

Ehud Y Isacoff

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.

165
papers

16,495
citations

68
h-index

127
g-index

180
ext. papers

18,607
ext. citations

12.9
avg, IF

6.69
L-index

#	Paper	IF	Citations
165	Determinants of synapse diversity revealed by super-resolution quantal transmission and active zone imaging.. <i>Nature Communications</i> , 2022 , 13, 229	17.4	2
164	Optogenetics 2022 ,		
163	In vivo volumetric imaging of calcium and glutamate activity at synapses with high spatiotemporal resolution. <i>Nature Communications</i> , 2021 , 12, 6630	17.4	1
162	Conformational rearrangement of the NMDA receptor amino-terminal domain during activation and allosteric modulation. <i>Nature Communications</i> , 2021 , 12, 2694	17.4	2
161	Selective Photoswitchable Allosteric Agonist of a G Protein-Coupled Receptor. <i>Journal of the American Chemical Society</i> , 2021 , 143, 8951-8956	16.4	5
160	Cell specific photoswitchable agonist for reversible control of endogenous dopamine receptors. <i>Nature Communications</i> , 2021 , 12, 4775	17.4	6
159	Fast widefield imaging of neuronal structure and function with optical sectioning in vivo. <i>Science Advances</i> , 2020 , 6, eaaz3870	14.3	13
158	Optical Control of Lysophosphatidic Acid Signaling. <i>Journal of the American Chemical Society</i> , 2020 , 142, 10612-10616	16.4	15
157	Experience, circuit dynamics, and forebrain recruitment in larval zebrafish prey capture. <i>ELife</i> , 2020 , 9,	8.9	6
156	Dimer interaction in the Hv1 proton channel. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 20898-20907	11.5	6
155	Genetically Targeted Optical Control of an Endogenous G Protein-Coupled Receptor. <i>Journal of the American Chemical Society</i> , 2019 , 141, 11522-11530	16.4	32
154	Optical control of sphingosine-1-phosphate formation and function. <i>Nature Chemical Biology</i> , 2019 , 15, 623-631	11.7	40
153	Restoration of high-sensitivity and adapting vision with a cone opsin. <i>Nature Communications</i> , 2019 , 10, 1221	17.4	50
152	Conformational pathway provides unique sensitivity to a synaptic mGluR. <i>Nature Communications</i> , 2019 , 10, 5572	17.4	19
151	Optical Control of Glutamate Receptors of the NMDA-Kind in Mammalian Neurons, with the Use of Photoswitchable Ligands. <i>Neuromethods</i> , 2018 , 293-325	0.4	4
150	Copper regulates rest-activity cycles through the locus coeruleus-norepinephrine system. <i>Nature Chemical Biology</i> , 2018 , 14, 655-663	11.7	53
149	Restoring Vision to the Blind with Chemical Photoswitches. <i>Chemical Reviews</i> , 2018 , 118, 10748-10773	68.1	73

