

Leslie Loew

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papers

14,444
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117
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217
ext. papers

16,318
ext. citations

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6.22
L-index

#	Paper	IF	Citations
197	The systems biology markup language (SBML): a medium for representation and exchange of biochemical network models. <i>Bioinformatics</i> , 2003 , 19, 524-31	7.2	2324
196	Second-harmonic imaging microscopy for visualizing biomolecular arrays in cells, tissues and organisms. <i>Nature Biotechnology</i> , 2003 , 21, 1356-60	44.5	968
195	Membrane potential can be determined in individual cells from the nernstian distribution of cationic dyes. <i>Biophysical Journal</i> , 1988 , 53, 785-94	2.9	436
194	High-resolution nonlinear optical imaging of live cells by second harmonic generation. <i>Biophysical Journal</i> , 1999 , 77, 3341-9	2.9	424
193	Spectra, membrane binding, and potentiometric responses of new charge shift probes. <i>Biochemistry</i> , 1985 , 24, 5749-55	3.2	333
192	The Virtual Cell: a software environment for computational cell biology. <i>Trends in Biotechnology</i> , 2001 , 19, 401-6	15.1	285
191	Construction of a fluorescent biosensor family. <i>Protein Science</i> , 2002 , 11, 2655-75	6.3	251
190	Optical imaging of cell membrane potential changes induced by applied electric fields. <i>Biophysical Journal</i> , 1986 , 50, 339-48	2.9	247
189	Dual-wavelength ratiometric fluorescence measurement of the membrane dipole potential. <i>Biophysical Journal</i> , 1994 , 67, 208-16	2.9	232
188	Simultaneous imaging of cell and mitochondrial membrane potentials. <i>Biophysical Journal</i> , 1989 , 56, 1053-69	2.9	229
187	OLM interneurons differentially modulate CA3 and entorhinal inputs to hippocampal CA1 neurons. <i>Nature Neuroscience</i> , 2012 , 15, 1524-30	25.5	216
186	Quantitative cell biology with the Virtual Cell. <i>Trends in Cell Biology</i> , 2003 , 13, 570-6	18.3	211
185	Imaging in five dimensions: time-dependent membrane potentials in individual mitochondria. <i>Biophysical Journal</i> , 1993 , 65, 2396-407	2.9	210
184	A general computational framework for modeling cellular structure and function. <i>Biophysical Journal</i> , 1997 , 73, 1135-46	2.9	190
183	Topology of the mitochondrial inner membrane: dynamics and bioenergetic implications. <i>IUBMB Life</i> , 2001 , 52, 93-100	4.7	190
182	Second-harmonic imaging microscopy of living cells. <i>Journal of Biomedical Optics</i> , 2001 , 6, 277-86	3.5	188
181	Computational neurobiology is a useful tool in translational neurology: the example of ataxia. <i>Frontiers in Neuroscience</i> , 2015 , 9, 1	5.1	187

