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Modulation of rhodopsin function by properties of the membrane bilayer

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|-----|--|-----|-----------|
| 399 | Role of Lipid Organization and Dynamics for Membrane Functionality. 1996 , 463-502 | | 12 |
| 398 | Effect of unsaturation on the chain order of phosphatidylcholines in a dioleoylphosphatidylethanolamine matrix. <i>Biophysical Journal</i> , 1996 , 71, 274-82 | 2.9 | 54 |
| 397 | Surface plasmon resonance spectroscopy studies of membrane proteins: transducin binding and activation by rhodopsin monitored in thin membrane films. <i>Biophysical Journal</i> , 1996 , 71, 283-94 | 2.9 | 85 |
| 396 | Membrane stiffness and channel function. <i>Biochemistry</i> , 1996 , 35, 3825-30 | 3.2 | 253 |
| 395 | Decreased 20:4n ω :20:5n ω ratio in sperm from cultured sea bass, <i>Dicentrarchus labrax</i> , broodstock compared with wild fish. <i>Aquaculture</i> , 1996 , 144, 189-199 | 4.4 | 47 |
| 394 | Effects of phosphatidylethanolamines on the activity of the Ca(2+)-ATPase of sarcoplasmic reticulum. 1996 , 320 (Pt 1), 309-14 | | 32 |
| 393 | Nuclear magnetic resonance investigation of hydrocarbon chain packing in bilayers of polyunsaturated phospholipids. 1996 , 31 Suppl, S199-203 | | 49 |
| 392 | NMR investigations of non-lamellar phase promoters in the lamellar phase state. <i>Chemistry and Physics of Lipids</i> , 1996 , 81, 105-116 | 3.7 | 61 |
| 391 | Deficit of didocosahexaenoyl phospholipid in the eyes of larval sea bass fed an essential fatty acid deficient diet. 1996 , 49, 941-952 | | 17 |
| 390 | Chapter 8 Influence of Nonlamellar-Forming Lipids on Rhodopsin. 1997 , 44, 285-356 | | 54 |
| 389 | Molecular sorting of lipids by bacteriorhodopsin in dilauroylphosphatidylcholine/distearoylphosphatidylcholine lipid bilayers. <i>Biophysical Journal</i> , 1997 , 73, 1940-53 | 2.9 | 103 |
| 388 | Molecular dynamics simulation of unsaturated lipid bilayers at low hydration: parameterization and comparison with diffraction studies. <i>Biophysical Journal</i> , 1997 , 73, 2269-79 | 2.9 | 291 |
| 387 | Influence of membrane-spanning alpha-helical peptides on the phase behavior of the dioleoylphosphatidylcholine/water system. <i>Biophysical Journal</i> , 1997 , 73, 3078-88 | 2.9 | 56 |
| 386 | Contrasting membrane localization and behavior of halogenated cyclobutanes that follow or violate the Meyer-Overton hypothesis of general anesthetic potency. <i>Biophysical Journal</i> , 1997 , 72, 1754-61 | 2.9 | 66 |
| 385 | Fatty acid composition, eicosanoid production and permeability in skin tissues of rainbow trout (<i>Oncorhynchus mykiss</i>) fed a control or an essential fatty acid deficient diet. 1997 , 56, 479-89 | | 11 |
| 384 | Notices. 1997 , 56, 489 | | |
| 383 | Small-scale lipid-membrane structure: simulation versus experiment. <i>Current Opinion in Structural Biology</i> , 1997 , 7, 518-27 | 8.1 | 113 |

| | | | |
|-----|--|-----|-----|
| 382 | The conformational preference of gramicidin channels is a function of lipid bilayer thickness. 1997 , 412, 15-20 | | 110 |
| 381 | Possible involvement of nonbilayer lipids in the stimulation of the activity of cytochrome P450SCC (CYP11A1) and its propensity to induce vesicle aggregation. <i>Chemistry and Physics of Lipids</i> , 1997 , 85, 91-9 | 3.7 | 8 |
| 380 | Surface plasmon resonance spectroscopy as a tool for investigating the biochemical and biophysical properties of membrane protein systems. II: Applications to biological systems. 1997 , 1331, 131-52 | | 108 |
| 379 | Modulation of the metarhodopsin I/metarhodopsin II equilibrium of bovine rhodopsin by ionic strength--evidence for a surface-charge effect. 1997 , 243, 174-80 | | 39 |
| 378 | Molecular speciation of fish sperm phospholipids: large amounts of dipolyunsaturated phosphatidylserine. 1997 , 32, 1085-91 | | 34 |
| 377 | Macroscopic orientation of natural and model membranes for structural studies. 1997 , 254, 132-8 | | 52 |
| 376 | The VEP and ERG in a young infant with cystic fibrosis. A case report. 1998 , 95, 63-71 | | 6 |
| 375 | The Effects of Chronic Ethanol Consumption on the Formation of Phosphatidylethanolamine Molecular Species and Their Appearance at the Plasma Membrane. 1998 , 22, 1245-1254 | | 2 |
| 374 | Hydrophobic mismatch between proteins and lipids in membranes. 1998 , 1376, 401-15 | | 481 |
| 373 | Remodeling of phospholipid fatty acids in mitochondrial membranes of estivating snails. 1998 , 33, 787-93 | | 21 |
| 372 | Self-assembly and organization of lipid-protein membranes. 1998 , 3, 78-87 | | 52 |
| 371 | Lipid and fatty acid composition of normal and malpigmented Atlantic halibut (<i>Hippoglossus hippoglossus</i>) fed enriched <i>Artemia</i> : a comparison with fry fed wild copepods. <i>Aquaculture</i> , 1998 , 163, 237-250 | 4.4 | 119 |
| 370 | Lipids in total extracts from <i>Acholeplasma laidlawii</i> A pack more closely than the individual lipids. Monolayers studied at the air-water interface. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1998 , 1369, 94-102 | 3.8 | 14 |
| 369 | Phospholipid acyl chain rotational dynamics are independent of headgroup structure in unilamellar vesicles containing binary mixtures of dioleoyl-phosphatidylcholine and dioleoyl-phosphatidylethanolamine. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1998 , 1415, 63-76 | 3.8 | 15 |
| 368 | Phosphorylation stabilizes the active conformation of rhodopsin. <i>Biochemistry</i> , 1998 , 37, 11393-8 | 3.2 | 18 |
| 367 | Kinetics of the light-induced proton translocation associated with the pH-dependent formation of the metarhodopsin I/II equilibrium of bovine rhodopsin. <i>Biochemistry</i> , 1998 , 37, 16888-97 | 3.2 | 25 |
| 366 | Stabilization of a Bicontinuous Cubic Phase from Polymerizable Monoacylglycerol and Diacylglycerol. <i>Langmuir</i> , 1998 , 14, 1921-1926 | 4 | 45 |
| 365 | Steady-state compartmentalization of lipid membranes by active proteins. <i>Biophysical Journal</i> , 1998 , 74, 745-52 | 2.9 | 59 |

| | | | |
|-----|---|------|-----|
| 364 | Coupled plasmon-waveguide resonance spectroscopy studies of the cytochrome b6f/plastocyanin system in supported lipid bilayer membranes. <i>Biophysical Journal</i> , 1998 , 75, 1874-85 | 2.9 | 46 |
| 363 | Energetics of inclusion-induced bilayer deformations. <i>Biophysical Journal</i> , 1998 , 74, 1966-83 | 2.9 | 296 |
| 362 | Dipole potentials and spontaneous curvature: membrane properties that could mediate anesthesia. 1998 , 100-101, 431-9 | | 31 |
| 361 | Effects of nonlamellar-prone lipids on the ATPase activity of SecA bound to model membranes. 1998 , 273, 21692-8 | | 25 |
| 360 | Membrane Lipids: What Membrane Physical Properties are Conserve during Physiochemically-Induced Membrane Restructuring?. 1998 , 38, 280-290 | | 40 |
| 359 | Light-dependent activation of rod transducin by pineal opsin. 1998 , 273, 26820-6 | | 22 |
| 358 | Steady-state organization of binary mixtures by active impurities. 1998 , 58, 3547-3551 | | 16 |
| 357 | Magic angle spinning NMR of the protonated retinylidene Schiff base nitrogen in rhodopsin: expression of 15N-lysine- and 13C-glycine-labeled opsin in a stable cell line. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1999 , 96, 487-92 | 11.5 | 73 |
| 356 | Phospholipid-assisted refolding of an integral membrane protein. Minimum structural features for phosphatidylethanolamine to act as a molecular chaperone. 1999 , 274, 12339-45 | | 110 |
| 355 | 2H-NMR in liquid crystals and membranes. 1999 , 158, 281-298 | | 18 |
| 354 | Aqueous two-phase systems containing self-associating block copolymers. Partitioning of hydrophilic and hydrophobic biomolecules. 1999 , 839, 71-83 | | 35 |
| 353 | Evidence for the unique function of docosahexaenoic acid during the evolution of the modern hominid brain. 1999 , 34 Suppl, S39-47 | | 215 |
| 352 | Plasmon resonance spectroscopy: probing molecular interactions within membranes. 1999 , 24, 213-9 | | 125 |
| 351 | The ambivalence of vitamin E in atherogenesis. 1999 , 24, 219-23 | | 107 |
| 350 | Molecular Dynamics Simulation of Membranes and a Transmembrane Helix. 1999 , 151, 358-387 | | 30 |
| 349 | Lysophosphatidylcholine modulates catalytically important motions of the Ca-ATPase phosphorylation domain. <i>Biochemistry</i> , 1999 , 38, 4604-12 | 3.2 | 16 |
| 348 | Is the protein/lipid hydrophobic matching principle relevant to membrane organization and functions?. 1999 , 458, 271-7 | | 161 |
| 347 | Chapter 2 Structure and Physical Properties of the Lipid Membrane. 1999 , 48, 23-47 | | 11 |

