MichÃ¨le Auger

List of Publications by Year
in descending order

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112 papers	5,727 citations	126907 33 h-index	76900 74 g-index
112 all docs	112 docs citations	112 times ranked	5570 citing authors

#	Article	IF	Citations
1	Heteronuclear decoupling in rotating solids. Journal of Chemical Physics, 1995, 103, 6951-6958.	3.0	2,064
2	Structural model for the Î²-amyloid fibril based on interstrand alignment of an antiparallel-sheet comprising a C-terminal peptide. Nature Structural and Molecular Biology, 1995, 2, 990-998.	8.2	423
3	Bicelles as model membranes for solid- and solution-state NMR studies of membrane peptides and proteins. Concepts in Magnetic Resonance Part A: Bridging Education and Research, 2005, 24A, 17-37.	0.5	176
4	Interaction of antimicrobial peptides from Australian amphibians with lipid membranes. Chemistry and Physics of Lipids, 2003, 122, 107-120.	3.2	131
5	Rotational Resonance Solid-State NMR Elucidates a Structural Model of Pancreatic Amyloid. Journal of the American Chemical Society, 1995, 117, 3539-3546.	13.7	130
6	An unusual peptide conformation may precipitate amyloid formation in Alzheimer's disease: application of solid-state NMR to the determination of protein secondary structure. Biochemistry, 1991, 30, 10382-10387.	2.5	103
7	A Multidimensional 1H NMR Investigation of the Conformation of Methionine-Enkephalin in Fast-Tumbling Bicelles. Biophysical Journal, 2004, 86, 1587-1600.	0.5	102
8	Quantitative Orientation Measurements in Thin Lipid Films by Attenuated Total Reflection Infrared Spectroscopy. Biophysical Journal, 1999, 76, 539-551.	0.5	92
9	High resolution 1H nuclear magnetic resonance of a transmembrane peptide. Biophysical Journal, 1995, 69, 1917-1932.	0.5	91
10	Solid state 13C-NMR spectroscopy and XRD studies of commercial and pyrolytic carbon blacks. Carbon, 2000, 38, 1279-1287.	10.3	90
11	31P NMR First Spectral Moment Study of the Partial Magnetic Orientation of Phospholipid Membranes. Biophysical Journal, 1999, 77, 888-902.	0.5	87
12	Exploiting Peptide Nanostructures To Construct Functional Artificial Ion Channels. Accounts of Chemical Research, 2013, 46, 2934-2943.	15.6	85
13	Evidence by infrared spectroscopy of the presence of two types of Î²-sheets in major ampullate spider silk and silkworm silk. Soft Matter, 2013, 9, 208-215.	2.7	83
14	Influence of the Length and Charge on the Activity of Î±-Helical Amphipathic Antimicrobial Peptides. Biochemistry, 2017, 56, 1680-1695.	2.5	83
15	Static and magic angle spinning NMR of membrane peptides and proteins. Progress in Nuclear Magnetic Resonance Spectroscopy, 1999, 35, 1-84.	7.5	72
16	Interaction of the Neuropeptide Met-Enkephalin with Zwitterionic and Negatively Charged Bicelles as Viewed by 31P and 2H Solid-State NMR. Biophysical Journal, 2003, 85, 328-339.	0.5	72
17	The structural basis of pancreatic amyloid formation: isotope-edited spectroscopy in the solid state. Journal of the American Chemical Society, 1992, 114, 790-791.	13.7	66
18	Interactions of the local anesthetic tetracaine with membranes containing phosphatidylcholine and cholesterol: a deuterium NMR study. Biochemistry, 1988, 27, 4660-4667.	2.5	63

