, 365 (2002).
- Humpert C, *Molecular Membrane Biol.*, 20, 155 (2003).
- Henriksen J., *Eur. Biophys. J.*, 33, 732 (2004).
- Leibler S., in "Statistical Mechanics of Membranes and Surfaces", ed. D.Nelson, T.Piran, and S.Weinberg, World Scientific, 2004, p.49
- Pecreaux J, *Eur. Phys. J. E*, 13, 277 (2004).
- Sevsek F, *Computer Methods Programs Biomedicine*, 73, 189 (2004).
- Cosgrove T, *Colloid Science: Principles, Methods and Applications*, Blackwell Publishing, (2005).
- Imparato A., Shillcock J.C., Lipowsky R., *Europhys. Lett.*, 69, 650 (2005).
- Marsh D., *Chem. and Phys. Lipids*, 144, 146 (2006)
- Esposito C., Tian A., Melamed S., et al., *Biophys.J.*, 93, 3169 (2007).
- Hale J., The thermal fluctuations of red blood cells, submitted by John Hale, to the University of Exeter as a thesis for the degree of Doctor of Philosophy in Physics, September 2009.
- Meleard P., Bagatolli L.A., Pott T., *METHODS IN ENZYMOLOGY LIPOSOMES*, 465, 161 (2009).
- Campelo F., FabrikantG., McMahon H. T., Kozlov M. M., *FEBS Letters*, 584, 1830 (2010).
- Eastoe J., in "Colloid Science: Principles, Methods, and Applications", ed. T. Cosgrove, John Wiley & Sons Ltd., Chichester, 2010.
- Gracia R. S., Bezlyepkina N., Knorr R.L., et al., *Soft Matter*, 6, 1472 (2010).
- Sevsek F., in "Advances in Planar Lipid Bilayers and Liposomes" Volume 12, Issue C, 2010, Pages 1-19.
- Meleard P., Pott T., Bouvrais H., Ipsen JH., *EUROPEAN PHYSICAL JOURNAL E*, 34 116 (2011).
- Usenik P., Vrtovec T., Pernus F., Likar B., *MEDICAL & BIOLOGICAL ENGINEERING & COMPUTING*, 49, 957 (2011).
- Bouvrais H., *Advances in Planar Lipid Bilayers and Liposomes*, 15, 1-75 (2012).
- Dimova R., *Advances in Planar Lipid Bilayers and Liposomes*, 16, 1-50 (2012).
- Meleard, Philippe; Pott, Tanja, Edited by: Iglic, A; Genova, J; Book Series: *Advances in Planar Lipid Bilayers and Liposomes* Volume: 17 Pages: 55-75 (2013).
- Mitkova,Denitsa; Stoyanova-Ivanova, Angelina; Georgieva,Stela; et al. Edited by: Iglic, A; Kulkarni, CV; Tien, HT; et al. Book Series: *Advances in Planar Lipid Bilayers and Liposomes*

Volume: 18 Pages: 1-20 2013).

- Simundic, Metka; Drasler, Barbara; Sustar, Vid; et al.,
BMC VETERINARY RESEARCH 9, Article Number: 7 (2013).
- Stukelj, Roman; Sustar, Vid; Mrvar-Brecko, Anita; et al.
GENERAL PHYSIOLOGY AND BIOPHYSICS 32, Pages: 33-45 (2013).
- Vitkova, Victoria; Petrov, Alexander G., Edited by: Iglic,A; Genova,J;
Book Series: Advances in Planar Lipid Bilayers and Liposomes
Volume: 17 Pages: 89-138 (2013).
- Zhan,Huan; Lazaridis, Themis, BIOPHYSICAL JOURNAL 104, 643-654 (2013).
- Patricia Bassereau, Benoit Sorre, Aurore Lévy, Advances in Colloid and
Interface Science 208 47-57 (2014)
- R. Dimova, Advances in Colloid and Interface Science 208, 47-57 (2014).
- Vitkova, V., Mitkova, D., Staněva, G., Colloids and Surfaces A, 460,
191 (2014).

Thermal Fluctuations of Giant Vesicles and Elastic
Properties of Bilayer Lipid Membranes. The Role of the
Excess Surface.

J. F. Faucon, P. Meleard, M. D. Mitov, I. Bivas, P.
Bothorel, Progr. Colloid Polym. Sci, 79, 11 (1989).

- BORJA M, J. OF PHYS. CHEM., 96 5434 (1992).
- Hristova K., J. Colloid Interface Sci., 168, 302 (1994)
- Hristova K., LIQUID CRYSTALS, 18, 423 (1995)
- Hristova K. and Needham D., in "Stealth Liposomes", ed. D. Lasic
and F.J.Martin, CRC Press, 1995, p.35
- Petrov AG, The Lyotropic State of Matter, Gordon and Breach
Science Publishers, 1999
- Bruckner E, J. Phys. Chem. B, 104, 2311 (2000).
- Vitkova, Victoria; Petrov, Alexander G., Edited by: Iglic,A; Genova,J;
Book Series: Advances in Planar Lipid Bilayers and Liposomes
Volume: 17 Pages: 89-138 2013).
- Vitkova, V., Mitkova, D., Staněva, G., Colloids and Surfaces A, 460,
191 (2014).

Bending Elasticity and Thermal Fluctuations of Lipid
Membranes. Theoretical and Experimental Requirements.

J. F. Faucon, M. D. Mitov, P. Meleard, I. Bivas, P.
Bothorel, J. Physique 50, 2389 (1989).

- Leibler S., Phys. Rev. Lett., 63, 406 (1989).
- Mutz M., Phys. Rev. Lett., 62, 2881 (1989).
- Mutz M., J. Phys., 51, 991 (1990).
- Harbich W., J. Phys., 51, 1027 (1990).
- Duwe H. P., J. Phys., 51, 945 (1990).
- Evans E., Phys. Rev. Lett., 64, 2094 (1990).
- Smeulder J. B., Phys. Rev., A, 42, 3483 (1990).
- Harbich W., Chem. Phys. Lett., 55, 191 (1990)
- Evans E., ELECTROCHIM. ACTA, 36, 1735 (1991)
- Evans E., LANGMUIR, 7, 1900 (1991)
- Drouffe JM., SCIENCE, 254, 1353 (1991)
- Seifert U., Phys. Rev. A, 44, 1182 (1991)
- Stohrer J., J. Chem. Phys., 95, 672 (1991)
- Daillant J., J. Phys. (Paris) II, 1, 149 (1991)
- Seifert U., Phys. Rev. Lett., 66, 2404 (1991)
- Kummrow M., Phys. Rev. A, 44, 8356 (1991)
- Fisher T. M., Biophys. J., 63, 1328 (1992)
- Waugh R.E., Biophys. J., 61, 974 (1992)

- Dufourc E.J. *Biophys. J.*, 61, 45 (1992)
- Heinrich V., *J. Phys. (Paris) II*, 2, 1081 (1992)
- Smeulders J.B.A.F., *Phys. Rev. A*, 46, 7708 (1992)
- Spooner P.J.R., *Biophys. J.*, 65, 106 (1993)
- Pfeffer W., *Europhys. Lett.*, 23, 457 (1993)
- Seifert U., *Europhys. Lett.*, 23, 71 (1993)
- Klosgen B., *Eur. Biophys. J.*, 22, 329 (1993)
- Song J.B., *Biophys. J.*, 64, 1967 (1993)
- Auguste F., *J. Phys (Paris) II*, 2197 (1994).
- Fendler J.H., *Adv. Polym. Sci.*, 113, 1 (1994)
- Zvelindovsky A.V., *J.Phys.(Paris) II*, 4, 613(1994)
- Mohandas N., *Ann.Rev.Biophys.Biomo.Str.*,23,787(1994)
- Mishima K., *BBA*, 1191, 157 (1994)
- Saint-Jalmes A., *Europhys. Lett.*, 28, 565 (1994).
- Zheng W.M., *Chinese Phys. Lett.*, 11, 227 (1994)
- Zheng W.M., *Communic. Theor. Phys.*, 21, 369 (1994)
- Hristova K., *J.Colloid Interface Sci.*,168,302(1994)
- Sornette D and Ostrovski N, in *Micelles, Membranes, Micro-emulsions, and monolayers*, W. Gelbart, A. Ben-Shaul and D. Roux eds., Springer (1994), p.251.
- Ben-Shaul A., *Handbook of Biol. Phys.*, Elsev. p.359 (1995)
- Hristova K., *MACROMOLECULES*, 28, 991 (1995)
- Hristova K., *LIQUID CRYSTALS*, 18, 423 (1995)
- Hristova K. and Needham D., in "Stealth Liposomes", ed. D. Lasic and F.J.Martin, CRC Press, 1995, p.35
- Needham D., in "Permeability and Stability of Lipid Bilayers", ed. E. A. Disalvo and S. A. Simon, CRC Press, 1995, p.49
- Michalet X., *Science* 269, 666 (1995).
- Seifert U., *Zetschrift fur Physic B*, B-97,299(1995)
- Seki K, *Physica A*, 219, 253 (1995)
- Yeung A., *J PHYSIQUE II*, 5, 1501 (1995)
- Radler J. O., *Phys. Rev. E*, 51, 4526 (1995).
- Bacri JC, *Europhys. Lett.*, 33, 235 (1996)
- Dobereiner HG, *Europhys. Lett.*, 36, 325 (1996)
- Heinrich V, *Annals of Biomedical Engineering*, 24, 595 (1996)
- Kellay H, *J. Phys. Cond. Mat.*, 8, A49 (1996)
- Komura S, in "Vesicles", ed. M. Rosoff, Marsel Dekker, 1996, p.197
- Mathivet L., *Biophys. J.*, 70, 1112 (1996)
- Needham D., and Zhelev D. V., in "Vesicles", ed. M. Rosoff, Marsel Dekker, 1996, p. 373
- Pieruschka P., *PHYS REV E*, 53, 2693 (1996)
- Suezaki Y, *Thin Solid Films*, 285, 373 (1996)
- Dobereiner HG, *Phys. Rev. E*, 55, 4458 (1997)
- Evans E, *Phys.Rev.Lett.*, 79, 2379 (1997)
- Fygenson DK, *Phys. Rev. E*, 55, 850 (1997)
- Gompper G, *Curr.Opinion in Colloid&Interface Sci.*,2,373(1997)
- Henrich V., *Phys.Rev. E*, 55, 1809 (1997)
- Koenig BW, *Biophys. J.*, 73, 1954 (1997)
- Seifert U, *Advances in Physics*, 46, 13 (1997)
- Nagle JF, *Phys. Rev. E*, 58, 7769 (1998)
- Petracche HI, *Phys. Rev. E*, 57, 7014 (1998)
- Tristram-Nagle S, *Biophys.J.*, 917 (1998)
- Wang R, *Colloids and Surfaces A*, 131, 257 (1998)
- Zhelev DV, *Bioophys.J.*, 75, 321 (1998)
- Sleep J, *Biophys. J.*, 77, 3085 (1999).
- Petrov AG, *The Lyotropic State of Matter*, Gordon and Breach Science Publishers, 1999
- Bernard AL, *Langmuir*, 16, 6809 (2000).