| | | | |
|-----|--|-----|-----|
| 346 | Spring constants for channel-induced lipid bilayer deformations. Estimates using gramicidin channels. <i>Biophysical Journal</i> , 1999 , 76, 889-95 | 2.9 | 166 |
| 345 | Phosphatidylethanolamine modulates Ca-ATPase function and dynamics. <i>Biochemistry</i> , 1999 , 38, 1356-64 | 3.2 | 33 |
| 344 | Solid-State NMR Line Shapes of Uniaxially Oriented Immobile Systems. 1999 , 121, 7636-7643 | | 45 |
| 343 | Correlation between the free energy of a channel-forming voltage-gated peptide and the spontaneous curvature of bilayer lipids. <i>Biochemistry</i> , 1999 , 38, 5932-8 | 3.2 | 83 |
| 342 | Phase properties of liquid-crystalline Phosphatidylcholine/Phosphatidylethanolamine bilayers revealed by fluorescent probes. 1999 , 369, 288-94 | | 18 |
| 341 | Natural copepods are superior to enriched artemia nauplii as feed for halibut larvae (<i>Hippoglossus hippoglossus</i>) in terms of survival, pigmentation and retinal morphology: relation to dietary essential fatty acids. 1999 , 129, 1186-94 | | 200 |
| 340 | Chapter 7 Interaction of Natural and Model Peptides with Membranes. 1999 , 48, 197-228 | | 6 |
| 339 | Ion channels as tools to monitor lipid bilayer-membrane protein interactions: gramicidin channels as molecular force transducers. 1999 , 294, 208-24 | | 86 |
| 338 | Chapter 1 Structure and mechanism of vertebrate visual pigments. 2000 , 3, 1-54 | | 8 |
| 337 | The transbilayer distribution of phospholipids in disc membranes is a dynamic equilibrium evidence for rapid flip and flop movement. 2000 , 267, 1473-83 | | 32 |
| 336 | Modulation of arachidonate and docosahexaenoate in <i>Morone chrysops</i> larval tissues and the effect on growth and survival. 2000 , 35, 1269-80 | | 28 |
| 335 | Modulation of glycophorin A transmembrane helix interactions by lipid bilayers: molecular dynamics calculations. 2000 , 302, 727-46 | | 105 |
| 334 | ¹ H and (¹³ C) NMR of multilamellar dispersions of polyunsaturated (22:6) phospholipids. <i>Biophysical Journal</i> , 2000 , 79, 885-97 | 2.9 | 40 |
| 333 | Inclusion-induced bilayer deformations: effects of monolayer equilibrium curvature. <i>Biophysical Journal</i> , 2000 , 79, 2583-604 | 2.9 | 136 |
| 332 | Area per lipid and acyl length distributions in fluid phosphatidylcholines determined by (² H) NMR spectroscopy. <i>Biophysical Journal</i> , 2000 , 79, 3172-92 | 2.9 | 522 |
| 331 | Docosahexaenoic acid-containing phosphatidylcholine affects the binding of monoclonal antibodies to purified Kb reconstituted into liposomes. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2000 , 1467, 293-306 | 3.8 | 13 |
| 330 | Softening of Membrane Bilayers by Detergents Elucidated by Deuterium NMR Spectroscopy. <i>Journal of Physical Chemistry B</i> , 2000 , 104, 12119-12129 | 3.4 | 62 |
| 329 | Effect of Unsaturated Lipid Chains on Dimensions, Molecular Order and Hydration of Membranes. <i>Journal of Physical Chemistry B</i> , 2001 , 105, 12378-12390 | 3.4 | 102 |

| | | | |
|-----|--|-----|-----|
| 328 | Membranotropic effects of the antibacterial agent Triclosan. 2001 , 390, 128-36 | | 147 |
| 327 | Protection of photoreceptor cells in adult rats from light-induced degeneration by adaptation to bright cyclic light. <i>Experimental Eye Research</i> , 2001 , 73, 569-77 | 3.7 | 56 |
| 326 | Structural properties of a highly polyunsaturated lipid bilayer from molecular dynamics simulations. <i>Biophysical Journal</i> , 2001 , 81, 204-16 | 2.9 | 121 |
| 325 | Lipid-mediated interactions between intrinsic membrane proteins: dependence on protein size and lipid composition. <i>Biophysical Journal</i> , 2001 , 81, 276-84 | 2.9 | 75 |
| 324 | Optical anisotropy in lipid bilayer membranes: coupled plasmon-waveguide resonance measurements of molecular orientation, polarizability, and shape. <i>Biophysical Journal</i> , 2001 , 80, 1557-67 ^{2.9} | | 155 |
| 323 | The essentiality of long chain n-3 fatty acids in relation to development and function of the brain and retina. 2001 , 40, 1-94 | | 778 |
| 322 | Self-association of model transmembrane alpha-helices is modulated by lipid structure. <i>Biochemistry</i> , 2001 , 40, 12379-86 | 3.2 | 74 |
| 321 | Effects of phospholipid headgroup and phase on the activity of diacylglycerol kinase of <i>Escherichia coli</i> . <i>Biochemistry</i> , 2001 , 40, 14891-7 | 3.2 | 25 |
| 320 | Influence of highly polyunsaturated lipid acyl chains of biomembranes on the NMR order parameters. 2001 , 123, 7381-7 | | 32 |
| 319 | Regulation of CTP: phosphocholine cytidyltransferase activity by the physical properties of lipid membranes: an important role for stored curvature strain energy. <i>Biochemistry</i> , 2001 , 40, 10522-31 | 3.2 | 115 |
| 318 | Can we identify the forces that drive the folding of integral membrane proteins?. 2001 , 29, 408-13 | | 13 |
| 317 | Effects of phytanic acid on the vitamin E status, lipid composition and physical properties of retinal cell membranes: implications for adult Refsum disease. 2001 , 101, 697-705 | | 6 |
| 316 | Effects of phytanic acid on the vitamin E status, lipid composition and physical properties of retinal cell membranes: implications for adult Refsum disease. 2001 , 101, 697 | | 4 |
| 315 | The role of retinal in the long-range protein-lipid interactions in bacteriorhodopsin-phosphatidylcholine vesicles. <i>European Biophysics Journal</i> , 2001 , 29, 628-40 | 1.9 | 5 |
| 314 | The role of docosahexaenoic acid in retinal function. 2001 , 36, 859-71 | | 116 |
| 313 | Incorporation, distribution, and metabolism of polyunsaturated fatty acids in the pineal gland of rainbow trout (<i>Oncorhynchus mykiss</i>) in vitro. 2001 , 31, 127-37 | | 8 |
| 312 | Biosynthesis of docosahexaenoate-containing glycerolipid molecular species in the retina. 2001 , 16, 205-14; discussion 215-21 | | 13 |
| 311 | Optimization of receptor-G protein coupling by bilayer lipid composition II: formation of metarhodopsin II-transducin complex. 2001 , 276, 42807-11 | | 79 |

