Maikel C. RheinstÃ¤dter

List of Publications by Year
in descending order

133 papers	3,533 citations	125106 35 h-index	198040 52 g-index
137 all docs	137 docs citations	137 times ranked	4511 citing authors

#	Article	IF	Citations
1	Erythro-VLPs: Anchoring SARS-CoV-2 spike proteins in erythrocyte liposomes. PLoS ONE, 2022, 17, e0263671.	1.1	10
2	Membrane interactions of non-membrane targeting antibiotics: The case of aminoglycosides, macrolides, and fluoroquinolones. Biochimica Et Biophysica Acta - Biomembranes, 2021, 1863, 183448.	1.4	17
3	Erythro-VLP: Erythrocyte Virus-Like-Particles. Biophysical Journal, 2021, 120, 196a.	0.2	1
4	Curcumin and Homotaurine Suppress Amyloid-Î² _{25â€“35} Aggregation in Synthetic Brain Membranes. ACS Chemical Neuroscience, 2021, 12, 1395-1405.	1.7	10
5	Order and disorderâ€”An integrative structure of the full-length human growth hormone receptor. Science Advances, 2021, 7, .	4.7	25
6	Graphite to diamond transition induced by photoelectric absorption of ultraviolet photons. Scientific Reports, 2021, 11, 2492.	1.6	4
7	Cationic, Anionic, and Amphoteric Dual pH/Temperature-Responsive Degradable Microgels via Self-Assembly of Functionalized Oligomeric Precursor Polymers. Macromolecules, 2021, 54, 351-363.	2.2	15
8	Blood bank storage of red blood cells increases RBC cytoplasmic membrane order and bending rigidity. PLoS ONE, 2021, 16, e0259267.	1.1	18
9	Hybrid Erythrocyte Liposomes: Functionalized Red Blood Cell Membranes for Molecule Encapsulation. Advanced Biology, 2020, 4, e1900185.	3.0	17
10	The Effects of Resveratrol, Caffeine, Î²â€Carotene, and Epigallocatechin Gallate (EGCG) on Amyloidâ€Î²25--35 Aggregation in Synthetic Brain Membranes. Molecular Nutrition and Food Research, 2020, 64, e2000632.	1.5	8
11	Perspective on the role of the physical properties of membranes in neurodegenerative and infectious diseases. Applied Physics Letters, 2020, 117, .	1.5	4
12	Stabilization of Lipid Membranes through Partitioning of the Blood Bag Plasticizer Di-2-ethylhexyl phthalate (DEHP). Langmuir, 2020, 36, 11899-11907.	1.6	15
13	Anesthetics significantly increase the amount of intramembrane water in lipid membranes. Soft Matter, 2020, 16, 9674-9682.	1.2	6
14	Molecular Mechanism for the Suppression of Alpha Synuclein Membrane Toxicity by an Unconventional Extracellular Chaperone. Journal of the American Chemical Society, 2020, 142, 9686-9699.	6.6	15
15	Benchtop-fabricated lipid-based electrochemical sensing platform for the detection of membrane disrupting agents. Scientific Reports, 2020, 10, 4595.	1.6	9
16	Structural Basis of Alpha Synuclein Assembly Toxicity Inhibition by Human Serum Albumin. Biophysical Journal, 2020, 118, 61a-62a.	0.2	0
17	Photopolymerized Starchstarch Nanoparticle (SNP) network hydrogels. Carbohydrate Polymers, 2020, 236, 115998.	5.1	16
18	How do bacterial membranes resist polymyxin antibiotics?. Communications Biology, 2020, 3, 77.	2.0	41