180	Characterization and application of a new optical probe for membrane lipid domains. <i>Biophysical Journal</i> , 2006 , 90, 2563-75	2.9	174
179	Virtual Cell modelling and simulation software environment. <i>IET Systems Biology</i> , 2008 , 2, 352-62	1.4	169
178	Kinetic analysis of receptor-activated phosphoinositide turnover. <i>Journal of Cell Biology</i> , 2003 , 161, 779-91	9.1	168
177	Dual-wavelength ratiometric fluorescence measurements of membrane potential. <i>Biochemistry</i> , 1989 , 28, 4536-9	3.2	163
176	Systems analysis of Ran transport. <i>Science</i> , 2002 , 295, 488-91	33.3	162
175	Localized membrane depolarizations and localized calcium influx during electric field-guided neurite growth. <i>Neuron</i> , 1992 , 9, 393-403	13.9	162
174	Evidence for a charge-shift electrochromic mechanism in a probe of membrane potential. <i>Nature</i> , 1979 , 281, 497-9	50.4	160
173	Charge-shift probes of membrane potential: a probable electrochromic mechanism for p-aminostyrylpyridinium probes on a hemispherical lipid bilayer. <i>Biophysical Journal</i> , 1981 , 34, 353-65	2.9	157
172	Electric field-directed fibroblast locomotion involves cell surface molecular reorganization and is calcium independent. <i>Journal of Cell Biology</i> , 1994 , 127, 117-28	7.3	144
171	A naphthyl analog of the aminostyryl pyridinium class of potentiometric membrane dyes shows consistent sensitivity in a variety of tissue, cell, and model membrane preparations. <i>Journal of Membrane Biology</i> , 1992 , 130, 1-10	2.3	137
170	Charge shift optical probes of membrane potential. Theory. <i>Biochemistry</i> , 1978 , 17, 4065-71	3.2	128
169	Palette of fluorinated voltage-sensitive hemicyanine dyes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 20443-8	11.5	126
168	Physiological cytosolic Ca ²⁺ transients evoke concurrent mitochondrial depolarizations. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1994 , 91, 12579-83	11.5	123
167	Probing membrane potential with nonlinear optics. <i>Biophysical Journal</i> , 1993 , 65, 672-9	2.9	122
166	Charge-shift probes of membrane potential. Characterization of aminostyrylpyridinium dyes on the squid giant axon. <i>Biophysical Journal</i> , 1985 , 47, 71-7	2.9	119
165	Near-infrared voltage-sensitive fluorescent dyes optimized for optical mapping in blood-perfused myocardium. <i>Heart Rhythm</i> , 2007 , 4, 1441-51	6.7	115
164	Nonlinear optical measurement of membrane potential around single molecules at selected cellular sites. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1999 , 96, 6700-4	11.5	113
163	Optical mapping of the isolated coronary-perfused human sinus node. <i>Journal of the American College of Cardiology</i> , 2010 , 56, 1386-94	15.1	112

162	An image-based model of calcium waves in differentiated neuroblastoma cells. <i>Biophysical Journal</i> , 2000 , 79, 163-83	2.9	112
161	Charge-shift probes of membrane potential. Synthesis. <i>Journal of Organic Chemistry</i> , 1984 , 49, 2546-2551	4.2	110
160	Novel naphthylstyryl-pyridium potentiometric dyes offer advantages for neural network analysis. <i>Journal of Neuroscience Methods</i> , 2004 , 134, 179-90	3	108
159	A fluorometric approach to local electric field measurements in a voltage-gated ion channel. <i>Neuron</i> , 2003 , 37, 85-97	13.9	107
158	Computational cell biology: spatiotemporal simulation of cellular events. <i>Annual Review of Biophysics and Biomolecular Structure</i> , 2002 , 31, 423-41		103
157	Intracellular fluorescent probe concentrations by confocal microscopy. <i>Biophysical Journal</i> , 1998 , 75, 1648-58	2.9	92
156	Membrane potential induced by external electric field pulses can be followed with a potentiometric dye. <i>Biophysical Journal</i> , 1987 , 51, 833-7	2.9	84
155	Design and characterization of electrochromic membrane probes. <i>Journal of Proteomics</i> , 1982 , 6, 243-60		84
154	Membrane electric properties by combined patch clamp and fluorescence ratio imaging in single neurons. <i>Biophysical Journal</i> , 1998 , 74, 48-53	2.9	83
153	Spatial modeling of cell signaling networks. <i>Methods in Cell Biology</i> , 2012 , 110, 195-221	1.8	81
152	Biophysical Journal 60 Years after Hodgkin-Huxley. <i>Biophysical Journal</i> , 2012 , 103, E1-E2	2.9	78
151	Amino(oligo)thiophene-based environmentally sensitive biomembrane chromophores. <i>Journal of Organic Chemistry</i> , 2008 , 73, 6587-94	4.2	78
150	Diffusion potential cascade. Convenient detection of transferable membrane pores. <i>Biochemistry</i> , 1983 , 22, 837-44	3.2	76
149	Action potential propagation in transverse-axial tubular system is impaired in heart failure. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 5815-9	11.5	75
148	Cholesterol-enriched lipid domains can be visualized by di-4-ANEPPDHQ with linear and nonlinear optics. <i>Biophysical Journal</i> , 2005 , 89, L04-6	2.9	75
147	Analysis of the effect of medium and membrane conductance on the amplitude and kinetics of membrane potentials induced by externally applied electric fields. <i>Biophysical Journal</i> , 1989 , 56, 121-8	2.9	73
146	Intracellular long-wavelength voltage-sensitive dyes for studying the dynamics of action potentials in axons and thin dendrites. <i>Journal of Neuroscience Methods</i> , 2007 , 164, 225-39	3	72
145	Cooperativity between cell contractility and adhesion. <i>Physical Review Letters</i> , 2004 , 93, 268109	7.4	71