| | | | |
|-----|--|-----|-----|
| 310 | Optimization of receptor-G protein coupling by bilayer lipid composition I: kinetics of rhodopsin-transducin binding. 2001 , 276, 42801-6 | | 86 |
| 309 | Composite membrane deformation on the mesoscopic length scale. 2001 , 64, 010901 | | 33 |
| 308 | Electrostatic interactions in a neutral model phospholipid bilayer by molecular dynamics simulations. 2002 , 116, 3052-3057 | | 80 |
| 307 | Interaction of A2E with model membranes. Implications to the pathogenesis of age-related macular degeneration. 2002 , 120, 147-57 | | 79 |
| 306 | Magic angle spinning nuclear magnetic resonance of isotopically labeled rhodopsin. 2002 , 343, 212-22 | | 25 |
| 305 | Electrostatic properties of membrane lipids coupled to metarhodopsin II formation in visual transduction. 2002 , 124, 7690-701 | | 47 |
| 304 | Molecular dynamics study of monolayers consisting of polyunsaturated diacylglycerolipids. 2002 , 4627, 129 | | |
| 303 | Regulation of lipid composition in <i>Acholeplasma laidlawii</i> and <i>Escherichia coli</i> membranes: NMR studies of lipid lateral diffusion at different growth temperatures. <i>Biochemistry</i> , 2002 , 41, 11512-5 | 3.2 | 48 |
| 302 | Evidence that helix 8 of rhodopsin acts as a membrane-dependent conformational switch. <i>Biochemistry</i> , 2002 , 41, 8298-309 | 3.2 | 89 |
| 301 | Structure of docosahexaenoic acid-containing phospholipid bilayers as studied by (2)H NMR and molecular dynamics simulations. 2002 , 124, 298-309 | | 130 |
| 300 | Conformational energetics of rhodopsin modulated by nonlamellar-forming lipids. <i>Biochemistry</i> , 2002 , 41, 6354-68 | 3.2 | 153 |
| 299 | Elastic deformation of membrane bilayers probed by deuterium NMR relaxation. 2002 , 124, 8471-84 | | 87 |
| 298 | Molecular organization of cholesterol in polyunsaturated membranes: microdomain formation. <i>Biophysical Journal</i> , 2002 , 82, 285-98 | 2.9 | 132 |
| 297 | Hydrophobic Matching Mechanism Investigated by Molecular Dynamics Simulations. <i>Langmuir</i> , 2002 , 18, 1340-1351 | 4 | 79 |
| 296 | Thermal behavior of liposomes containing PCs with long and very long chain PUFAs isolated from retinal rod outer segment membranes. <i>Journal of Lipid Research</i> , 2002 , 43, 1440-9 | 6.3 | 8 |
| 295 | Anesthetics and the brain. 2002 , 20, 265-92 | | 27 |
| 294 | Flow-mediated on-surface reconstitution of G-protein coupled receptors for applications in surface plasmon resonance biosensors. 2002 , 300, 132-8 | | 94 |
| 293 | Retinal sensitivity loss in third-generation n-3 PUFA-deficient rats. 2002 , 37, 759-65 | | 46 |

| | | | |
|-----|--|-----|-----|
| 292 | Optimal potentials for predicting inter-helical packing in transmembrane proteins. 2002 , 49, 342-9 | | 21 |
| 291 | Towards an understanding of complex biological membranes from atomistic molecular dynamics simulations. 2002 , 22, 151-73 | | 76 |
| 290 | Enhancement of G protein-coupled signaling by DHA phospholipids. 2003 , 38, 437-43 | | 97 |
| 289 | The structure of DHA in phospholipid membranes. 2003 , 38, 445-52 | | 70 |
| 288 | Interpretation of small angle X-ray measurements guided by molecular dynamics simulations of lipid bilayers. <i>Chemistry and Physics of Lipids</i> , 2003 , 126, 211-23 | 3.7 | 50 |
| 287 | Docosahexaenoic acid: membrane properties of a unique fatty acid. <i>Chemistry and Physics of Lipids</i> , 2003 , 126, 1-27 | 3.7 | 599 |
| 286 | The Lipids. 2003 , 181-257 | | 88 |
| 285 | The lipid bilayer concept: Experimental realization and current applications. 2003 , 7, 1-73 | | 10 |
| 284 | Molecular dynamics simulation of dark-adapted rhodopsin in an explicit membrane bilayer: coupling between local retinal and larger scale conformational change. 2003 , 333, 493-514 | | 88 |
| 283 | The trials and tribulations of membrane protein folding in vitro. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2003 , 1610, 51-6 | 3.8 | 46 |
| 282 | Lipid-protein interactions in biological membranes: a structural perspective. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2003 , 1612, 1-40 | 3.8 | 664 |
| 281 | Biotechnological approaches to modify rapeseed oil composition for applications in aquaculture. 2003 , 165, 349-357 | | 33 |
| 280 | DHA-rich phospholipids optimize G-Protein-coupled signaling. 2003 , 143, S80-6 | | 52 |
| 279 | Visual development: Neural basis and new assessment methods. 2003 , 143, S87-95 | | 25 |
| 278 | Synaptic lipid signaling: significance of polyunsaturated fatty acids and platelet-activating factor. <i>Journal of Lipid Research</i> , 2003 , 44, 2221-33 | 6.3 | 197 |
| 277 | Hydrophobic coupling of lipid bilayer energetics to channel function. 2003 , 121, 477-93 | | 77 |
| 276 | Molecular dynamics simulations of ionic concentration gradients across model bilayers. 2003 , 118, 1957-1969 | | 9 |
| 275 | Elastic properties of bilayer lipid membranes and pore formation. 2003 , 173-204 | | 5 |

274 Retinal docosahexaenoic acid, age-related diseases, and glaucoma. **2003**, 205-222

273 Evolutionarily conserved ELOVL4 gene expression in the vertebrate retina. **2003**, 44, 2841-50 35

272 Evidence for the unique function of DHA during the evolution of the modern hominid brain. **2004**, 11, 30-37

271 Membrane inclusions as coupled harmonic oscillators: effects due to anisotropic membrane slope relaxation. **2004**, 120, 7183-93 11

270 Identification of core amino acids stabilizing rhodopsin. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 7246-51 11.5 130

269 Elastic coupling of integral membrane protein stability to lipid bilayer forces. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 4065-70 11.5 196

268 Effect of the Pore Region of a Transmembrane Ion Channel on the Physical Properties of a Simple Membrane. *Journal of Physical Chemistry B*, **2004**, 108, 2608-2613 3.4 20

267 Does perinatal omega-3 polyunsaturated fatty acid deficiency increase appetite signaling?. **2004**, 12, 1886-94 17

266 Jumping to rafts: gatekeeper role of bilayer elasticity. **2004**, 29, 325-30 26

265 Lanosterol and cholesterol-induced variations in bilayer elasticity probed by 2H NMR relaxation. *Langmuir*, **2004**, 20, 1043-6 4 37

264 Perturbation of the hydrophobic core of lipid bilayers by the human antimicrobial peptide LL-37. *Biochemistry*, **2004**, 43, 8459-69 3.2 226

263 Acid-base equilibria in rhodopsin: dependence of the protonation state of glu134 on its environment. *Biochemistry*, **2004**, 43, 6858-64 3.2 24

262 How lipids affect the activities of integral membrane proteins. *Biochimica Et Biophysica Acta - Biomembranes*, **2004**, 1666, 62-87 3.8 907

261 Nonbilayer lipids affect peripheral and integral membrane proteins via changes in the lateral pressure profile. *Biochimica Et Biophysica Acta - Biomembranes*, **2004**, 1666, 275-88 3.8 318

260 The Binary Mixing Behavior of Phospholipids in a Bilayer: A Molecular Dynamics Study. *Journal of Physical Chemistry B*, **2004**, 108, 2454-2463 3.4 104

259 Structure and fluctuations of charged phosphatidylserine bilayers in the absence of salt. *Biophysical Journal*, **2004**, 86, 1574-86 2.9 235

258 Visual maturation of term infants fed long-chain polyunsaturated fatty acid-supplemented or control formula for 12 mo. **2005**, 81, 871-9 130