148	Multiplexed temporally focused light shaping for high-resolution multi-cell targeting. <i>Optica</i> , 2018 , 5, 1478	8.6	22
147	Optogenetic Retinal Gene Therapy with the Light Gated GPCR Vertebrate Rhodopsin. <i>Methods in Molecular Biology</i> , 2018 , 1715, 177-189	1.4	9
146	Input-Specific Plasticity and Homeostasis at the Drosophila Larval Neuromuscular Junction. <i>Neuron</i> , 2017 , 93, 1388-1404.e10	13.9	68
145	Synapses in the spotlight with synthetic optogenetics. <i>EMBO Reports</i> , 2017 , 18, 677-692	6.5	24
144	Dual optical control and mechanistic insights into photoswitchable group II and III metabotropic glutamate receptors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, E3546-E3554	11.5	54
143	A new mechanism of voltage-dependent gating exposed by K10.1 channels interrupted between voltage sensor and pore. <i>Journal of General Physiology</i> , 2017 , 149, 577-593	3.4	24
142	Restoration of patterned vision with an engineered photoactivatable G protein-coupled receptor. <i>Nature Communications</i> , 2017 , 8, 1862	17.4	53
141	Optical Control of Dopamine Receptors Using a Photoswitchable Tethered Inverse Agonist. <i>Journal of the American Chemical Society</i> , 2017 , 139, 18522-18535	16.4	43
140	Precise modulation of neuronal activity with synthetic photoswitchable ligands. <i>Current Opinion in Neurobiology</i> , 2017 , 45, 202-209	7.6	21
139	Measuring Behavioral Individuality in the Acoustic Startle Behavior in Zebrafish. <i>Bio-protocol</i> , 2017 , 7,	0.9	2
138	Sequential Steps of CRAC Channel Activation. <i>Cell Reports</i> , 2017 , 19, 1929-1939	10.6	26
137	A phosphotyrosine switch regulates organic cation transporters. <i>Nature Communications</i> , 2016 , 7, 10880	17.4	74
136	Mechanism of Assembly and Cooperativity of Homomeric and Heteromeric Metabotropic Glutamate Receptors. <i>Neuron</i> , 2016 , 92, 143-159	13.9	93
135	MEC-10 and MEC-19 Reduce the Neurotoxicity of the MEC-4(d) DEG/ENaC Channel in <i>Caenorhabditis elegans</i> . <i>G3: Genes, Genomes, Genetics</i> , 2016 , 6, 1121-30	3.2	4
134	Cooperative Binding of Stromal Interaction Molecule 1 (STIM1) to the N and C Termini of Calcium Release-activated Calcium Modulator 1 (Orai1). <i>Journal of Biological Chemistry</i> , 2016 , 291, 334-41	5.4	37
133	Allosteric substrate switching in a voltage-sensing lipid phosphatase. <i>Nature Chemical Biology</i> , 2016 , 12, 261-7	11.7	26
132	Optical control of neuronal activity using a light-operated GIRK channel opener (LOGO). <i>Chemical Science</i> , 2016 , 7, 2347-2352	9.4	39
131	A family of photoswitchable NMDA receptors. <i>ELife</i> , 2016 , 5,	8.9	47

130	Molecular basis for multimerization in the activation of the epidermal growth factor receptor. <i>ELife</i> , 2016 , 5,	8.9	91
129	A Toolkit for Orthogonal and in vivo Optical Manipulation of Ionotropic Glutamate Receptors. <i>Frontiers in Molecular Neuroscience</i> , 2016 , 9, 2	6.1	29
128	Neuromodulatory Regulation of Behavioral Individuality in Zebrafish. <i>Neuron</i> , 2016 , 91, 587-601	13.9	44
127	Heterodimerization within the TREK channel subfamily produces a diverse family of highly regulated potassium channels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 4194-9	11.5	45
126	Caenorhabditis elegans paraoxonase-like proteins control the functional expression of DEG/ENaC mechanosensory proteins. <i>Molecular Biology of the Cell</i> , 2016 , 27, 1272-85	3.5	19
125	BMP signaling and microtubule organization regulate synaptic strength. <i>Neuroscience</i> , 2015 , 291, 155-66	3.9	7
124	Optogenetic Vision Restoration Using Rhodopsin for Enhanced Sensitivity. <i>Molecular Therapy</i> , 2015 , 23, 1562-71	11.7	83
123	Photoactivatable genetically encoded calcium indicators for targeted neuronal imaging. <i>Nature Methods</i> , 2015 , 12, 852-8	21.6	67
122	Critical role for Orai1 C-terminal domain and TM4 in CRAC channel gating. <i>Cell Research</i> , 2015 , 25, 963-80	4.7	65
121	A specialized molecular motion opens the Hv1 voltage-gated proton channel. <i>Nature Structural and Molecular Biology</i> , 2015 , 22, 283-290	17.6	33
120	Orthogonal Optical Control of a G Protein-Coupled Receptor with a SNAP-Tethered Photochromic Ligand. <i>ACS Central Science</i> , 2015 , 1, 383-93	16.8	78
119	Conformational dynamics of a class C G-protein-coupled receptor. <i>Nature</i> , 2015 , 524, 497-501	50.4	109
118	Subunit composition of a DEG/ENaC mechanosensory channel of Caenorhabditis elegans. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 11690-5	11.5	30
117	Controlling ionotropic and metabotropic glutamate receptors with light: principles and potential. <i>Current Opinion in Pharmacology</i> , 2015 , 20, 135-43	5.1	44
116	A spinal opsin controls early neural activity and drives a behavioral light response. <i>Current Biology</i> , 2015 , 25, 69-74	6.3	28
115	Two-photon brightness of azobenzene photoswitches designed for glutamate receptor optogenetics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, E776-85	11.5	74
114	Fluorescent labeling for patch-clamp fluorometry (PCF) measurements of real-time protein motion in ion channels. <i>Methods in Molecular Biology</i> , 2015 , 1266, 93-106	1.4	1
113	APP homodimers transduce an amyloid- β -mediated increase in release probability at excitatory synapses. <i>Cell Reports</i> , 2014 , 7, 1560-1576	10.6	82