144	Synthesis, spectra, delivery and potentiometric responses of new styryl dyes with extended spectral ranges. <i>Journal of Neuroscience Methods</i> , 2006 , 151, 200-15	3	68
143	Optogenetics design of mechanistically-based stimulation patterns for cardiac defibrillation. <i>Scientific Reports</i> , 2016 , 6, 35628	4.9	66
142	Local photorelease of caged thymosin beta4 in locomoting keratocytes causes cell turning. <i>Journal of Cell Biology</i> , 2001 , 153, 1035-48	7.3	66
141	SBML Level 3: an extensible format for the exchange and reuse of biological models. <i>Molecular Systems Biology</i> , 2020 , 16, e9110	12.2	65
140	Defects in T-tubular electrical activity underlie local alterations of calcium release in heart failure. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 15196-201	11.5	63
139	Sensitivity of second harmonic generation from styryl dyes to transmembrane potential. <i>Biophysical Journal</i> , 2004 , 86, 1169-76	2.9	63
138	Molecular machines or pleiomorphic ensembles: signaling complexes revisited. <i>Journal of Biology</i> , 2009 , 8, 81		61
137	An unexpected blue shift caused by differential solvation of a chromophore oriented in a lipid bilayer. <i>Journal of the American Chemical Society</i> , 1979 , 101, 5439-5440	16.4	59
136	Fluorometric analysis of transferable membrane pores. <i>Biochemistry</i> , 1985 , 24, 2101-4	3.2	58
135	Characterization of a new series of fluorescent probes for imaging membrane order. <i>PLoS ONE</i> , 2013 , 8, e52960	3.7	58
134	Distinct electric potentials in soma and neurite membranes. <i>Neuron</i> , 1994 , 13, 1187-93	13.9	57
133	Second Harmonic Generation Properties of Fluorescent Polymer-Encapsulated Gold Nanoparticles. <i>Journal of the American Chemical Society</i> , 2000 , 122, 10234-10235	16.4	56
132	Determination of time-dependent inositol-1,4,5-trisphosphate concentrations during calcium release in a smooth muscle cell. <i>Biophysical Journal</i> , 1999 , 77, 617-28	2.9	56
131	Single-sensor system for spatially resolved, continuous, and multiparametric optical mapping of cardiac tissue. <i>Heart Rhythm</i> , 2011 , 8, 1482-91	6.7	55
130	Stoichiometry of Nck-dependent actin polymerization in living cells. <i>Journal of Cell Biology</i> , 2012 , 197, 643-58	7.3	55
129	Voltage-sensitive dyes for monitoring multineuronal activity in the intact central nervous system. <i>The Histochemical Journal</i> , 1998 , 30, 169-87		54
128	Direct measurement of the voltage sensitivity of second-harmonic generation from a membrane dye in patch-clamped cells. <i>Optics Letters</i> , 2003 , 28, 1221-3	3	54
127	Functional profile of the giant metacerebral neuron of <i>Helix aspersa</i> : temporal and spatial dynamics of electrical activity in situ. <i>Journal of Physiology</i> , 2000 , 527 Pt 1, 55-69	3.9	52

