

# Leslie Loew

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

197  
papers

14,444  
citations

60  
h-index

117  
g-index

217  
ext. papers

16,318  
ext. citations

4.8  
avg, IF

6.22  
L-index

#	Paper	IF	Citations
197	Optogenetic manipulation of cardiac electrical dynamics using sub-threshold illumination: dissecting the role of cardiac alternans in terminating rapid rhythms.. <i>Basic Research in Cardiology</i> , <b>2022</b> , 117, 25	11.8	0
196	Ten steps to investigate a cellular system with mathematical modeling. <i>PLoS Computational Biology</i> , <b>2021</b> , 17, e1008921	5	3
195	Hyperexcitable Phenotypes in Induced Pluripotent Stem Cell-Derived Neurons From Patients With 15q11-q13 Duplication Syndrome, a Genetic Form of Autism. <i>Biological Psychiatry</i> , <b>2021</b> , 90, 756-765	7.9	3
194	The solubility product extends the buffering concept to heterotypic biomolecular condensates. <i>ELife</i> , <b>2021</b> , 10,	8.9	5
193	A Complete and Low-Cost Cardiac Optical Mapping System in Translational Animal Models. <i>Frontiers in Physiology</i> , <b>2021</b> , 12, 696270	4.6	2
192	Mechanism of actin filament nucleation. <i>Biophysical Journal</i> , <b>2021</b> , 120, 4399-4417	2.9	1
191	Fast Optical Investigation of Cardiac Electrophysiology by Parallel Detection in Multiwell Plates. <i>Frontiers in Physiology</i> , <b>2021</b> , 12, 692496	4.6	3
190	Transcranial photoacoustic imaging of NMDA-evoked focal circuit dynamics in the rat hippocampus. <i>Journal of Neural Engineering</i> , <b>2020</b> , 17, 025001	5	10
189	Arrhythmia susceptibility in a rat model of acute atrial dilation. <i>Progress in Biophysics and Molecular Biology</i> , <b>2020</b> , 154, 21-29	4.7	3
188	Voltage-Dependent Photoluminescence of Carbon Dots. <i>Journal of the Electrochemical Society</i> , <b>2020</b> , 167, 147515	3.9	4
187	SBML Level 3: an extensible format for the exchange and reuse of biological models. <i>Molecular Systems Biology</i> , <b>2020</b> , 16, e9110	12.2	65
186	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> , <b>2020</b> , 154, 3-10	4.7	6
185	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> , <b>2019</b> , 13, 579	5.1	24
184	The Interplay of Structural and Cellular Biophysics Controls Clustering of Multivalent Molecules. <i>Biophysical Journal</i> , <b>2019</b> , 116, 560-572	2.9	12
183	In vivo ratiometric optical mapping enables high-resolution cardiac electrophysiology in pig models. <i>Cardiovascular Research</i> , <b>2019</b> , 115, 1659-1671	9.9	22
182	Perspectives on Sharing Models and Related Resources in Computational Biomechanics Research. <i>Journal of Biomechanical Engineering</i> , <b>2018</b> , 140,	2.1	8
181	Real-time optical manipulation of cardiac conduction in intact hearts. <i>Journal of Physiology</i> , <b>2018</b> , 596, 3841-3858	3.9	31