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19	Conformation of Spider Silk Proteins In Situ in the Intact Major Ampullate Gland and in Solution. Biomacromolecules, 2007, 8, 2342-2344.	5.4	63
20	Two-Dimensional Infrared Correlation Spectroscopy Study of the Aggregation of Cytochrome c in the Presence of Dimyristoylphosphatidylglycerol. Biophysical Journal, 2001, 81, 305-312.	0.5	60
21	Solvent history dependence of gramicidin-lipid interactions: a Raman and infrared spectroscopic study. Biophysical Journal, 1993, 65, 2484-2492.	0.5	57
22	The effects of amphotericin B on pure and ergosterol- or cholesterol-containing dipalmitoylphosphatidylcholine bilayers as viewed by 2H NMR. Chemistry and Physics of Lipids, 2002, 119, 1-11.	3.2	57
23	Spider silk as a blueprint for greener materials: a review. International Materials Reviews, 2016, 61, 127-153.	19.3	54
24	Peptidoglycan lytic activity of thePseudomonas aeruginosaphage ÃÂ†KZ gp144 lytic transglycosylase. FEMS Microbiology Letters, 2007, 266, 201-209.	1.8	50
25	Measurement of the Lateral Diffusion of Dipalmitoylphosphatidylcholine Adsorbed on Silica Beads in the Absence and Presence of Melittin: A 31P Two-Dimensional Exchange Solid-State NMR Study. Biophysical Journal, 1998, 74, 857-868.	0.5	47
26	Internuclear distance measurement in a reaction intermediate: solid-state carbon-13 NMR rotational resonance determination of the Schiff base configuration in the M photointermediate of bacteriorhodopsin. Journal of the American Chemical Society, 1993, 115, 8515-8516.	13.7	45
27	Elucidation of motional modes in glycoglycerolipid bilayers. A deuterium NMR relaxation and line-shape study. Journal of the American Chemical Society, 1990, 112, 1373-1381.	13.7	43
28	High-speed magic angle spinning solid-state 1H nuclear magnetic resonance study of the conformation of gramicidin A in lipid bilayers. Biophysical Journal, 1995, 69, 1933-1938.	0.5	43
29	13C-NMR spectroscopy study of polyurethane obtained from azide hydroxyl-terminated polymer cured with isophorone diisocyanate (IPDI). Journal of Polymer Science Part A, 1997, 35, 2991-2998.	2.3	43
30	Effect of pH on the Structure of the Recombinant C-Terminal Domain of Nephila clavipes Dragline Silk Protein. Biomacromolecules, 2014, 15, 4447-4454.	5.4	42
31	Interaction between Î²-Purothionin and Dimyristoylphosphatidylglycerol:A 31P-NMR and Infrared Spectroscopic Study. Biophysical Journal, 2002, 83, 2074-2083.	0.5	41
32	Spider wrapping silk fibre architecture arising from its modular soluble protein precursor. Scientific Reports, 2015, 5, 11502.	3.3	39
33	Investigation of the Temperature Behavior of the Bands Due to the Methylene Stretching Vibrations of Phospholipid Acyl Chains by Two-Dimensional Infrared Correlation Spectroscopy. Applied Spectroscopy, 2000, 54, 948-955.	2.2	38
34	The chain conformational order of ergosterol- or cholesterol-containing DPPC bilayers as modulated by Amphotericin B: a FTIR study. Chemistry and Physics of Lipids, 2008, 151, 41-50.	3.2	37
35	Molecular Details of Anesthetic-Lipid Interaction. Annals of the New York Academy of Sciences, 1991, 625, 668-684.	3.8	34
36	Insights on the Interactions of Synthetic Amphipathic Peptides with Model Membranes as Revealed by 31P and 2H Solid-State NMR and Infrared Spectroscopies. Biophysical Journal, 2006, 90, 4071-4084.	0.5	32