126	Second-harmonic generation of biological interfaces: probing the membrane protein bacteriorhodopsin and imaging membrane potential around GFP molecules at specific sites in neuronal cells of <i>C. elegans</i> . <i>Chemical Physics</i> , 1999 , 245, 133-144	2.3	52
125	Dye screening and signal-to-noise ratio for retrogradely transported voltage-sensitive dyes. <i>Journal of Neuroscience Methods</i> , 1996 , 70, 121-9	3	50
124	Single-voxel recording of voltage transients in dendritic spines. <i>Biophysical Journal</i> , 2011 , 101, L11-3	2.9	48
123	Morphological control of inositol-1,4,5-trisphosphate-dependent signals. <i>Journal of Cell Biology</i> , 1999 , 147, 929-36	7.3	47
122	Fluorescent indicators of membrane potential: microspectrofluorometry and imaging. <i>Methods in Cell Biology</i> , 1989 , 30, 193-218	1.8	47
121	An open model of actin dendritic nucleation. <i>Biophysical Journal</i> , 2009 , 96, 3529-42	2.9	46
120	Modeling and analysis of calcium signaling events leading to long-term depression in cerebellar Purkinje cells. <i>Biophysical Journal</i> , 2005 , 89, 3790-806	2.9	45
119	A wave of IP ₃ production accompanies the fertilization Ca ²⁺ wave in the egg of the frog, <i>Xenopus laevis</i> : theoretical and experimental support. <i>Cell Calcium</i> , 2004 , 35, 433-47	4	45
118	Dynamics of action potential backpropagation in basal dendrites of prefrontal cortical pyramidal neurons. <i>European Journal of Neuroscience</i> , 2008 , 27, 923-36	3.5	43
117	Biochemical events associated with the stimulation of rabbit neutrophils by platelet-activating factor. <i>Journal of Leukocyte Biology</i> , 1986 , 40, 533-48	6.5	43
116	Technical features of a CCD video camera system to record cardiac fluorescence data. <i>Annals of Biomedical Engineering</i> , 1997 , 25, 713-25	4.7	42
115	Analysis of phosphatidylinositol-4,5-bisphosphate signaling in cerebellar Purkinje spines. <i>Biophysical Journal</i> , 2008 , 95, 1795-812	2.9	42
114	New near-infrared optical probes of cardiac electrical activity. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2006 , 290, H2633-43	5.2	42
113	Second harmonic imaging microscopy. <i>Methods in Enzymology</i> , 2003 , 361, 47-69	1.7	42
112	Physiological modeling with virtual cell framework. <i>Methods in Enzymology</i> , 2000 , 321, 1-23	1.7	41
111	The virtual cell: an integrated modeling environment for experimental and computational cell biology. <i>Annals of the New York Academy of Sciences</i> , 2002 , 971, 595-6	6.5	40
110	Initiation of sodium spikelets in basal dendrites of neocortical pyramidal neurons. <i>Journal of Membrane Biology</i> , 2005 , 208, 155-69	2.3	39
109	Voltage-sensitive dyes: measurement of membrane potentials induced by DC and AC electric fields. <i>Bioelectromagnetics</i> , 1992 , Suppl 1, 179-89	1.6	39

108	Confocal microscopy of potentiometric fluorescent dyes. <i>Methods in Cell Biology</i> , 1993 , 38, 195-209	1.8	38
107	Novel insights on the relationship between T-tubular defects and contractile dysfunction in a mouse model of hypertrophic cardiomyopathy. <i>Journal of Molecular and Cellular Cardiology</i> , 2016 , 91, 42-51	5.8	37
106	GFP is a selective non-linear optical sensor of electrophysiological processes in <i>Caenorhabditis elegans</i> . <i>Biophysical Journal</i> , 2000 , 79, 2345-52	2.9	37
105	SpringSaLaD: A Spatial, Particle-Based Biochemical Simulation Platform with Excluded Volume. <i>Biophysical Journal</i> , 2016 , 110, 523-529	2.9	35
104	Unique contrast patterns from resonance-enhanced chiral SHG of cell membranes. <i>Journal of the American Chemical Society</i> , 2006 , 128, 11030-1	16.4	35
103	Isolation, characterization and partial purification of a transferable membrane channel (amoebapore) produced by <i>Entamoeba histolytica</i> . <i>Molecular and Biochemical Parasitology</i> , 1989 , 33, 237-47	1.9	35
102	Analysis of nonlinear dynamics on arbitrary geometries with the Virtual Cell. <i>Chaos</i> , 2001 , 11, 115-131	3.3	33
101	Real-time optical manipulation of cardiac conduction in intact hearts. <i>Journal of Physiology</i> , 2018 , 596, 3841-3858	3.9	31
100	Anatomic localization and autonomic modulation of atrioventricular junctional rhythm in failing human hearts. <i>Circulation: Arrhythmia and Electrophysiology</i> , 2011 , 4, 515-25	6.4	30
99	Probing the function of neuronal populations: combining micromirror-based optogenetic photostimulation with voltage-sensitive dye imaging. <i>Neuroscience Research</i> , 2013 , 75, 76-81	2.9	29
98	Wavelength- and time-dependence of potentiometric non-linear optical signals from styryl dyes. <i>Journal of Membrane Biology</i> , 2005 , 208, 103-11	2.3	29
97	The effect of asymmetric surface potentials on the intramembrane electric field measured with voltage-sensitive dyes. <i>Biophysical Journal</i> , 2003 , 84, 2768-80	2.9	28
96	Gigantic optical non-linearities from nanoparticle-enhanced molecular probes with potential for selectively imaging the structure and physiology of nanometric regions in cellular systems. <i>Bioimaging</i> , 1996 , 4, 215-224		28
95	Compartmental and Spatial Rule-Based Modeling with Virtual Cell. <i>Biophysical Journal</i> , 2017 , 113, 1365-1372		26
94	Virtual NEURON: a strategy for merged biochemical and electrophysiological modeling. <i>Journal of Computational Neuroscience</i> , 2011 , 31, 385-400	1.4	26
93	Design and Use of Organic Voltage Sensitive Dyes. <i>Advances in Experimental Medicine and Biology</i> , 2015 , 859, 27-53	3.6	25
92	In situ optical mapping of voltage and calcium in the heart. <i>PLoS ONE</i> , 2012 , 7, e42562	3.7	25
91	Listening to membrane potential: photoacoustic voltage-sensitive dye recording. <i>Journal of Biomedical Optics</i> , 2017 , 22, 45006	3.5	24