180	Voltage-sensitive dye delivery through the blood brain barrier using adenosine receptor agonist regadenoson. <i>Biomedical Optics Express</i> , <b>2018</b> , 9, 3915-3922	3.5	9
179	mol2sphere: spherical decomposition of multi-domain molecules for visualization and coarse grained spatial modeling. <i>Bioinformatics</i> , <b>2018</b> , 34, 3948-3950	7.2	1
178	How to Choose a Potentiometric Membrane Probe <b>2018</b> , 139-151		1
177	Tethered Bichromophoric Fluorophore Quencher Voltage Sensitive Dyes. <i>ACS Sensors</i> , <b>2018</b> , 3, 2621-2628	4.2	9
176	A minimal actomyosin-based model predicts the dynamics of filopodia on neuronal dendrites. <i>Molecular Biology of the Cell</i> , <b>2017</b> , 28, 1021-1033	3.5	10
175	Low-Cost Optical Mapping Systems for Panoramic Imaging of Complex Arrhythmias and Drug-Action in Translational Heart Models. <i>Scientific Reports</i> , <b>2017</b> , 7, 43217	4.9	22
174	Listening to membrane potential: photoacoustic voltage-sensitive dye recording. <i>Journal of Biomedical Optics</i> , <b>2017</b> , 22, 45006	3.5	24
173	Recording membrane potential changes through photoacoustic voltage sensitive dye <b>2017</b> ,		1
172	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> , <b>2017</b> , 121, 143-152	3.4	4
171	Compartmental and Spatial Rule-Based Modeling with Virtual Cell. <i>Biophysical Journal</i> , <b>2017</b> , 113, 1365-1372	3.7	26
170	Fragility of foot process morphology in kidney podocytes arises from chaotic spatial propagation of cytoskeletal instability. <i>PLoS Computational Biology</i> , <b>2017</b> , 13, e1005433	5	13
169	Optogenetics design of mechanistically-based stimulation patterns for cardiac defibrillation. <i>Scientific Reports</i> , <b>2016</b> , 6, 35628	4.9	66
168	Rule-based modeling with Virtual Cell. <i>Bioinformatics</i> , <b>2016</b> , 32, 2880-2	7.2	19
167	New and Notable Changes at Biophysical Journal. <i>Biophysical Journal</i> , <b>2016</b> , 110, E01-2	2.9	1
166	SpringSaLaD: A Spatial, Particle-Based Biochemical Simulation Platform with Excluded Volume. <i>Biophysical Journal</i> , <b>2016</b> , 110, 523-529	2.9	35
165	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> , <b>2016</b> , 91, 42-51	5.8	37
164	Integration of linear and dendritic actin nucleation in Nck-induced actin comets. <i>Molecular Biology of the Cell</i> , <b>2016</b> , 27, 247-59	3.5	9
163	EPSPs Measured in Proximal Dendritic Spines of Cortical Pyramidal Neurons. <i>ENeuro</i> , <b>2016</b> , 3,	3.9	24

162	T-Tubular Electrical Defects Contribute to Blunted $\beta$ Adrenergic Response in Heart Failure. <i>International Journal of Molecular Sciences</i> , <b>2016</b> , 17,	6.3	10
161	Proteo-lipobeads for the oriented encapsulation of membrane proteins. <i>Soft Matter</i> , <b>2015</b> , 11, 2906-2908	3.6	11
160	Design and Use of Organic Voltage Sensitive Dyes. <i>Advances in Experimental Medicine and Biology</i> , <b>2015</b> , 859, 27-53	3.6	25
159	Computational neurobiology is a useful tool in translational neurology: the example of ataxia. <i>Frontiers in Neuroscience</i> , <b>2015</b> , 9, 1	5.1	187
158	Second Harmonic Imaging of Membrane Potential. <i>Advances in Experimental Medicine and Biology</i> , <b>2015</b> , 859, 473-92	3.6	3
157	Pathway Commons at virtual cell: use of pathway data for mathematical modeling. <i>Bioinformatics</i> , <b>2014</b> , 30, 292-4	7.2	13
156	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> , <b>2014</b> , 111, 15196-201	11.5	63
155	Monitoring membrane potential with second-harmonic generation. <i>Cold Spring Harbor Protocols</i> , <b>2014</b> , 2014, 643-54	1.2	3
154	Combined optogenetics and voltage sensitive dye imaging at single cell resolution. <i>Frontiers in Cellular Neuroscience</i> , <b>2014</b> , 8, 311	6.1	15
153	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> , <b>2014</b> , 8, 453	5.1	11
152	There is more than one way to model an elephant. Experiment-driven modeling of the actin cytoskeleton. <i>Biophysical Journal</i> , <b>2013</b> , 104, 520-32	2.9	22
151	Superresolving dendritic spines. <i>Biophysical Journal</i> , <b>2013</b> , 104, 741-3	2.9	9
150	Probing the function of neuronal populations: combining micromirror-based optogenetic photostimulation with voltage-sensitive dye imaging. <i>Neuroscience Research</i> , <b>2013</b> , 75, 76-81	2.9	29
149	Characterization of voltage-sensitive dyes in living cells using two-photon excitation. <i>Methods in Molecular Biology</i> , <b>2013</b> , 995, 147-60	1.4	9
148	Pleomorphic ensembles: formation of large clusters composed of weakly interacting multivalent molecules. <i>Biophysical Journal</i> , <b>2013</b> , 105, 2451-60	2.9	21
147	Evaluation of voltage-sensitive fluorescence dyes for monitoring neuronal activity in the embryonic central nervous system. <i>Journal of Membrane Biology</i> , <b>2013</b> , 246, 679-88	2.3	11
146	Science communication: Quality at stake. <i>Science</i> , <b>2013</b> , 342, 1169	33.3	
145	Computational analysis of Rho GTPase cycling. <i>PLoS Computational Biology</i> , <b>2013</b> , 9, e1002831	5	11