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37	New approach to study fast and slow motions in lipid bilayers: application to dimyristoylphosphatidylcholine-cholesterol interactions. Biophysical Journal, 1995, 68, 1952-1959.	0.5	31
38	Bacterial species selective toxicity of two isomeric Î±/Î²-peptides: Role of membrane lipids. Molecular Membrane Biology, 2005, 22, 457-469.	2.0	31
39	Mimicking and Understanding the Agglutination Effect of the Antimicrobial Peptide Thanatin Using Model Phospholipid Vesicles. Biochemistry, 2015, 54, 3932-3941.	2.5	30
40	Vibrational Circular Dichroism Reveals Supramolecular Chirality Inversion of Î±-Synuclein Peptide Assemblies upon Interactions with Anionic Membranes. ACS Nano, 2019, 13, 3232-3242.	14.6	30
41	Synthesis of [2]- and [3]rotaxanes through Sonogashira coupling. Tetrahedron Letters, 2009, 50, 5497-5500.	1.4	29
42	A comparative study between human skin substitutes and normal human skin using Raman microspectroscopy. Acta Biomaterialia, 2014, 10, 2703-2711.	8.3	29
43	Understanding amyloid fibril formation using protein fragments: structural investigations via vibrational spectroscopy and solid-state NMR. Biophysical Reviews, 2018, 10, 1133-1149.	3.2	28
44	Slow motions in lipid bilayers. Direct detection by two-dimensional solid-state deuterium nuclear magnetic resonance. Biophysical Journal, 1991, 59, 31-38.	0.5	26
45	Monitoring the Aging Dynamics of Glycidyl Azide Polyurethane by NMR Relaxation Times. Macromolecules, 1999, 32, 1602-1610.	4.8	26
46	The orientation effect of gramicidin A on bicelles and Eu3+-doped bicelles as studied by solid-state NMR and FT-IR spectroscopy. Chemistry and Physics of Lipids, 2006, 139, 137-149.	3.2	26
47	Elucidation of slow motions in glycoglycerolipid bilayers by two-dimensional solid-state deuteron NMR. Chemical Physics Letters, 1990, 165, 162-167.	2.6	23
48	Characterization of the structure of human skin substitutes by infrared microspectroscopy. Analytical and Bioanalytical Chemistry, 2013, 405, 8709-8718.	3.7	22
49	Membrane Interactions of Synthetic Peptides with Antimicrobial Potential: Effect of Electrostatic Interactions and Amphiphilicity. Probiotics and Antimicrobial Proteins, 2015, 7, 66-74.	3.9	22
50	Determining the Mode of Action Involved in the Antimicrobial Activity ofÂSynthetic Peptides: A Solid-State NMR and FTIR Study. Biophysical Journal, 2012, 103, 1470-1479.	0.5	21
51	Biological membrane structure by solid-state NMR. Current Issues in Molecular Biology, 2000, 2, 119-24.	2.4	21
52	Membrane structure and dynamics as viewed by solid-state NMR spectroscopy. Biophysical Chemistry, 1997, 68, 233-241.	2.8	20
53	Adsorption of stereoregular poly(methyl methacrylates) on ?-alumina: Spectroscopic analysis. Journal of Polymer Science, Part B: Polymer Physics, 1999, 37, 2985-2995.	2.1	20
54	Model of interaction between a cardiotoxin and dimyristoylphosphatidic acid bilayers determined by solid-state 31P NMR spectroscopy. Biophysical Journal, 1996, 70, 1737-1744.	0.5	19

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55	Interaction of 4-tert-Butyl-[3-(2-chloroethyl) Ureido] Benzene with Phosphatidylcholine Bilayers: A Differential Scanning Calorimetry and Infrared Spectroscopy Study. Archives of Biochemistry and Biophysics, 1996, 334, 193-199.	3.0	17
56	Insights on the interaction of met-enkephalin with negatively charged membranesâ€"an infrared and solid-state NMR spectroscopic study. Chemistry and Physics of Lipids, 2004, 127, 175-187.	3.2	17
57	Structural and Mechanical Roles for the C-Terminal Nonrepetitive Domain Become Apparent in Recombinant Spider Aciniform Silk. Biomacromolecules, 2017, 18, 3678-3686.	5.4	17
58	Major Ampullate Spider Silk with Indistinguishable Spidroin Dope Conformations Leads to Different Fiber Molecular Structures. International Journal of Molecular Sciences, 2016, 17, 1353.	4.1	16
59	A 3D-psoriatic skin model for dermatological testing: The impact of culture conditions. Biochemistry and Biophysics Reports, 2016, 8, 268-276.	1.3	16
60	Oriented samples: a tool for determining the membrane topology and the mechanism of action of cationic antimicrobial peptides by solid-state NMR. Biophysical Reviews, 2015, 7, 311-320.	3.2	15
61	Multinuclear solid-state nmr spectroscopy of envelopes from virgin and explanted silicone breast prostheses: An exploratory study. Magnetic Resonance in Medicine, 1997, 37, 11-17.	3.0	14
62	Temperature and pressure dependent growth and morphology of DMPC/DSPC domains studied by Brewster angle microscopy. Chemistry and Physics of Lipids, 2005, 133, 165-179.	3.2	14
63	Structure and Segmental Motions in a Substituted Polythiophene: A Solidâ€State NMR Study. Macromolecular Chemistry and Physics, 2008, 209, 2455-2462.	2.2	14
64	Structure and membrane interactions of the Î²-amyloid fragment 25â€"35 as viewed using spectroscopic approaches. Physical Chemistry Chemical Physics, 2013, 15, 7228.	2.8	14
65	Membrane interactions of a new class of anticancer agents derived from arylchloroethylurea: a FTIR spectroscopic study. Chemistry and Physics of Lipids, 2001, 111, 163-175.	3.2	13
66	Structure and pHâ€induced alterations of recombinant and natural spider silk proteins in solution. Biopolymers, 2012, 97, 337-346.	2.4	13
67	A quantitative analysis of the supercontraction-induced molecular disorientation of major ampullate spider silk. Physical Chemistry Chemical Physics, 2017, 19, 31487-31498.	2.8	13
68	Membrane composition modulates the interaction between a new class of antineoplastic agents deriving from aromatic 2-chloroethylureas and lipid bilayers: a solid-state NMR study. Chemistry and Physics of Lipids, 2007, 146, 125-135.	3.2	12
69	Synthesis and properties of monofluorinated dimyristoylphosphatidylcholine derivatives: Potential fluorinated probes for the study of membrane topology. Organic and Biomolecular Chemistry, 2012, 10, 1145-1148.	2.8	12
70	Study of In Vitro Capillary-Like Structures in Psoriatic Skin Substitutes. BioResearch Open Access, 2014, 3, 197-205.	2.6	12
71	Evaluation of the effect of fluorination on the property of monofluorinated dimyristoylphosphatidylcholines. Organic and Biomolecular Chemistry, 2014, 12, 5126-5135.	2.8	11
72	Besides Fibrillization: Putative Role of the Peptide Fragment 71â€"82 on the Structural and Assembly Behavior of Î±-Synuclein. Biochemistry, 2014, 53, 6463-6472.	2.5	11

