

List of publications of Martin Hof from 2010:

(93 published; 9/2016)

Overview (conference abstracts, editorials, protein data, and news items are not listed):

- 80 articles in impacted Journals
- 1 Articles in Conference Proceedings listed in Web of Science
- 8 Chapters in Books
- 4 Edited Book

(Entire list of publications till 2009 has 113 entries)

1. Amaro, Mariana - Šachl, Radek - Aydogan, Gokcan - Mikhalyov, I. - Vácha, R. - Hof, Martin. **GM1 Ganglioside Inhibits β -Amyloid Oligomerization Induced by Sphingomyelin.** *Angewandte Chemie : International edition*. Roč. 55, č. 32 (2016), s. 9411-9415 ISSN 1521-3773
2. Dmytro Dziuba, Petr Pospíšil, Ján Matyašovský, Jiří Brynda, Dana Nachtigallová, Lubomír Rulíšek, Radek Pohl, Martin Hof and Michal Hocek. **Solvatochromic fluorene-linked nucleoside and DNA as color-changing fluorescent probes for sensing interactions.** *Chemical Science*, doi: [10.1039/C6SC02548J](https://doi.org/10.1039/C6SC02548J)
3. Dziuba, Dmytro - Jurkiewicz, Piotr - Cebecauer, Marek - Hof, Martin - Hocek, Michal **A Rotational BODIPY Nucleotide: An Environment-Sensitive Fluorescence-Lifetime Probe for DNA Interactions and Applications in Live-Cell Microscopy.** *Angewandte Chemie - International Edition*. Roč. 55, č. 1 (2016), s. 174-178 ISSN 1433-7851
4. Amaro, Mariana - Filipe, H. A. - Ramalho, J. P. P. - Hof, Martin - Loura, L. M. S. **Fluorescence of nitrobenzoxadiazole (NBD) labeled lipids in model membranes is connected not to lipid mobility, but to probe location.** *Physical Chemistry Chemical Physics*. Roč. 18, č. 10 (2016), s. 7042-7054
5. Lidman, M. - Pokorná, Šárka - Dingeldein, A. P. G. - Sparrman, T. - Wallgren, M. - Šachl, Radek - Hof, Martin - Gröbner, G. **The oxidized phospholipid PazePC promotes permeabilization of mitochondrial membranes by Bax.** *Biochimica Et Biophysica Acta-Biomembranes*. Roč. 1858, č. 6 (2016), s. 1288-1297 ISSN 0005-2736

6. Šachl, Radek - Bergstrand, J. - Widengren, J. - Hof, Martin **Fluorescence correlation spectroscopy diffusion laws in the presence of moving nanodomains.** *Journal of Physics D-Applied Physics*. Roč. 49, č. 11 (2016), 114002 ISSN 0022-3727
7. Vogl, F. - Humpolíčková, Jana - Amaro, Mariana - Koller, D. - Köfeler, H. - Zenzmeier, E. - Hof, Martin - Hermetter, E. **Role of protein kinase C δ in apoptotic signaling of oxidized phospholipids in RAW 264.7 macrophages.** *Biochimica Et Biophysica Acta-Molecular and Cell Biology of Lipids*. Roč. 1861, č. 4 (2016), s. 320-330 ISSN
8. Kůsová, Kateřina - Pelant, Ivan - Humpolíčková, Jana - Hof, Martin **Comprehensive description of blinking-dynamics regimes in single-direct-band-gap silicon nanocrystals.** *Physical Review. B*. Roč. 93, č. 3 (2016), "035412-1"- "035412-13" ISSN 1098-0121
9. Laňková, Martina - Humpolíčková, Jana - Vosolsobě, S. - Cit, Zdeněk - Lacek, Jozef - Čovan, Martin - Čovanová, Milada - Hof, Martin - Petrášek, Jan **Determination of Dynamics of Plant Plasma Membrane Proteins with Fluorescence Recovery and Raster Image Correlation Spectroscopy.** *Microscopy and Microanalysis*. Roč. 22, č. 2 (2016), s. 290-299 ISSN 1431-9276
10. Loizeau, D. - Jurkiewicz, Piotr - Aydogan, Gokcan - Philimonenko, Anatoly - Mahfoudhi, S. - Hozák, Pavel - Maroto, A. - Couthon-Courves, H. - Jaffres, P.-A. - Deschamps, L. - Giamarchi, P. - Hof, Martin. **Biophysical properties of cationic lipophosphoramidates: Vesicle morphology, bilayer hydration and dynamics.** *Colloids and Surfaces B-Biointerfaces*. Roč. 136, DEC 2015 (2015), s. 192-200 ISSN 0927-7765
11. David M. Jameson (Volume Ed.), Hof, M. (Series Ed.) **Perspective on Fluorescence.** Springer Series on Fluorescence 17, Springer, 2016.