- Brocca P., Cantu L., Corti M., and Del Favero E., in "Progress in Colloid and Interface science (Trends in Colloid and Interface Science XIV)" Springer, 2000, p.181
- Bruckner E, J. Phys. Chem. B, 104, 2311 (2000).
- Dobereiner H-G, in Giant Vesicles, P. L. Luisi and P. Walde eds., John Wiley & Sons, Ltd, Chichester (2000), p.149.
- Nagle JF, Biochim. Biophys. Acta Biomembranes, 1469, 159 (2000).
- Needham D and Zhelev D, in Giant Vesicles, P. L. Luisi and P. Walde eds., John Wiley&Sons, Ltd, Chichester (2000), p.103.
- Petrache HI, Biophys. J., 79, 3172 (2000).
- Rawicz W, Biophys. J., 79, 328 (2000).
- Seifert U, in Giant Vesicles, P. L. Luisi and P. Walde eds., John Wiley & Sons, Ltd, Chichester (2000), p.71.
- Fournier J.-B., Phys. Rev. Lett., 86, 4970 (2001)
- Guttenberg Z, Europhys. Lett, 54, 826 (2001).
- Helfer E, Phys. Rev. E, 63, 021904 (2001).
- Manneville JB, Phys. Rev. E, 64, 021908 (2001).
- Althoff G, J. Phys. Chem. B, 106, 5517 (2002).
- Boal D., Mechanics of the Cell, Cambridge University Press, 2002
- Henriksen JR, Eur. Phys. J., 9, 365 (2002).
- Miao L, Eur. Phys. J. E, 9, 143 (2002).
- Needham D., Matherials Research Society Symposium - Proceedings, vol. 774, 173 (2003).
- Riske KA, Biophys. J., 85, 2351 (2003).
- Zhao SL, Int. J. Modern Phys., 17, 4661 (2003).
- Brocca P, Langmuir, 20, 2141 (2004).
- Girard P., Membranes hors d'équilibre: échanges et transport actif, PhD thesis, Université Paris 7 (2004).
- Henriksen J., Eur. Biophys. J., 33, 732 (2004).
- Henriksen J., Eur. Phys. J. E, 14, 149 (2004).
- Liang XM, Colloids and Surfaces B, 34, 41 (2004).
- Majhenc J., Biochim. Biophys. Acta, 1664, 257 (2004).
- Mao G. in Dekker Encyclopedia of Nanoscience and Nanotechnology, JA Schwartz, CI Contescu and K Putyera eds., Marcel Dekker, New-York, 2004, p. 933.
- Pecreaux J, Eur. Phys. J. E, 13, 277 (2004).
- Rowat A.C., Eur. Biophys. J., 33, 300 (2004).
- Baumgart T., Das S., Webb W.W., et al., Biophys. J., 89, 1067 (2005).
- Cuvelier D., Derenyi I., Bassereau P., et al., Biophys. J., 88, 2714 (2005).
- Gawrish K., in "The Structure of Biological Membranes", ed. P. L. Yeagle, CRC Press, 2005, p. 147
- Lomholt M.A., Hansen P.L., Miao L., Eur. Phys. J. E, 16, 439 (2005).
- Rodriguez N., Pincet F., Cribier S., Colloids and Surfaces B, 42, 125 (2005).
- Balogh J., Olsson U., Pedersen J.S., J. Dispersion Sci. and Technol., 27, 497 (2006).
- Harmandaris V.A., Deserno M., J. Chem. Phys., 125, 204905 (2006).
- Mader M.-A., Vitkova V., Abkarian M., et al., Eur. Phys. J. E, 19, 389 (2006).
- Marsh D., Chem. and Phys. Lipids, 144, 146 (2006).
- Norouzi D., Muller M.M., Deserno M., Phys. Rev. E, 74, 061914 (2006).
- Shkulipa SA, COMPUTER SIMULATIONS OF LIPID BILAYER DYNAMICS, DISSERTATION to obtain the doctor's degree at the University of Twente (2006).
- Choe S., Sun S.X, Biophys. J., 92, 1204 (2007).
- Esposito C., Tian A., Melamed S., et al., Biophys.J., 93, 3169 (2007).
- Fery A., Weinkamer R., Polymer, 48, 7221 (2007).

- Gruhn T., Franke T., Dimova R., et al., *Langmuir*, 23, 5423 (2007).
- Muller M. M., Theoretical studies of fluid membrane mechanics, Dissertation zur Erlangung des Grades "Doktor der Naturwissenschaften" am Fachbereich Physik, Mathematik und Informatik der Johannes Gutenberg-Universitat in Mainz, (2007).
- Kiselev M.A., Gutberlet T., Hoell A., et al., *Chem. Phys.*, 345, 181 (2008).
- Rappolt M., Pabst G., in "Structure and Dynamics of Membranous Interfaces", edited by Dr. Kaushik Nag, Wiley, p. 45, 2008.
- Oradd G., Shahedi V., Lindblom G., *Biochim Biophys Acta - Biomembranes*, 1788, 1762 (2009).
- Shimanouchi, T., Ishii H., Yoshimoto N., et al., *Colloids and Surfaces B*, 73, 156 (2009).
- Danov K. D., Kralchevsky P.A., Stoyanov S.D., *Langmuir*, 26, 143 (2010).
- Gracia R. S., Bezlyepkina N., Knorr R.L., et al., *Soft Matter*, 6, 1472 (2010).
- Reister-Gottfried E., Leitenberger S.M., Seifert U., *Phys. Rev. E*, 81, 031903 (2010).
- Kahya N., *Biochim Biophys Acta - Biomembranes*, 1798, 1392 (2010).
- Brandt E. G., Braun A. R., Sachs J. N., Nagle J. F., Edholm O., *Biophys. J.*, 100, 2104 (2011).
- Elsayed M.M.A., Cevc G., *Biochim Biophys Acta - Biomembranes*, 1808, 140 (2011).
- Kawabata Y., Shinoda T., Kato T., *Phys Chem Chem Phys*, 13, 3484 (2011).
- Shchelokovskyy P., Tristram-Nagle S., Dimova R., *New Journal of Physics*, 13, 025004 (2011).
- Shiba., Noguchi., PHYSICAL REVIEW E, 84, 031926 (2011).
- Shimanouchi T., Sasaki., Hiroiwa Azusa; et al. *COLLOIDS AND SURFACES B-BIOINTERFACES*, 88 221 (2011).
- Tsai F., Stuhrmann B., Koenderink GH., *LANGMUIR*, 27, 10061 (2011).
- Usenik P., Vrtovec T., Pernus F., Likar B., *MEDICAL & BIOLOGICAL ENGINEERING & COMPUTING*, 49, 957 (2011).
- Zhou H., Gabilondo B.B., Losert W. Van De Water W., *Phys. Rev. E*, 83, 011905 (2011).
- Bouvrais H., Advances in Planar Lipid Bilayers and Liposomes, 15, 1-75 (2012).
- Dimova R., Advances in Planar Lipid Bilayers and Liposomes, 16, 1-50 (2012).
- Hu, Mingyang; Briguglio, John J.; Deserno, Markus BIOPHYSICAL JOURNAL Volume: 102 Issue: 6 Pages: 1403-1410 (2012).
- Levant, Michael; Steinberg, Victor, PHYSICAL REVIEW LETTERS Volume: 109 Issue: 26 Article Number: 268103 (2012).
- Mitkova, D.; Stoyanova-Ivanova, A.; Ermakov, Yu A.; et al. Book Author(s): DimovaMalinovska, D; Nesheva, D; Pecheva, E; et al. Conference: 17th International School on Condensed Matter Physics (ISCMP) - Open Problems in Condensed Matter Physics, Biomedical Physics and their Applications Location: Varna, BULGARIA Date: SEP 02-07, 2012 Journal of Physics Conference Series Volume: 398 Article Number: 012028 Published: 2012
- Portet T., Mauroy C., Demery V., Houles T., Escoffre J.-M., Dean D.S., Rols M.-P., *Journal of Membrane Biology*, 245, 555-564 (2012).
- Sustar V., Zelko J., Lopalco P., Lobasso S., Ota A., Ulrich N.P., Corcelli A., Kralj-Iglic V., *PLoS ONE* 7, e39401 (2012).
- Bouvrais, Helene; Ipsen, John H., Edited by: Iglic, A; Genova, J Book Series: Advances in Planar Lipid Bilayers and Liposomes