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19	Avidity within the Nâ€terminal anchor drives Î±â€synuclein membrane interaction and insertion. FASEB Journal, 2020, 34, 7462-7482.	0.2	28
20	Editorial. Chemistry and Physics of Lipids, 2019, 225, 104808.	1.5	0
21	Editorial. Chemistry and Physics of Lipids, 2019, 225, 104809.	1.5	0
22	Injectable Poly(oligoethylene glycol methacrylate)-Based Hydrogels Fabricated from Highly Branched Precursor Polymers: Controlling Gel Properties by Precursor Polymer Morphology. ACS Applied Polymer Materials, 2019, 1, 369-380.	2.0	8
23	Atomic resolution map of the soluble amyloid beta assembly toxic surfaces. Chemical Science, 2019, 10, 6072-6082.	3.7	48
24	Glucose Can Protect Membranes against Dehydration Damage by Inducing a Glassy Membrane State at Low Hydrations. Membranes, 2019, 9, 15.	1.4	19
25	Steroidâ€“steroid interactions in biological membranes: Cholesterol and cortisone. Chemistry and Physics of Lipids, 2019, 221, 193-197.	1.5	5
26	Membrane charge and lipid packing determine polymyxin-induced membrane damage. Communications Biology, 2019, 2, 67.	2.0	37
27	Lipid Rafts: Buffers of Cell Membrane Physical Properties. Journal of Physical Chemistry B, 2019, 123, 2050-2056.	1.2	40
28	Aspirin locally disrupts the liquid-ordered phase. Royal Society Open Science, 2018, 5, 171710.	1.1	7
29	Dynamically Cross-Linked Self-Assembled Thermoresponsive Microgels with Homogeneous Internal Structures. Langmuir, 2018, 34, 1601-1612.	1.6	25
30	Carbapenems and Lipid Bilayers: Localization, Partitioning, and Energetics. ACS Infectious Diseases, 2018, 4, 926-935.	1.8	14
31	Modulation of DEG/ENaCs by Amphiphiles Suggests Sensitivity to Membrane Alterations. Biophysical Journal, 2018, 114, 1321-1335.	0.2	12
32	Membrane curvature allosterically regulates the phosphatidylinositol cycle, controlling its rate and acyl-chain composition of its lipid intermediates. Journal of Biological Chemistry, 2018, 293, 17780-17791.	1.6	47
33	The Molecular Structure of Human Red Blood Cell Membranes From Highly Oriented, Solid Supported Multi-Lamellar Membranes. Biophysical Journal, 2018, 114, 270a.	0.2	0
34	Membrane Cholesterol Reduces Polymyxin B Nephrotoxicity in Renal Membrane Analogues. Biophysical Journal, 2018, 114, 451a.	0.2	0
35	Membrane-Modulating Drugs can Affect the Size of Amyloid-Î²25â€“35 Aggregates in Anionic Membranes. Scientific Reports, 2018, 8, 12367.	1.6	8
36	X-ray and neutron scattering for health and disease. Acta Crystallographica Section A: Foundations and Advances, 2018, 74, a376-a376.	0.0	0

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37	Partitioning of caffeine in lipid bilayers reduces membrane fluidity and increases membrane thickness. Physical Chemistry Chemical Physics, 2017, 19, 7101-7111.	1.3	33
38	Giant axonal neuropathy alters the structure of keratin intermediate filaments in human hair. Journal of the Royal Society Interface, 2017, 14, 20170123.	1.5	7
39	Curcumin Protects Membranes through a Carpet or Insertion Model Depending on Hydration. Langmuir, 2017, 33, 8516-8524.	1.6	24
40	Beyond buckling: humidity-independent measurement of the mechanical properties of green nanobiocomposite films. Nanoscale, 2017, 9, 7781-7790.	2.8	20
41	The Molecular Structure of Human Red Blood Cell Membranes from Highly Oriented, Solid Supported Multi-Lamellar Membranes. Scientific Reports, 2017, 7, 39661.	1.6	53
42	pH-Ionizable in Situ Gelling Poly(oligo ethylene glycol methacrylate)-Based Hydrogels: The Role of Internal Network Structures in Controlling Macroscopic Properties. Macromolecules, 2017, 50, 7687-7698.	2.2	10
43	Membrane Cholesterol Reduces Polymyxin B Nephrotoxicity in Renal Membrane Analogs. Biophysical Journal, 2017, 113, 2016-2028.	0.2	24
44	Nanostructure of Fully Injectable Hydrazoneâ€“Thiosuccinimide Interpenetrating Polymer Network Hydrogels Assessed by Small-Angle Neutron Scattering and dSTORM Single-Molecule Fluorescence Microscopy. ACS Applied Materials & Interfaces, 2017, 9, 42179-42191.	4.0	14
45	Design of Hydrated Porphyrin-Phospholipid Bilayers with Enhanced Magnetic Resonance Contrast. Small, 2017, 13, 1602505.	5.2	18
46	Membrane-Accelerated Amyloid-Î² Aggregation and Formation of Cross-Î² Sheets. Membranes, 2017, 7, 49.	1.4	41
47	Tuning the properties of injectable poly(oligoethylene glycol methacrylate) hydrogels by controlling precursor polymer molecular weight. Journal of Materials Chemistry B, 2016, 4, 6541-6551.	2.9	9
48	A Cytosolic Amphiphilic Î±-Helix Controls the Activity of the Bile Acid-sensitive Ion Channel (BASIC). Journal of Biological Chemistry, 2016, 291, 24551-24565.	1.6	6
49	Amyloid-Î²_{25â€“35}peptides aggregate into cross-Î² sheets in unsaturated anionic lipid membranes at high peptide concentrations. Soft Matter, 2016, 12, 3165-3176.	1.2	23
50	Organization of Nucleotides in Different Environments and the Formation of Pre-Polymers. Scientific Reports, 2016, 6, 31285.	1.6	26
51	The Lipid Bilayer Provides a Site for Cortisone Crystallization at High Cortisone Concentrations. Scientific Reports, 2016, 6, 22425.	1.6	23
52	Swelling of phospholipid membranes by divalent metal ions depends on the location of the ions in the bilayers. Soft Matter, 2016, 12, 6737-6748.	1.2	53
53	Structural Abnormalities in the Hair of a Patient with a Novel Ribosomopathy. PLoS ONE, 2016, 11, e0149619.	1.1	6
54	Diffusion in membranes: Toward a two-dimensional diffusion map. EPJ Web of Conferences, 2015, 83, 02019.	0.1	1