257 Duration of long-chain polyunsaturated fatty acids availability in the diet and visual acuity. **2005**, 81, 197-203 58

| | | | |
|-----|--|-----|-----|
| 256 | The role of omega-3 long-chain polyunsaturated fatty acids in health and disease of the retina. 2005 , 24, 87-138 | | 570 |
| 255 | Properties of docosahexaenoic-acid-containing lipids and their influence on the function of rhodopsin. <i>Current Opinion in Structural Biology</i> , 2005 , 15, 416-22 | 8.1 | 90 |
| 254 | Docosahexaenoic acid affects cell signaling by altering lipid rafts. 2005 , 45, 559-79 | | 198 |
| 253 | Probing specific lipid-protein interaction by saturation transfer difference NMR spectroscopy. 2005 , 127, 13110-1 | | 53 |
| 252 | Involvement of nonlamellar-prone lipids in the stability increase of human cytochrome P450 1A2 in reconstituted membranes. <i>Biochemistry</i> , 2005 , 44, 9188-96 | 3.2 | 19 |
| 251 | Environmental Effects on Glycophorin A Folding and Structure Examined through Molecular Simulations. 2005 , 1, 375-88 | | 3 |
| 250 | Phosphatidylethanolamine enhances rhodopsin photoactivation and transducin binding in a solid supported lipid bilayer as determined using plasmon-waveguide resonance spectroscopy. <i>Biophysical Journal</i> , 2005 , 88, 198-210 | 2.9 | 91 |
| 249 | The transmembrane domain of the acetylcholine receptor: insights from simulations on synthetic peptide models. <i>Biophysical Journal</i> , 2005 , 88, 959-70 | 2.9 | 21 |
| 248 | Effect of packing density on rhodopsin stability and function in polyunsaturated membranes. <i>Biophysical Journal</i> , 2005 , 89, 1833-40 | 2.9 | 31 |
| 247 | Molecular and Cellular Regulation of Pineal Organ Responses. 2006 , 25, 243-306 | | 17 |
| 246 | The evidence for efficacy of omega-3 fatty acids in preventing or slowing the progression of retinitis pigmentosa: a systematic review. 2006 , 41, 481-90 | | 22 |
| 245 | Molecular simulation study of structural and dynamic properties of mixed DPPC/DPPE bilayers. <i>Biophysical Journal</i> , 2006 , 90, 3951-65 | 2.9 | 134 |
| 244 | Curvature and hydrophobic forces drive oligomerization and modulate activity of rhodopsin in membranes. <i>Biophysical Journal</i> , 2006 , 91, 4464-77 | 2.9 | 229 |
| 243 | Introduction to the membrane protein reviews: the interplay of structure, dynamics, and environment in membrane protein function. 2006 , 75, 707-12 | | 87 |
| 242 | Contribution of omega-3 fatty acids to the thermodynamics of membrane protein solvation. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 8907-9 | 3.4 | 37 |
| 241 | Conformational states and dynamics of rhodopsin in micelles and bilayers. <i>Biochemistry</i> , 2006 , 45, 5538-50 | | 70 |
| 240 | The effect of binding of spider-derived antimicrobial peptides, oxyopinins, on lipid membranes. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2006 , 1758, 1475-82 | 3.8 | 22 |
| 239 | Efficacy of omega-3 fatty acids in preventing age-related macular degeneration: a systematic review. 2006 , 113, 1165-72; quiz 1172-3, 1178 | | 53 |

| | | | |
|-----|---|------|-----|
| 238 | Polyunsaturated fatty acids, membrane organization, T cells, and antigen presentation. 2006 , 84, 1277-89 | | 141 |
| 237 | Physical coupling between lipids and proteins: a paradigm for cellular control. 2006 , 6, 112-132 | | 26 |
| 236 | Predisposition of the dark state of rhodopsin to functional changes in structure. 2006 , 65, 970-83 | | 37 |
| 235 | How a small change in retinal leads to G-protein activation: initial events suggested by molecular dynamics calculations. 2007 , 66, 559-74 | | 20 |
| 234 | The physical chemistry of biological membranes. 2006 , 2, 564-7 | | 77 |
| 233 | The biological significance of lipid-protein interactions. 2006 , 18, S1281-91 | | 22 |
| 232 | Manipulating lipid bilayer material properties using biologically active amphipathic molecules. 2006 , 18, S1235-S1255 | | 29 |
| 231 | A role for direct interactions in the modulation of rhodopsin by omega-3 polyunsaturated lipids. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006 , 103, 4888-93 | 11.5 | 236 |
| 230 | Acyl chain-dependent effect of lysophosphatidylcholine on human neutrophils. 2007 , 82, 1501-9 | | 68 |
| 229 | Evidence for the effect of omega-3 fatty acids on progression of age-related macular degeneration: a systematic review. 2007 , 27, 216-21 | | 23 |
| 228 | Role of sterol type on lateral pressure profiles of lipid membranes affecting membrane protein functionality: Comparison between cholesterol, desmosterol, 7-dehydrocholesterol and ketosterol. 2007 , 159, 311-23 | | 107 |
| 227 | Dynamic structure of retinylidene ligand of rhodopsin probed by molecular simulations. 2007 , 372, 906-917 | | 38 |
| 226 | Polyunsaturation in lipid membranes: dynamic properties and lateral pressure profiles. <i>Journal of Physical Chemistry B</i> , 2007 , 111, 3139-50 | 3.4 | 163 |
| 225 | Membrane lipid polymorphism: relationship to bilayer properties and protein function. <i>Methods in Molecular Biology</i> , 2007 , 400, 15-26 | 1.4 | 28 |
| 224 | Handbook of Nutrition and Ophthalmology. 2007 , | | 1 |
| 223 | Variation in fatty acid composition of <i>Artemia salina</i> nauplii enriched with microalgae and baker's yeast for use in larviculture. 2007 , 55, 4043-51 | | 38 |
| 222 | Curcumin is a modulator of bilayer material properties. <i>Biochemistry</i> , 2007 , 46, 10384-91 | 3.2 | 112 |
| 221 | Interaction of an amphipathic peptide with phosphatidylcholine/phosphatidylethanolamine mixed membranes. <i>Biophysical Journal</i> , 2007 , 93, 3900-6 | 2.9 | 21 |

| | | | |
|-----|--|-----|-----|
| 220 | Domain formation in model membranes studied by pulsed-field gradient-NMR: the role of lipid polyunsaturation. <i>Biophysical Journal</i> , 2007 , 93, 3182-90 | 2.9 | 64 |
| 219 | Bilayer thickness and membrane protein function: an energetic perspective. 2007 , 36, 107-30 | | 621 |
| 218 | Methods in Membrane Lipids. <i>Methods in Molecular Biology</i> , 2007 , | 1.4 | 16 |
| 217 | Acyl chain conformations in phospholipid bilayers: a comparative study of docosahexaenoic acid and saturated fatty acids. <i>Chemistry and Physics of Lipids</i> , 2008 , 153, 76-80 | 3.7 | 64 |
| 216 | Polyunsaturated fatty acids and membrane organization: elucidating mechanisms to balance immunotherapy and susceptibility to infection. <i>Chemistry and Physics of Lipids</i> , 2008 , 153, 24-33 | 3.7 | 52 |
| 215 | Signal transducing membrane complexes of photoreceptor outer segments. 2008 , 48, 2052-61 | | 96 |
| 214 | Regulation of membrane proteins by dietary lipids: effects of cholesterol and docosahexaenoic acid acyl chain-containing phospholipids on rhodopsin stability and function. <i>Biophysical Journal</i> , 2008 , 95, 1206-16 | 2.9 | 36 |
| 213 | Molecular simulations of lipid-mediated protein-protein interactions. <i>Biophysical Journal</i> , 2008 , 95, 1851-65 | | 136 |
| 212 | Lipid-rhodopsin hydrophobic mismatch alters rhodopsin helical content. 2008 , 130, 12465-71 | | 64 |
| 211 | Rapid incorporation of functional rhodopsin into nanoscale apolipoprotein bound bilayer (NABB) particles. 2008 , 377, 1067-81 | | 101 |
| 210 | Membrane Structure - I. <i>Biophysical Journal</i> , 2008 , 94, 387-399 | 2.9 | 1 |
| 209 | Reconstitution of rhodopsin into polymerizable planar supported lipid bilayers: influence of dienoyl monomer structure on photoactivation. <i>Langmuir</i> , 2008 , 24, 11067-75 | 4 | 22 |
| 208 | Interacting targets of the farnesyl of transducin gamma-subunit. <i>Biochemistry</i> , 2008 , 47, 8424-33 | 3.2 | 6 |
| 207 | Chapter 5 Implicit Modeling of Membranes. 2008 , 131-157 | | 13 |
| 206 | Why is intelligence correlated with semen quality?: Biochemical pathways common to sperm and neuron function and their vulnerability to pleiotropic mutations. 2009 , 2, 385-7 | | 8 |
| 205 | Alamethicin aggregation in lipid membranes. <i>Journal of Membrane Biology</i> , 2009 , 231, 11-27 | 2.3 | 33 |
| 204 | Microbial fatty acid conversion within the rumen and the subsequent utilization of these fatty acids to improve the healthfulness of ruminant food products. 2009 , 84, 1033-43 | | 19 |
| 203 | Retinal conformation and dynamics in activation of rhodopsin illuminated by solid-state H NMR spectroscopy. <i>Photochemistry and Photobiology</i> , 2009 , 85, 442-53 | 3.6 | 18 |