- Volume: 17 Pages: 77-88 (2013).
- Evans, E.; Rawicz, W.; Smith, B. A., FARADAY DISCUSSIONS Volume: 161 Pages: 591-611 (2013).
 - Hu, Mingyang; de Jong, Djurre H.; Marrink, Siewert J.; et al. FARADAY DISCUSSIONS Volume: 161 Pages: 365-382 (2013).
 - Hu, Mingyang; Diggins, Patrick; Deserno, Markus JOURNAL OF CHEMICAL PHYSICS Volume: 138 Issue: 21 Article Number: 214110 (2013).
 - Li, Jianfeng; Pastor, Kyle A.; Shi, An-Chang; et al. PHYSICAL REVIEW E Volume: 88 Issue: 1 Article Number: 012718 (2013).
 - Loftus, Andrew F.; Noreng, Sigrid; Hsieh, Vivian L.; et al. LANGMUIR Volume: 29 Issue: 47 Pages: 14588-14594 (2013).
 - Solmaz, Mehmet E.; Sankhagowit, Shalene; Biswas, Roshni; et al. RSC ADVANCES Volume: 3 Issue: 37 Pages: 16632-16638 (2013).
 - Mell, Michael; Moleiro, Lara H.; Hertle, Yvonne; et al. EUROPEAN PHYSICAL JOURNAL E Volume: 36 Issue: 7 Article Number: 75 (2013).
 - Mitkova, Denitsa; Stoyanova-Ivanova, Angelina; Georgieva, Stela; et al. Edited by: Iglic, A; Kulkarni, CV; Tien, HT; et al. Book Series: Advances in Planar Lipid Bilayers and Liposomes Volume: 18 Pages: 1-20 (2013).
 - Stukelj, Roman; Sustar, Vid; Mrvar-Brecko, Anita; et al. GENERAL PHYSIOLOGY AND BIOPHYSICS Volume: 32 Issue: 1 Pages: 33-45 (2013).
 - Vitkova, Victoria; Petrov, Alexander G., Edited by: Iglic, A; Genova, J ADVANCES IN PLANAR LIPID BILAYERS AND LIPOSOMES, VOL 17 Book Series: Advances in Planar Lipid Bilayers and Liposomes Volume: 17 Pages: 89-138 (2013).
 - Wang H., Hu D., Zhang P., Communications in Computational Physics, 13, 1093-1106 (2013).
 - Patricia Bassereau, Benoit Sorre, Aurore Lévy, Advances in Colloid and Interface Science 208 47-57 (2014)
 - Cherstvy, Andrey G.; Petrov, Eugene P., PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 16 Issue: 5 Pages: 2020-2037 (2014).
 - R. Dimova, Advances in Colloid and Interface Science 208, 47-57 (2014).
 - Mitkova, D., Marukovich, N., Ermakov, Y.A., Vitkova, V., Colloids and Surfaces A 460, 71 (2014).
 - Pera, H., Kleijn, J.M., Leermakers, F.A.M., Journal of Chemical Physics 140, 065102, (2014).
 - Santhosh, P.B., Kiryakova S.I., Genova, J.L., Ulrich, N.P., Colloids and Surfaces A, 460, 248(2014).
 - Vitkova, V., Mitkova, D., Stanova, G., Colloids and Surfaces A, 460, 191 (2014).
 - M. Deserno, Chem. Phys. Lipids (in press).

Computer-Aided Investigations of the Hydrophobic Core of the Lipid Monolayer.

I. Bivas, B. Lemaire, P. Bothorel, in: "Molecular Description of Biological Membranes by Computer - Aided Conformational Analysis", R. Brasseur Ed., CRC Press, Boca Raton, USA, vol. 1 (1990) p. 85.
 - Sugar I.P., METHODS IN ENZYMOLOGY, 240, 569 (1994)
 - Petrov AG, The Lyotropic State of Matter, Gordon and Breach Science Publishers, 1999

Change in the Structure and Permeability of Phosphatidyl-choline Membranes Stimulated by Prostaglandins.

A. D. Sorokina, N. D. Janopolskaya, G. A. Deborin, T. L. Yailenko, L. I. Boguslavsky, I. Bivas, Bioelectrochemistry & Bioenergetics, 23, 271 (1990).
- Galvezruiz MJ, ACS Symposium Series, 493, 135 (1992).
- Gladilin KL, Adv. Biochem. Microbiol., 31, 53 (1995).

Effect of Flexoelectricity on the Curvature Elasticity of Membranes.

I. Bivas and A. Kozlov, Liquid Crystals, 8, 813 (1990).
- Winterhalter M., J. Phys. Chem., 96, 327 (1992)
- Petrov AG, The Lyotropic State of Matter, Gordon and Breach Science Publishers, 1999
- Petrov AG, Biochim. Biophys. Acta Biomembranes, 1561, 1, (2002).

Influence of the Electric Double Layers of the Membrane on the Value of its Flexoelectric Coefficient.

K. Hristova, I. Bivas, A. G. Petrov and A. Derzhanski, Mol. Cryst. Liq. Crystals, 200, 71 (1991).
- Raphael LM, Biophys. J., 78, 2844 (2000).
- Harland B., Brownell W.E., Spector A.A., Sun S.X., Phys. Rev. E, 81, 031907 (2010).
- Ahmadpoor, F.; Deng, Q.; Liu, L. P.; et al., PHYSICAL REVIEW E 88, Article Number: 050701 (2013).
- Loubet, Bastien; Hansen, Per Lyngs; Lomholt, Michael Andersen PHYSICAL REVIEW E 88, Article Number: 062715 (2013).

Molecular Theory of the Lifetime of Black Lipid Membranes.

I. Bivas, J. Colloid and Interface Sci., 144, 63 (1991).
- Winterhalter M., Klotz K.-H., and Benz, R., in "Electromanipulation of Cells", Ed. U. Zimmermann and G.A.Neil, CRC Press, Boca Raton, 1996, p. 137
- Petrov AG, The Lyotropic State of Matter, Gordon and Breach Science Publishers, 1999
- Vitkova, Victoria; Petrov, Alexander G., Edited by: Iglic,A;Genova, J; Book Series: Advances in Planar Lipid Bilayers and Liposomes, Volume: 17 Pages: 89-138 (2013).
- M. Winterhalter, Advances in Colloid and Interface Science 208, 121-128 (2014).

The Electric Part of the Curvature Elasticity of a Membrane and its Relation to Flexoelectricity.

I. Bivas and K. Hristova, Liquid Crystals, 9, 883 (1991).

- Todorov-AT, LANGMUIR, 10, 2344 (1994)
- Petrov AG, The Lyotropic State of Matter, Gordon and Breach Science Publishers, 1999
- Shoemaker SD, Biophys. J., 83, 2007 (2002).

Frequency Dependence of the Membrane Flexoelectric Voltage Responce. Adsorption of Multivalent Counterions on the Surface of Curved Lipid Bilayer.

K. Hristova, I. Bivas and A. Derzhanski, Mol. Cryst. Liq. Crystals, 215, 237 (1992).

- Petrov AG, Biochim. Biophys. Acta, 1561, 1, (2002).
- Petrov A. G., Membrane Science and Technology, 7, 205 (2003).
- Petrov AG, Current Topics in Membranes, 58,121 (2007).

Correlations between the form fluctuation modes of flaccid quasispherical lipid vesicles and their role in the calculation of the curvature elastic modulus of the vesicle membrane. Numerical results.

I. Bivas, L. Bivolarski, M. D. Mitov, A. Derzhanski,
J. Physique II, 2, 1423 (1992).

- Seifert U., Zetschrift fur Physic B, B-97, 299 (1995)
- Lipowsky R, CURRENT OPIN STRUCT BIOLOGY, 5, 531 (1995)
- Pieruschka P., PHYS REV E, 53, 2693 (1996)
- Seifert U, Advances in Physics, 46, 13 (1997)
- Petrov AG, The Lyotropic State of Matter, Gordon and Breach Science Publishers, 1999.
- Bruckner E, J. Phys. Chem. B, 104, 2311 (2000).
- Sevsek F., in "Advances in Planar Lipid Bilayers and Liposomes" Volume 12, Issue C, Pages 1-19 (2010).
- Vitkova, Victoria; Misbah, Chaouqi, Edited by: Iglic, A Book Series: Advances in Planar Lipid Bilayers and Liposomes Volume: 14 Pages: 257-292 (2011).
- Stukelj, Roman; Sustar, Vid; Mrvar-Brecko, Anita; et al. GENERAL PHYSIOLOGY AND BIOPHYSICS 32, Pages: 33-45 (2013).

Temperature and Chain Length Effects on Bending Elasticity of Phosphatidylcholine Bilayers

L. Fernandez-Puente, I. Bivas, M. D. Mitov, P. Meleard, Europhys. Lett., 28, 181 (1994)

- Honger T., Phys. Rev. Lett., 72, 3911 (1994).
- Lemmich J, PHYS REV LETT, 75, 3958 (1995)
- Kralchevsky P.A., J CHEM SOC-FARADAY TRANS, 91, 3415 (1995)
- Ipsen J.H., J. PHYSIQUE I, 5, 1563 (1995)
- Honger T, Biochemistry, 35, 9003 (1996)
- Konig S, Curr. Opinion in Colloid & Interface Sci., 1, 78 (1996).
- Lemmich J, PHYS REV E, 53, 5169 (1996)
- Hackl W, J. Physique II, 7, 1141 (1997)
- Honger T, Methods in Enzymology, 286, 168 (1997)
- Jutila A, J. Phys. Chem. B, 101, 7635 (1997)
- Lemmich J, Eur.Biophys.J. with Biophys.Lett., 25, 61 (1997)
- Lemmich J, Eur.Biophys.J. with Biophys.Lett., 25, 293 (1997)
- Hansen PL, Phys. Rev. E, 58, 2311 (1998)
- Heimburg T, Biochim. Biophys. Acta, 1415, 147 (1998)
- Nagle JF, Phys. Rev. E, 58, 7769 (1998)
- Danov K.D., in "Handbook of Detergents, Part A", ed. G. Broze, Surfactant Science Series, v. 82, CRC Press, 1999, p. 303.
- Nagle JF and Tristram-Nagle S., in "Lipid Bilayer Structure and Interactions", ed. J. Katsaras and T. Gutberlet, Springer, 1999, p. 1
- Schneider MF, Proc. Natl. Acad. Sci. USA, 96, 14312 (1999).
- Angelova MI, in Giant Vesicles, P. L. Luisi and P. Walde eds., John Wiley & Sons, Ltd, Chichester (2000), p.27.
- Bruckner E, J. Phys. Chem. B, 104, 2311 (2000)
- Dimova R, Biophys. J., 79, 340 (2000).
- Kharakoz DP, Russian J. Phys. Chem., 74, S177 (2000).
- Kharakoz DP, J. Phys. Chem. B, 104, 10368 (2000).
- Korreman SS, Eur. Phys. J. E, 1, 87 (2000).
- Seifert U, in Giant Vesicles, P. L. Luisi and P. Walde eds., John Wiley & Sons, Ltd, Chichester (2000), p.71.
- Jutila A., Lateral heterogeneity in model membranes, Academic Dissertation, University of Helsinki (2001).
- Bellet-Amalric E, in the Proceedings of the ILL Millenium

Symposium & European User Meeting, 6-7 April 2001, Grenoble, France, p. 51, (2001).