112	Phospholipase D2 specifically regulates TREK potassium channels via direct interaction and local production of phosphatidic acid. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 13547-52	11.5	36
111	Tethered ligands reveal glutamate receptor desensitization depends on subunit occupancy. <i>Nature Chemical Biology</i> , 2014 , 10, 273-80	11.7	51
110	Stoichiometry and specific assembly of Best ion channels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 6491-6	11.5	20
109	Restoration of visual function by expression of a light-gated mammalian ion channel in retinal ganglion cells or ON-bipolar cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, E5574-83	11.5	77
108	Evoked and spontaneous transmission favored by distinct sets of synapses. <i>Current Biology</i> , 2014 , 24, 484-93	6.3	92
107	Photoswitching of cell surface receptors using tethered ligands. <i>Methods in Molecular Biology</i> , 2014 , 1148, 45-68	1.4	19
106	Bringing optogenetics to the synapse. <i>Neuron</i> , 2013 , 79, 209-10	13.9	2
105	A red-shifted, fast-relaxing azobenzene photoswitch for visible light control of an ionotropic glutamate receptor. <i>Journal of the American Chemical Society</i> , 2013 , 135, 17683-6	16.4	160
104	Conduits of life spark: a perspective on ion channel research since the birth of neuron. <i>Neuron</i> , 2013 , 80, 658-74	13.9	33
103	The Brain Prize 2013: the optogenetics revolution. <i>Trends in Neurosciences</i> , 2013 , 36, 557-60	13.3	23
102	Optical control of metabotropic glutamate receptors. <i>Nature Neuroscience</i> , 2013 , 16, 507-16	25.5	165
101	Rapid feedback regulation of synaptic efficacy during high-frequency activity at the <i>Drosophila</i> larval neuromuscular junction. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 9142-7	11.5	24
100	Measuring membrane voltage with fluorescent proteins. <i>Cold Spring Harbor Protocols</i> , 2013 , 2013, 606-13	3.2	2
99	AMPA receptor/TARP stoichiometry visualized by single-molecule subunit counting. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 5163-8	11.5	59
98	3 Challenges and opportunities for optochemical genetics 2013 , 35-46		
97	Emergence of patterned activity in the developing zebrafish spinal cord. <i>Current Biology</i> , 2012 , 22, 93-102	23	123
96	Molecular mechanism of the assembly of an acid-sensing receptor ion channel complex. <i>Nature Communications</i> , 2012 , 3, 1252	17.4	36
95	A glutamate switch controls voltage-sensitive phosphatase function. <i>Nature Structural and Molecular Biology</i> , 2012 , 19, 633-41	17.6	37

94	Optical control of endogenous proteins with a photoswitchable conditional subunit reveals a role for TREK1 in GABA(B) signaling. <i>Neuron</i> , 2012 , 74, 1005-14	13.9	81
93	Optogenetic activation of LiGluR-expressing astrocytes evokes anion channel-mediated glutamate release. <i>Journal of Physiology</i> , 2012 , 590, 855-73	3.9	60
92	Assembly stoichiometry of the GluK2/GluK5 kainate receptor complex. <i>Cell Reports</i> , 2012 , 1, 234-40	10.6	39
91	Colloids as mobile substrates for the implantation and integration of differentiated neurons into the mammalian brain. <i>PLoS ONE</i> , 2012 , 7, e30293	3.7	16
90	Two-photon scanning microscopy of in vivo sensory responses of cortical neurons genetically encoded with a fluorescent voltage sensor in rat. <i>Frontiers in Neural Circuits</i> , 2012 , 6, 15	3.5	12
89	Structure-Based Design of Light-Controlled Proteins. <i>Neuromethods</i> , 2011 , 233-266	0.4	1
88	Functional architecture of olfactory ionotropic glutamate receptors. <i>Neuron</i> , 2011 , 69, 44-60	13.9	384
87	The pore of the voltage-gated proton channel. <i>Neuron</i> , 2011 , 72, 991-1000	13.9	53
86	Specializations of a pheromonal glomerulus in the Drosophila olfactory system. <i>Journal of Neurophysiology</i> , 2011 , 105, 1711-21	3.2	11
85	Optical quantal analysis of synaptic transmission in wild-type and rab3-mutant Drosophila motor axons. <i>Nature Neuroscience</i> , 2011 , 14, 519-26	25.5	296
84	Calmodulin overexpression does not alter Cav1.2 function or oligomerization state. <i>Channels</i> , 2011 , 5, 320-4	3	12
83	LiGluR restores visual responses in rodent models of inherited blindness. <i>Molecular Therapy</i> , 2011 , 19, 1212-9	11.7	140
82	Optical probing of a dynamic membrane interaction that regulates the TREK1 channel. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011 , 108, 2605-10	11.5	52
81	Genetic screen for potassium leaky small mechanosensitive channels (MscS) in Escherichia coli: recognition of cytoplasmic β domain as a new gating element. <i>Journal of Biological Chemistry</i> , 2011 , 286, 877-88	5.4	35
80	Structural model of the TRPP2/PKD1 C-terminal coiled-coil complex produced by a combined computational and experimental approach. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011 , 108, 10133-8	11.5	41
79	Photoswitchable Ligand-Gated Ion Channels. <i>Neuromethods</i> , 2011 , 267-285	0.4	
78	The opening of the two pores of the Hv1 voltage-gated proton channel is tuned by cooperativity. <i>Nature Structural and Molecular Biology</i> , 2010 , 17, 44-50	17.6	104
77	Multiple C-terminal tail Ca(2+)/CaMs regulate Ca(V)1.2 function but do not mediate channel dimerization. <i>EMBO Journal</i> , 2010 , 29, 3924-38	13	63