90	Transcranial Recording of Electrophysiological Neural Activity in the Rodent Brain Using Functional Photoacoustic Imaging of Near-Infrared Voltage-Sensitive Dye. <i>Frontiers in Neuroscience</i> , 2019 , 13, 579	5.1	24
89	Where does all the PIP2 come from?. <i>Journal of Physiology</i> , 2007 , 582, 945-51	3.9	24
88	EPSPs Measured in Proximal Dendritic Spines of Cortical Pyramidal Neurons. <i>ENeuro</i> , 2016 , 3,	3.9	24
87	Simultaneous measurement and modulation of multiple physiological parameters in the isolated heart using optical techniques. <i>Pflugers Archiv European Journal of Physiology</i> , 2012 , 464, 403-14	4.6	23
86	Use of virtual cell in studies of cellular dynamics. <i>International Review of Cell and Molecular Biology</i> , 2010 , 283, 1-56	6	23
85	Low-Cost Optical Mapping Systems for Panoramic Imaging of Complex Arrhythmias and Drug-Action in Translational Heart Models. <i>Scientific Reports</i> , 2017 , 7, 43217	4.9	22
84	There is more than one way to model an elephant. Experiment-driven modeling of the actin cytoskeleton. <i>Biophysical Journal</i> , 2013 , 104, 520-32	2.9	22
83	In vivo ratiometric optical mapping enables high-resolution cardiac electrophysiology in pig models. <i>Cardiovascular Research</i> , 2019 , 115, 1659-1671	9.9	22
82	Pleomorphic ensembles: formation of large clusters composed of weakly interacting multivalent molecules. <i>Biophysical Journal</i> , 2013 , 105, 2451-60	2.9	21
81	High-precision recording of the action potential in isolated cardiomyocytes using the near-infrared fluorescent dye di-4-ANBDQBS. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2010 , 299, H1271-81	5.2	21
80	Nonlinear optical potentiometric dyes optimized for imaging with 1064-nm light. <i>Journal of Biomedical Optics</i> , 2007 , 12, 044001	3.5	21
79	Rule-based modeling with Virtual Cell. <i>Bioinformatics</i> , 2016 , 32, 2880-2	7.2	19
78	Intracellular signaling: spatial and temporal control. <i>Physiology</i> , 2005 , 20, 169-79	9.8	19
77	Computational analysis of calcium signaling and membrane electrophysiology in cerebellar Purkinje neurons associated with ataxia. <i>BMC Systems Biology</i> , 2012 , 6, 70	3.5	18
76	Imaging activity of neuronal populations with new long-wavelength voltage-sensitive dyes. <i>Brain Cell Biology</i> , 2008 , 36, 157-72		18
75	Cortically restricted production of IP3 leads to propagation of the fertilization Ca ²⁺ wave along the cell surface in a model of the <i>Xenopus</i> egg. <i>Journal of Theoretical Biology</i> , 2004 , 231, 487-96	2.3	18
74	Insertion of amphiphilic molecules into membranes is catalyzed by a high molecular weight non-ionic surfactant. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1987 , 899, 104-12	3.8	18
73	Lipid composition affects the rate of photosensitized dissipation of cross-membrane diffusion potential on liposomes. <i>Journal of Physical Chemistry B</i> , 2010 , 114, 10097-104	3.4	16