- Brown M. F., Phys. Rev. Lett., 64, 010901 (2001).
- Goldman C, J. Chem. Phys., 114, 6242 (2001).
- Ivanova VP, Phys. Rev. E, 63, 041914 (2001).
- Kralchevski P. A. and K. Nagayama, in "Particles at Fluid Interfaces and Membranes", Elsevier, Amsterdam, 2001, chap.10, pp. 426-468.
- Lee CH, Phys. Rev. E, 64, 020901 (2001).
- Leonard A, Langmuir, 17, 2019 (2001).
- Pencer J., LIGHT SCATTERING CHARACTERIZATION OF EXTRUDED VESICLES: SHAPE CHANGES AND MECHANICAL PROPERTIES, Thesis, in partial fulfilment of requirement for the degree of Doctor of Philosophy, The University of Guelph, Canada (2001).
- Soubiran L, Langmuir, 17, 7988 (2001).
- Brown MF, J. Am. Chem. Soc., 124, 8471 (2002).
- Kralchevsky P. A., in "Handbook of Surface and Colloid Chemistry", ed. K. S. Birdi, CRC Press, NY, Chapter 5, p. 106 (2002).
- Martinez GV., Phys. Rev. E, 66, 050902 (2002).
- Mishima K., Biochim. Biophys. Acta- Biomembr., 1565, 107 (2002).
- D'Onofrio T. G., Langmuir, 19, 1618 (2003).
- D'Onofrio T. G., Manipulating and Measuring the Physical Properties and Local Structure of Biomembranes, PhD Thesis, Pennsylvania State University (2003).
- Heimborg T., Membrane Science and Technology, 7, 269(2003).
- Kharakoz D. P., Membrane Science and Technology, 7, 239 (2003).
- Pabst G., Langmuir, 19, 1716 (2003).
- Shoemaker SD., Biophys. J., 84, 998 (2003).
- Squires AM, Seddon JM, and Templer RH, in "Biophysical Chemistry", ed. RH Templer and R. Leatherbarrow, Royal Society of Chemistry, 2003, p. 177
- Cherney DP., Analyt. Chem., 76, 4920 (2004).
- Harroun T. A., Phys. Rev. E, 69, 031906 (2004).
- Hostrup P., Phys. Chem. Chem. Phys., 6, 1608 (2004).
- Majhenc J., Biochim. Biophys. Acta, 1664, 257 (2004).
- Pabst G., Phys. Rev. E, 70, 021908 (2004).
- Rappolt M., Recent Res. Devel. Biophys., 3, 363 (2004).
- Rowat A.C., Eur. Biophys. J., 33, 300 (2004).
- Stevens MJ, J. Chem. Phys., 121, 11942 (2004).
- Tachev KD., Colloids & Surfaces B, 34, 123 (2004).
- Baumgart T., Das S., Webb W.W., Jenkins J.T., Biophys. J., 89, 1067, (2005).
- Daillant J., Bellet-Amalric E., Braslau A., Charitat T., Fragneto G., Graner F., Mora S., (...), Stidder B., Proc. Natl. Acad. Sci. (USA), 102, 11639 (2005).
- Gordeliy V.I., Cherezov V., Teixeira J., Phys. Rev. E, 72, 061913 (2005).
- Metso A., Impact of Hydrophobic Mismatch on Lateral Organisation of Lipids, Academic Dissertation, University of Helsinki, 2005.
- Rowat A. C., Keller D., Ipsen J.H. Biochim. Biophys. Acta-Biomembr., 1713, 29 (2005).
- Fresch B., Frezzato D., Moro G.J., Kothe G., Freed J.H., J. Phys. Chem. B, 47, 24238 (2006).
- Henriksen J., Rowat A.C., Brief E., Hsueh Y.W., Thewalt J.L., Zuckermann M.J., Ipsen J.H., Biophys. J., 90, 1639 (2006).
- Marsh D., Chem. and Phys. Lipids, 144, 146 (2006)
- Puff M., Angelova M.I., in "Advances in Planar Lipid Bilayers and Liposomes" Volume 5, Elsevier, 2006, Pages 173-228.

- Rappolt M., in "Advances in Planar Lipid Bilayers and Liposomes" Volume 5, Elsevier, 2006, Pages 253-283.
- Sasaki DJ, Stevens M.J. *MRS Bulletin*, 31, 521 (2006).
- Heimburg T., in "Thermal Biophysics of Membranes" Wiley-VCH, p.341, 2007.
- Horne III MK, Merryman P., Cullinane A., Remaley A.T., *European Journal of Haematology*, 80, 495 (2008).
- Jean-Francois F., Castano S., Desbat B., Odaert B., Roux M., Metz-Boutigue M.-H., Dufourc E.J., *Biochemistry*, 47, 6394 (2008).
- Kralchevski P.A., K. D. Danov, N. D. Denkov, in "Handbook of Surface and Colloid Chemistry", third edition, ed. KS Birdi, CRC Press, p.197, 2008.
- Rappolt M., Pabst G., in "Structure and Dynamics of Membranous Interfaces", edited by Dr. Kaushik Nag, Wiley, p. 45, 2008.
- Shen Y., Hao J., Hoffmann H., Wu Z., *Soft Matter*, 4, 805 (2008).
- Hale J., The thermal fluctuations of red blood cells, submitted by John Hale, to the University of Exeter as a thesis for the degree of Doctor of Philosophy in Physics, September 2009.
- Bogara M. B., Krishnamoorti R., *Langmuir*, 26, 5734 (2010).
- Danov K. D., Kralchevsky P.A., Stoyanov S.D., *Langmuir*, 26, 143 (2010).
- Basheva E. S., Kralchevsky P. A., Christov N. C., et al., *LANGMUIR* 27, 2382-2392 (2011).
- Orsi M., Essex J.W., *PLoS ONE*, 6, e28637 (2011).
- Thakkar F. M., Maiti P. K., Kumaran V., Ayappa K. G., Source: *SOFT MATTER*, 8, 3963 (2011).
- Bouvrais H., Advances in Planar Lipid Bilayers and Liposomes, 15, 1-75 (2012).
- Tayebi L., Vashaee D., Parikh A.N., *ChemPhysChem*, 13, 314-322 (2012).
- Gerbelli, Barbara B.; Rubim, Rafael L.; Silva, Emerson R.; et al. *LANGMUIR* 29, Issue: 45 Pages: 13717-13722 (2013).
- Grelard, Axelle; Guichard, Paul; Bonnafous, Pierre; et al. *FASEB JOURNAL* 27, Issue: 10 Pages: 4316-4326 (2013).
- Mingyang; Diggins, Patrick; Deserno, Markus, *JOURNAL OF CHEMICAL PHYSICS* 138, Article Number: 214110 (2013).
- Nakano, Takeo; Kikugawa, Gota; Ohara, Taku, *JOURNAL OF HEAT TRANSFER-TRANSACTIONS OF THE ASME* 135, Issue: 6 Special Issue: SI Article Number: 061301 2013).
- Tarazona, Pedro; Chacon, Enrique; Bresme, Fernando, *JOURNAL OF CHEMICAL PHYSICS* 139, Article Number: 094902 (2013).
- Vitkova, Victoria; Petrov, Alexander G., Edited by: Iglic,A; Genova,J; Book Series: Advances in Planar Lipid Bilayers and Liposomes Volume: 17 Pages: 89-138 (2013).
- Waagner, Dorthe; Bouvrais, Helene; Ipsen, John H.; et al. *CRYOBIOLOGY* 67 Issue: 3 Pages: 383-385 (2013).
- R. Dimova, Advances in Colloid and Interface Science 208, 47-57 (2014).
- Levine, Z.A., Venable, R.M., Watson, M.C., Lerner, M.G., Shea, J.-E., Pastor, R.W., Brown, F.L.H., *Journal of the American Chemical Society* 136, Pages 13582-13585 (2014).
- Venable, R.M., Sodt, A.J., Rogaski, B., Rui, H., Hatcher, E., MacKerell Jr., A.D., Pastor, R.W., Klauda, J.B., *Biophys. J.* 107, 134 (2014).

Estimation of thin-film platinum thermometer precision
in the range 13.8-273.16 K and common mathematical
description above 70 K
D. A. Dimitrov, J.K. Georgiev, A. L. Zahariev, I. Bivas,
Cryogenics, 36, 599 (1996).
- Rubin LG, *Cryogenics*, 37, 341 (1997)

Bending elasticities of modified membranes: Influences of temperature and sterol content,

P. Meleard, C. Gerbeaud, T. Pott, L. Fernandez-Puente, I. Bivas, M. D. Mitov, J. Dufourcq, P. Bothorel, Biophys. J., 72, 2616 (1997).

- Gradzielski M, Curr. Opinion in Colloid & Interface Sci., 3, 478 (1998)
- Nagle JF, Phys. Rev. E, 58, 7769 (1998)
- Heimburg T, Biochim. Biophys. Acta, 1415, 147 (1998)
- Tu KC, Biophys. J., 75, 2147 (1998)
- Bagatolli LA, Biophys. J., 77, 2090 (1999)
- Klosgen B, in "Lipid Bilayer Structure and Interactions", ed. J. Katsaras and T. Gutberlet, Springer, 1989, p. 1
- Harroun TA, Biophys. J., 76, 3176 (1999).
- Hotani H, Curr. Opinion Colloid Interface Sci., 4, 358 (1999)
- Manneville JB, Phys. Rev. Lett., 82, 4356 (1999).
- Schneider MF, Proc. Natl. Acad. Sci.(USA), 96, 1432 (1999)
- Angelova MI, in Giant Vesicles, P. L. Luisi and P. Walde eds., John Wiley & Sons, Ltd, Chichester (2000), p.27.
- Bagatolli LA, Biophys. J., 78, 290 (2000).
- Bagatolli LA, Biophys. J., 79, 434 (2000).
- Bagatolli LA, Chem. Phys. Lipids, 105, 135 (2000).
- Bruckner E, J. Phys. Chem. B, 104, 2311 (2000)
- Danov KD, Phys. Fluids, 12, 2711 (2000).
- Dimova R., Biophys. J., 79, 340 (2000).
- Dobereiner HG, Curr. Opinion Colloid Interface Sci., 5, 256 (2000).
- Heimburg T., Curr. Opinion Colloid Interface Sci., 5, 224 (2000)
- Klosgen B and Helfrich W, in Giant Vesicles, P. L. Luisi and P. Walde eds., John Wiley&Sons, Ltd, Chichester (2000), p.243.
- Nagle JF, Biochim. Biophys. Acta -Biomembranes, 1469, 159 (2000).
- Otten D, J. Phys. Chem. B, 104, 12119 (2000).
- Petracche HI, Biophys. J., 79, 3172 (2000)
- Walde P, in Giant Vesicles, P. L. Luisi and P. Walde eds., John Wiley & Sons, Ltd, Chichester (2000), p.297.
- Jutila A., Lateral heterogeneity in model membranes, Academic Dissertation, University of Helsinki (2001).
- Bagatolli LA, J. Fluorescence, 11, 141 (2001).
- Brown M. F., Phys. Rev. E, 64, 010901 (2001).
- Fragneto G., Europhys. Lett., 53, 100 (2001).
- Hellweg T, Colloids Surfaces A, 183, 159 (2001).
- Ivanova VP, Phys. Rev. E, 63, 041914 (2001).
- Lee CH, Phys. Rev. E, 64, 020901 (2001).
- Lee CH, Optical Engineering, 40, 2077 (2001).
- Loura LMS, Biophys. J., 80, 776 (2001).
- Manneville JB, Phys. Rev. E, 64, 021908 (2001).
- Mecke KR, J. Phys. - Cond. Matt., 13, 4615 (2001).
- Mishima K., Chem. Phys. Lipids, 110, 27 (2001).
- Pencer J., LIGHT SCATTERING CHARACTERIZATION OF EXTRUDED VESICLES: SHAPE CHANGES AND MECHANICAL PROPERTIES, Thesis, in partial fulfillment of requirement for the degree of Doctor of Philosophy, The University of Guelph, Canada (2001).
- Politowska E, Acta Biochimica Polonica, 48, 83 (2001)
- Boal D., Mechanics of the Cell, Cambridge University Press, 2002
- Brown MF, J. Am. Chem. Soc., 124, 8471 (2002).
- Komorowska M., J. Photochem. Photobiol., 68, 93 (2002).
- Martinez GV., Phys. Rev. E, 66, 050902 (2002).
- May S, Langmuir, 18, 6356 (2002).
- Miao L, Biophys. J., 82, 1429 (2002).

