Laxman Mainali

List of Publications by Year
in descending order

42 papers	1,097 citations	394421 19 h-index	414414 32 g-index
42 all docs	42 docs citations	42 times ranked	637 citing authors

#	Article	IF	Citations
1	High Cholesterol/Low Cholesterol: Effects in Biological Membranes: A Review. Cell Biochemistry and Biophysics, 2017, 75, 369-385.	1.8	204
2	Functions of Cholesterol and the Cholesterol Bilayer Domain Specific to the Fiber-Cell Plasma Membrane of the Eye Lens. Journal of Membrane Biology, 2012, 245, 51-68.	2.1	64
3	Using spin-label electron paramagnetic resonance (EPR) to discriminate and characterize the cholesterol bilayer domain. Chemistry and Physics of Lipids, 2011, 164, 819-829.	3.2	60
4	The immiscible cholesterol bilayer domain exists as an integral part of phospholipid bilayer membranes. Biochimica Et Biophysica Acta - Biomembranes, 2011, 1808, 1072-1080.	2.6	58
5	Formation of Cholesterol Bilayer Domains Precedes Formation of Cholesterol Crystals in Cholesterol/Dimyristoylphosphatidylcholine Membranes: EPR and DSC Studies. Journal of Physical Chemistry B, 2013, 117, 8994-9003.	2.6	52
6	Properties of membranes derived from the total lipids extracted from the human lens cortex and nucleus. Biochimica Et Biophysica Acta - Biomembranes, 2013, 1828, 1432-1440.	2.6	50
7	Membrane fluidity profiles as deduced by saturation-recovery EPR measurements of spin-lattice relaxation times of spin labels. Journal of Magnetic Resonance, 2011, 212, 418-425.	2.1	49
8	Properties of membranes derived from the total lipids extracted from clear and cataractous lenses of 61â€“70-year-old human donors. European Biophysics Journal, 2015, 44, 91-102.	2.2	39
9	Changes in the Properties and Organization of Human Lens Lipid Membranes Occurring with Age. Current Eye Research, 2017, 42, 721-731.	1.5	38
10	Phases and domains in sphingomyelinâ€“cholesterol membranes: structure and properties using EPR spin-labeling methods. European Biophysics Journal, 2012, 41, 147-159.	2.2	36
11	Using spin-label W-band EPR to study membrane fluidity profiles in samples of small volume. Journal of Magnetic Resonance, 2013, 226, 35-44.	2.1	36
12	Phase-Separation and Domain-Formation in Cholesterol-Sphingomyelin Mixture: Pulse-EPR Oxygen Probing. Biophysical Journal, 2011, 101, 837-846.	0.5	35
13	Properties of fiber cell plasma membranes isolated from the cortex and nucleus of the porcine eye lens. Experimental Eye Research, 2012, 97, 117-129.	2.6	32
14	Cholesterol Bilayer Domains in the Eye Lens Health: A Review. Cell Biochemistry and Biophysics, 2017, 75, 387-398.	1.8	29
15	Lipid domains in intact fiber-cell plasma membranes isolated from cortical and nuclear regions of human eye lenses of donors from different age groups. Experimental Eye Research, 2015, 132, 78-90.	2.6	26
16	Organization of lipids in fiber-cell plasma membranes of the eye lens. Experimental Eye Research, 2017, 156, 79-86.	2.6	25
17	Formation of cholesterol Bilayer Domains Precedes Formation of Cholesterol Crystals in Membranes Made of the Major Phospholipids of Human Eye Lens Fiber Cell Plasma Membranes. Current Eye Research, 2020, 45, 162-172.	1.5	24
18	Spin-label saturation-recovery EPR at W-band: Applications to eye lens lipid membranes. Journal of Magnetic Resonance, 2011, 212, 86-94.	2.1	22