| | | | |
|-----|---|------|-----|
| 202 | Stability of asymmetric lipid bilayers assessed by molecular dynamics simulations. 2009 , 131, 15194-202 | | 56 |
| 201 | Role of helix 8 in G protein-coupled receptors based on structure-function studies on the type 1 angiotensin receptor. 2009 , 302, 118-27 | | 47 |
| 200 | Amphipath-induced nanoscale changes in outer hair cell plasma membrane curvature. <i>Biophysical Journal</i> , 2009 , 96, 510-20 | 2.9 | 22 |
| 199 | Membranes from Polymerizable Lipids. <i>Advances in Polymer Science</i> , 2009 , 1-42 | 1.3 | 12 |
| 198 | Phospholipids are needed for the proper formation, stability, and function of the photoactivated rhodopsin-transducin complex. <i>Biochemistry</i> , 2009 , 48, 5159-70 | 3.2 | 34 |
| 197 | 3D pressure field in lipid membranes and membrane-protein complexes. 2009 , 102, 078101 | | 156 |
| 196 | [Epidemiology of age related macular degeneration]. 2009 , 32, 440-51 | | 15 |
| 195 | Complexes between photoactivated rhodopsin and transducin: progress and questions. 2010 , 428, 1-10 | | 43 |
| 194 | Protein folding in membranes. <i>Cellular and Molecular Life Sciences</i> , 2010 , 67, 1779-98 | 10.3 | 59 |
| 193 | Chemical shift tensor - the heart of NMR: Insights into biological aspects of proteins. 2010 , 57, 181-228 | | 136 |
| 192 | Structure and function of G protein-coupled receptors using NMR spectroscopy. 2010 , 57, 159-80 | | 32 |
| 191 | Fatty acid profiles of spiny lobster (<i>Panulirus homarus</i>) phyllosoma fed enriched <i>Artemia</i> . 2010 , 41, e393 | | 4 |
| 190 | Retinal very long-chain PUFAs: new insights from studies on ELOVL4 protein. <i>Journal of Lipid Research</i> , 2010 , 51, 1624-42 | 6.3 | 110 |
| 189 | Loss of lysophosphatidylcholine acyltransferase 1 leads to photoreceptor degeneration in rd11 mice. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 15523-8 ^{11.5} | | 49 |
| 188 | Contribution of membrane elastic energy to rhodopsin function. <i>Biophysical Journal</i> , 2010 , 99, 817-24 | 2.9 | 92 |
| 187 | Conformational exchange in a membrane transport protein is altered in protein crystals. <i>Biophysical Journal</i> , 2010 , 99, 1604-10 | 2.9 | 40 |
| 186 | Cholesterol in bilayers with PUFA chains: doping with DMPC or POPC results in sterol reorientation and membrane-domain formation. <i>Biochemistry</i> , 2010 , 49, 7485-93 | 3.2 | 90 |
| 185 | Sequential rearrangement of interhelical networks upon rhodopsin activation in membranes: the Meta II(a) conformational substate. 2010 , 132, 4815-21 | | 45 |

| | | | |
|-----|---|-----|-----|
| 184 | Light activation of rhodopsin: insights from molecular dynamics simulations guided by solid-state NMR distance restraints. 2010 , 396, 510-27 | | 50 |
| 183 | Retinal dynamics during light activation of rhodopsin revealed by solid-state NMR spectroscopy. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2010 , 1798, 177-93 | 3.8 | 31 |
| 182 | Membrane simulations mimicking acidic pH reveal increased thickness and negative curvature in a bilayer consisting of lysophosphatidylcholines and free fatty acids. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2010 , 1798, 938-46 | 3.8 | 40 |
| 181 | Response of GWALP transmembrane peptides to changes in the tryptophan anchor positions. <i>Biochemistry</i> , 2011 , 50, 7522-35 | 3.2 | 17 |
| 180 | Solid-state ^1H NMR shows equivalence of dehydration and osmotic pressures in lipid membrane deformation. <i>Biophysical Journal</i> , 2011 , 100, 98-107 | 2.9 | 35 |
| 179 | Protein shape change has a major effect on the gating energy of a mechanosensitive channel. <i>Biophysical Journal</i> , 2011 , 100, 1651-9 | 2.9 | 45 |
| 178 | Quantitative modeling of membrane deformations by multihelical membrane proteins: application to G-protein coupled receptors. <i>Biophysical Journal</i> , 2011 , 101, 2092-101 | 2.9 | 76 |
| 177 | Lipids. 2011 , 47-81 | | 42 |
| 176 | Interleaflet interaction and asymmetry in phase separated lipid bilayers: molecular dynamics simulations. 2011 , 133, 6563-77 | | 141 |
| 175 | An NMR database for simulations of membrane dynamics. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2011 , 1808, 818-39 | 3.8 | 77 |
| 174 | Recent progress in the study of G protein-coupled receptors with molecular dynamics computer simulations. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2011 , 1808, 1868-78 | 3.8 | 67 |
| 173 | Regulation of Protein Function by Membrane Elastic Properties. 2011 , 187-203 | | |
| 172 | Role of membrane integrity on G protein-coupled receptors: Rhodopsin stability and function. 2011 , 50, 267-77 | | 52 |
| 171 | Mutual adaptation of a membrane protein and its lipid bilayer during conformational changes. 2011 , 2, 304 | | 89 |
| 170 | Retina and omega-3. 2011 , 2011, 748361 | | 42 |
| 169 | Raman Spectroscopic Imaging of Cholesterol and Docosahexaenoic Acid Distribution in the Retinal Rod Outer Segment. 2011 , 64, 611-616 | | 12 |
| 168 | How to Understand Lipid-Protein Interactions in Biological Membranes. 2011 , 273-313 | | 1 |
| 167 | Retinal dynamics underlie its switch from inverse agonist to agonist during rhodopsin activation. 2011 , 18, 392-4 | | 64 |

| | | | |
|-----|---|------|-----|
| 166 | Nutritional influences on visual development and function. 2011 , 30, 188-203 | | 51 |
| 165 | Ground-state properties of the retinal molecule: from quantum mechanical to classical mechanical computations of retinal proteins. 2011 , 130, 1169-1183 | | 12 |
| 164 | Unraveling lipid/protein interaction in model lipid bilayers by Atomic Force Microscopy. 2011 , 24, 387-96 | | 33 |
| 163 | The molecular basis of mechanisms underlying polarization vision. 2011 , 366, 627-37 | | 59 |
| 162 | Solid-state ² H NMR relaxation illuminates functional dynamics of retinal cofactor in membrane activation of rhodopsin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011 , 108, 8263-8 | 11.5 | 47 |
| 161 | Low aqueous solubility of 11-cis-retinal limits the rate of pigment formation and dark adaptation in salamander rods. 2012 , 139, 493-505 | | 17 |
| 160 | On-chip stochastic resonance of ion channel systems with variable internal noise. 2012 , 11, 169-75 | | 4 |
| 159 | The Membrane as a Transporter, Ion Channels and Membrane Pumps. 2012 , 51-74 | | |
| 158 | Lipid Bilayer-Membrane Protein Coupling. 2012 , 75-125 | | |
| 157 | The role of docosahexaenoic and the marine food web as determinants of evolution and hominid brain development: the challenge for human sustainability. 2012 , 21, 17-39 | | 31 |
| 156 | Modulation of the interaction between neurotensin receptor NTS1 and Gq protein by lipid. 2012 , 417, 95-111 | | 96 |
| 155 | Artificial membrane-like environments for in vitro studies of purified G-protein coupled receptors. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2012 , 1818, 225-33 | 3.8 | 65 |
| 154 | Molecular simulations and solid-state NMR investigate dynamical structure in rhodopsin activation. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2012 , 1818, 241-51 | 3.8 | 26 |
| 153 | The role of the lipid matrix for structure and function of the GPCR rhodopsin. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2012 , 1818, 234-40 | 3.8 | 87 |
| 152 | Hydrogen bond dynamics in membrane protein function. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2012 , 1818, 942-50 | 3.8 | 54 |
| 151 | Curvature forces in membrane lipid-protein interactions. <i>Biochemistry</i> , 2012 , 51, 9782-95 | 3.2 | 112 |
| 150 | 9.12 Interactions of the Cell Membrane with Integral Proteins. 2012 , 229-242 | | 2 |
| 149 | UV-visible and infrared methods for investigating lipid-rhodopsin membrane interactions. <i>Methods in Molecular Biology</i> , 2012 , 914, 127-53 | 1.4 | 9 |