76	Multiple C-terminal tail Ca ²⁺ /CaMs regulate CaV1.2 function but do not mediate channel dimerization. <i>EMBO Journal</i> , 2010 , 29, 4062-4062	13	1
75	Electrochemical coupling in the voltage-dependent phosphatase Ci-VSP. <i>Nature Chemical Biology</i> , 2010 , 6, 369-75	11.7	53
74	Scanless two-photon excitation of channelrhodopsin-2. <i>Nature Methods</i> , 2010 , 7, 848-54	21.6	304
73	A light-gated, potassium-selective glutamate receptor for the optical inhibition of neuronal firing. <i>Nature Neuroscience</i> , 2010 , 13, 1027-32	25.5	112
72	Two-photon imaging of calcium in virally transfected striate cortical neurons of behaving monkey. <i>PLoS ONE</i> , 2010 , 5, e13829	3.7	42
71	Filtering of visual information in the tectum by an identified neural circuit. <i>Science</i> , 2010 , 330, 669-73	33.3	186
70	<i>Pseudomonas aeruginosa</i> Homoserine lactone activates store-operated cAMP and cystic fibrosis transmembrane regulator-dependent Cl ⁻ secretion by human airway epithelia. <i>Journal of Biological Chemistry</i> , 2010 , 285, 34850-63	5.4	28
69	Stoichiometry of the KCNQ1 - KCNE1 ion channel complex. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 18862-7	11.5	143
68	Alternative splicing of neuroligin regulates the rate of presynaptic differentiation. <i>Journal of Neuroscience</i> , 2010 , 30, 11435-46	6.6	29
67	Green fluorescent proteins (GFPs) for measuring voltage. <i>Cold Spring Harbor Protocols</i> , 2010 , 2010, pdb.top76 3		
66	Optical control of neuronal activity. <i>Annual Review of Biophysics</i> , 2010 , 39, 329-48	21.1	98
65	Genetically Encoded Protein Sensors of Membrane Potential 2010 , 157-163		2
64	Structural and molecular basis of the assembly of the TRPP2/PKD1 complex. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 11558-63	11.5	141
63	Nanosculpting reversed wavelength sensitivity into a photoswitchable iGluR. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 6814-9	11.5	75
62	Molecular recognition and self-assembly special feature: Calix[4]arene-based conical-shaped ligands for voltage-dependent potassium channels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 10482-6	11.5	43
61	Architecture and gating of Hv1 proton channels. <i>Journal of Physiology</i> , 2009 , 587, 5325-9	3.9	18
60	Optogenetic dissection of a behavioural module in the vertebrate spinal cord. <i>Nature</i> , 2009 , 461, 407-10	50.4	324
59	Subunit organization and functional transitions in Ci-VSP. <i>Nature Structural and Molecular Biology</i> , 2008 , 15, 106-8	17.6	114