12. Karel Prochazka (Volume Ed.), Hof, M. (Series Ed.) **Fluorescence Studies of Polymer Containing Systems,** Springer Series on Fluorescence 16, Springer, 2016.
13. Amaro M, Brezovský J, Kováčová S, Sýkora J, Bednář D, Němec V, Lišková V, Kurumbang NP, Beerens K, Chaloupková R, Paruch K, Hof M, Damborský J.; **Site-specific analysis of protein hydration based on unnatural amino Acid fluorescence.**, *J Am Chem Soc.*, 2015, 137(15):4988-92. DOI: 10.1021/jacs.5b01681
14. Brejchová, J.; Sýkora, J.; Ostašov, P.; Merta, L.; Roubalová, L.; Janáček, J.; Hof, M.; Svoboda, P. **TRH-receptor mobility and function in intact and cholesterol-depleted plasma membrane of HEK293 cells stably expressing TRH-R-eGFP.** 2015, *BBA - Biomembranes*. 1848(3), 781-96, DOI: doi:10.1016/j.bbamem.2014.11.029
15. Tomek P, Hrouzek P, Kuzma M, Sýkora J, Fišer R, Černý J, Novák P, Bártová S, Šimek P, Hof M, Kavan D, Kopecký J.; **Cytotoxic Lipopeptide Muscotoxin A, Isolated from Soil Cyanobacterium Desmonostoc muscorum, Permeabilizes Phospholipid Membranes by Reducing Their Fluidity.**, 2015, *Chem Res Toxicol.*, 28 (2), pp 216–224. DOI: 0.1021/tx500382b
16. Peter Kapusta, Michael Wahl, Rainer Erdmann (Volume Ed.), Hof, M. (Series Ed.) **Advanced Photon Counting.** Springer Series on Fluorescence 15, Springer, 2015.

17. Kulig W, Olżyńska A, Jurkiewicz P, Kantola AM, Komulainen S, Manna M, Pourmousa M, Vazdar M, Cwiklik L, Rog T, Khelashvili G, Harries D, Telkki VV, Hof M, Vattulainen I, Jungwirth P.; **Cholesterol under oxidative stress-How lipid membranes sense oxidation as cholesterol is being replaced by oxysterols.**, Free Radic Biol Med., 2015, 84:30-41. DOI: [10.1016/j.freeradbiomed.2015.03.006](https://doi.org/10.1016/j.freeradbiomed.2015.03.006)
18. Ménová, P.; Dziuba, D.; Güixens-Gallardo, P.; Jurkiewicz, P.; Hof, M.; Hocek M.; **Fluorescence quenching in oligonucleotides containing 7-substituted 7-deazaguanine bases prepared by the nicking enzyme amplification reaction.** 2015, Bioconjug. Chem., 26(2), 361-366. DOI: [10.1021/acs.bioconjchem.5b00006](https://doi.org/10.1021/acs.bioconjchem.5b00006)
19. Sýkora, J.; Brezovský, J.; Koudeláková, T.; Lahoda, M.; Fořtová, A.; Chernovets, T.; Chaloupková, R.; Štěpánková, V.; Prokop, Z.; Smatanová, I.K.; Hof, M.; Damborský, J. **Dynamics and hydration explain failed functional transformation in dehalogenase design.** Nat. Chem. Biol. Roč. 10, č. 6 (2014), s. 428-430. DOI: [10.1038/nchembio.1502](https://doi.org/10.1038/nchembio.1502)
20. Amaro, M.; Šachl, R.; Jurkiewicz, P.; Coutinho, A.; Prieto, M.; Hof, M. **Time-Resolved Fluorescence in Lipid Bilayers: Selected Applications and Advantages over Steady State.** 2014, Biophys. J., 107, 1--10. DOI: [10.1016/j.bpj.2014.10.058](https://doi.org/10.1016/j.bpj.2014.10.058)
21. Radek Šachl, Mariana Amaro, Gokcan Aydogan, Alena Koukalová, Ilya I. Mikhalyov, Ivan A. Boldyrev, Jana Humpolíčková, Martin Hof. **On multivalent receptor activity of GM1 in cholesterol containing membranes.** 2015, BBA-Molecular Cell Research, 1853(4), 850-7 DOI: [10.1016/j.bbamcr.2014.07.016](https://doi.org/10.1016/j.bbamcr.2014.07.016)
