Michael Rappolt

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Influence of humectants on the thermotropic behaviour and nanostructure of fully hydrated lecithin bilayers. Chemistry and Physics of Lipids, 2022, 243, 105165.	3.2	2
2	Membrane mixing and dynamics in hybrid POPC/poly(1,2-butadiene- <i>block</i> -ethylene oxide) (PBd- <i>b</i> -PEO) lipid/block co-polymer giant vesicles. Soft Matter, 2022, 18, 1294-1301.	2.7	11
3	Detergent-Free Functionalization of Hybrid Vesicles with Membrane Proteins Using SMALPs. Macromolecules, 2022, 55, 3415-3422.	4.8	4
4	The past, present and future of lipid self-assembly nanostructure research. Advances in Biomembranes and Lipid Self-Assembly, 2022, , .	0.6	0
5	In situ monitoring of the formation of lipidic non-lamellar liquid crystalline depot formulations in synovial fluid. Journal of Colloid and Interface Science, 2021, 582, 773-781.	9.4	11
6	The Unique Crystallization Behavior of Buffalo Milk Fat. Crystal Growth and Design, 2021, 21, 2113-2127.	3.0	5
7	Liquid crystalline phases of linear alkylbenzene sulphonate in spray-dried detergent powders studied by small-angle X-ray scattering, TEM, and ATR-IR spectroscopy. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 614, 126130.	4.7	2
8	Breaking Isolation to Form New Networks: pH-Triggered Changes in Connectivity inside Lipid Nanoparticles. Journal of the American Chemical Society, 2021, 143, 16556-16565.	13.7	11
9	The stabilization and release performances of curcumin-loaded liposomes coated by high and low molecular weight chitosan. Food Hydrocolloids, 2020, 99, 105355.	10.7	99
10	Structure and Dynamics of Dioleoyl-Phosphatidylcholine Bilayers under the Influence of Quercetin and Rutin. Langmuir, 2020, 36, 11776-11786.	3.5	6
11	Stability and release performance of curcumin-loaded liposomes with varying content of hydrogenated phospholipids. Food Chemistry, 2020, 326, 126973.	8.2	83
12	Hybrid Vesicle Stability under Sterilisation and Preservation Processes Used in the Manufacture of Medicinal Formulations. Polymers, 2020, 12, 914.	4.5	4
13	An Evidence for a Novel Antiviral Mechanism: Modulating Effects of Arg-Glc Maillard Reaction Products on the Phase Transition of Multilamellar Vesicles. Frontiers in Cell and Developmental Biology, 2020, 8, 629775.	3.7	0
14	Structural Transformation in Vesicles upon Hydrolysis of Phosphatidylethanolamine and Phosphatidylcholine with Phospholipase C. Langmuir, 2019, 35, 14949-14958.	3.5	12
15	Effect of β-sitosterol on the curcumin-loaded liposomes: Vesicle characteristics, physicochemical stability, in vitro release and bioavailability. Food Chemistry, 2019, 293, 92-102.	8.2	92
16	50 Years of structural lipid bilayer modelling. Advances in Biomembranes and Lipid Self-Assembly, 2019, 29, 1-21.	0.6	1
17	Drug-Membrane Interactions in the Renin Angiotensin System. Series in Bioengineering, 2019, , 339-364.	0.6	1
18	Early stages of fat crystallisation evaluated by lowâ€field NMR and smallâ€angle Xâ€ray scattering. Magnetic Resonance in Chemistry, 2019, 57, 686-694.	1.9	10

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19	Vinblastine. Advances in Biomembranes and Lipid Self-Assembly, 2019, 29, 127-157.	0.6	2
20	Structurally induced modulation of in vitro digestibility of amylopectin corn starch upon esterification with folic acid. International Journal of Biological Macromolecules, 2019, 129, 361-369.	7.5	21
21	Effects of folic acid esterification on the hierarchical structure of amylopectin corn starch. Food Hydrocolloids, 2019, 86, 162-171.	10.7	36