| | | | |
|-----|---|-----|----|
| 148 | In silico design of robust bolalipid membranes. 2012 , 13, 196-205 | | 34 |
| 147 | Ion pore formation in lipid bilayers and related energetic considerations. 2012 , 19, 1619-34 | | 6 |
| 146 | Quantifying the differential effects of DHA and DPA on the early events in visual signal transduction. <i>Chemistry and Physics of Lipids</i> , 2012 , 165, 393-400 | 3.7 | 23 |
| 145 | Membrane Biophysics. 2013 , | | 15 |
| 144 | Assessing smectic liquid-crystal continuum models for elastic bilayer deformations. <i>Chemistry and Physics of Lipids</i> , 2013 , 169, 19-26 | 3.7 | 16 |
| 143 | Photoreceptor inner and outer segments. 2013 , 72, 231-65 | | 15 |
| 142 | Reconstitution of membrane proteins into model membranes: seeking better ways to retain protein activities. 2013 , 14, 1589-607 | | 66 |
| 141 | Rhodopsin-lipid interactions studied by NMR. 2013 , 522, 209-27 | | 17 |
| 140 | Biophysical characterization of membrane proteins in nanodiscs. <i>Methods</i> , 2013 , 59, 287-300 | 4.6 | 73 |
| 139 | The cost of living in the membrane: a case study of hydrophobic mismatch for the multi-segment protein LeuT. <i>Chemistry and Physics of Lipids</i> , 2013 , 169, 27-38 | 3.7 | 38 |
| 138 | Encyclopedia of Biophysics. 2013 , 2186-2191 | | |
| 137 | Encyclopedia of Biophysics. 2013 , 2169-2169 | | |
| 136 | Solid-state ^{13}C NMR reveals annealing of raft-like membranes containing cholesterol by the intrinsically disordered protein β Synuclein. 2013 , 425, 2973-87 | | 46 |
| 135 | Encyclopedia of Biophysics. 2013 , 2178-2185 | | 4 |
| 134 | Encyclopedia of Biophysics. 2013 , 2264-2273 | | |
| 133 | Single tryptophan and tyrosine comparisons in the N-terminal and C-terminal interface regions of transmembrane GWALP peptides. <i>Journal of Physical Chemistry B</i> , 2013 , 117, 13786-94 | 3.4 | 10 |
| 132 | Triton X-100 inhibits L-type voltage-operated calcium channels. 2013 , 91, 316-24 | | 7 |
| 131 | Recent Progress in Advanced Nanobiological Materials for Energy and Environmental Applications. 2013 , 6, 5821-5856 | | 12 |

| | | | |
|-----|--|-----|-----|
| 130 | Phosphoinositides alter lipid bilayer properties. 2013 , 141, 673-90 | | 18 |
| 129 | Is the fluid mosaic (and the accompanying raft hypothesis) a suitable model to describe fundamental features of biological membranes? What may be missing?. 2013 , 4, 457 | | 44 |
| 128 | Oleoyl-lysophosphatidylcholine limits endothelial nitric oxide bioavailability by induction of reactive oxygen species. <i>PLoS ONE</i> , 2014 , 9, e113443 | 3.7 | 12 |
| 127 | Relationship between the reconstituted vesicle size and the transmembrane protein-to-lipid ratio. 2014 , 460, 510-515 | | |
| 126 | Model cell membranes: discerning lipid and protein contributions in shaping the cell. 2014 , 205, 207-20 | | 46 |
| 125 | G Protein-Coupled Receptors - Modeling and Simulation. <i>Advances in Experimental Medicine and Biology</i> , 2014 , | 3.6 | 7 |
| 124 | Solid-state NMR spectroscopy to study protein-lipid interactions. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2014 , 1841, 1146-60 | 5 | 40 |
| 123 | Conformational interchange of a carbohydrate by mechanical compression at the air-water interface. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 10286-94 | 3.6 | 12 |
| 122 | Not just an oil slick: how the energetics of protein-membrane interactions impacts the function and organization of transmembrane proteins. <i>Biophysical Journal</i> , 2014 , 106, 2305-16 | 2.9 | 46 |
| 121 | Molecular dynamics simulations of the adenosine A2a receptor in POPC and POPE lipid bilayers: effects of membrane on protein behavior. <i>Journal of Chemical Information and Modeling</i> , 2014 , 54, 573-81 ^{6.1} | | 31 |
| 120 | Accelerated terahertz water dynamics under osmotic interaction of lipid bilayers and polyethylene glycol. 2015 , | | |
| 119 | Membrane Protein Structure, Function, and Dynamics: a Perspective from Experiments and Theory. <i>Journal of Membrane Biology</i> , 2015 , 248, 611-40 | 2.3 | 101 |
| 118 | Retinal Conformation Changes Rhodopsin's Dynamic Ensemble. <i>Biophysical Journal</i> , 2015 , 109, 608-17 | 2.9 | 6 |
| 117 | Comparative Mutagenesis Studies of Retinal Release in Light-Activated Zebrafish Rhodopsin Using Fluorescence Spectroscopy. <i>Biochemistry</i> , 2015 , 54, 4507-18 | 3.2 | 22 |
| 116 | Linking fatty acids in the diet and tissues to quality of larval southern flounder (<i>Paralichthys lethostigma</i>). 2015 , 467, 7-15 | | 12 |
| 115 | Rhodopsin/lipid hydrophobic matching-rhodopsin oligomerization and function. <i>Biophysical Journal</i> , 2015 , 108, 1125-32 | 2.9 | 40 |
| 114 | Chloroform alters interleaflet coupling in lipid bilayers: an entropic mechanism. 2015 , 12, | | 9 |
| 113 | Thermosensing via transmembrane protein-lipid interactions. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2015 , 1848, 1757-64 | 3.8 | 17 |

| | | | |
|-----|--|------|----|
| 112 | Tocopherol Is Well Designed to Protect Polyunsaturated Phospholipids: MD Simulations. <i>Biophysical Journal</i> , 2015 , 109, 1608-18 | 2.9 | 30 |
| 111 | Structure and function of G protein-coupled receptor oligomers: implications for drug discovery. 2015 , 7, 408-27 | | 18 |
| 110 | Elastic deformation and area per lipid of membranes: atomistic view from solid-state deuterium NMR spectroscopy. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2015 , 1848, 246-59 | 3.8 | 37 |
| 109 | Biochemical Roles of Eukaryotic Cell Surface Macromolecules. <i>Advances in Experimental Medicine and Biology</i> , 2015 , | 3.6 | 4 |
| 108 | Membrane-Mediated Oligomerization of G Protein Coupled Receptors and Its Implications for GPCR Function. <i>Frontiers in Physiology</i> , 2016 , 7, 494 | 4.6 | 72 |
| 107 | Impact of the lipid environment on the protonation dynamics of bacteriorhodopsin studied with time-resolved step-scan FTIR spectroscopy. 2016 , 5, 167-174 | | 2 |
| 106 | Structural Influences: Cholesterol, Drug, and Proton Binding to Full-Length Influenza A M2 Protein. <i>Biophysical Journal</i> , 2016 , 110, 1391-9 | 2.9 | 29 |
| 105 | Cholesterol-induced suppression of membrane elastic fluctuations at the atomistic level. <i>Chemistry and Physics of Lipids</i> , 2016 , 199, 39-51 | 3.7 | 19 |
| 104 | The Influence of Lipid Bilayer Physicochemical Properties on Gramicidin A Conformer Preferences. <i>Biophysical Journal</i> , 2016 , 110, 1826-1835 | 2.9 | 18 |
| 103 | The Linoleic-to-Linolenic Dietary Intake Ratio: The Fundamental Implications of Imbalance and Excess Looked at from Both a Functional and an Evolutionary Perspective: An Overview. 2016 , 321-348 | | |
| 102 | A Comparison between the Photoactivation Kinetics of Human and Bovine Rhodopsins. <i>Biochemistry</i> , 2016 , 55, 7005-7013 | 3.2 | 5 |
| 101 | Probing Hydronium Ion Histidine NH Exchange Rate Constants in the M2 Channel via Indirect Observation of Dipolar-Dephased N Signals in Magic-Angle-Spinning NMR. 2016 , 138, 15801-15804 | | 10 |
| 100 | Alteration of interleaflet coupling due to compounds displaying rapid translocation in lipid membranes. <i>Scientific Reports</i> , 2016 , 6, 32934 | 4.9 | 5 |
| 99 | Dynamics of Hydrogel-Assisted Giant Unilamellar Vesicle Formation from Unsaturated Lipid Systems. <i>Langmuir</i> , 2016 , 32, 12702-12709 | 4 | 12 |
| 98 | The Functional Activity of the Human Serotonin 5-HT1A Receptor Is Controlled by Lipid Bilayer Composition. <i>Biophysical Journal</i> , 2016 , 110, 2486-2495 | 2.9 | 25 |
| 97 | Clinical concentrations of chemically diverse general anesthetics minimally affect lipid bilayer properties. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, 3109-3114 | 11.5 | 35 |
| 96 | Interplay of G Protein-Coupled Receptors with the Membrane: Insights from Supra-Atomic Coarse Grain Molecular Dynamics Simulations. <i>Chemical Reviews</i> , 2017 , 117, 156-185 | 68.1 | 42 |
| 95 | Soft Matter in Lipid-Protein Interactions. <i>Annual Review of Biophysics</i> , 2017 , 46, 379-410 | 21.1 | 68 |