22. Kulig, W.; Jurkiewicz, P.; Olżyńska, A.; Tynkkynen, J.; Javanainen, M.; Manna, M.; Rog, T.; Hof, M.; Vattulainen, I.; Jungwirth, P. **Experimental determination and computational interpretation of biophysical properties of lipid bilayers enriched by cholesteryl hemisuccinate.** BBA - Biomembranes, 2015, 1848(2), 422-432. DOI: [10.1016/j.bbamem.2014.10.032](https://doi.org/10.1016/j.bbamem.2014.10.032)
23. Koukalová, A.; Pokorná, Š; Fišer, R.; Kopecký V., Jr.; Humpolíčková, J.; Cerný, J.; Hof, M. **Membrane activity of the pentaene macrolide didehydroroflomycoïn in model lipid bilayers.** BBA - Biomembranes, 2015, 1848(2), 444-452. DOI: [10.1016/j.bbamem.2014.10.038](https://doi.org/10.1016/j.bbamem.2014.10.038)
24. Parkkila, P.; Štefl, M.; Olżyńska, A.; Hof, M.; Kinnunen, P.K.J. **Phospholipid lateral diffusion in phosphatidylcholine-sphingomyelin-cholesterol monolayers; Effects of oxidatively truncated phosphatidylcholines.** 2015, BBA - Biomembranes, 1848(1), 167-173. DOI: [10.1016/j.bbamem.2014.10.025](https://doi.org/10.1016/j.bbamem.2014.10.025)
25. Pospisil, P.; Luxem, K.E.; Ener M.E.; Sykora, J.; Kocabova, J.; Gray, H.B.; Vlcek, A.; Hof, M. **Fluorescence Quenching of Dimethylaminonaphthalene Dyes Badan and Prodan by Tryptophan in Cytochromes P450 and Micelles.** 2014, J. Phys. Chem. 118(34), 10085--10091. DOI: [10.1021/jp504625d](https://doi.org/10.1021/jp504625d)
26. Štefl, M.; Šachl, R.; Olżyńska, A.; Amaro, M.; Savchenko, D.; Deyneka, A.; Hermetter, A.; Cwiklik, L.; Humpolíčková, J.; Hof, M. **Comprehensive portrait of cholesterol containing oxidized membrane.** 2014, BBA - Biomembranes, 1838, 7, 1769-1776 DOI: [10.1016/j.bbamem.2014.02.006](https://doi.org/10.1016/j.bbamem.2014.02.006)

27. Macháň, Radek - Jurkiewicz, Piotr - Olżyńska, Agnieszka - Olšinová, Marie - Cebecauer, Marek - Marquette, A. - Bechinger, B. - Hof, Martin **Peripheral and Integral Membrane Binding of Peptides Characterized by Time-Dependent Fluorescence Shifts: Focus on Antimicrobial Peptide LAH4** *Langmuir*. Roč. 30, č. 21 (2014), s. 6171-6179. ISSN 0743-7463
28. Macháň, Radek - Kapusta, Peter - Hof, Martin **Statistical filtering in fluorescence microscopy and fluorescence correlation spectroscopy.** *Analytical and Bioanalytical Chemistry*. Roč. 406, - (2014), s. 4797-4813. ISSN 1618-2642BBA
29. Olšinová, M.; Jurkiewicz, P.; Pozník, M.; Šachl, R.; Praušová, T.; Hof, M.; Kozmík, V.; Teplý, F.; Svoboda, J.; Cebecauer, M. **Di- and tri-oxalkyl derivatives of a boron dipyrromethene (BODIPY) rotor dye in lipid bilayers.** *Phys Chem Chem Phys*. Roč. 16, č. 22 (2014), s. 10688-10697 ISSN: [1463-9076](#)
30. Pruchnik, H.; Kral, T.; Hof, M. **Interaction of new butyltin citrate complex with lipid model membrane and DNA.** 2014, *J Therm Anal Calorim*, online. DOI: [10.1007/s10973-014-3805-4](#)
31. Först G.; Cwiklik, L.; Jurkiewicz, P.; Schubert, R.; Hof, M. **Interactions of beta-blockers with model lipid membranes: Molecular view of the interaction of acebutolol, oxprenolol, and propranolol with phosphatidylcholine vesicles by time-dependent fluorescence shift and molecular dynamics simulations.** Roč. 87, - (2014), s. 559-569., *Eur. J. Pharm. Biopharm.* DOI: [10.1016/j.ejpb.2014.03.013](#)
32. Ujčíková, H.; Břejchová, J.; Vošahlíková, M.; Kagan, D.; Dlouhá, K.; Sýkora, J.; Merta, L.; Drastichová, Z.; Novotný, J.; Ostašov, P; Roubalová, L.; Parenti, M.; Hof, M.; Svoboda, P. **Opioid-receptor (OR) signaling cascades in rat cerebral cortex and model cell lines: the role of plasma membrane structure.** 2014, *Physiol. Res.*, 63, Suppl.1, S165-S176. ISSN (online): [1802-9973](#)