22	A reconstitution method for integral membrane proteins in hybrid lipid-polymer vesicles for enhanced functional durability. Methods, 2018, 147, 142-149.	3.8	30
23	Global Small-Angle X-ray Scattering Data Analysis of Triacylglycerols in the α-Phase (Part II). Journal of Physical Chemistry B, 2018, 122, 10330-10336.	2.6	10
24	Bile Salts Caught in the Act: From Emulsification to Nanostructural Reorganization of Lipid Self-Assemblies. Langmuir, 2018, 34, 13626-13637.	3.5	22
25	Global Small-Angle X-ray Scattering Data Analysis of Triacylglycerols in the Molten State (Part I). Journal of Physical Chemistry B, 2018, 122, 10320-10329.	2.6	18
26	Spherical-supported membranes as platforms for screening against membrane protein targets. Analytical Biochemistry, 2018, 549, 58-65.	2.4	6
27	Heteroprotein Complex Formation of Bovine Lactoferrin and Pea Protein Isolate: A Multiscale Structural Analysis. Biomacromolecules, 2017, 18, 625-635.	5.4	69
28	Exploring the interactions of irbesartan and irbesartan–2-hydroxypropyl-β-cyclodextrin complex with model membranes. Biochimica Et Biophysica Acta - Biomembranes, 2017, 1859, 1089-1098.	2.6	26
29	Synthesis and organogelating behaviour of amino acid-functionalised triphenylenes. Soft Matter, 2017, 13, 5922-5932.	2.7	3
30	Interactions of Flavonoids With Lipidic Mesophases. Advances in Biomembranes and Lipid Self-Assembly, 2017, 25, 95-123.	0.6	2
31	Acoustic properties of crystallized fat: Relation between polymorphic form, microstructure, fracturing behavior, and sound intensity. European Journal of Lipid Science and Technology, 2016, 118, 1257-1270.	1.5	5
32	Experimental Modeling of Flavonoid–Biomembrane Interactions. Langmuir, 2016, 32, 13234-13243.	3.5	59
33	Effects of High Pressure on Internally Self-Assembled Lipid Nanoparticles: A Synchrotron Small-Angle X-ray Scattering (SAXS) Study. Langmuir, 2016, 32, 11907-11917.	3.5	19
34	Facile Preparation of Internally Self-assembled Lipid Particles Stabilized by Carbon Nanotubes. Journal of Visualized Experiments, 2016, , 53489.	0.3	10
35	Comparative study of interactions of aliskiren and AT 1 receptor antagonists with lipid bilayers. Biochimica Et Biophysica Acta - Biomembranes, 2015, 1848, 984-994.	2.6	10
36	Stability of the Metastable α-Polymorph in Solid Triglyceride Drug-Carrier Nanoparticles. Langmuir, 2015, 31, 6663-6674.	3.5	17

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37	Fullerene up-take alters bilayer structure and elasticity: A small angle X-ray study. Chemistry and Physics of Lipids, 2015, 188, 46-53.	3.2	18
38	Effects of magnetic cobalt ferrite nanoparticles on biological and artificial lipid membranes. International Journal of Nanomedicine, 2014, 9, 1559.	6.7	41
39	Global small-angle X-ray scattering data analysis for multilamellar vesicles: the evolution of the scattering density profile model. Journal of Applied Crystallography, 2014, 47, 173-180.	4.5	62
40	Synchrotron X-ray investigation of the layer spacing in a series of low molar mass bi-mesogen organosiloxane smectic materials. Phase Transitions, 2014, 87, 739-745.	1.3	0
41	Temperature Dependence of Lo/Ld Domain Thickness and Elasticity by Global Saxs Data Analysis. Biophysical Journal, 2014, 106, 512a.	0.5	Ο
42	How the chain configuration governs the packing of inverted micelles in the cubic Fd3m-phase. Soft Matter, 2013, 9, 6291.	2.7	31
43	Monolayer spontaneous curvature of raft-forming membrane lipids. Soft Matter, 2013, 9, 10877.	2.7	210
44	Control and Analysis of Oriented Thin Films of Lipid Inverse Bicontinuous Cubic Phases Using Grazing Incidence Small-Angle X-ray Scattering. Langmuir, 2013, 29, 9874-9880.	3.5	29