- Shillock JC, J. Chem. Phys., 117, 5048 (2002)
- Bagatolli LA, Methods in Enzymology, 360, 481 (2003).
- Bagatolli LA, Methods in Enzymology, 367, 233 (2003).
- Baran M., Chem. Phys. Lipids, 120, 21 (2003).
- Beer C, Virology, 308, 137 (2003).
- Chen PJ, Biophys. Chem., 105, 721 (2003).
- Dobereiner HG, Phys. Rev. Lett., 91, 048301 (2003).
- D'Onofrio TG, Langmuir, 19, 1618 (2003).
- D'Onofrio T. G., Manipulating and Measuring the Physical Properties and Local Structure of Biomembranes, PhD Thesis, Pennsylvania State University (2003).
- Douliez JP, J. Colloid Interface Sci., 266, 477 (2003).
- Fragneto J, Langmuir, 19, 7695 (2003).
- Heimburg T., Membrane Science and Technology, 7, 269 (2003).
- Holopainen JM, Methods in Enzymology, 367, 15 (2003).
- Jedlovszky P, J. Phys. Chem. B, 107, 5311 (2003).
- Koster G, Proc. Natl. Acad. Sci. USA, 100, 15583 (2003)
- Lee CC, Biophys. J., 84, 1756 (2003).
- Mecke KR, Langmuir, 19, 2080 (2003).
- Nieh M.-P., Phys. Rev. Lett., 91, 158105 (2003).
- Shoemaker SD, Biophys. J., 84, 998 (2003).
- Brocca P, Langmuir, 20, 2141 (2004).
- Gompper G. and Kroll DM, in "Statistical Mechanics of Membranes and Surfaces", ed. D.Nelson, T.Piran, and S.Weinberg, World Scientific, 2004, p.359
- Henriksen J., Eur. Biophys. J., 33, 732 (2004).
- Hostrup P., Phys. Chem. Chem. Phys., 6, 1608 (2004).
- Jedlovszky P, J. Phys. Chem., 108, 465 (2004).
- Lee CC, J. Chinese Chem. Soc., 51, 1183 (2004).
- Liang XM., J. Colloid Interface Sci., 278, 53 (2004).
- Lundbaek J.A., J. Gen. Physiol., 123, 599 (2004).
- Martinez GV, Langmuir, 20, 1043 (2004).
- Nikolov V. K., Model membranes grafted with long polymers, PhD thesis, Potsdam (Germany) (2004).
- Pecreaux J, Eur. Phys. J. E, 13, 277 (2004).
- Petracche HI, Macromolecular symposia, 219, 39 (2004).
- Rowat A.C., Eur. Biophys. J., 33, 300 (2004).
- Alinchenko M. G., Voloshin V.P., Medvedev N.N., Mezei M., Partay L., Jedlovszky P. J., Phys. Chem. B, 109, 16490 (2005).
- Baumgart T., Das S., Webb W.W., Jenkins J.T., Biophys. J., 89, 1067 (2005).
- Chu N, Kucerka, N., Liu Y., Tristram-Nagle S., Nagle J.F., Phys. Rev. E, 71, 041904 (2005).
- Daillant J., Bellet-Amalric E., Braslau A., Charitat T., Fragneto G., Graner F., Mora S., (...), Stidder B., Proc. Natl. Acad. Sci. (USA), 102, 11639 (2005).
- Imparato A., Shillcock J.C., Lipowsky R., Europhys. Lett., 69, 650 (2005).
- Karmakar S., Raghunathan V.A., Phys. Rev. E, 71, 061924 (2005).
- Korlach J., Reichle C., Muller T., Schnelle T., Webb W.W., Biophys. J., 89, 554 (2005).
- Koster G., Membrane Tube Formation by Motor Proteins, PhD thesis Leiden University (2005).
- Kuzmin P.I., Akimov S.A., Chizmadzhev Y.A., Zimmerberg J., Cohen F.S., Biophys. J., 88, 1120 (2005).
- Metso A., Impact of Hydrophobic Mismatch on Lateral Organisation of Lipids, Academic Dissertation, University of Helsinki, 2005.
- Dean DS, Manghi M., Phys. Rev. E, 74, 021916 (2006).

- Di Maio I. L., Carl D., Langehanenberg P., Valenzuela S.M., Battle A.R., Al Khazaaly S., Killingsworth M., (...), Martin D.K., Prog. Biomed. Optics and Imaging - Proceedings of SPIE, 6036, 60361R (2006).
- Dimova R., Aranda S., Bezlyepkina N., Nikolov V., Riske K.A., Lipowsky R., J. Phys. Cond. Mat. 18, S1151 (2006).
- Gondre-Lewis M. C., Petrache H.I., Wassif C.A., Harries D., Parsegian A., Porter F.D., Loh Y.P., J. Cell Sci., 119, 1876 (2006).
- Henriksen J., Rowat A.C., Brief E., Hsueh Y.W., Thewalt J.L., Zuckermann M.J., Ipsen J.H., Biophys. J., 90, 1639 (2006).
- Lecuyer S., Charitat T., Europhys. Lett., 75, 652 (2006).
- Marsh D., Shanmugavadi B., Kleinschmidt J.H., Biophys. J., 91, 227 (2006).
- Marsh D., Chem. and Phys. Lipids, 144, 146 (2006).
- Puff M., Angelova M.I., in "Advances in Planar Lipid Bilayers and Liposomes" Volume 5, Elsevier, 2006, Pages 173-228.
- Patty P. Y., USING VESICLES TO STUDY THE EFFECT OF STEROLS ON THE MECHANICAL STRENGTH OF LIPID MEMBRANES AND THE PROTEIN-MEMBRANE LIPID INTERACTIONS, PhD thesis, SIMON FRASER UNIVERSITY, 2006.
- Carattino M. D., Liu W., Hill W.G., Satlin L.M., Kleyman T.R., Am. J. Physiol. Renal. Physiol., 293, F316 (2007).
- Charitat T., Lecuyer S., J. Daillant, Collection SFN, 8, 115 (2007).
- Delatour V., Propulsion de liposomes geants par polymerisation d'actine: un modele pour l'interaction dynamique cytosquelette-membrane dans la motilite, THESE DE DOCTORAT DE L'UNIVERSITE PARIS XI - U.F.R. Scientifique d'ORSAY - Soutenue le Vendredi 14 septembre 2007.
- Dimova R., Pouliquen B., Methods in Molecular Biology, 400, 227-236 (2007).
- Heimburg T., in "Thermal Biophysics of Membranes" Wiley-VCH,p.346, 2007.
- Kohler G., Moya S.E., Leporatti S., Bitterlich C., Donath E., Europ. Biophys. J., 36, 337 (2007).
- Loura, L.M.S., Methods in Molecular Biology, 400, 489 (2007).
- Sarasij RC, Mayor S., Rao M., Biophys. J., 92, 3140 (2007).
- Shanmugavadi B., Spontaneous Folding of Human VDAC into Lipid Membranes is Oriented and Indicates a Partially Uncoupled Mechanism, Dissertation zur Erlangung des akademischen Grades des Doktors der Naturwissenschaften an der Universit?t Konstanz Mathematisch -Naturwissenschaftliche Sektion Fachbereich Biologie, Tag der m?ndlischen Pr?fung: 16.04.2007.
- Towles K.B., Dan N., Langmuir, 23, 13053 (2007).
- Zhou Y., Berry C.K., Storer P.A., Raphael R.M., Biomaterials, 28, 1298 (2007).
- Akimov S. A., Frolov V.A.J., Kuzmin P.I., Zimmerberg J., Chizmadzhev Y.A., Cohen F.S., Phys. Rev. E, 77, 051901 (2008).
- Charitat T., Lecuyer S., Biointerphases, 3, FB2 (2008).
- Gillmor SD, Weiss P.S., J. Phys. Chem. B, 112, 13629 (2008).
- Hernandez V. A., Scholz F., Bioelectrochemistry, 74, 149 (2008).
- Hernandez V. A., Scholz F., ISRAEL JOURNAL OF CHEMISTRY, 48 169 (2008)
- Lundquist A., Nanosized Bilayer Disks as Model Membranes for Interaction Studies,Dissertation presented at Uppsala University, Uppsala, 2008, for the degree of Doctor of Philosophy.
- Manojlovic V., Winkler K., Bunjes V., Neub A., Schubert R., Bugarski B., Leneweit G., Colloids and Surfaces B: 64, 284 (2008).
- Orsi M., Haubertin D.Y., Sanderson W.E., Essex J.W., J. Phys. Chem. B., 112, 802 (2008).
- Orsi M., The Development of a Coarse-Grain Biomembrane Model and

its Use in Multiscale Simulations of Solute Permeability, Thesis for the degree of Doctor of Philosophy, UNIVERSITY OF SOUTHAMPTON, FACULTY OF ENGINEERING, SCIENCE & MATHEMATICS School of Chemistry (2008).