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55	Effect of shampoo, conditioner and permanent waving on the molecular structure of human hair. PeerJ, 2015, 3, e1296.	0.9	34
56	Effect of Cholesterol on the Structure of a Five-Component Mitochondria-Like Phospholipid Membrane. Membranes, 2015, 5, 664-684.	1.4	15
57	Neutron Scattering at the Intersection of Heart Health Science and Biophysics. Journal of Cardiovascular Development and Disease, 2015, 2, 125-140.	0.8	3
58	Strong Static Magnetic Fields Increase the Gel Signal in Partially Hydrated DPPC/DMPC Membranes. Membranes, 2015, 5, 532-552.	1.4	1
59	The Position of AÎ²22-40 and AÎ²1-42 in Anionic Lipid Membranes Containing Cholesterol. Membranes, 2015, 5, 824-843.	1.4	17
60	Cholesterol expels ibuprofen from the hydrophobic membrane core and stabilizes lamellar phases in lipid membranes containing ibuprofen. Soft Matter, 2015, 11, 4756-4767.	1.2	42
61	Aspirin inhibits formation of cholesterol rafts in fluid lipid membranes. Biochimica Et Biophysica Acta - Biomembranes, 2015, 1848, 805-812.	1.4	33
62	The organization of melatonin in lipid membranes. Biochimica Et Biophysica Acta - Biomembranes, 2015, 1848, 1032-1040.	1.4	47
63	Anomalous and anisotropic nanoscale diffusion of hydration water molecules in fluid lipid membranes. Soft Matter, 2015, 11, 8354-8371.	1.2	34
64	The structure of peopleâ€™s hair. PeerJ, 2014, 2, e619.	0.9	63
65	Structure of Cholesterol in Lipid Rafts. Physical Review Letters, 2014, 113, 228101.	2.9	55
66	The Interaction of Bio-Molecules with Lipid Membranes Studied by X-ray Diffraction. Zeitschrift Fur Physikalische Chemie, 2014, 228, 1105-1120.	1.4	3
67	Self-Assembly Enhances the Strength of Fibers Made from Vimentin Intermediate Filament Proteins. Biomacromolecules, 2014, 15, 574-581.	2.6	38
68	Injectable hydrogels with in situ-forming hydrophobic domains: oligo(<scp>d</scp>,<scp>l</scp>-lactide) modified poly(oligoethylene glycol methacrylate) hydrogels. Polymer Chemistry, 2014, 5, 6811-6823.	1.9	32
69	Acetylsalicylic acid (ASA) increases the solubility of cholesterol when incorporated in lipid membranes. Soft Matter, 2014, 10, 4275-4286.	1.2	29
70	Hierarchical, self-similar structure in native squid pen. Soft Matter, 2014, 10, 5541-5549.	1.2	40
71	Nanosecond lipid dynamics in membranes containing cholesterol. Soft Matter, 2014, 10, 2600.	1.2	46
72	Probing the Internal Morphology of Injectable Poly(oligoethylene glycol methacrylate) Hydrogels by Light and Small-Angle Neutron Scattering. Macromolecules, 2014, 47, 6017-6027.	2.2	16