45	Formation of Curved Membranes and Membrane Fusion Processes Studied by Synchrotron X-ray-Scattering Techniques. Behavior Research Methods, 2013, , 29-54.	4.0	8
46	The Micellar Cubic Fd3m Phase. Behavior Research Methods, 2013, , 111-145.	4.0	8
47	In situ forming drug delivery systems based on lyotropic liquid crystalline phases: structural characterization and release properties. Journal of Drug Delivery Science and Technology, 2013, 23, 325-332.	3.0	26
48	Losartan's affinity to fluid bilayers modulates lipid–cholesterol interactions. Physical Chemistry Chemical Physics, 2012, 14, 4780.	2.8	40
49	Self-Assembled Nanostructures of Fully Hydrated Monoelaidin–Elaidic Acid and Monoelaidin–Oleic Acid Systems. Langmuir, 2012, 28, 10105-10119.	3.5	60
50	Comparative study of the AT1 receptor prodrug antagonist candesartan cilexetil with other sartans on the interactions with membrane bilayers. Biochimica Et Biophysica Acta - Biomembranes, 2012, 1818, 3107-3120.	2.6	19
51	Lipid Sorting by Ceramide and the Consequences for Membrane Proteins. Biophysical Journal, 2012, 102, 2031-2038.	0.5	24
52	Impact of Sterol Tilt on Membrane Bending Rigidity in Cholesterol and 7DHC-Containing DMPC Membrane. Biophysical Journal, 2012, 102, 413a.	0.5	1
53	Characterization of Bupivacaine-Loaded Formulations Based on Liquid Crystalline phases and Microemulsions: The Effect of Lipid Composition. Langmuir, 2012, 28, 2881-2889.	3.5	75
54	Scattering techniques in biology—Marking the contributions to the field from Peter Laggner on the occasion of his 68th birthday. European Biophysics Journal, 2012, 41, 777-779.	2.2	0

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55	Structural characterization of lipidic systems under nonequilibrium conditions. European Biophysics Journal, 2012, 41, 831-840.	2.2	43
56	Experimental evidence for the interaction of C-60 fullerene with lipid vesicle membranes. Carbon, 2012, 50, 1170-1178.	10.3	35
57	Uniform metal nanoparticles produced at high yield in dense microemulsions. Journal of Colloid and Interface Science, 2012, 372, 16-23.	9.4	30
58	In situ characterization of lipidic bupivacaine-loaded formulations. Soft Matter, 2011, 7, 8291.	2.7	43
59	The role of calcium in membrane condensation and spontaneous curvature variations in model lipidic systems. Physical Chemistry Chemical Physics, 2011, 13, 3115-3125.	2.8	75
60	Elastic deformations in hexagonal phases studied by small-angle X-ray diffraction and simulations. Physical Chemistry Chemical Physics, 2011, 13, 3100-3107.	2.8	31
61	Transfer of lipid and phase reorganisation in self-assembled liquid crystal nanostructured particles based on phytantriol. Physical Chemistry Chemical Physics, 2011, 13, 3026.	2.8	33
62	Segregation into domains observed in liquid crystal phases: comparison of experimental and theoretical data. Soft Matter, 2011, 7, 3392.	2.7	3
63	Mesostructured Silica Aerosol Particles: Comparison of Gas-Phase and Powder Deposit X-ray Diffraction Data. Langmuir, 2011, 27, 5542-5548.	3.5	4
64	Impact of sterol tilt on membrane bending rigidity in cholesterol and 7DHC-containing DMPC membranes. Soft Matter, 2011, 7, 10299.	2.7	18
65	Interactions of the AT1 antagonist valsartan with dipalmitoyl-phosphatidylcholine bilayers. Biochimica Et Biophysica Acta - Biomembranes, 2011, 1808, 1753-1763.	2.6	48
66	Thermal, dynamic and structural properties of drug AT1 antagonist olmesartan in lipid bilayers. Biochimica Et Biophysica Acta - Biomembranes, 2011, 1808, 2995-3006.	2.6	23
67	Aerosol Flow Reactor with Controlled Temperature Gradient for <i>In Situ</i> Gas-Phase X-Ray Experiments—Measurements of Evaporation-Induced Self-Assembly (EISA) in Aerosols. Aerosol Science and Technology, 2011, 45, 805-810.	3.1	6