144	Characterization of a new series of fluorescent probes for imaging membrane order. <i>PLoS ONE</i> , <b>2013</b> , 8, e52960	3.7	58
143	Palette of fluorinated voltage-sensitive hemicyanine dyes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2012</b> , 109, 20443-8	11.5	126
142	Spatial Organization and Diffusion in Neuronal Signaling <b>2012</b> , 133-161		3
141	A Mathematical Model for Nephtrin Localization in Podocyte Foot Processes. <i>Biophysical Journal</i> , <b>2012</b> , 102, 593a-594a	2.9	2
140	OLM interneurons differentially modulate CA3 and entorhinal inputs to hippocampal CA1 neurons. <i>Nature Neuroscience</i> , <b>2012</b> , 15, 1524-30	25.5	216
139	Computational analysis of calcium signaling and membrane electrophysiology in cerebellar Purkinje neurons associated with ataxia. <i>BMC Systems Biology</i> , <b>2012</b> , 6, 70	3.5	18
138	Biophysical Journal 60 Years after Hodgkin-Huxley. <i>Biophysical Journal</i> , <b>2012</b> , 103, E1-E2	2.9	78
137	Spatial modeling of cell signaling networks. <i>Methods in Cell Biology</i> , <b>2012</b> , 110, 195-221	1.8	81
136	Cardiac electrophysiological imaging systems scalable for high-throughput drug testing. <i>Pflugers Archiv European Journal of Physiology</i> , <b>2012</b> , 464, 645-56	4.6	9
135	Simultaneous measurement and modulation of multiple physiological parameters in the isolated heart using optical techniques. <i>Pflugers Archiv European Journal of Physiology</i> , <b>2012</b> , 464, 403-14	4.6	23
134	CaMKII activation and dynamics are independent of the holoenzyme structure: an infinite subunit holoenzyme approximation. <i>Physical Biology</i> , <b>2012</b> , 9, 036010	3	12
133	Stoichiometry of Nck-dependent actin polymerization in living cells. <i>Journal of Cell Biology</i> , <b>2012</b> , 197, 643-58	7.3	55
132	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> , <b>2012</b> , 109, 5815-9	11.5	75
131	In situ optical mapping of voltage and calcium in the heart. <i>PLoS ONE</i> , <b>2012</b> , 7, e42562	3.7	25
130	Single-sensor system for spatially resolved, continuous, and multiparametric optical mapping of cardiac tissue. <i>Heart Rhythm</i> , <b>2011</b> , 8, 1482-91	6.7	55
129	Single-voxel recording of voltage transients in dendritic spines. <i>Biophysical Journal</i> , <b>2011</b> , 101, L11-3	2.9	48
128	Anatomic localization and autonomic modulation of atrioventricular junctional rhythm in failing human hearts. <i>Circulation: Arrhythmia and Electrophysiology</i> , <b>2011</b> , 4, 515-25	6.4	30
127	Virtual NEURON: a strategy for merged biochemical and electrophysiological modeling. <i>Journal of Computational Neuroscience</i> , <b>2011</b> , 31, 385-400	1.4	26