33. Benda, A.; Kapusta, Peter; Hof, Martin; Gaus, K. **Fluorescence spectral correlation spectroscopy (FSCS) for probes with highly overlapping emission spectra.** 2014, *Opt. Express*, 22, 3, 2973-2988. DOI: [10.1364/OE.22.002973](#)
34. Vošahlíková, M.; Jurkiewicz, P.; Roubalová, L.; Hof, M.; Svoboda, P. **High- and low-affinity sites for sodium in δ -OR-G₁ α (Cys³⁵¹-Ile³⁵¹) fusion protein stably expressed in HEK293 cells; functional significance and correlation with biophysical state of plasma membrane.** 2014, *Naunyn-Schmiedeberg's Arch Pharmacol*, Roč. 387, č. 5 (2014), s. 487-502. DOI: [10.1007/s00210-014-0962-8](#)
35. Khandelia, H.; Loubet, B.; Olżyńska, A.; Jurkiewicz, P. and Hof, M. **Pairing of cholesterol with oxidized phospholipid species in lipid bilayers.** 2014, *Soft Matter* 10, 639-647. DOI: [10.1039/C3SM52310A](#)
36. Štefl, M.; Benda, A.; Gregor, I. and Hof, M. **The fast polarization modulation based dual-focus fluorescence correlation spectroscopy.** 2014, *Opt. Express*, 22, 1, 885-899. DOI: [10.1364/OE.22.000885](#)
37. Timr, Š.; Bondar, A.; Cwiklik, L.; Štefl, M.; Hof, M.; Vazdar, M.; Lazar, J. and Jungwirth, P. **Accurate Determination of the Orientational Distribution of a Fluorescent Molecule in a Phospholipid Membrane.** 2014, *J. Phys. Chem. B* - Roč. 118, č. 4 (2014), s. 855-863 DOI: [10.1021/jp4067026](#)
38. Przybylo, M.; Procek, J.; Hof, M.; Langner, M. **The alteration of lipid bilayer dynamics by phloretin and 6-ketocholestanol.** 2014, *Chem Phys Lipids* - Roč. 178, FEB 2014 (2014), s. 38-44 DOI: [10.1016/j.chemphyslip.2013.11.005](#)

39. Steinberger, T.; Macháň, R.; Hof, M. **Z-Scan Fluorescence Correlation Spectroscopy as a Tool for Diffusion Measurements in Planar Lipid Membranes**. In: Engelborghs, Y.; Visser, A. (Ed.) *Methods in Molecular Biology*, Volume 1076, 617-634, New York: Humana Press, 2014. DOI: [10.1007/978-1-62703-649-8_28](https://doi.org/10.1007/978-1-62703-649-8_28)
40. Hof, Martin - Macháň, Radek - Sablinskas, V. - Steiner, G. **Applications**. *Handbook of Spectroscopy. Second Completely Revised and Enlarged Edition*. Vol. 1. 2. Weinheim : Wiley-VCH, 2014 - (Gauglitz, G.; Moore, D.), s. 95-181 ISBN 978-3-527-32150-6
41. Hof, Martin - Macháň, Radek **Basics of Optical Spectroscopy**. *Handbook of Spectroscopy. Second Completely Revised and Enlarged Edition*. Vol. 1. 2. Weinheim : Wiley-VCH, 2014 - (Gauglitz, G.; Moore, D.), s. 31-38 ISBN 978-3-527-32150-6
42. Amaro, M.; Brezovský, J.; Kováčová, S.; Maier, L.; Chaloupková, R.; Sýkora, J.; Paruch, K.; Damborský, J. and Hof, M. **Are Time-Dependent Fluorescence Shifts at the Tunnel Mouth of Haloalkane Dehalogenase Enzymes Dependent on the Choice of the Chromophore?** 2013, *J. Phys. Chem. B*, 117 (26), 7898-7906. DOI: [10.1021/jp403708c](https://doi.org/10.1021/jp403708c)
43. Vazdar, M.; Wernersson, E.; Khabiri, M.; Cwiklik, L.; Jurkiewicz, P.; Hof, M.; Mann, E.; Kolusheva, S.; Jelinek, R.; Jungwirth, P. **Aggregation of Oligoarginines at Phospholipid Membranes: Molecular Dynamics Simulations, Time-Dependent Fluorescence Shift, and Biomimetic Colorimetric Assays**. 2013, *J. Phys. Chem. B* 117, 39, 11530-11540. DOI: [10.1021/jp405451e](https://doi.org/10.1021/jp405451e)