72	Second harmonic imaging of exocytosis at fertilization. <i>Biophysical Journal</i> , 2005 , 88, L46-8	2.9	16
71	Combined optogenetics and voltage sensitive dye imaging at single cell resolution. <i>Frontiers in Cellular Neuroscience</i> , 2014 , 8, 311	6.1	15
70	Fragility of foot process morphology in kidney podocytes arises from chaotic spatial propagation of cytoskeletal instability. <i>PLoS Computational Biology</i> , 2017 , 13, e1005433	5	13
69	Pathway Commons at virtual cell: use of pathway data for mathematical modeling. <i>Bioinformatics</i> , 2014 , 30, 292-4	7.2	13
68	The Interplay of Structural and Cellular Biophysics Controls Clustering of Multivalent Molecules. <i>Biophysical Journal</i> , 2019 , 116, 560-572	2.9	12
67	CaMKII activation and dynamics are independent of the holoenzyme structure: an infinite subunit holoenzyme approximation. <i>Physical Biology</i> , 2012 , 9, 036010	3	12
66	Faster voltage-dependent activation of Na ⁺ channels in growth cones versus somata of neuroblastoma N1E-115 cells. <i>Biophysical Journal</i> , 1996 , 71, 2501-8	2.9	12
65	The virtual cell. <i>Pacific Symposium on Biocomputing Pacific Symposium on Biocomputing</i> , 1999 , 228-39	1.3	12
64	Proteo-lipobeads for the oriented encapsulation of membrane proteins. <i>Soft Matter</i> , 2015 , 11, 2906-2908	3.6	11
63	Integration of modeling with experimental and clinical findings synthesizes and refines the central role of inositol 1,4,5-trisphosphate receptor 1 in spinocerebellar ataxia. <i>Frontiers in Neuroscience</i> , 2014 , 8, 453	5.1	11
62	Evaluation of voltage-sensitive fluorescence dyes for monitoring neuronal activity in the embryonic central nervous system. <i>Journal of Membrane Biology</i> , 2013 , 246, 679-88	2.3	11
61	Computational analysis of Rho GTPase cycling. <i>PLoS Computational Biology</i> , 2013 , 9, e1002831	5	11
60	A minimal actomyosin-based model predicts the dynamics of filopodia on neuronal dendrites. <i>Molecular Biology of the Cell</i> , 2017 , 28, 1021-1033	3.5	10
59	Transcranial photoacoustic imaging of NMDA-evoked focal circuit dynamics in the rat hippocampus. <i>Journal of Neural Engineering</i> , 2020 , 17, 025001	5	10
58	Modeling capping protein FRAP and CALI experiments reveals in vivo regulation of actin dynamics. <i>Cytoskeleton</i> , 2010 , 67, 519-34	2.4	10
57	Activation of phospholipase C increases intramembrane electric fields in N1E-115 neuroblastoma cells. <i>Biophysical Journal</i> , 2003 , 84, 4144-56	2.9	10
56	T-Tubular Electrical Defects Contribute to Blunted βAdrenergic Response in Heart Failure. <i>International Journal of Molecular Sciences</i> , 2016 , 17,	6.3	10
55	Integration of linear and dendritic actin nucleation in Nck-induced actin comets. <i>Molecular Biology of the Cell</i> , 2016 , 27, 247-59	3.5	9