| | | | |
|----|---|------|----|
| 94 | Allosteric modulation model of the mu opioid receptor by herkinorin, a potent not alkaloidal agonist. <i>Journal of Computer-Aided Molecular Design</i> , 2017 , 31, 467-482 | 4.2 | 10 |
| 93 | Molecular Simulations of Complex Membrane Models. 2017 , 1-18 | | |
| 92 | Gramicidin A Channel Formation Induces Local Lipid Redistribution I: Experiment and Simulation. <i>Biophysical Journal</i> , 2017 , 112, 1185-1197 | 2.9 | 31 |
| 91 | Gramicidin A Channel Formation Induces Local Lipid Redistribution II: A 3D Continuum Elastic Model. <i>Biophysical Journal</i> , 2017 , 112, 1198-1213 | 2.9 | 15 |
| 90 | Impact of temperature on sea bass, <i>Dicentrarchus labrax</i> , retina: Fatty acid composition, expression of rhodopsin and enzymes of lipid and melatonin metabolism. <i>Experimental Eye Research</i> , 2017 , 159, 87-97 | 3.7 | 8 |
| 89 | The Biophysics of Cell Membranes. <i>Springer Series in Biophysics</i> , 2017 , | | 1 |
| 88 | Membrane Lipid-Protein Interactions. <i>Springer Series in Biophysics</i> , 2017 , 61-84 | | 1 |
| 87 | Concepts and Methods of Solid-State NMR Spectroscopy Applied to Biomembranes. <i>Chemical Reviews</i> , 2017 , 117, 12087-12132 | 68.1 | 58 |
| 86 | Probing Self-Assembly of G Protein-Coupled Receptor Oligomers in Membranes Using Molecular Dynamics Modeling and Experimental Approaches. 2017 , 385-414 | | 1 |
| 85 | Divergent effects of anesthetics on lipid bilayer properties and sodium channel function. <i>European Biophysics Journal</i> , 2017 , 46, 617-626 | 1.9 | 23 |
| 84 | Identification of Two New Cholesterol Interaction Sites on the A Adenosine Receptor. <i>Biophysical Journal</i> , 2017 , 113, 2415-2424 | 2.9 | 49 |
| 83 | Oxidation-Induced Increase In Photoreactivity of Bovine Retinal Lipid Extract. <i>Cell Biochemistry and Biophysics</i> , 2017 , 75, 443-454 | 3.2 | 5 |
| 82 | Protein Sequence and Membrane Lipid Roles in the Activation Kinetics of Bovine and Human Rhodopsins. <i>Biophysical Journal</i> , 2017 , 113, 1934-1944 | 2.9 | 6 |
| 81 | Methods of reconstitution to investigate membrane protein function. <i>Methods</i> , 2018 , 147, 126-141 | 4.6 | 24 |
| 80 | Challenges and approaches to understand cholesterol-binding impact on membrane protein function: an NMR view. <i>Cellular and Molecular Life Sciences</i> , 2018 , 75, 2137-2151 | 10.3 | 13 |
| 79 | G protein-coupled receptor-receptor interactions give integrative dynamics to intercellular communication. <i>Reviews in the Neurosciences</i> , 2018 , 29, 703-726 | 4.7 | 25 |
| 78 | Molecular Machines of the Cell. 2018 , 183-235 | | |
| 77 | Effect of dietary docosahexaenoic acid on rhodopsin content and packing in photoreceptor cell membranes. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2018 , 1860, 1403-1413 | 3.8 | 15 |

| | | | |
|----|---|------|-----|
| 76 | Impact of the lipid bilayer on energy transfer kinetics in the photosynthetic protein LH2. <i>Chemical Science</i> , 2018 , 9, 3095-3104 | 9.4 | 15 |
| 75 | Lipids Alter Rhodopsin Function via Ligand-like and Solvent-like Interactions. <i>Biophysical Journal</i> , 2018 , 114, 355-367 | 2.9 | 31 |
| 74 | Lipid-induced dynamics of photoreceptors monitored by time-resolved step-scan FTIR spectroscopy. <i>Chemical Physics</i> , 2018 , 512, 53-61 | 2.3 | 4 |
| 73 | Nutritional effect of <i>Artemia nauplii</i> enriched with <i>Tetraselmis suecica</i> and <i>Chaetoceros calcitrans</i> microalgae on growth and survival on the river prawn <i>Macrobrachium americanum</i> larvae. <i>Aquaculture International</i> , 2018 , 26, 1001-1015 | 2.6 | 7 |
| 72 | Structural insights into positive and negative allosteric regulation of a G protein-coupled receptor through protein-lipid interactions. <i>Scientific Reports</i> , 2018 , 8, 4456 | 4.9 | 25 |
| 71 | The effect of dietary DHA and taurine on rotifer capture success, growth, survival and vision in the larvae of Atlantic bluefin tuna (<i>Thunnus thynnus</i>). <i>Aquaculture</i> , 2018 , 482, 137-145 | 4.4 | 18 |
| 70 | Tuning biomimetic membrane barrier properties by hydrocarbon, cholesterol and polymeric additives. <i>Bioinspiration and Biomimetics</i> , 2017 , 13, 016005 | 2.6 | 7 |
| 69 | Exploring Molecular-Biomembrane Interactions with Surface Plasmon Resonance and Dual Polarization Interferometry Technology: Expanding the Spotlight onto Biomembrane Structure. <i>Chemical Reviews</i> , 2018 , 118, 5392-5487 | 68.1 | 40 |
| 68 | Reconstitution and functional studies of hamster P-glycoprotein in giant liposomes. <i>PLoS ONE</i> , 2018 , 13, e0199279 | 3.7 | 7 |
| 67 | Flexible lipid nanomaterials studied by NMR spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2019 , 21, 18422-18457 | 3.6 | 9 |
| 66 | Rhodopsin Oligomerization and Aggregation. <i>Journal of Membrane Biology</i> , 2019 , 252, 413-423 | 2.3 | 14 |
| 65 | Local Enrichment of Unsaturated Chains around the A Adenosine Receptor. <i>Biochemistry</i> , 2019 , 58, 4096-4105 | 3.4 | 3 |
| 64 | Quantum Mechanical and Molecular Mechanics Modeling of Membrane-Embedded Rhodopsins. <i>Journal of Membrane Biology</i> , 2019 , 252, 425-449 | 2.3 | 5 |
| 63 | Protein Lipidation. <i>Methods in Molecular Biology</i> , 2019 , | 1.4 | 0 |
| 62 | Reconstitution of the Rhodopsin-Transducin Complex into Lipid Nanodiscs. <i>Methods in Molecular Biology</i> , 2019 , 2009, 317-324 | 1.4 | 2 |
| 61 | Introduction: Biomembrane Structure, Dynamics, and Reactions. <i>Chemical Reviews</i> , 2019 , 119, 5535-5536 | 68.1 | 3 |
| 60 | Oxidative Stress in Retinal Degeneration Promoted by Constant LED Light. <i>Frontiers in Cellular Neuroscience</i> , 2019 , 13, 139 | 6.1 | 19 |
| 59 | Multiscale Simulations of Biological Membranes: The Challenge To Understand Biological Phenomena in a Living Substance. <i>Chemical Reviews</i> , 2019 , 119, 5607-5774 | 68.1 | 130 |