44. Hromadová, M.; Pospíšil, L.; Sokolová, R.; Bulíčková, J.; Hof, M.; Fischer-Durand, N.; Salmain, M. **Atrazine-Based Self-Assembled Monolayers and Their Interaction with Anti-Atrazine Antibody: Building of an Immunosensor**. 2013, *Langmuir* 29, 52, 16084-16092. DOI: [10.1021/la404029j](https://doi.org/10.1021/la404029j)
45. Hnilicová, J.; Hozeifi, S.; Stejskalová, E.; Dušková, E.; Poser, I.; Humpolíčková, J.; Hof, M.; Staněk, D. **The C-terminal domain of Brd2 is important for chromatin interaction and regulation of transcription and alternative splicing**. 2013, *Mol Biol Cell*. 24, 22, 3557-3568. DOI: [10.1091/mbc.E13-06-0303](https://doi.org/10.1091/mbc.E13-06-0303)
46. Wu, Y.; Štefl, M.; Olžyňska, A.; Hof, M.; Yahioğlu, G.; Yip, P.; Casey, D. R.; Ces, O.; Humpolíčková, J.; Kuimova, M. K. **Molecular rheometry: direct determination of viscosity in L_o and L_d lipid phases via fluorescence lifetime imaging**. 2013, *Phys. Chem. Chem. Phys.* 15, 36, 14986-93. DOI: [10.1039/C3CP51953H](https://doi.org/10.1039/C3CP51953H)
47. Misiak, P.; Wilk, K.A.; Kral, T.; Woźniak, E.; Pruchnik, H.; Frąckowiak, R.; Hof, M.; Różycka-Roszak, B. **New gluconamide-type cationic surfactants: Interactions with DNA and lipid membranes**. 2013, *Biophys Chem*, 180-181, 44-54. DOI: [10.1016/j.bpc.2013.06.010](https://doi.org/10.1016/j.bpc.2013.06.010)
48. Wallgren, M.; Beranová, L.; Pham, Q. D.; Linh, K.; Lidman, M.; Procek, J.; Cyprych, K.; Kinnunen, P. K. J.; Hof, M.; Gröbner, G. **Impact of oxidized phospholipids on the structural and dynamic organization of phospholipid membranes: a combined DSC and solid state NMR study**. 2013, *Faraday Discuss.* 161, 499-513. DOI: [10.1039/c2fd20089a](https://doi.org/10.1039/c2fd20089a)
49. Štěpánková, V.; Khabiri, M.; Brezovský, J.; Pavelka, A.; Sýkora, J.; Amaro, M.; Minofar, B.; Prokop, Z.; Hof, M.; Ettrich, R.; Chaloupková, R.; Damborský, J. **Expansion of Access Tunnels and Active-Site Cavities Influence Activity of Haloalkane**

- Dehalogenases in Organic Cosolvents.** 2013, *Chembiochem.* 14, 7, 890-897. DOI: [10.1002/cbic.201200733](https://doi.org/10.1002/cbic.201200733)
50. Ostašov, P.; Sýkora, J.; Brejchová, J.; Olžyńska, A.; Hof, M.; Svoboda, P. **FLIM studies of 22- and 25-NBD-cholesterol in living HEK293 cells: Plasma membrane change induced by cholesterol depletion** 2013, *Chemistry and Physics of Lipids*, 167-168, 62-69. DOI: [10.1016/j.chemphyslip.2013.02.006](https://doi.org/10.1016/j.chemphyslip.2013.02.006)
51. Macháň, R.; Hof, M. **Fluorescence Correlation Spectroscopy of Lipids.** In: Roberts, G. (Ed.) *Encyclopedia of Biophysics*, 789-795, Heidelberg: Springer, 2013. ISBN: [978-3-642-16711-9](https://doi.org/10.1007/978-3-642-16711-9)
52. Pokorná, Š.; Jurkiewicz, P.; Cwiklik, L.; Vazdar, M. and Hof, M. **Interactions of monovalent salts with cationic lipid bilayers.** 2013, *Faraday Discuss.* 160, 341-358. DOI: [10.1039/C2FD20098H](https://doi.org/10.1039/C2FD20098H)
53. Hof, M. (Series Ed.) **Fluorescent Methods to Study Biological Membranes.** Springer Series on Fluorescence 13, 485 pg., Heidelberg: Springer, 2013. ISBN:[978-3-642-33127-5](https://doi.org/10.1007/978-3-642-33127-5).