- Pan J., Mills T.T., Tristram-Nagle S., Nagle J.F., Phys. Rev. Lett., 100, 198103 (2008).
- Rappolt M., Pabst G., in "Structure and Dynamics of Membranous Interfaces", edited by Dr. Kaushik Nag, Wiley, p. 45, 2008.
- Seto H., Yamada N.L., Nagao M., Hishida M., Takeda T., Eur. Phys. J., 26, 217 (2008).
- Shen Y., Hao J., Hoffmann H., Wu Z., Soft Matter, 4, 805 (2008).
- Arriaga L. R., Lpez-Montero I., Monroy F., Orts-Gi, G., Farago B., Hellweg T., Biophys. J., 96, 3629 (2009).
- Bruckner R. J., Mansy S.S., Ricardo A., Mahadevan L., Szostak, J.W., Biophys. J., 97, 3113 (2009).
- Garcia-Ruiz C., Mari M., Coiell A., Morales A., Caballero F., Montero J., Terrones O., (...), Fernandez-Checa J.C., Histology and Histopathology, 24, 117 (2009).
- Gillmor S.D., Heetderks J.J., Weiss P.S., J. Phys. Chem. B, 113, 11490 (2009).
- Hale J., The thermal fluctuations of red blood cells, submitted by John Hale, to the University of Exeter as a thesis for the degree of Doctor of Philosophy in Physics, September 2009.
- Izvekov S., Voth G.A., J. Phys. Chem. B, 113, 4443 (2009).
- Oradd G., Shahedi V., Lindblom G., Biochim Biophys Acta - Biomembranes, 1788, 1762 (2009).
- Pan J., Tristram-Nagle S., Nagle J.F., Phys. Rev. E, 80, 021931 (2009).
- Pinot M., Chesnel F., Kubiak J.Z., Arnal I., Nedelec F.J., Gueroui Z., Current Biology, 19, 954 (2009).
- Roldan-Vargas S., Pelaez-Fernandez M., Barnadas-Rodriguez R., Quesada-Perez M., Estelrich J., Callejas-Fernandez J., Phys. Rev. E, 80, 021403 (2009).
- Sagar G. H., Bellare J.R., J. Phys. Chem. B, 113, 13805 (2009).
- Shimanouchi T., Umakoshi H., Kuboi R., Langmuir, 25, 4835 (2009).
- Tian A. W., Capraro B.R., Esposito C., Baumgart T., Biophys. J., 97, 1636 (2009).
- Bruning B., Rheinstadter M.C., Hiess A., Weinhausen B., Reusch, T., Aeffner S., Salditt T., Eur. Phys. J. E, 31, 419 (2010).
- Gracia R. S., Bezlyepkina N., Knorr R.L., Lipowsky R., Dimova R., Soft Matter, 6, 1472 (2010).
- De Meyer F.J.-M., Benjamini A., Rodgers J.M., Misteli Y., Smit B., J. Physical Chemistry B, 114, 10451 (2010).
- Laohavosit A., Brown A.T., Cicuta P., Davies J.M., Plant Physiology, 152, 1824 (2010).
- Lopez-Montero I., Arriaga L.R., Rivas G., Velez M., Monroy F., Chem. Phys. Lipids, 163, 56 (2010).
- Orsi M., Michel J., Essex J.W., J. Phys. Cond. Mat., 22, 155106 (2010).
- Pili B., Bourgaux C., Amenitsch H., Keller G., Lepetre-Mouelhi S., Desmaele D., Couvreur P., Ollivon M., Biochim Biophys Acta - Biomembranes, 1798, 1522 (2010).
- Portet T., Dimova R., Biophys. J., 99, 3264 (2010).
- Rosetti C. M., Maggio B., Wilke N., Biochim Biophys Acta - Biomembranes, 1798, 498 (2010).
- Sullan RMA, Li JK, Hao CC, Walker GC2, Zou S, BIOPHYSICAL JOURNAL, 99, 507 (2010).
- Tian A., SORTING OF AMPHIPHILE MEMBRANE COMPONENTS IN CURVATURE

AND COMPOSITION GRADIENTS, A DISSERTATION in Chemical and Biomolecular Engineering Presented to the Faculties of the University of Pennsylvania in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy, 2010.

- Usenik P., Vrtovec T., Pernu F., Likar B., 2010 20th International Conference on Pattern Recognition, ICPR 2010; Istanbul; 23 August 2010 through 26 August 2010; Category number E4109; Code 82392 (2010).
- Zook J. M., Vreeland W. N., Soft Matter, 6, 1352 (2010).
- Basheva E. S., Kralchevsky P. A., Christov N. C., et al., LANGMUIR 27, 2382, (2011).
- Chung., Boxer SG., LANGMUIR, 27, 5492 (2011).
- Jing J., Li Y., Liu J., Zhan S., Progress in Chemistry, 23, 2598-2606 (2011).
- Gillmor S., Lee J., Ren X., PHYSICA D-NONLINEAR PHENOMENA, 240, 1913 (2011).
- Meilhac N., Destainville N., J. PHYS. CHEMISTRY B, 115 7190 (2011).
- Perlo J., Meledandri C.J., Anoardo E., Brougham D. F., J. PHYS. CHEM. B, 115 3444-3451 (2011).
- Shiba., Noguchi., PHYSICAL REVIEW E, 84, 031926 (2011).
- Usenik P., Vrtovec T., Pernu F., Likar B., MEDICAL & BIOLOGICAL ENGINEERING & COMPUTING, 49, 957 (2011).
- Bouvrais H., Advances in Planar Lipid Bilayers and Liposomes, 15, 1-75 (2012).
- Decker C., Fahr A., Kuntsche J., May, S., Chemistry and Physics of Lipids, 165, 520-529 (2012).
- Dimova R., Advances in Planar Lipid Bilayers and Liposomes, 16, 1-50 (2012).
- Forsyth A.M., Braunm?ller, S., Wan J., Franke T., Stone H.A., Microvascular Research 83, 347-351 (2012).
- Ogunyankin M.O., Torres,A., Yaghmaie F., Longo, M.L., Langmuir 28, 7107-7113 (2012).
- Reviakine I., Gallego M., Johannsmann D., Tellechea E., Journal of Chemical Physics, 136, 084702 (2012).
- Schrader W., Behrends R., Kaatze U., Journal of Physical Chemistry B, 116, 2446-2454 (2012).
- Shao C., Kendall E.L., Devoe D.L., Lab on a Chip - Miniaturisation for Chemistry and Biology, 12, 3142-3149 (2012).
- Staneva, Galya; Momchilova, Albena; Koumanov, Kamen; et al. Edited by: Iglic, A; Genova, J, Book Series: Advances in Planar Lipid Bilayers and Liposomes Volume: 17 Pages: 167-213 (2013).
- Vanegas J.M., Contreras M.F., Faller R., Longo M.L., Biophysical Journal, 102, 507 (2012).
- Yamada N. L., Langmuir, 28, 17381-17388 (2012).
- Yi Zheng, Nagao Michihiro, Bossev Dobrin P., BIOPHYSICAL CHEMISTRY 160, 20, (2012).
- Watson M.C., Brandt E.G., Welch P.M., Brown F.L.H., Physical Review Letters 109, 028102 (2012).
- Hu, Mingyang; Diggins, Patrick; Deserno, Markus, JOURNAL OF CHEMICAL PHYSICS Volume: 138 Issue: 21 Article Number: 214110 (2013).
- Kawamoto, Shuhei; Nakamura, Takenobu; Nielsen, Steven O.; et al. JOURNAL OF CHEMICAL PHYSICS 139, Article Number: 034108 (2013).
- Khan, Muhammad Shuja; Dosoky, Noura Sayed; Williams, John Dalton INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES 14, 21561 (2013).
- Loftus, Andrew F.; Noreng, Sigrid; Hsieh, Vivian L.; et al. LANGMUIR Volume: 29, Pages: 14588-14594 (2013).
- Mitkova, Denitsa; Stoyanova-Ivanova, Angelina; Georgieva, Stela; et al. Edited by: Iglic, A; Kulkarni, CV; Tien, HT; et al.

- Book Series: Advances in Planar Lipid Bilayers and Liposomes
 Volume: 18 Pages: 1-20 (2013).
- Nagle, John F., FARADAY DISCUSSIONS, 161, 11-29 (2013).
 - Ogunyankin, Maria O.; Huber, Dale L.; Sasaki, Darryl Y.; et al.
LANGMUIR Volume: 29 Issue: 20 Pages: 6109-6115 (2013).
 - Pannuzzo, Martina; Milardi, Danilo; Raudino, Antonio; et al.
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, 15, Pages: 8940-8951 (2013).
 - Phapal, Sopan M.; Sunthar, P., *CHEMISTRY AND PHYSICS OF LIPIDS*
 Volume: 172 Pages: 20-30 (2013).
 - Shimanouchi, Toshinori; Umakoshi, Hiroshi; Kuboi, Ryoichi
JOURNAL OF COLLOID AND INTERFACE SCIENCE 394 Pages: 269-276 (2013).
 - Stukelj, Roman; Sustar, Vid; Mrvar-Brecko, Anita; et al.
GENERAL PHYSIOLOGY AND BIOPHYSICS 32 Pages: 33-45 (2013).
 - Vitkova, Victoria; Petrov, Alexander G., Edited by: Iglic, A; Genova, J
 Book Series: Advances in Planar Lipid Bilayers and Liposomes
 Volume: 17 Pages: 89-138 (2013).
 - Bouvrais, Helene; Duelund, Lars; Ipsen, John H.
LANGMUIR Volume: 30 Issue: 1 Pages: 13-16 (2014).
 - Beate-Annette Brüning, Sylvain Prévost, Ralf Stehle, Roland Steitz,
 Peter Falus, Bela Farago, Thomas Hellweg, *Biochimica et Biophysica Acta - Biomembranes* 1838, 2412 (2014).
 - R. Dimova, *Advances in Colloid and Interface Science* 208, 47-57 (2014).
 - Luka Kristanc, Bojan Boži?, Gregor Gomiš?ek, *Biochimica et Biophysica Acta - Biomembranes* 1838, 2635 (2014).
 - John F. Nagle, Michael S. Jablin, Stephanie Tristram-Nagle, Kiyotaka Akabori, *Chemistry and Physics of Lipids* (in press)
 - T.T.H. Pham, C. Gueutin, M. Cheron, S. Abreu, P. Chaminade, P.M. Loiseau, G. Barratt, *Biochimie* (in press).

Elastic properties of lipid bilayers containing modified lipids,
 I. Bivas, D. Georgescauld, N. Jeandaine, M. Winterhalter, P. Meleard,
 G. Marinov, P. Bothorel, *Prog. Colloid Polym. Sci.*, 105, 197 (1997).