| | | | |
|----|---|------|----|
| 58 | Lipid species affect morphology of endoplasmic reticulum: a sea urchin oocyte model of reversible manipulation. <i>Journal of Lipid Research</i> , 2019 , 60, 1880-1891 | 6.3 | 7 |
| 57 | Structural and Functional Consequences of the Weak Binding of Chlorin e6 to Bovine Rhodopsin. <i>Photochemistry and Photobiology</i> , 2019 , 95, 787-802 | 3.6 | 4 |
| 56 | Cholesterol Modulation of Protein Function. <i>Advances in Experimental Medicine and Biology</i> , 2019 , | 3.6 | 1 |
| 55 | Cholesterol Effects on the Physical Properties of Lipid Membranes Viewed by Solid-state NMR Spectroscopy. <i>Advances in Experimental Medicine and Biology</i> , 2019 , 1115, 99-133 | 3.6 | 8 |
| 54 | A Critical Analysis of Molecular Mechanisms Underlying Membrane Cholesterol Sensitivity of GPCRs. <i>Advances in Experimental Medicine and Biology</i> , 2019 , 1115, 21-52 | 3.6 | 27 |
| 53 | Membrane curvature affects the stability and folding kinetics of bacteriorhodopsin. <i>Process Biochemistry</i> , 2019 , 76, 111-117 | 4.8 | 3 |
| 52 | Regulating Lipid Composition Rationalizes Acyl Tail Saturation Homeostasis in Ectotherms. <i>Biophysical Journal</i> , 2020 , 119, 892-899 | 2.9 | 8 |
| 51 | Graphs of dynamic H-bond networks: from model proteins to protein complexes in cell signaling. <i>Current Opinion in Structural Biology</i> , 2020 , 64, 79-87 | 8.1 | 10 |
| 50 | Bioavailability and spatial distribution of fatty acids in the rat retina after dietary omega-3 supplementation. <i>Journal of Lipid Research</i> , 2020 , 61, 1733-1746 | 6.3 | 3 |
| 49 | Differential adaptations in rod outer segment disc membranes in different models of congenital stationary night blindness. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2020 , 1862, 183396 | 3.8 | 2 |
| 48 | Computer simulations of protein-membrane systems. <i>Progress in Molecular Biology and Translational Science</i> , 2020 , 170, 273-403 | 4 | 15 |
| 47 | Direct and indirect cholesterol effects on membrane proteins with special focus on potassium channels. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2020 , 1865, 158706 | 5 | 20 |
| 46 | Activation of the G-Protein-Coupled Receptor Rhodopsin by Water. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 2288-2295 | 16.4 | 7 |
| 45 | Activation of the G-Protein-Coupled Receptor Rhodopsin by Water. <i>Angewandte Chemie</i> , 2021 , 133, 2318-2325 | 16.4 | 7 |
| 44 | Membrane Curvature Revisited-the Archetype of Rhodopsin Studied by Time-Resolved Electronic Spectroscopy. <i>Biophysical Journal</i> , 2021 , 120, 440-452 | 2.9 | 4 |
| 43 | Curvature Energetics Determined by Alchemical Simulation on Four Topologically Distinct Lipid Phases. <i>Journal of Physical Chemistry B</i> , 2021 , 125, 1815-1824 | 3.4 | 0 |
| 42 | Altered Membrane Mechanics Provides a Receptor-Independent Pathway for Serotonin Action. <i>Chemistry - A European Journal</i> , 2021 , 27, 7533-7541 | 4.8 | 5 |
| 41 | The Membrane as a System: How Lipid Structure Affects Membrane Protein Function. 2006 , 141-175 | | 2 |

| | | | |
|----|--|-----|----|
| 40 | Phospholipid Main Phase Transition Assessed by Fluorescence Spectroscopy. 2004 , 257-297 | | 2 |
| 39 | Long-chain polyunsaturated fatty acids in breast milk: are they essential?. <i>Advances in Experimental Medicine and Biology</i> , 2001 , 501, 375-83 | 3.6 | 24 |
| 38 | Membrane Structure and Dynamics Studied with NMR Spectroscopy. 1996 , 175-252 | | 21 |
| 37 | The rhodopsin-arrestin-1 interaction in bicelles. <i>Methods in Molecular Biology</i> , 2015 , 1271, 77-95 | 1.4 | 2 |
| 36 | X-ray scattering and solid-state deuterium nuclear magnetic resonance probes of structural fluctuations in lipid membranes. <i>Methods in Molecular Biology</i> , 2007 , 400, 341-53 | 1.4 | 8 |
| 35 | Single-molecule methods for monitoring changes in bilayer elastic properties. <i>Methods in Molecular Biology</i> , 2007 , 400, 543-70 | 1.4 | 34 |
| 34 | Role of lipid-mediated effects in β -adrenergic receptor dimerization. <i>Advances in Experimental Medicine and Biology</i> , 2015 , 842, 247-61 | 3.6 | 19 |
| 33 | How the dynamic properties and functional mechanisms of GPCRs are modulated by their coupling to the membrane environment. <i>Advances in Experimental Medicine and Biology</i> , 2014 , 796, 55-74 | 3.6 | 21 |
| 32 | Coarse-grained molecular dynamics provides insight into the interactions of lipids and cholesterol with rhodopsin. <i>Advances in Experimental Medicine and Biology</i> , 2014 , 796, 75-94 | 3.6 | 25 |
| 31 | Chapter 2:Lateral Pressure Profiles in Lipid Membranes: Dependence on Molecular Composition. <i>RSC Biomolecular Sciences</i> , 2010 , 26-55 | | 9 |
| 30 | Phospholipids. 2006 , 399-420 | | 1 |
| 29 | Ion Pore Formation in Membranes due to Complex Interactions between Lipids and Antimicrobial Peptides or Biomolecules. <i>The Electrical Engineering Handbook</i> , 2012 , 893-934 | | 5 |
| 28 | Force transduction and lipid binding in MscL: a continuum-molecular approach. <i>PLoS ONE</i> , 2014 , 9, e113947 | 3.7 | 29 |
| 27 | Fatty acid transport protein 1 regulates retinoid metabolism and photoreceptor development in mouse retina. <i>PLoS ONE</i> , 2017 , 12, e0180148 | 3.7 | 5 |
| 26 | Molecular Dynamics Simulations of Adenosine Receptors: Advances, Applications and Trends. <i>Current Pharmaceutical Design</i> , 2019 , 25, 783-816 | 3.3 | 17 |
| 25 | C-Graphs Tool with Graphical User Interface to Dissect Conserved Hydrogen-Bond Networks: Applications to Visual Rhodopsins. <i>Journal of Chemical Information and Modeling</i> , 2021 , 61, 5692-5707 | 6.1 | 1 |
| 24 | Mechanisms of the Modulation of Membrane Interfacial Enzyme Catalysis by Non-lamellar Forming Lipids: Comparison with the Behavior of a Fluorescent Probe in Membranes. <i>Springer Series on Fluorescence</i> , 2002 , 263-276 | 0.5 | |
| 23 | Essential Fatty Acids and Visual Dysfunction. <i>Food Additives</i> , 2007 , 1019-1060 | | |

- 22 The Role of Omega-3 Polyunsaturated Fatty Acids in Food Intake and Energy Homeostasis. *Food Additives*, **2007**, 837-854
- 21 The Pineal Organ of Fish. **2010**, 9-33 1
- 20 References. 207-243
- 19 Consequences of Hydrophobic Matching on the Lateral Distribution of Lipids Around Bacteriorhodopsin Reconstituted in DLPC/DSPC Mixtures. **1998**, 321-331
- 18 Membrane composition influences the conformation and function of the dopamine transporter in vivo.
- 17 Regulating lipid composition rationalizes acyl-tail saturation homeostasis in ectotherms. 1
- 16 Encyclopedia of Biophysics. **2020**, 1-16
- 15 Encyclopedia of Biophysics. **2020**, 1-16
- 14 Essential Fatty Acids and Visual Development in Infants. **2007**, 415-441
- 13 Detecting water-protein chemical exchange in membrane-bound proteins/peptides by solid-state NMR spectroscopy. *Magnetic Resonance Letters*, **2021**, 0
- 12 Functional and structural characterization of membrane-binding proteins using NMR. *Annual Reports on NMR Spectroscopy*, **2022**, 47-131 1.7
- 11 Regulation of Gramicidin Channel Function Solely by Changes in Lipid Intrinsic Curvature.. *Frontiers in Physiology*, **2022**, 13, 836789 4.6 0
- 10 Fatty acid composition of phospholipids and triacylglycerols in the flesh of the thick-lipped grey mullet (*Chelon labrosus*) living in Tunisian geothermal water and seawater: A comparative study. *Grasas Y Aceites*, **2022**, 73, e448 1.3
- 9 Conserved hydrogen-bond motifs of membrane transporters and receptors.. *Biochimica Et Biophysica Acta - Biomembranes*, **2022**, 1864, 183896 3.8 0
- 8 Membranes from Polymerizable Lipids. *Advances in Polymer Science*, **2009**, 1-42 1.3
- 7 Cholesterol stiffening of lipid membranes and drug interactions: Insights from neutron spin echo and deuterium NMR spectroscopy. **2022**, 771-796
- 6 Phospholipid Headgroups Govern Area Per Lipid and Emergent Elastic Properties of Bilayers. **2022**, 0
- 5 Hydrogen-bond networks for proton couplings in G-Protein coupled receptors. 10, 0

- 4 Cholesterol Stiffening of Lipid Membranes. **2022**, 255, 385-405 1
- 3 Physiological changes in bilayer thickness induced by cholesterol control GPCR rhodopsin function. **2022**, 0
- 2 Screening for bilayer-active and likely cytotoxic molecules reveals bilayer-mediated regulation of cell function. **2023**, 155, 0
- 1 Biophysics of Membrane Stiffening by Cholesterol and Phosphatidylinositol 4,5-bisphosphate (PIP2). **2023**, 61-85 0