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73	The Interaction between Amyloid-Î² Peptides and Anionic Lipid Membranes Containing Cholesterol and Melatonin. PLoS ONE, 2014, 9, e99124.	1.1	63
74	Small-scale structure in fluid cholesterolâ€“lipid bilayers. Current Opinion in Colloid and Interface Science, 2013, 18, 440-447.	3.4	63
75	Solubility of cholesterol in lipid membranes and the formation of immiscible cholesterol plaques at high cholesterol concentrations. Soft Matter, 2013, 9, 9342.	1.2	55
76	Static magnetic fields enhance lipid order in native plant plasma membrane. Soft Matter, 2013, 9, 6804.	1.2	18
77	The Observation of Highly Ordered Domains in Membranes with Cholesterol. PLoS ONE, 2013, 8, e66162.	1.1	100
78	Incoherent Neutron Spin-Echo Spectroscopy as an Option to Study Long-Range Lipid Diffusion. , 2013, 2013, 1-9.		14
79	Adenosine Monophosphate Forms Ordered Arrays in Multilamellar Lipid Matrices: Insights into Assembly of Nucleic Acid for Primitive Life. PLoS ONE, 2013, 8, e62810.	1.1	52
80	A Supported Bilayer Model to Study the Effect of Membrane Composition on Bcl-2 Family Proteins. Biophysical Journal, 2012, 102, 647a.	0.2	0
81	Co-existence of gel and fluid lipid domains in single-component phospholipid membranes. Soft Matter, 2012, 8, 4687.	1.2	38
82	Partitioning of ethanol into lipid membranes and its effect on fluidity and permeability as seen by X-ray and neutron scattering. Soft Matter, 2012, 8, 11839.	1.2	50
83	The Production of Fibers and Films from Solubilized Hagfish Slime Thread Proteins. Biomacromolecules, 2012, 13, 3475-3482.	2.6	35
84	Effect of cholesterol on the lateral nanoscale dynamics of fluid membranes. European Biophysics Journal, 2012, 41, 901-913.	1.2	51
85	Lipid Membrane Dynamics. Neutron Scattering Applications and Techniques, 2012, , 263-286.	0.2	4
86	Interaction of Aspirin (Acetylsalicylic Acid) with Lipid Membranes. PLoS ONE, 2012, 7, e34357.	1.1	58
87	Hydration Water Freezing in Single Supported Lipid Bilayers. , 2012, 2012, 1-7.		10
88	Short range ballistic motion in fluid lipid bilayers studied by quasi-elastic neutron scattering. Soft Matter, 2011, 7, 8358.	1.2	55
89	Chain formation in a magnetic fluid under the influence of strong external magnetic fields studied by small angle neutron scattering. Soft Matter, 2011, 7, 6678.	1.2	32
90	Protein-Protein Interactions in Membranes. Protein and Peptide Letters, 2011, 18, 344-353.	0.4	18

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91	Ethanol enhances collective dynamics of lipid membranes. Physical Review E, 2011, 83, 050907.	0.8	21
92	Influence of cholesterol on the collective dynamics of the phospholipid acyl chains in model membranes. European Physical Journal E, 2010, 31, 419-428.	0.7	15
93	Dynamics of polymers in elongational flow studied by the neutron spin-echo technique. Physica B: Condensed Matter, 2010, 405, 3690-3693.	1.3	2
94	Applications of neutron and X-ray scattering to the study of biologically relevant model membranes. Chemistry and Physics of Lipids, 2010, 163, 460-479.	1.5	195
95	Diffusion in single supported lipid bilayers studied by quasi-elastic neutron scattering. Soft Matter, 2010, 6, 5864.	1.2	29
96	Subdiffusion and lateral diffusion coefficient of lipid atoms and molecules in phospholipid bilayers. Physical Review E, 2009, 79, 011907.	0.8	91
97	Protein-Protein Interaction in Purple Membrane. Physical Review Letters, 2009, 103, 128104.	2.9	35
98	Subdiffusion And Diffusion Of Lipid Atoms And Molecules: Relating The Dynamics Of Lipids To Neutron Scattering Experiments. Biophysical Journal, 2009, 96, 198a.	0.2	0
99	Anomalous Diffusion Of Lipid Atoms And Molecules In Phospholipid Bilayers: A Combined Molecular Dynamics And Theoretical Study. Biophysical Journal, 2009, 96, 354a.	0.2	0
100	Cooperative long range protein-protein dynamics in Purple Membrane. Biophysical Journal, 2009, 96, 378a.	0.2	0
101	Collective molecular dynamics in proteins and membranes (Review). Biointerphases, 2008, 3, FB83-FB90.	0.6	11
102	Atomic force microscopy study of thick lamellar stacks of phospholipid bilayers. Physical Review E, 2008, 77, 021905.	0.8	8
103	Motional Coherence in Fluid Phospholipid Membranes. Physical Review Letters, 2008, 101, 248106.	2.9	47
104	Spin dynamics ofYMnO3studied via inelastic neutron scattering and the anisotropic Hubbard model. Physical Review B, 2007, 76, .	1.1	36
105	Nanosecond molecular relaxations in lipid bilayers studied by high energy-resolution neutron scattering andin situdiffraction. Physical Review E, 2007, 75, 011907.	0.8	25
106	Short-Range Order and Collective Dynamics of DMPC Bilayers: A Comparison between Molecular Dynamics Simulations, X-Ray, and Neutron Scattering Experiments. Biophysical Journal, 2007, 93, 3156-3168.	0.2	77
107	Structural and dynamical studies from bio-mimetic systems: an overview. Comptes Rendus Physique, 2007, 8, 865-883.	0.3	35
108	Neutron spin-echo on magnetic single crystals in the quantum limit. Physica B: Condensed Matter, 2007, 397, 95-98.	1.3	0