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125	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> , <b>2010</b> , 299, H1271-81	5.2	21
124	Use of virtual cell in studies of cellular dynamics. <i>International Review of Cell and Molecular Biology</i> , <b>2010</b> , 283, 1-56	6	23
123	Optical mapping of the isolated coronary-perfused human sinus node. <i>Journal of the American College of Cardiology</i> , <b>2010</b> , 56, 1386-94	15.1	112
122	Lipid composition affects the rate of photosensitized dissipation of cross-membrane diffusion potential on liposomes. <i>Journal of Physical Chemistry B</i> , <b>2010</b> , 114, 10097-104	3.4	16
121	Modeling capping protein FRAP and CALI experiments reveals in vivo regulation of actin dynamics. <i>Cytoskeleton</i> , <b>2010</b> , 67, 519-34	2.4	10
120	Second Harmonic Imaging of Membrane Potential <b>2010</b> , 147-155		1
119	Design and Use of Organic Voltage Sensitive Dyes <b>2010</b> , 13-23		9
118	The correlation between photosensitizers membrane localization, membrane-residing targets, and photosensitization efficiency <b>2009</b> ,		4
117	Molecular machines or pleiomorphic ensembles: signaling complexes revisited. <i>Journal of Biology</i> , <b>2009</b> , 8, 81		61
116	Toward A Computational Model Of IP3R1-associated Ataxia. <i>Biophysical Journal</i> , <b>2009</b> , 96, 96a	2.9	2
115	An open model of actin dendritic nucleation. <i>Biophysical Journal</i> , <b>2009</b> , 96, 3529-42	2.9	46
114	Using the Virtual Cell Simulation Environment for Extracting Quantitative Parameters from Live Cell Fluorescence Imaging Data. <i>Microscopy and Microanalysis</i> , <b>2009</b> , 15, 1522-1523	0.5	3
113	Using the Virtual Cell Simulation Environment for Extracting Quantitative Parameters from Live Cell Fluorescence Imaging Data. <i>Microscopy Today</i> , <b>2009</b> , 17, 36-39	0.4	3
112	Dynamics of action potential backpropagation in basal dendrites of prefrontal cortical pyramidal neurons. <i>European Journal of Neuroscience</i> , <b>2008</b> , 27, 923-36	3.5	43
111	Analysis of phosphatidylinositol-4,5-bisphosphate signaling in cerebellar Purkinje spines. <i>Biophysical Journal</i> , <b>2008</b> , 95, 1795-812	2.9	42
110	Amino(oligo)thiophene-based environmentally sensitive biomembrane chromophores. <i>Journal of Organic Chemistry</i> , <b>2008</b> , 73, 6587-94	4.2	78
109	Virtual Cell modelling and simulation software environment. <i>IET Systems Biology</i> , <b>2008</b> , 2, 352-62	1.4	169

108	Geometry shapes cell signaling network output. <i>Chemistry and Biology</i> , <b>2008</b> , 15, 523-4		2
107	Imaging activity of neuronal populations with new long-wavelength voltage-sensitive dyes. <i>Brain Cell Biology</i> , <b>2008</b> , 36, 157-72		18
106	Near-infrared voltage-sensitive fluorescent dyes optimized for optical mapping in blood-perfused myocardium. <i>Heart Rhythm</i> , <b>2007</b> , 4, 1441-51	6.7	115
105	Intracellular long-wavelength voltage-sensitive dyes for studying the dynamics of action potentials in axons and thin dendrites. <i>Journal of Neuroscience Methods</i> , <b>2007</b> , 164, 225-39	3	72
104	Where does all the PIP2 come from?. <i>Journal of Physiology</i> , <b>2007</b> , 582, 945-51	3.9	24
103	Nonlinear optical potentiometric dyes optimized for imaging with 1064-nm light. <i>Journal of Biomedical Optics</i> , <b>2007</b> , 12, 044001	3.5	21
102	Synthesis, spectra, delivery and potentiometric responses of new styryl dyes with extended spectral ranges. <i>Journal of Neuroscience Methods</i> , <b>2006</b> , 151, 200-15	3	68
101	New near-infrared optical probes of cardiac electrical activity. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>2006</b> , 290, H2633-43	5.2	42
100	Think Simulation - Think Experiment: The Virtual Cell Paradigm <b>2006</b> ,		2
99	Characterization and application of a new optical probe for membrane lipid domains. <i>Biophysical Journal</i> , <b>2006</b> , 90, 2563-75	2.9	174
98	Unique contrast patterns from resonance-enhanced chiral SHG of cell membranes. <i>Journal of the American Chemical Society</i> , <b>2006</b> , 128, 11030-1	16.4	35
97	Second harmonic imaging of exocytosis at fertilization. <i>Biophysical Journal</i> , <b>2005</b> , 88, L46-8	2.9	16
96	Cholesterol-enriched lipid domains can be visualized by di-4-ANEPPDHQ with linear and nonlinear optics. <i>Biophysical Journal</i> , <b>2005</b> , 89, L04-6	2.9	75
95	Modeling and analysis of calcium signaling events leading to long-term depression in cerebellar Purkinje cells. <i>Biophysical Journal</i> , <b>2005</b> , 89, 3790-806	2.9	45
94	Second harmonic generation imaging microscopy with a high-power ultrafast fiber laser <b>2005</b> ,		2
93	Endogenous inhibitors of InsP3-induced Ca <sup>2+</sup> release in neuroblastoma cells. <i>Brain Research</i> , <b>2005</b> , 1055, 60-72	3.7	4
92	Wavelength- and time-dependence of potentiometric non-linear optical signals from styryl dyes. <i>Journal of Membrane Biology</i> , <b>2005</b> , 208, 103-11	2.3	29
91	Initiation of sodium spikelets in basal dendrites of neocortical pyramidal neurons. <i>Journal of Membrane Biology</i> , <b>2005</b> , 208, 155-69	2.3	39