68	Liquid Crystalline Nanoparticles as Drug Nanocarriers. Surfactant Science, 2010, , 337-353.	0.0	2
69	Bilayer thickness estimations with "poor―diffraction data. Journal of Applied Physics, 2010, 107, .	2.5	33
70	Gold-embedded photosensitive liposomes for drug delivery: Triggering mechanism and intracellular release. Journal of Controlled Release, 2010, 147, 136-143.	9.9	140
71	Interactions Of Different Sartans with the Bilayer Interface Studied by Saxs. Scientia Pharmaceutica, 2010, 78, 723-723.	2.0	0
72	Effective Antimicrobial and Anti-Endotoxin Activity of Cationic Peptides Based on Lactoferricin: A Biophysical and Microbiological Study. Anti-Infective Agents in Medicinal Chemistry, 2010, 9, 9-22.	0.6	9

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73	Local x-ray structure analysis of optically manipulated biological micro-objects. Applied Physics Letters, 2010, 97, .	3.3	6
74	Nonequilibrium Effects in Self-Assembled Mesophase Materials: Unexpected Supercooling Effects for Cubosomes and Hexosomes. Langmuir, 2010, 26, 9000-9010.	3.5	61
75	Structural Elucidation of Light Activated Vesicles. Journal of Physical Chemistry Letters, 2010, 1, 962-966.	4.6	40
76	Effects of Pressure and Temperature on the Self-Assembled Fully Hydrated Nanostructures of Monooleinâ^'Oil Systems. Langmuir, 2010, 26, 1177-1185.	3.5	52
77	Interactions at the bilayer interface and receptor site induced by the novel synthetic pyrrolidinone analog MMK3. Biochimica Et Biophysica Acta - Biomembranes, 2010, 1798, 422-432.	2.6	22
78	Membrane-Mediated Effect on Ion Channels Induced by the Anesthetic Drug Ketamine. Journal of the American Chemical Society, 2010, 132, 7990-7997.	13.7	83
79	Weakened Hydrogen Bonds in Water Confined between Lipid Bilayers: The Existence of a Longâ€Range Attractive Hydration Force. ChemPhysChem, 2009, 10, 1438-1441.	2.1	22
80	Chapter 9 Stability of the Inverted Hexagonal Phase. Behavior Research Methods, 2009, 9, 237-278.	4.0	11
81	Role of Phospholipid Asymmetry in Stability of Inverted Hexagonal Mesoscopic Phases. Biophysical Journal, 2009, 96, 349a-350a.	0.5	5
82	Conformational and hydrational properties during the Lβ- to Lα- and Lα- to HII-phase transition in phosphatidylethanolamine. Chemistry and Physics of Lipids, 2008, 154, 46-55.	3.2	53
83	Impurities in Commercial Phytantriol Significantly Alter Its Lyotropic Liquid-Crystalline Phase Behavior. Langmuir, 2008, 24, 6998-7003.	3.5	89
84	Differential Modulation of Membrane Structure and Fluctuations by Plant Sterols and Cholesterol. Biophysical Journal, 2008, 94, 3935-3944.	0.5	136
85	Influence of antimicrobial peptides on the formation of nonlamellar lipid mesophases. Biochimica Et Biophysica Acta - Biomembranes, 2008, 1778, 2325-2333.	2.6	47
86	Role of Phospholipid Asymmetry in the Stability of Inverted Hexagonal Mesoscopic Phases. Journal of Physical Chemistry B, 2008, 112, 16575-16584.	2.6	31
87	Novel <i>in situ</i> setup to study the formation of nanoparticles in the gas phase by small angle x-ray scattering. Review of Scientific Instruments, 2008, 79, 043905.	1.3	7
88	Calcium Triggered Lα-H2 Phase Transition Monitored by Combined Rapid Mixing and Time-Resolved Synchrotron SAXS. PLoS ONE, 2008, 3, e2072.	2.5	63
89	Self-Assembly in Monoelaidin Aqueous Dispersions: Direct Vesicles to Cubosomes Transition. PLoS ONE, 2008, 3, e3747.	2.5	71
90	Optical Tweezers for Sample Fixing in Micro-Diffraction Experiments. AIP Conference Proceedings, 2007, , .	0.4	0