- L. Cantu, *J. Phys. Cond. Mat.*, 9, 5033 (1997).
- Petrov AG, *The Lyotropic State of Matter*, Gordon and Breach
 Science Publishers, 1999

Elasticity of bilayers containing PEG lipids,
 I. Bivas, M. Winterhalter, P. Meleard, P. Bothorel,
Europhys. Lett., 41, 261 (1998).

- Frette V, *Phys. Rev. Lett.*, 83, 2465 (1999).
- Chu S.-C., *The Interactions between Phosphatidylcholine Vesicles and Ionic Surfactants : Temperature and PEG-Lipid*, Master's Thesis, Department of Chemical and Materials Engineering, National Central University, Taiwan (2001).
- Nicolas A, *Europhys. Lett.*, 53, 687 (2001).
- Auth T., *Effective Curvature Elastic Constants for Membrane-Polymer Systems*, Inaugural-Dissertation zur Erlangung des Doktorgrads der Mathematisch-Naturwissenschaftlichen Fakultat der Universitat zu Koln (2003).
- Albertorio F., Diaz A.J., Yang T., Chapa V.A., Kataoka S., Castellana E.T., Cremer P.S., *Langmuir*, 21, 7476 (2005).
- Albertorio F., *SUPPORTED PHOSPHOLIPID MEMBRANES AS BIOMETRIC LABS-ON-A-CHIP: ANALYTICAL DEVICES THAT MIMIC CELL MEMBRANE ARCHITECTURES AND PROVIDE INSIGHT INTO THE MECHANISM OF BIOPRESERVATION*, A Dissertation Submitted to the Office of Graduate Studies of Texas A&M University in partial fulfillment of the requirements for the degree of DOCTOR OF PHILOSOPHY

(2006).

- Daniel S., Albertorio F., Cremer P.S., MRS Bulletin, 31, 536 (2006).
- Cans A.-S., Andes-Koback M., Keating C.D., J. American Chem. Society, 130, 7400 (2008).
- Kotulská M., Kubica K., in "Advances in Planar Lipid Bilayers and Liposomes", Volume 7, Elsevier, Pages 1-38, (2008).
- Nam J., Vanderlick T.K., Beales P.A., Soft Matter, 8, 7982-7988 (2012).
- Everett, W. Neil; Bevan, Michael A., SOFT MATTER 10, 332 (2014).

Thermal shape fluctuations of a quasi spherical lipid vesicle when the mutual displacements of its monolayers are taken into account,

I. Bivas, P. Meleard, I. Mitcheva, P. Bothorel, Colloids and Surfaces A, 157, 33 (1999).

- Petrov AG, The Lyotropic State of Matter, Gordon and Breach Science Publishers, 1999.
- Miao L, Lomholt M. A., Kleis J., Eur. Phys. J. E, 9, 143 (2002).
- Shkulipa S. A., COMPUTER SIMULATIONS OF LIPID BILAYER DYNAMICS, DISSERTATION to obtain the doctor's degree at the University of Twente (2006).
- Shkulipa S. A., den Otter W.K., Briels W.J., Phys. Rev. Lett., 96, 178302 (2006).
- Shkulipa S. A., den Otter W.K., Briels W.J., J. Chem. Phys., 125, 234905 (2006).
- Cantu L., Del Favero E., Sonnino S., Prinetti A., CHEMISTRY AND PHYSICS OF LIPIDS, 164, 796 (2011).
- Zupanc J., Drobne D., Drasler B., Valant J., Iglic A., Kralj-Iglic V., Makovec D., Rappolt M., Sartori B., Kogej K., Carbon, 50, 1170 (2012).
- Vitkova, Victoria; Petrov, Alexander G., Edited by: Iglic,A; Genova,J; Book Series: Advances in Planar Lipid Bilayers and Liposomes Volume: 17 Pages: 89-138 (2013).

Mechanical properties of lipid bilayers, containing modified lipids
I. Bivas, V. Vitkova, M. D. Mitov, M. Winterhalter, R. G. Alargova, P. Meleard, and P. Bothorel, in "Giant Vesicles", P. Walde and P. L. Luisi eds., John Wiley & Sons, p.207 (2000).

- Siegel A.P., Hussain N.F., Johnson M., Naumann C.A., Soft Matter, 8, 5873-5880 (2012).

Elasticity and Shape Equation of a Liquid Membrane

I. Bivas, The Europ. Phys. J. B, 29, 317 (2002).

- Mader M.-A., Vitkova V., Abkarian M., Viallat A., Podgorski T., Eur. Phys. J. E, 19, 389 (2006).

Bending Elasticity and Bending Fluctuations of Lipid Bilayer Containing an Additive,

I. Bivas and P. Meleard, Phys. Rev. E, 67, 012901 (2003).

- Hoffmann M., Eur. Phys. J. E, 16, 125 (2005).
- Biscari P., Napoli G., Biomechanics and Modeling in Mechanobiol., 6, 297(2007).
- Del Favero E., Raudino A., Brocca P., Motta S., Fragneto G., Corti M., Cantù L., LANGMUIR, 25, 4190 (2009).
- Pan J., Tielemans D.P., Nagle J.F., Kucerka N., Tristram-Nagle, S., Biochim. Biophys. Acta Biomembranes, 1788, 1387 (2009).
- Reister-Gottfried E., Leitenberger S.M., Seifert U., Phys. Rev. E, 81 031903 (2010).

- Raudino A., Pannuzzo M., J. Chem. Phys., 132, 045103 (2010).
- Raudino A., Pannuzzo M., J. Phys. Chem. B, 114, 15495 (2010).
- Shchelokovskyy P., Tristram-Nagle S., Dimova R., New Journal of Physics, 13, 025004 (2011).
- Dimova R., Advances in Planar Lipid Bilayers and Liposomes, 16, 1-50 (2012).
- Stukelj, Roman; Sustar, Vid; Mrvar-Brecko, Anita; et al. GENERAL PHYSIOLOGY AND BIOPHYSICS 32, Pages: 33-45 (2013)
- Vitkova, Victoria; Petrov, Alexander G., Edited by: Iglic, A; Genova, J Book Series: Advances in Planar Lipid Bilayers and Liposomes Volume: 17 Pages: 89-138 (2013).
- R. Dimova, Advances in Colloid and Interface Science 208, 47-57 (2014).
- Poornima Budime Santhosh, Aljaž Velikonja, Šarka Perutkova, Ekaterina Gongadze, Mukta Kulkarni, Julia Genova, Kristina Elerši?, Aleš Igli?, V. Kralj-Igli?, Nataša P. Ulrih, Chem. Phys. Lipids 178, 52 (2014).
- Vitkova, V., Mitkova, D., Stančeva, G., Colloids and Surfaces A, 460, 191 (2014).

Rubbing-induced surface textures in nematic MBBA layers and their behaviour under applied d.c. or a.c. voltages

H. P. Hinov, I. Bivas, M. D. Mitov, and K. Shoumarov, Liquid Crystals, 30 (8), 945 (2003).

- Tadapatri P., Krishnamurthy K.S., Journal of Physical Chemistry B, 116 (2), 782 (2012).
- Chiba, Takaaki; Inoue, Hayato; Kuwahara, Shota; et al. JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY A-CHEMISTRY Volume: 266, Pages: 1-5 (2013).

A further experimental study of parallel surface-induced flexoelectric domains (PSIFED) (flexo-dielectric walls)

H. P. Hinov, I. Bivas, M. D. Mitov, K. Shoumarov, and Y. Marinov, Liquid Crystals, 30 (11), 1293 (2003).

- Elston S. J, Phys.Rev. E, 78, 011701 (2008).
- Derfel G., Buczkowska M., MOLECULAR CRYSTALS AND LIQUID CRYSTALS Sp. Iss. SI, 213 (2011).
- Tadapatri P., Krishnamurthy K.S., Journal of Physical Chemistry B, 116 (2), 782 (2012).
- Aguirre L.E., Anoardo E., Iber N., Buka A., Physical Review E, 85, 041703 (2012).
- Krishnamurthy, K. S.; Kumar, Pramoda; Kumar, M. Vijay, PHYSICAL REVIEW E Volume: 87, Article Number: 022504 (2013).

Boundaries of the Liquid Crystalline Phase in the Binary System Triton-X-114 - Water

S. Panayotova and I. Bivas, Bulg. J. Phys., 31, 83 (2004).
- Zhao G., Shing Bor Chen, Langmuir, 23, 9967 (2007).

Fields and forces acting on a planar membrane with a conducting channel,

- I. Bivas and C. Danelon, Phys. Rev. E, 69, 041901 (2004).
- Temiz-Artmann A, Linder P., Kayser P., Digel I., Artmann G.M., Lucke P., Methods and Findings in Experimental and Clinical Pharmacology, 27, 391-394 (2005).
- Kullich W., Schwann H., Walcher J., Machreich K., J. of Back and Musculoskeletal Rehabilitation, 19, 79 (2006).
- Neu W.K. and Neu J. C., in "Irreversible Electroporation", edited by B. Rubinsky, Springer Berlin Heidelberg, pp.85-122, 2010.

Mechanical properties of lipid mono- and bilayers in the presence of small carbohydrates in the aqueous phase,

V. Vitkova, J. Genova, M. D. Mitov, and I. Bivas, Compt. rendus Acad. bulg. Sci., 57(6), 55 (2004).

- Divet F., G. Danker, and C. Misbah, Phys. Rev. E, 72, 041901 (2005).

Surface charge effect on the bending elasticity of lipid bilayers

V. Vitkova, J. Genova, O. Finogenova, M. D. Mitov, Yu. Ermakov, and I. Bivas, Compt. rendus Acad. bulg. Sci., 57 (11), 25 (2004).

- David R. Slochower, Yu-Hsiu Wang, Richard W. Tourdot, Ravi Radhakrishnan, Paul A. Janmey, Advances in Colloid and Interface Science 208, 177-188 (2014).

Permeability and Hidden Area of Lipid Bilayer,

V. Vitkova, J. Genova, and I. Bivas, Europ. Biophys.J., 33, 706 (2004).

- Inaba T., Ishijima A., Honda M., Nomura F., Takiguchi K., Hotani H., J. Molecular Biol., 348, 325 (2005).
- Gauthier A., Jo's, B., J. Chem. Phys. B, 127, 105104 (2007).
- Minetti C., Callens N., Coupler G., Podgorski T., Dubois F., Applied Optics, 47, 5305 (2008).
- Shchelokovskyy P., Tristram-Nagle S., Dimova R., New Journal of Physics, 13, 025004 (2011).
- Seth, Mansi; Ramachandran, Arun; Leal, L. Gary, LANGMUIR Volume: 29 Issue: 46 Pages: 14057-14065 (2013).