54. Pokorná, Š.; Olžyńska, A.; Jurkiewicz, P.; Hof M. **Hydration and Mobility in Lipid Bilayers Probed by Time-Dependent Fluorescence Shift.** In: Hof, M. (Ed.) *Fluorescent Methods to Study Biological Membranes*, 141-159, Heidelberg: Springer, 2013. DOI: [10.1007/4243_2012_46](https://doi.org/10.1007/4243_2012_46)
55. Šachl, R.; Johansson, L.B.-Å.; Hof, M. **Förster Resonance Energy Transfer (FRET) between Heterogeneously Distributed Probes: Application to Lipid Nanodomains and Pores.** 2012, *International Journal of Molecular Sciences* 13, 12, 16141-16156. DOI: [10.3390/ijms131216141](https://doi.org/10.3390/ijms131216141)
56. Kapusta, P.; Macháň, R.; Benda, A.; Hof, M. **Fluorescence Lifetime Correlation Spectroscopy (FLCS): Concepts, Applications and Outlook.** 2012, *International Journal of Molecular Sciences* 13, 10, 12890-12910. DOI: [10.3390/ijms131012890](https://doi.org/10.3390/ijms131012890)
57. Jurkiewicz, P.; Olžyńska, A.; Cwiklik, L.; Conte, E.; Jungwirth, P.; Megli, F.M.; Hof M. **Biophysics of lipid bilayers containing oxidatively modified phospholipids: Insights from fluorescence and EPR experiments and from MD simulations.** 2012, *BBA - Biomembranes* 1818, 10, 2388-2402 DOI: [10.1016/j.bbamem.2012.05.020](https://doi.org/10.1016/j.bbamem.2012.05.020)
58. Beranová, L.; Humpolíčková, J.; Sýkora, J.; Benda, A.; Cwiklik, L.; Jurkiewicz, P.; Gröbner, G.; Hof, M. **Effect of heavy water on phospholipid membranes: experimental confirmation of molecular dynamics simulations.** 2012, *Phys. Chem. Chem. Phys.* 14, 42, 14516-14522. DOI: [10.1039/C2CP41275F](https://doi.org/10.1039/C2CP41275F)
59. Štefl, M.; Šachl, R.; Humpolíčková, J.; Cebecauer, M.; Macháň, R.; Kolářová, M.; Johansson, L.B.-Å.; Hof, M. **Dynamics and Size of Cross-Linking-Induced Lipid Nanodomains in Model Membranes.** 2012, *Biophysical Journal* 102, 9, 2104-2113. DOI: [10.1016/j.bpj.2012.03.054](https://doi.org/10.1016/j.bpj.2012.03.054)
60. Jurkiewicz, P.; Cwiklik, L.; Vojtíšková, A.; Jungwirth, P.; Hof, M. **Structure, Dynamics, and Hydration of POPC/POPS Bilayers Suspended in NaCl, KCl, and CsCl Solutions.** 2012, *BBA - Biomembranes* 1818, 3, 609-616. DOI: [10.1016/j.bbamem.2011.11.033](https://doi.org/10.1016/j.bbamem.2011.11.033)
61. Jurkiewicz, P.; Cwiklik, L.; Jungwirth, P.; Hof, M. **Lipid hydration and mobility: An interplay between fluorescence solvent relaxation experiments and molecular dynamics simulations.** 2012, *Biochimie*, 94, 26-32 DOI: [10.1016/j.biochi.2011.06.027](https://doi.org/10.1016/j.biochi.2011.06.027)

62. Przybyło, M.; Procek, J.; Kaczyński, M.; Borowik, T.; Hof, M.; Langner, M. **A Multi Time-Scale Approach of the Lipid Bilayer Dynamics**. In: Iglič, A. (Ed.) *Advances in Planar Lipid Bilayers and Liposomes*, 105-137, San Diego: Elsevier, 2012. DOI: [B978-0-12-396533-2.00002-1](https://doi.org/10.1016/B978-0-12-396533-2.00002-1)
63. Dohnalová, K.; Fučíková, A.; Umesh, Ch. P.; Humpolíčková, J.; Paulusse, J. M. J.; Valenta, J.; Zuilhof, H.; Hof, M.; Gregorkiewicz, T. **Microscopic Origin of the Fast Blue-Green Luminescence of Chemically Synthesized Non-oxidized Silicon Quantum Dots**. 2012, *Small* 8, 20, 3185-3191. DOI: [10.1002/smll.201200477](https://doi.org/10.1002/smll.201200477)
64. Vazdar, M.; Jurkiewicz, P.; Hof, M.; Jungwirth, P.; Cwiklik, L. **Behavior of 4-Hydroxynonenal in Phospholipid Membranes**. 2012, *Journal of Physical Chemistry B* 116, 22, 6411-6415. DOI: [10.1021/jp3044219](https://doi.org/10.1021/jp3044219)
65. Štefl, M.; Macháň, R.; Hof, M. **Z-Scan Fluorescence Correlation Spectroscopy: A Powerful Tool for Determination of Lateral Diffusion in Biological Systems**. 2011, *Reviews in Fluorescence* 2009, 6, 321-344, ISBN: 978-1-4419-9671-8.
66. Šachl, R.; Humpolíčková, J.; Štefl, M.; Johansson, L.B.-Å.; Hof, M. **Limitations of Electronic Energy Transfer in Lipid Nanodomain Size Estimation**. 2011, *Biophys. J.*, 101, L60-L62.