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91	Scanning x-ray microdiffraction of optically manipulated liposomes. Applied Physics Letters, 2007, 91, 234107.	3.3	15
92	Tuning Curvature and Stability of Monoolein Bilayers by Designer Lipid-Like Peptide Surfactants. PLoS ONE, 2007, 2, e479.	2.5	101
93	Rigidification of Neutral Lipid Bilayers in the Presence of Salts. Biophysical Journal, 2007, 93, 2688-2696.	0.5	206
94	D-72 Self Assembly and High Pressure Behavior of Non-Lamellar Phospholipid Phases On Solid Supports Studied with Gisaxd. Powder Diffraction, 2007, 22, 181-181.	0.2	0
95	Effect of Sodium Dodecyl Sulfate at Different Hydration Conditions on Dioleoyl Phosphatidylcholine Bilayers Studied by Grazing Incidence X-ray Diffraction. Langmuir, 2006, 22, 5256-5260.	3.5	15
96	Chapter 9 The Biologically Relevant Lipid Mesophases as "Seen―by X-Rays. Behavior Research Methods, 2006, 5, 253-283.	4.0	39
97	Bidirectional tensile testing cell for in situ small angle X-ray scattering investigations of soft tissue. Nuclear Instruments & Methods in Physics Research B, 2006, 246, 262-268.	1.4	12
98	Non-equilibrium formation of the cubic Pn 3 m phase in a monoolein/water system. Europhysics Letters, 2006, 75, 267-273.	2.0	42
99	Structure of DNA-CTAB-hexanol complexes. Physical Review E, 2006, 73, 031904.	2.1	26
100	Phospholipid Mesophases at Solid Interfaces: In situ X-Ray Diffraction and Spin-Label Studies. ChemInform, 2005, 36, no.	0.0	0
101	<i>In situ</i> tensile testing of human aortas by time-resolved small-angle X-ray scattering. Journal of Synchrotron Radiation, 2005, 12, 727-733.	2.4	35
102	Divalent cations affect chain mobility and aggregate structure of lipopolysaccharide from Salmonella minnesota reflected in a decrease of its biological activity. Biochimica Et Biophysica Acta - Biomembranes, 2005, 1715, 122-131.	2.6	81
103	Structure and fluctuations of phosphatidylcholines in the vicinity of the main phase transition. Physical Review E, 2004, 70, 021908.	2.1	58
104	Development of a two-dimensional virtual-pixel X-ray imaging detector for time-resolved structure research. Journal of Synchrotron Radiation, 2004, 11, 177-186.	2.4	11
105	Phospholipid mesophases at solid interfaces: in-situ X-ray diffraction and spin-label studies. Advances in Colloid and Interface Science, 2004, 111, 63-77.	14.7	30
106	Elucidation of the isomeric domains formed by sodium N-dodecanoyl-l-prolinate. Journal of Colloid and Interface Science, 2004, 280, 212-218.	9.4	2
107	In Situ Sensing of Salinity in Oriented Lipid Multilayers by Surface X-ray Scattering. Langmuir, 2004, 20, 4621-4628.	3.5	19
108	Structural, dynamic and mechanical properties of POPC at low cholesterol concentration studied in pressure/temperature space. European Biophysics Journal, 2003, 31, 575-585.	2.2	61

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109	Structural analysis of weakly ordered membrane stacks. Journal of Applied Crystallography, 2003, 36, 1378-1388.	4.5	181
110	Mechanism of the Lamellar/Inverse Hexagonal Phase Transition Examined by High Resolution X-Ray Diffraction. Biophysical Journal, 2003, 84, 3111-3122.	0.5	225
111	Hydrophilic/Hydrophobic Balance Determines Morphology of Glycolipids with Oligolactose Headgroups. Biophysical Journal, 2003, 84, 306-313.	0.5	24
112	Structure and Interactions in the Anomalous Swelling Regime of Phospholipid Bilayersâ€. Langmuir, 2003, 19, 1716-1722.	3.5	142
113	Discontinuous Unbinding of Lipid Multibilayers. Physical Review Letters, 2003, 91, 028101.	7.8	56
114	Salt-induced phase separation in the liquid crystalline phase of phosphatidylcholines. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2001, 183-185, 171-181.	4.7	54