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19	Lipidâ€“protein interactions in plasma membranes of fiber cells isolated from the human eye lens. Experimental Eye Research, 2014, 120, 138-151.	2.6	22
20	Spin-label W-band EPR with Seven-Loopâ€“Six-Gap Resonator: Application to Lens Membranes Derived from Eyes of a Single Donor. Applied Magnetic Resonance, 2014, 45, 1343-1358.	1.2	17
21	Detection of cholesterol bilayer domains in intact biological membranes: Methodology development and its application to studies of eye lens fiber cell plasma membranes. Experimental Eye Research, 2019, 178, 72-81.	2.6	15
22	Association of Alpha-Crystallin with Fiber Cell Plasma Membrane of the Eye Lens Accompanied by Light Scattering and Cataract Formation. Membranes, 2021, 11, 447.	3.0	15
23	Saturation Recovery EPR Spin-Labeling Method for Quantification of Lipids in Biological Membrane Domains. Applied Magnetic Resonance, 2017, 48, 1355-1373.	1.2	14
24	Interaction of alpha-crystallin with four major phospholipids of eye lens membranes. Experimental Eye Research, 2021, 202, 108337.	2.6	14
25	Interaction of Alpha-Crystallin with Phospholipid Membranes. Current Eye Research, 2021, 46, 185-194.	1.5	13
26	Mechanical properties of the high cholesterol-containing membrane: An AFM study. Biochimica Et Biophysica Acta - Biomembranes, 2021, 1863, 183625.	2.6	12
27	Confocal Microscopy Confirmed that in Phosphatidylcholine Giant Unilamellar Vesicles with very High Cholesterol Content Pure Cholesterol Bilayer Domains Form. Cell Biochemistry and Biophysics, 2019, 77, 309-317.	1.8	11
28	Characterization of the Distribution of Spinâ€“Lattice Relaxation Rates of Lipid Spin Labels in Fiber Cell Plasma Membranes of Eye Lenses with a Stretched Exponential Function. Applied Magnetic Resonance, 2019, 50, 903-918.	1.2	11
29	Factors Determining the Oxygen Permeability of Biological Membranes: Oxygen Transport Across Eye Lens Fiber-Cell Plasma Membranes. Advances in Experimental Medicine and Biology, 2017, 977, 27-34.	1.6	10
30	Cholesterol and cholesterol bilayer domains inhibit binding of alpha-crystallin to the membranes made of the major phospholipids of eye lens fiber cell plasma membranes. Experimental Eye Research, 2021, 206, 108544.	2.6	10
31	Amounts of phospholipids and cholesterol in lipid domains formed in intact lens membranes: Methodology development and its application to studies of porcine lens membranes. Experimental Eye Research, 2015, 140, 179-186.	2.6	9
32	Alpha-Crystallin Association with the Model of Human and Animal Eye Lens-Lipid Membranes is Modulated by Surface Hydrophobicity of Membranes. Current Eye Research, 2022, 47, 843-853.	1.5	8
33	Magnetic Resonance Spectra and Statistical Geometry. Applied Magnetic Resonance, 2010, 37, 865-880.	1.2	7
34	Spin-Labeled Small Unilamellar Vesicles with the T 1-Sensitive Saturation-Recovery EPR Display as an Oxygen-Sensitive Analyte for Measurement of Cellular Respiration. Applied Magnetic Resonance, 2015, 46, 885-895.	1.2	6
35	Alpha-Crystallin-Membrane Association Modulated by Phospholipid Acyl Chain Length and Degree of Unsaturation. Membranes, 2022, 12, 455.	3.0	6
36	Membrane elasticity modulated by cholesterol in model of porcine eye lens-lipid membrane. Experimental Eye Research, 2022, 220, 109131.	2.6	5

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37	Oxidation of Polyunsaturated Phospholipid Decreases the Cholesterol Content at which Cholesterol Bilayer Domains Start to form in Phospholipid-Cholesterol Membranes. Biophysical Journal, 2017, 112, 375a.	0.5	4
38	Hyperbolic-cosine waveguide tapers and oversize rectangular waveguide for reduced broadband insertion loss in W-band electron paramagnetic resonance spectroscopy. II. Broadband characterization. Review of Scientific Instruments, 2016, 87, 034704.	1.3	3
39	An AFM Approach Applied in a Study of Î±-Crystallin Membrane Association: New Insights into Lens Hardening and Presbyopia Development. Membranes, 2022, 12, 522.	3.0	3
40	Cholesterol Bilayer Domain in Phospholipid Bilayer Membranes can be Detected by Confocal Microscope. Biophysical Journal, 2015, 108, 403a-404a.	0.5	2
41	Lipid-Protein Interactions in Fiber Cell Plasma Membrane Isolated From Human and Porcine Eye Lenses. Biophysical Journal, 2017, 112, 319a.	0.5	1
42	Phase Boundaries in Phosphatidylcholine Membranes Saturated and Oversaturated with Cholesterol. Biophysical Journal, 2012, 102, 81a-82a.	0.5	0