67. Šachl, R.; Mikhalyov, I.; Gretskeya, N.; Olžyńska, A.; Hof, M.; Johansson, L.B.-Å. **Distribution of BODIPY-labelled phosphatidylethanolamines in lipid bilayers exhibiting different curvatures**. 2011, *Physical Chemistry Chemical Physics* 13, 24, 11694-11701.
68. Norris, S.C.P.; Humpolíčková, J.; Amler, E.; Huranová, M.; Buzgo, M.; Macháň, R.; Lukáš, D.; Hof, M. **Raster image correlation spectroscopy as a novel tool to study interactions of macromolecules with nanofiber scaffolds**. 2011, *Acta Biomaterialia*, 7, 4195-4203. DOI: [10.1016/j.actbio.2011.07.012](https://doi.org/10.1016/j.actbio.2011.07.012)
69. Macháň, R.; Hof, M.; Chernovets, T.; Zhmak, M. N.; Ovchinnikova, T. V.; Sýkora, J. **Formation of arenicin-1 microdomains in bilayers and their specific lipid interaction revealed by Z-scan FCS**. 2011, *Analytical and Bioanalytical Chemistry* 399, 10, 3547-3554.
70. Volinsky, R.; Cwiklik, L.; Jurkiewicz, P.; Hof, M.; Jungwirth, P.; Kinnunen, P.K.J. **Oxidized Phosphatidylcholines Facilitate Phospholipid Flip-Flop in Liposomes**. 2011, *Biophysical Journal*, 101, 6, 1376-1384. DOI: [10.1016/j.bpj.2011.07.051](https://doi.org/10.1016/j.bpj.2011.07.051)
71. Cwiklik, L.; Aquino, A. J. A.; Vazdar, M.; Jurkiewicz, P.; Pittner, J.; Hof, M.; Lischka, H. **Absorption and Fluorescence of PRODAN in Phospholipid Bilayers: A Combined Quantum Mechanics and Classical Molecular Dynamics Study**. 2011, *Journal of Physical Chemistry A*, 115, 41, 11428-11437, ISSN 1089-5639. DOI: [10.1021/jp205966b](https://doi.org/10.1021/jp205966b)
72. Breton, M.; Berret, J. F.; Bourgaux, C.; Kral, T.; Hof, M.; Pichon, Ch.; Bessodes, M.; Scherman, D.; Mignet, N. **Protonation of Lipids Impacts the Supramolecular and Biological Properties of Their Self-Assembly**. 2011, *Langmuir*, 27, 20, 12336-12345, ISSN 0743-7463.
73. Brejchová, J.; Sýkora, J.; Dlouhá, K.; Roubalová, L.; Ostašov, P.; Vošahlíková, M.; Hof, M.; Svoboda, P. **Fluorescence spectroscopy studies of HEK293 cells expressing DOR-Gi(1) α fusion protein; the effect of cholesterol depletion**. 2011, *Biochimica Et Biophysica Acta-Biomembranes*, 1808, 12, 2819-2829, ISSN 0005-2736.

74. Procházka, K.; Limpouchová, Z.; Uhlík, F.; Košovan, P.; Matějček, P.; Štěpánek, M.; Uchman, M.; Kuldová, J.; Šachl, R.; Humpolíčková, J.; Hof, M. **Fluorescence Spectroscopy as a Tool for Investigating the Self-Organized Polyelectrolyte Systems**. 2011, *Advances in Polymer Science*, 241/2011, 187-249. DOI: 10.1007/12_2010_56.
75. Sokolová, L.; Williamson, H.; Sýkora, J.; Hof, M.; Gray, H.B.; Brutschy, B.; Vlček Jr.A. **Mass Spectrometric Characterization of Oligomers in Pseudomonas aeruginosa Azurin Solutions**. 2011, *Journal of Physical Chemistry B*. 115, 16, 4790-4800.
76. Pembouong, G.; Morellet, N.; Kral, T.; Hof, M.; Scherman, D.; Bureau, M. F.; Mignet, N. **A comprehensive study in triblock copolymer membrane interaction**. 2011, *Journal of Controlled Release* 151, 1, 57-64.
77. Košovan, P.; Uhlík, F.; Kuldová, J.; Štěpánek, M.; Limpouchová, Z.; Procházka, K.; Benda, A.; Humpolíčková, J.; Hof, M. **Monte Carlo simulation of fluorescence correlation spectroscopy data**. 2011, *Collection of Czechoslovak Chemical Communications* 76, 3, 207-222
78. Humpolíčková, J.; Benda, A.; Macháň, R.; Enderlein, J.; Hof, M. **Dynamic saturation optical microscopy: employing dark-state formation kinetics for resolution enhancement**. 2010, *Physical Chemistry Chemical Physics* 12, 12457-12465.