115	Refined structure of 1,2-diacyl-P-O-ethylphosphatidylcholine bilayer membranes. Chemistry and Physics of Lipids, 2001, 112, 137-150.	3.2	37
116	Collagen fibrils are differently organized in weight-bearing and not-weight-bearing regions of pig articular cartilage. The Journal of Experimental Zoology, 2000, 287, 346-352.	1.4	24
117	Novel detector systems for time resolved SAXS experiments. Journal of Applied Crystallography, 2000, 33, 778-781.	4.5	2
118	New evidence for gel-liquid crystalline phase coexistence in the ripple phase of phosphatidylcholines. European Biophysics Journal, 2000, 29, 125-133.	2.2	61
119	Structural information from multilamellar liposomes at full hydration: Fullq-range fitting with high quality x-ray data. Physical Review E, 2000, 62, 4000-4009.	2.1	440
120	Smectic ordering of octylcyanobiphenyl confined to control porous glasses. Journal of Physics Condensed Matter, 2000, 12, A431-A436.	1.8	7
121	X-ray Kinematography of Temperature-Jump Relaxation Probes the Elastic Properties of Fluid Bilayersâ€. Langmuir, 2000, 16, 8994-9001.	3.5	31
122	Synchrotron X-ray study at Trieste: No correlation between breast cancer and hair structure. Synchrotron Radiation News, 1999, 12, 32-34.	0.8	15
123	Biological X-ray diffraction measurements with a novel two-dimensional gaseous pixel detector. Journal of Synchrotron Radiation, 1999, 6, 985-994.	2.4	6
124	Trapping of short-lived intermediates in phospholipid phase transitions: The Lα* phase. Faraday Discussions, 1999, 111, 31-40.	3.2	11
125	An ordered metastable phase in hydrated phosphatidylethanolamine: the Y-transition. Biochimica Et Biophysica Acta - Biomembranes, 1999, 1417, 183-190.	2.6	20
126	Small-angle X-ray scattering studies of nanophase TiO2 thin films. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1998, 54, 174-181.	3.5	11

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127	First performance assessment of the small-angle X-ray scattering beamline at ELETTRA. Journal of Synchrotron Radiation, 1998, 5, 506-508.	2.4	244
128	Lα-phase separation in phosphatidylcholine–water systems induced by alkali chlorides. Biochimica Et Biophysica Acta - Biomembranes, 1998, 1372, 389-393.	2.6	29
129	Kinetics of glycolipid phase transitions: ms laser Tâ€ j ump synchrotron studies. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1997, 101, 789-808.	0.9	11
130	Fast PC-based data acquisition system for gas-filled position sensitive detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1997, 392, 384-391.	1.6	8
131	Performance and First Results of the ELETTRA High-Flux Beamline for Small-Angle X-ray Scattering. Journal of Applied Crystallography, 1997, 30, 872-876.	4.5	124
132	New phases induced by sucrose in saturated phosphatidylethanolamines: an expanded lamellar gel phase and a cubic phase. Biochimica Et Biophysica Acta - Biomembranes, 1996, 1285, 109-122.	2.6	28
133	Simultaneous small―and wideâ€angle Xâ€ray diffraction during the main transition of dimyristoylphosphatidylethanolamine. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1996, 100, 1153-1162.	0.9	39
134	Structure of the stable and metastable ripple phase of dipalmitoylphosphatidylcholine. European Biophysics Journal, 1996, 24, 381-386.	2.2	59
135	On the existence of bicontinuous cubic phases in dioleoylphosphatidylethanolamine. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1994, 98, 1287-1293.	0.9	50
136	Time-resolved simultaneous small- and wide-angle x-ray diffraction on dipalmitoylphosphatidylcholine by laser temperature-jump. , 1993, , 25-29.		26