

## List of publications of Martin Hof from 2010:

(75 published; 12/2014)

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

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

(Entire list of publications till 2009 has 113 entries)

1. 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)
2. 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)
3. 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.** 2014, BBA-Molecular Cell Research. DOI: [10.1016/j.bbamcr.2014.07.016](https://doi.org/10.1016/j.bbamcr.2014.07.016)
4. 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)
5. 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)
6. 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)
7. 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)
8. Štefl, M.; Šachl, R.; Olžyńska, 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)
  9. Macháň, Radek - Jurkiewicz, Piotr - Olžyńska, 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
  10. 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
  11. 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](https://doi.org/10.1039/c4cp00000a)
  12. 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](https://doi.org/10.1007/s10973-014-3805-4)
  13. 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](https://doi.org/10.1016/j.ejpb.2014.03.013)
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  15. 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](https://doi.org/10.1364/OE.22.002973)
  16. Vošahlíková, M.; Jurkiewicz, P.; Roubalová, L.; Hof, M.; Svoboda, P. **High- and low-affinity sites for sodium in  $\delta$ -OR-G $\beta$ 1 $\alpha$  (Cys<sup>351</sup>-Ile<sup>351</sup>) 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](https://doi.org/10.1007/s00210-014-0962-8)
  17. Khandelia, H.; Loubet, B.; Olžyńska, 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](https://doi.org/10.1039/C3SM52310A)
  18. 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](https://doi.org/10.1364/OE.22.000885)
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  21. Steinberger, T.; Macháň, R.; Hof, M. **Z-Scan Fluorescence Correlation Spectroscopy as a Tool for Diffusion Measurements in Planar Lipid Membranes** *Fluorescence Spectroscopy and Microscopy*. 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)
  22. 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

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