90	STAT module can function as a biphasic amplitude filter. <i>IET Systems Biology</i> , <b>2005</b> , 2, 43-52		6
89	Intracellular signaling: spatial and temporal control. <i>Physiology</i> , <b>2005</b> , 20, 169-79	9.8	19
88	A wave of IP3 production accompanies the fertilization Ca <sup>2+</sup> wave in the egg of the frog, <i>Xenopus laevis</i> : theoretical and experimental support. <i>Cell Calcium</i> , <b>2004</b> , 35, 433-47	4	45
87	Novel naphthylstyryl-pyridium potentiometric dyes offer advantages for neural network analysis. <i>Journal of Neuroscience Methods</i> , <b>2004</b> , 134, 179-90	3	108
86	Cortically restricted production of IP3 leads to propagation of the fertilization Ca <sup>2+</sup> wave along the cell surface in a model of the <i>Xenopus</i> egg. <i>Journal of Theoretical Biology</i> , <b>2004</b> , 231, 487-96	2.3	18
85	Cooperativity between cell contractility and adhesion. <i>Physical Review Letters</i> , <b>2004</b> , 93, 268109	7.4	71
84	Sensitivity of second harmonic generation from styryl dyes to transmembrane potential. <i>Biophysical Journal</i> , <b>2004</b> , 86, 1169-76	2.9	63
83	Quantitative cell biology with the Virtual Cell. <i>Trends in Cell Biology</i> , <b>2003</b> , 13, 570-6	18.3	211
82	Second-harmonic imaging microscopy for visualizing biomolecular arrays in cells, tissues and organisms. <i>Nature Biotechnology</i> , <b>2003</b> , 21, 1356-60	44.5	968
81	The systems biology markup language (SBML): a medium for representation and exchange of biochemical network models. <i>Bioinformatics</i> , <b>2003</b> , 19, 524-31	7.2	2324
80	Direct measurement of the voltage sensitivity of second-harmonic generation from a membrane dye in patch-clamped cells. <i>Optics Letters</i> , <b>2003</b> , 28, 1221-3	3	54
79	The effect of asymmetric surface potentials on the intramembrane electric field measured with voltage-sensitive dyes. <i>Biophysical Journal</i> , <b>2003</b> , 84, 2768-80	2.9	28
78	Activation of phospholipase C increases intramembrane electric fields in N1E-115 neuroblastoma cells. <i>Biophysical Journal</i> , <b>2003</b> , 84, 4144-56	2.9	10
77	A fluorometric approach to local electric field measurements in a voltage-gated ion channel. <i>Neuron</i> , <b>2003</b> , 37, 85-97	13.9	107
76	Kinetic analysis of receptor-activated phosphoinositide turnover. <i>Journal of Cell Biology</i> , <b>2003</b> , 161, 779-91	9.3	168
75	Second harmonic imaging microscopy. <i>Methods in Enzymology</i> , <b>2003</b> , 361, 47-69	1.7	42
74	Construction of a fluorescent biosensor family. <i>Protein Science</i> , <b>2002</b> , 11, 2655-75	6.3	251
73	The virtual cell: an integrated modeling environment for experimental and computational cell biology. <i>Annals of the New York Academy of Sciences</i> , <b>2002</b> , 971, 595-6	6.5	40