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73	Discriminating Lipidâ€“ from Proteinâ€“Calcium Binding To Understand the Interaction between Recoverin and Phosphatidylglycerol Model Membranes. Biochemistry, 2016, 55, 3481-3491.	2.5	11
74	High resolution solid-state29si nmr spectroscopy of silicone gels used to fill breast prostheses. Magnetic Resonance in Medicine, 1995, 34, 548-554.	3.0	10
75	Amphiphilicity Is a Key Determinant in the Membrane Interactions of Synthetic 14-mer Cationic Peptide Analogues. Biochemistry, 2016, 55, 6919-6930.	2.5	10
76	Interaction between lipid bilayers and a new class of antineoplastic agents derived from arylchloroethylurea: a 2H solid-state NMR study. Biochemistry and Cell Biology, 1998, 76, 465-471.	2.0	9
77	Anomalous Diffusion in a Gel-Fluid Lipid Environment: A Combined Solid-State NMR and Obstructed Random-Walk Perspective. Biophysical Journal, 2004, 87, 2456-2469.	0.5	9
78	Lipid bilayer tethered inside a nanoporous support: a solid-state nuclear magnetic resonance investigation. Analytical Biochemistry, 2005, 336, 253-261.	2.4	9
79	Spectroscopic characterization of DMPC/DOTAP cationic liposomes and their interactions with DNA and drugs. Chemistry and Physics of Lipids, 2009, 158, 91-101.	3.2	9
80	Synthesis of Fluorineâ€Containing Molecular Rotors and Their Assembly on Gold Nanoparticles. European Journal of Organic Chemistry, 2010, 2010, 3049-3067.	2.4	9
81	Investigation of the mechanism of action of novel amphipathic peptides: Insights from solid-state NMR studies of oriented lipid bilayers. Biochimica Et Biophysica Acta - Biomembranes, 2014, 1838, 2173-2179.	2.6	9
82	Effect of Mechanical Deformation on the Structure of Regenerated Bombyx mori Silk Fibroin Films as Revealed Using Raman and Infrared Spectroscopy. Applied Spectroscopy, 2015, 69, 689-698.	2.2	8
83	Structure and Membrane Interactions of Antimicrobial Peptides as Viewed by Solid-State NMR Spectroscopy. Annual Reports on NMR Spectroscopy, 2008, 63, 1-21.	1.5	7
84	The Thermal Stability of Recoverin Depends on Calcium Binding and Its Myristoyl Moiety As Revealed by Infrared Spectroscopy. Biochemistry, 2014, 53, 48-56.	2.5	7
85	Spider silk inspired materials and sustainability: perspective. Materials Technology, 2016, , 1-16.	3.0	7
86	Progress in the synthesis of fluorinated phosphatidylcholines for biological applications. Organic and Biomolecular Chemistry, 2018, 16, 4925-4941.	2.8	7
87	Structure of a Parkinsonâ€™s Disease-Involved Î±-Synuclein Peptide Is Modulated by Membrane Composition and Physical State. Journal of Physical Chemistry B, 2020, 124, 3469-3481.	2.6	7
88	Biophysical studies of the interactions between the phage Ï•KZ gp144 lytic transglycosylase and model membranes. European Biophysics Journal, 2010, 39, 263-276.	2.2	6
89	A Flexible Synthetic Approach to Phosphatidylglycerols. European Journal of Organic Chemistry, 2017, 2017, 6401-6407.	2.4	6
90	Membrane fluidity is a driving force for recoverin myristoyl immobilization in zwitterionic lipids. Biochemical and Biophysical Research Communications, 2017, 490, 1268-1273.	2.1	6