Alamethicin influence on the membrane bending elasticity,

V. Vitkova, P. Meleard, T. Pott, and I. Bivas, Europ. Biophys. J., 35, 281 (2006).

- Marsh D., Chem. and Phys. Lipids, 144, 146 (2006).
- Hanulova M., Interaction of antimicrobial peptides with lipid membranes, Dissertation zur Erlangung des Doktorgrades des Departments Physik der Universitat Hamburg, Hamburg, 2008.
- Pan J., Tielemans D.P., Nagle J.F., Kucerka N., Tristram-Nagle, S., Biochim. Biophys. Acta Biomembranes, 1788, 1387 (2009).
- Lee Ji-Hwan, Choi Sung-Min, Doe Changwoo, Faraone Antonio, Pincus Philip A., and Kline Steven R., Phys. Rev. Lett., 105, 038101 (2010).
- Pabst G., N. Kucerka, M.-P. Nieh, M.C. Rheinstadter, J. Katsaras, Chem. Phys. Lipids, 163, 460 (2010).
- Reister-Gottfried E., Leitenberger S.M., Seifert U., Phys. Rev. E, 81, 031903 (2010).
- Settles E.I., Loftus A.F., McKeown A.N., Parthasarathy R., Biophys. J., 99, 1539 (2010).
- Bouvrais H., Advances in Planar Lipid Bilayers and Liposomes, 15, 1-75 (2012).
- Bruno, Michael J.; Rusinova, Radda; Gleason, Nicholas J.; et al. FARADAY DISCUSSIONS Volume: 161 Pages: 461-480 Published: 2013
- Genova, Julia, Edited by: Iglic, A; Genova, J; Book Series: Advances in Planar Lipid Bilayers and Liposomes Volume: 17 Pages: 1-27 Published: 2013.
- Pabst, Georg, Edited by: Iglic, A; Kulkarni, CV; Tien, HT; et al. Book Series: Advances in Planar Lipid Bilayers and Liposomes Volume: 18 Pages: 81-109 Published: 2013.
- R. Dimova, Advances in Colloid and Interface Science 208, 47-57 (2014).
- Asif Rahaman, Themis Lazaridis, Biochim. Biophys Acta - Biomembranes 1838, 1440 (2014).

Sugars in the aqueous phase change the mechanical properties of lipid mono- and bilayers

V. Vitkova, J. Genova, M. D. Mitov and I. Bivas, Mol. Cryst. Liq. Cryst. 449 95 (2006).

- Mertins O., Dimova R., Langmuir, 27, 5506 (2011).
- Shchelokovskyy P., Tristram-Nagle S., Dimova R., New Journal of Physics, 13, 025004 (2011).
- Peterlin P., Arrigler V., Haleva E., Diamant H., Soft Matter, 8, 2185 (2012).
- Meleard, Philippe; Pott, Tanja, Edited by: Iglic, A; Genova, J; Book Series: Advances in Planar Lipid Bilayers and Liposomes Volume: 17 Pages: 55-75 (2013).
- Nagle, John F., FARADAY DISCUSSIONS 161, Pages: 11-29 (2013).
- Solmaz, Mehmet E.; Sankhagowit, Shalene; Biswas, Roshni; et al. RSC ADVANCES Volume: 3 Issue: 37 Pages: 16632-16638 (2013).
- John F. Nagle, Michael S. Jablin, Stephanie Tristram-Nagle, Kiyotaka Akabori, Chemistry and Physics of Lipids (in press)

Electrostatic and mechanical properties of a flat lipid bilayer containing ionic lipids,

I. Bivas, Colloids and Surfaces A: Physicochem. and Engineering Aspects, 282-283, 423 (2006).

- Wiacek, A.E., Colloids and Surfaces A, 302, 141 (2007).
- Wiacek, A.E., Colloids and Surfaces A, 332, 150 (2009).
- Gongadze E., van Rienen U., Kralj-Iglic V., Iglic A., GENERAL PHYSIOLOGY AND BIOPHYSICS, 30, 130 (2011).
- Gongadze E., Kabaso D., Bauer S., Slivnik T., Schmuki P., van Rienen U., Iglic A., INTERNATIONAL JOURNAL OF NANOMEDICINE 6, 1801 (2011).
- Gongadze E., Iglic A., Bioelectrochemistry, 87, 199-203 (2012).
- Gongadze E., Iglic A., Bulgarian J. Phys. 39, 12-28 (2012).
- Gongadze, E.; van Rienen, U.; Kralj-Iglic, V.; et al., COMPUTER METHODS IN BIOMECHANICS AND BIOMEDICAL ENGINEERING Volume: 16 Issue: 5 Pages: 463-480 (2013).
- Loubet, Bastien; Hansen, Per Lyngs; Lomholt, Michael Andersen PHYSICAL REVIEW E 88, Article Number: 062715 (2013).
- Velikonja, Aljaz; Santhosh, Poornima Budime; Gongadze, Ekaterina; et al. INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES 14, 15312 (2013).
- Vitkova, Victoria; Petrov, Alexander G., Edited by: Iglic, A; Genova, J; Book Series: Advances in Planar Lipid Bilayers and Liposomes Volume: 17 Pages: 89-138 (2013).

Elasticity and Electrostatics of Amphiphilic Layers,

I. Bivas and Yu. A. Ermakov, in "Advances in Planar Lipid Bilayers and Liposomes", edited by A. Leitmannova Liu, Elsevier, Amsterdam, 2007, Volume 5, Chapter 11, pp. 313-343.

- Gongadze E., Kabaso D., Bauer S., Slivnik T., Schmuki P., van Rienen U., Iglic A., INTERNATIONAL JOURNAL OF NANOMEDICINE 6, 1801 (2011).
- Gongadze E., van Rienen U., Kralj-Iglic V., Iglic A., GENERAL PHYSIOLOGY AND BIOPHYSICS, 30, 130 (2011).
- Gongadze E., Iglic A., Bioelectrochemistry, 87, 199-203 (2012).
- Gongadze E., Iglic A., Bulgarian J. Phys. 39, 12-28 (2012).
- Iglic, A.; Gongadze, E, Book Author(s): Dimova-Malinovska, D; Nesheva, D; Pecheva, E; et al. Book Series: Journal of Physics Conference Series, Volume: 398 Article Number: 012004 (2012).
- Gongadze, Ekaterina; Iglic, Ales, GENERAL PHYSIOLOGY AND BIOPHYSICS Volume: 32 Issue: 1 Pages: 143-145 (2013)
- Gongadze, E.; van Rienen, U.; Kralj-Iglic, V.; et al., COMPUTER METHODS IN BIOMECHANICS AND BIOMEDICAL ENGINEERING Volume: 16 Issue: 5 Pages: 463-480 (2013).
- Gongadze, Ekaterina; Velikonja, Ajaz; Slivnik, Tomaz; et al.

ELECTROCHIMICA ACTA Volume: 109 Pages: 656-662 (2013).

- Mitkova, Denitsa; Stoyanova-Ivanova, Angelina; Georgieva, Stela; et al. Edited by: Iglic, A; Kulkarni, CV; Tien, HT; et al., Book Series: Advances in Planar Lipid Bilayers and Liposomes Volume: 18 Pages: 1-20 (2013).
- Vitkova, Victoria; Petrov, Alexander G., Edited by: Iglic, A; Genova, J; Book Series: Advances in Planar Lipid Bilayers and Liposomes Volume: 17 Pages: 89-138 (2013).
- Gongadze, E., Velikonja, A., Perutkova, Š., Kramar, P., Ma?ek-Lebar, A., Kralj-Igli?, V., Igli?, A., Electrochimica Acta 126 42 (2014)
- Velikonja, A., Gongadze, E., Kralj-Iglic, V., Iglic, A., International Journal of Electrochemical Science 9, 5885 (2014).

Membrane bending elasticity of human erythrocyte ghosts,

V. Vitkova, V. Dolchinkova, M. D. Mitov, and I. Bivas, Journal of Optoelectronics and Advanced Materials, 9, 431 (2007).

- Sinclair GA, Physical and Chemical Constraints on the Near-Bottom Ecology of Karenia brevis, A dissertation submitted to the Graduate Faculty of North Carolina State University in partial fulfillment of the requirements for the Degree of Doctor of Philosophy, Marine Earth and Atmospheric Sciences, Raleigh, North Carolina, 2008.

Large scale vibrational Hamiltonian calculations on thiophosgene, Svetoslav Rashev, Isak Bivas, David C. Moule, Chemical Physics Letters, 438, 153-156 (2007).

- McKellar A.R.W., Billinghamurst B.E., J. Molecular Spectroscopy, 260, 66 (2010).

Shape fluctuations of nearly spherical lipid vesicles and emulsion droplets, Isak Bivas, Phys. Rev. E, 81, 061911 (2010).

- Przybylo M., Procek J., Kaczynski M., Borowik T., Hof M., Langner M., Advances in Planar Lipid Bilayers and Liposomes, 15, 105-137 (2012).
- Simundic, Metka; Drasler, Barbara; Sustar, Vid; et al., BMC VETERINARY RESEARCH 9, Article Number: 7 (2013).
- Stukelj, Roman; Sustar, Vid; Mrvar-Brecko, Anita; et al. GENERAL PHYSIOLOGY AND BIOPHYSICS 32, Pages: 33-45 (2013).
- R. Dimova, Advances in Colloid and Interface Science 208, 47-57 (2014).
- Vitkova, V., Mitkova, D., Staneva, G., Colloids and Surfaces A, 460, 191 (2014).

Bending rigidity of lipid membranes and the pH of aqueous surroundings, V. Vitkova, D. Mitkova, A. Stoyanova-Ivanova, N. Kozarev, I. Bivas, COMPTES RENDUS DE L'ACADEMIE BULGARE DES SCIENCES, Volume 65, Issue 3, Pages: 329-334 (2012).

- Genova, Julia, Edited by: Iglic, A; Genova, J; Book Series: Advances in Planar Lipid Bilayers and Liposomes Volume: 17 Pages: 1-27 (2013).

Registration and analysis of the shape fluctuations of nearly spherical lipid vesicles,

Julia Genova, Victoria Vitkova, and Isak Bivas, Phys. Rev. E, 88, 022707 (2013).

- David Abreu, Michael Levant, Victor Steinberg, Udo Seifert, Advances in Colloid and Interface Science 208, 129-141 (2014).

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