79. Šachl, R.; Boldyrev, I.; Johansson, L.B.-Å. **Localisation of BODIPY labelled phosphatidylcholines in lipid bilayers**. 2010, *Physical Chemistry Chemical Physics*, 12(23), 6027.
80. Huranová, M.; Ivani, I.; Benda, A.; Poser, I.; Brody, Y.; Hof, M.; Shav-Tal, Y.; Neugebauer, K.; Staněk D. **The differential interaction of snRNPs with pre-mRNA reveals splicing kinetics in living cells**. 2010, *Journal of Cell Biology* 191, 75-86.
81. Barucha-Kraszewska, J.; Kraszewski, S.; Jurkiewicz, P.; Ramseyer, Ch.; Hof, M. **Numerical studies of the membrane fluorescent dyes dynamics in ground and excited states**. 2010, *Biochimica Et Biophysica Acta-Biomembranes* 1798, 1724-1734.
82. Beranová, L.; Cwiklik, L.; Jurkiewicz, P.; Hof, M.; Jungwirth, P. **Oxidation Changes Physical Properties of Phospholipid Bilayers: Fluorescence Spectroscopy and Molecular Simulations**. 2010, *Langmuir* 26, 61406144.
83. Mosinger, J.; Lang, K.; Hostomský, J.; Franc, J.; Sýkora, J.; Hof, M.; Kubát, P. **Singlet Oxygen Imaging in Polymeric Nanofibers by Delayed Fluorescence**. 2010, *Journal of Physical Chemistry B*. 114, 48, 15773-15779.
84. Kral, T.; Leblond, J.; Hof, M.; Scherman, D.; Hersovici, J.; Mignet, N. **Lipopolythiourea/DNA interaction: A biophysical study**. 2010, *Biophysical Chemistry* 148, 68-73, ISSN 0301-4622.
85. Hovorka, O.; Šubr, V.; Větvička, D.; Kovář, L.; Strohalm, J.; Strohalm, M.; Benda, A.; Hof, M.; Ulbrich, K.; Říhová, B. **Spectral analysis of doxorubicin accumulation and the indirect quantification of its DNA intercalation**. *European Journal of Pharmaceutics and Biopharmaceutics*. 76 - 2010, 514-524.
86. Kułakowska-Zan, A.; Jurkiewicz, P.; Sýkora, J.; Benda, A.; Mely, Y.; Hof, M. **Fluorescence Lifetime Tuning - A Novel Approach to Study Flip-Flop Kinetics in Supported Phospholipid Bilayers**. 2010, *Journal of Fluorescence* 20, 563-569.

87. Macháň, R.; Hof, M. **Lipid diffusion in planar membranes investigated by fluorescence correlation spectroscopy**. 2010, *Biochimica Et Biophysica Acta-Biomembranes* 1798, 1377-1391.
88. Macháň, R.; Miszta, A.; Hermens, W.; Hof, M. **Real-time monitoring of melittin-induced pore and tubule formation from supported lipid bilayers and its physiological relevance**. 2010, *Chemistry and Physics of Lipids* 163, 200-206.
89. Procházka, K.; Matějček, P.; Štěpánek, M.; Limpouchová, Z.; Hof, M.; Humpolíčková, J.; Šachl, R.; Schroeder, J. **Solvent relaxation studies applied to stimuli-responsive core-shell nanoparticles**. 2010, *Proceedings of SPIE*, 7571.
90. Macháň, R.; Hof, M. **Recent Developments in Fluorescence Correlation Spectroscopy for Diffusion Measurements in Planar Lipid Membranes**. 2010, *International Journal of Molecular Sciences* 11, 427-457, ISSN 1422-0067.
91. Miszta, A.; Macháň, R.; Hermens, W. Th.; Hof, M. **Peptide-Membrane Interactions Studied by Ellipsometry, Laser Scanning Microscopy, and Z-Scan Fluorescence Correlation Spectroscopy. Membrane Active Peptides. Methods and Results on Structure and Function**. 2010, ed. Castanho, M., La Jolla: International University Line, 219-245, ISBN 978-0-9720774-5-3.
92. Uchman, M.; Jurkiewicz, P.; Cígler, P.; Grüner, B.; Hof, M.; Procházka, K.; Matějček, P. **Interaction of Fluorescently Substituted Metallacarboranes with Cyclodextrins and Phospholipid Bilayers: Fluorescence and Light Scattering Study**. 2010, *Langmuir* 26, 6268-6275.
93. Vácha, R.; Jurkiewicz, P.; Petrov, M.; Berkowitz, M. L.; Böckmann, R. A.; Barucha-Kraszewska, J.; Hof, M. Jungwirth, P. **Mechanism of Interaction of Monovalent Ions with Phosphatidylcholine Lipid Membranes**. 2010, *Journal of Physical Chemistry B* 114, 9504-9509.