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91	New insights into the influence of monofluorination on dimyristoylphosphatidylcholine membrane properties: A solid-state NMR study. Biochimica Et Biophysica Acta - Biomembranes, 2018, 1860, 654-663.	2.6	6
92	Membrane Assembly and Ion Transport Ability of a Fluorinated Nanopore. PLoS ONE, 2016, 11, e0166587.	2.5	6
93	Solid-state nuclear magnetic resonance (NMR) spectroscopy reveals distinctive protein dynamics in closely related spider silks. Canadian Journal of Chemistry, 2011, 89, 1047-1054.	1.1	4
94	Novel approaches to probe the binding of recoverin to membranes. European Biophysics Journal, 2018, 47, 679-691.	2.2	4
95	Lipid membrane interactions of a fluorinated peptide with potential ion channelâ€forming ability. Peptide Science, 2019, 111, e24051.	1.8	3
96	Magnetically-orientable Tween-based model membranes for NMR studies of proteins. Biochimica Et Biophysica Acta - Biomembranes, 2020, 1862, 183379.	2.6	3
97	The effect of pH on the interactions in mixed monolayers between phosphatidylserine and all-Trans retinal. Journal of Colloid and Interface Science, 1988, 123, 1-7.	9.4	2
98	Towards the use of monofluorinated dimyristoylphosphatidylcholines as 19F NMR reporters in bacterial model membranes. Journal of Fluorine Chemistry, 2018, 206, 43-47.	1.7	2
99	Crown ether modified peptide interactions with model membranesâ€¡. Supramolecular Chemistry, 2019, 31, 159-171.	1.2	2
100	Structure and Dynamics of the Glycolipid Components of Membrane Receptors:2H NMR Provides a Route to In Vivo Observation. Annals of the New York Academy of Sciences, 1989, 568, 44-51.	3.8	1
101	Effect of Electrostatic Interactions on the Membrane Interactions of Amphiphilic Peptides with Antimicrobial Potential. Biophysical Journal, 2012, 102, 89a-90a.	0.5	1
102	Membrane solid-state NMR in Canada: A historical perspective. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2017, 1865, 1483-1489.	2.3	1
103	Transdermal diffusion, spatial distribution and physical state of a potential anticancer drug in mouse skin as studied by diffusion and spectroscopic techniques. Biomedical Spectroscopy and Imaging, 2018, 7, 47-61.	1.2	1
104	CHAPTER 11. Membrane Interactions of Amphiphilic Peptides with Antimicrobial Potential: A Solid-State NMR Study. New Developments in NMR, 2014, , 200-213.	0.1	1
105	Interaction between lipid bilayers and a new class of antineoplastic agents derived from arylchloroethylurea: a ²H solid-state NMR study. Biochemistry and Cell Biology, 1998, 76, 465-471.	2.0	1
106	Biophysical Studies Of The Membrane Interactions Of A Transthyretin Fragment TTR(10-20). Biophysical Journal, 2009, 96, 454a.	0.5	0
107	Structural Studies Of Recombinant And Natural Spider Silk Proteins Studied By Nuclear Magnetic Resonance; Insights For The Spinning Process. Biophysical Journal, 2009, 96, 586a.	0.5	0
108	Stabilization and Structure Determination of the Recombinant C-Terminal Domain of Nephila Clavipes Dragline Silk. Biophysical Journal, 2012, 102, 389a.	0.5	0

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109	Spectroscopic Investigations of Synthetic Amphiphilic Peptides in Interactions with Model Membranes. Biophysical Journal, 2014, 106, 86a.	0.5	0
110	Spectroscopic Investigation of Î±-Synuclein 71-82, a Peptide Derived from a Protein Involved in Parkinson's Disease. Biophysical Journal, 2017, 112, 478a-479a.	0.5	0
111	Electrostatic Interactions to Guide the Self-Assembly of Highly Ordered Amyloid-Like Nanostructures. Biophysical Journal, 2018, 114, 587a-588a.	0.5	0
112	Deuterium NMR as a monitor of organization and dynamics at the surface of membranes: the glycolipids. Progress in Clinical and Biological Research, 1989, 292, 13-22.	0.2	0