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109	Dynamics of argon in confined geometry. European Physical Journal: Special Topics, 2007, 141, 117-120.	1.2	2
110	Neutron diffraction study ofYVO3,NdVO3, andTbVO3. Physical Review B, 2006, 73, .	1.1	87
111	Probing dynamics at interfaces: options for neutron and X-ray spectroscopy. Journal of Neutron Research, 2006, 14, 257-268.	0.4	6
112	The â€˜neutron windowâ€™ of collective excitations in lipid membranes. Physica B: Condensed Matter, 2006, 385-386, 722-724.	1.3	3
113	Dispersion Relation of Lipid Membrane Shape Fluctuations by Neutron Spin-Echo Spectrometry. Physical Review Letters, 2006, 97, 048103.	2.9	70
114	Fermi Surface Topology and the Superconducting Gap Function inUPd2Al3: A Neutron Spin-Echo Study. Physical Review Letters, 2006, 97, 057002.	2.9	9
115	Exploring the collective dynamics of lipid membranes with inelastic neutron scattering. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2006, 24, 1191-1196.	0.9	18
116	Neutron Diffraction Study of He Solidified in a Mesoporous Glass. Journal of Low Temperature Physics, 2005, 138, 1013-1024.	0.6	20
117	Molecular motions in lipid bilayers studied by the neutron backscattering technique. Physical Review E, 2005, 71, 061908.	0.8	58
118	Low-dimensional ordering and fluctuations in methanol-Î²-hydroquinone clathrate studied by x-ray and neutron diffraction. Physical Review B, 2005, 71, .	1.1	1
119	Quantum helimagnetism of the frustrated spin-Â½ chain LiCuVO 4. Europhysics Letters, 2005, 70, 237-243.	0.7	230
120	La dynamique collective des membranes bicouches de modÃ¨le Ã©tudiÃ© par diffusion inÃ©lastique de neutrons. European Physical Journal Special Topics, 2005, 130, 141-151.	0.2	0
121	Aging and scaling laws inÎ²-hydroquinone-clathrate. Physical Review B, 2004, 69, .	1.1	10
122	Quenched chirality inRbNiCl3:â€ƒLinear birefringence and neutron diffraction. Physical Review B, 2004, 70, .	1.1	2
123	UFOâ€"a multi-analyser option for IN12. Physica B: Condensed Matter, 2004, 350, E849-E851.	1.3	7
124	Collective dynamics in phospholipid bilayers investigated by inelastic neutron scattering: exploring the dynamics of biological membranes with neutrons. Physica B: Condensed Matter, 2004, 350, 136-139.	1.3	19
125	Magnetic structure of the heavy-fermion alloy CeCu2(Si0.5Ge0.5)2. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 44-45.	1.0	5
126	Collective dynamics in phospholipid bilayers investigated by inelastic neutron scattering: exploring the dynamics of biological membranes with neutrons. Physica B: Condensed Matter, 2004, 350, 136-136.	1.3	1

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127	Collective Dynamics of Lipid Membranes Studied by Inelastic Neutron Scattering. Physical Review Letters, 2004, 93, 108107.	2.9	120
128	Inversion and suppression of an oxygen bulk phase transition in confined geometry. European Physical Journal E, 2003, 12, 39-42.	0.7	3
129	Aging and memory effects in Î²-hydroquinone-clathrate. Physical Review B, 2002, 65, .	1.1	18
130	Dipolar ordering and relaxations in acetonitrile-Î²-hydroquinone clathrate. Physical Review B, 2002, 66, .	1.1	4
131	Tuning anisotropy by impurities: magnetocaloric experiments on CsNi 0.9 Fe 0.1 Cl 3. European Physical Journal B, 2001, 22, 461-471.	0.6	8
132	Dipolar ordering and glassy freezing in methanol-Î²-hydroquinone-clathrate. Physical Review B, 2001, 63, .	1.1	10
133	Dipolar ordering and glassy freezing in a clathrate. Europhysics Letters, 2000, 51, 407-412.	0.7	7