54	Voltage-sensitive dye delivery through the blood brain barrier using adenosine receptor agonist regadenoson. <i>Biomedical Optics Express</i> , 2018 , 9, 3915-3922	3.5	9
53	Superresolving dendritic spines. <i>Biophysical Journal</i> , 2013 , 104, 741-3	2.9	9
52	Cardiac electrophysiological imaging systems scalable for high-throughput drug testing. <i>Pflugers Archiv European Journal of Physiology</i> , 2012 , 464, 645-56	4.6	9
51	Characterization of voltage-sensitive dyes in living cells using two-photon excitation. <i>Methods in Molecular Biology</i> , 2013 , 995, 147-60	1.4	9
50	The Virtual Cell Project. <i>Novartis Foundation Symposium</i> , 151-161		9
49	Confocal and nonlinear optical imaging of potentiometric dyes. <i>Methods in Cell Biology</i> , 2002 , 70, 429-521.8	1.8	9
48	Gigantic optical non-linearities from nanoparticle-enhanced molecular probes with potential for selectively imaging the structure and physiology of nanometric regions in cellular systems. <i>Bioimaging</i> , 1996 , 4, 215-224		9
47	Graded fibronectin receptor aggregation in migrating cells. <i>Cytoskeleton</i> , 1996 , 34, 185-93		9
46	Tethered Bichromophoric Fluorophore Quencher Voltage Sensitive Dyes. <i>ACS Sensors</i> , 2018 , 3, 2621-2628	2.2	9
45	Design and Use of Organic Voltage Sensitive Dyes 2010 , 13-23		9
44	Perspectives on Sharing Models and Related Resources in Computational Biomechanics Research. <i>Journal of Biomechanical Engineering</i> , 2018 , 140,	2.1	8
43	STAT module can function as a biphasic amplitude filter. <i>IET Systems Biology</i> , 2005 , 2, 43-52		6
42	Absorption and vibrational spectra of the surface properties of molecular monolayers with large light-induced dipole alterations. <i>Spectrochimica Acta Part A: Molecular Spectroscopy</i> , 1988 , 44, 793-803		6
41	Recent progress in optical voltage-sensor technology and applications to cardiac research: from single cells to whole hearts. <i>Progress in Biophysics and Molecular Biology</i> , 2020 , 154, 3-10	4.7	6
40	The Virtual Cell project. <i>Novartis Foundation Symposium</i> , 2002 , 247, 151-60; discussion 160-1, 198-206, 244-52		6
39	On the Membrane Binding of the Potentiometric Probe Di-4-ANEPPS: A Fluorescence and Resonance Raman Study. <i>Spectroscopy Letters</i> , 1993 , 26, 1181-1193	1.1	5
38	Characterization of Potentiometric Membrane Dyes. <i>Advances in Chemistry Series</i> , 1994 , 151-173		5
37	The solubility product extends the buffering concept to heterotypic biomolecular condensates. <i>ELife</i> , 2021 , 10,	8.9	5

36	pH and Potential Transients of the bc Complex Co-Reconstituted in Proteo-Lipobeads with the Reaction Center from <i>Rb. sphaeroides</i> . <i>Journal of Physical Chemistry B</i> , 2017 , 121, 143-152	3.4	4
35	The correlation between photosensitizers membrane localization, membrane-residing targets, and photosensitization efficiency 2009 ,		4
34	Endogenous inhibitors of InsP3-induced Ca ²⁺ release in neuroblastoma cells. <i>Brain Research</i> , 2005 , 1055, 60-72	3.7	4
33	Absolute spectroscopic determination of cross-membrane potential. <i>Journal of Fluorescence</i> , 1993 , 3, 265-9	2.4	4
32	Voltage-Dependent Photoluminescence of Carbon Dots. <i>Journal of the Electrochemical Society</i> , 2020 , 167, 147515	3.9	4
31	Potentiometric Membrane Dyes and Imaging Membrane Potential in Single Cells 1999 , 210-221		4
30	Arrhythmia susceptibility in a rat model of acute atrial dilation. <i>Progress in Biophysics and Molecular Biology</i> , 2020 , 154, 21-29	4.7	3
29	Monitoring membrane potential with second-harmonic generation. <i>Cold Spring Harbor Protocols</i> , 2014 , 2014, 643-54	1.2	3
28	Second Harmonic Imaging of Membrane Potential. <i>Advances in Experimental Medicine and Biology</i> , 2015 , 859, 473-92	3.6	3
27	Spatial Organization and Diffusion in Neuronal Signaling 2012 , 133-161		3
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