72	Systems analysis of Ran transport. <i>Science</i> , <b>2002</b> , 295, 488-91	33.3	162
71	Confocal and nonlinear optical imaging of potentiometric dyes. <i>Methods in Cell Biology</i> , <b>2002</b> , 70, 429-52	1.8	9
70	Computational cell biology: spatiotemporal simulation of cellular events. <i>Annual Review of Biophysics and Biomolecular Structure</i> , <b>2002</b> , 31, 423-41		103
69	The Virtual Cell project. <i>Novartis Foundation Symposium</i> , <b>2002</b> , 247, 151-60; discussion 160-1, 198-206, 244-52		6
68	Topology of the mitochondrial inner membrane: dynamics and bioenergetic implications. <i>IUBMB Life</i> , <b>2001</b> , 52, 93-100	4.7	190
67	The Virtual Cell: a software environment for computational cell biology. <i>Trends in Biotechnology</i> , <b>2001</b> , 19, 401-6	15.1	285
66	Local photorelease of caged thymosin beta4 in locomoting keratocytes causes cell turning. <i>Journal of Cell Biology</i> , <b>2001</b> , 153, 1035-48	7.3	66
65	Analysis of nonlinear dynamics on arbitrary geometries with the Virtual Cell. <i>Chaos</i> , <b>2001</b> , 11, 115-131	3.3	33
64	Second-harmonic imaging microscopy of living cells. <i>Journal of Biomedical Optics</i> , <b>2001</b> , 6, 277-86	3.5	188
63	Physiological modeling with virtual cell framework. <i>Methods in Enzymology</i> , <b>2000</b> , 321, 1-23	1.7	41
62	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> , <b>2000</b> , 527 Pt 1, 55-69	3.9	52
61	Second Harmonic Imaging Microscopy: A New Non-Linear Optical Modality for Cell Membrane Physiology. <i>Microscopy and Microanalysis</i> , <b>2000</b> , 6, 810-811	0.5	
60	An image-based model of calcium waves in differentiated neuroblastoma cells. <i>Biophysical Journal</i> , <b>2000</b> , 79, 163-83	2.9	112
59	GFP is a selective non-linear optical sensor of electrophysiological processes in <i>Caenorhabditis elegans</i> . <i>Biophysical Journal</i> , <b>2000</b> , 79, 2345-52	2.9	37
58	Second Harmonic Generation Properties of Fluorescent Polymer-Encapsulated Gold Nanoparticles. <i>Journal of the American Chemical Society</i> , <b>2000</b> , 122, 10234-10235	16.4	56
57	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> , <b>1999</b> , 96, 6700-4	11.5	113
56	Morphological control of inositol-1,4,5-trisphosphate-dependent signals. <i>Journal of Cell Biology</i> , <b>1999</b> , 147, 929-36	7.3	47
55	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> , <b>1999</b> , 245, 133-144	2.3	52

54	Determination of time-dependent inositol-1,4,5-trisphosphate concentrations during calcium release in a smooth muscle cell. <i>Biophysical Journal</i> , <b>1999</b> , 77, 617-28	2.9	56
53	High-resolution nonlinear optical imaging of live cells by second harmonic generation. <i>Biophysical Journal</i> , <b>1999</b> , 77, 3341-9	2.9	424
52	The virtual cell. <i>Pacific Symposium on Biocomputing Pacific Symposium on Biocomputing</i> , <b>1999</b> , 228-39	1.3	12
51	Potentiometric Membrane Dyes and Imaging Membrane Potential in Single Cells <b>1999</b> , 210-221		4
50	Voltage-sensitive dyes for monitoring multineuronal activity in the intact central nervous system. <i>The Histochemical Journal</i> , <b>1998</b> , 30, 169-87		54
49	Intracellular fluorescent probe concentrations by confocal microscopy. <i>Biophysical Journal</i> , <b>1998</b> , 75, 1648-58	2.9	92
48	Membrane electric properties by combined patch clamp and fluorescence ratio imaging in single neurons. <i>Biophysical Journal</i> , <b>1998</b> , 74, 48-53	2.9	83
47	Convolution and Deconvolution For 3D Imaging Of Cell Physiology. <i>Microscopy and Microanalysis</i> , <b>1998</b> , 4, 886-887	0.5	
46	A general computational framework for modeling cellular structure and function. <i>Biophysical Journal</i> , <b>1997</b> , 73, 1135-46	2.9	190
45	Technical features of a CCD video camera system to record cardiac fluorescence data. <i>Annals of Biomedical Engineering</i> , <b>1997</b> , 25, 713-25	4.7	42
44	Faster voltage-dependent activation of Na <sup>+</sup> channels in growth cones versus somata of neuroblastoma N1E-115 cells. <i>Biophysical Journal</i> , <b>1996</b> , 71, 2501-8	2.9	12
43	Potentiometric dyes: new modalities for optical imaging of membrane potential <b>1996</b> ,		1
42	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> , <b>1996</b> , 4, 215-224		9
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2	The Virtual Cell Project. <i>Novartis Foundation Symposium</i> , 151-161		9
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