58	Colloid-guided assembly of oriented 3D neuronal networks. <i>Nature Methods</i> , 2008 , 5, 735-40	21.6	79
57	The voltage-gated proton channel Hv1 has two pores, each controlled by one voltage sensor. <i>Neuron</i> , 2008 , 58, 546-56	13.9	192
56	Optical switches for remote and noninvasive control of cell signaling. <i>Science</i> , 2008 , 322, 395-9	33.3	259
55	Nanoengineering ion channels for optical control. <i>Physiology</i> , 2008 , 23, 238-47	9.8	26
54	Rules of engagement for NMDA receptor subunits. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 14163-8	11.5	119
53	Optical lock-in detection imaging microscopy for contrast-enhanced imaging in living cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 17789-94	11.5	175
52	Mechanisms of photoswitch conjugation and light activation of an ionotropic glutamate receptor. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007 , 104, 10865-70	11.5	152
51	All optical interface for parallel, remote, and spatiotemporal control of neuronal activity. <i>Nano Letters</i> , 2007 , 7, 3859-63	11.5	60
50	Optical switches and triggers for the manipulation of ion channels and pores. <i>Molecular BioSystems</i> , 2007 , 3, 686-704		60
49	Molecular imaging of hydrogen peroxide produced for cell signaling. <i>Nature Chemical Biology</i> , 2007 , 3, 263-7	11.7	360
48	Subunit counting in membrane-bound proteins. <i>Nature Methods</i> , 2007 , 4, 319-21	21.6	519
47	The twisted ion-permeation pathway of a resting voltage-sensing domain. <i>Nature</i> , 2007 , 445, 546-9	50.4	119
46	Drosophila huntingtin-interacting protein 14 is a presynaptic protein required for photoreceptor synaptic transmission and expression of the palmitoylated proteins synaptosome-associated protein 25 and cysteine string protein. <i>Journal of Neuroscience</i> , 2007 , 27, 12874-83	6.6	49
45	Remote control of neuronal activity with a light-gated glutamate receptor. <i>Neuron</i> , 2007 , 54, 535-45	13.9	281
44	Closing in on the resting state of the Shaker K(+) channel. <i>Neuron</i> , 2007 , 56, 124-40	13.9	243
43	Reversibly caged glutamate: a photochromic agonist of ionotropic glutamate receptors. <i>Journal of the American Chemical Society</i> , 2007 , 129, 260-1	16.4	135
42	How does voltage open an ion channel?. <i>Annual Review of Cell and Developmental Biology</i> , 2006 , 22, 23-52.6	22.6	245
41	A selective turn-on fluorescent sensor for imaging copper in living cells. <i>Journal of the American Chemical Society</i> , 2006 , 128, 10-1	16.4	686

40	Allosteric control of an ionotropic glutamate receptor with an optical switch. <i>Nature Chemical Biology</i> , 2006 , 2, 47-52	11.7	497
39	Analysis of a RanGTP-regulated gradient in mitotic somatic cells. <i>Nature</i> , 2006 , 440, 697-701	50.4	290
38	Molecular handles for the mechanical manipulation of single-membrane proteins in living cells. <i>IEEE Transactions on Nanobioscience</i> , 2005 , 4, 269-76	3.4	2
37	Neuronal activation by GPI-linked neuroligin-1 displayed in synthetic lipid bilayer membranes. <i>Langmuir</i> , 2005 , 21, 10693-8	4	28
36	Shedding light on membrane proteins. <i>Trends in Neurosciences</i> , 2005 , 28, 472-9	13.3	27
35	Voltage-sensing arginines in a potassium channel permeate and occlude cation-selective pores. <i>Neuron</i> , 2005 , 45, 379-88	13.9	224
34	How far will you go to sense voltage?. <i>Neuron</i> , 2005 , 48, 719-25	13.9	57
33	Boronate-based fluorescent probes for imaging cellular hydrogen peroxide. <i>Journal of the American Chemical Society</i> , 2005 , 127, 16652-9	16.4	484
32	Neuronal synapse interaction reconstituted between live cells and supported lipid bilayers. <i>Nature Chemical Biology</i> , 2005 , 1, 283-9	11.7	52
31	Heterogeneity in synaptic transmission along a <i>Drosophila</i> larval motor axon. <i>Nature Neuroscience</i> , 2005 , 8, 1188-96	25.5	84
30	The cooperative voltage sensor motion that gates a potassium channel. <i>Journal of General Physiology</i> , 2005 , 125, 57-69	3.4	106
29	A fluorescent probe designed for studying protein conformational change. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005 , 102, 965-70	11.5	95
28	In vivo performance of genetically encoded indicators of neural activity in flies. <i>Journal of Neuroscience</i> , 2005 , 25, 4766-78	6.6	182
27	Light-activated ion channels for remote control of neuronal firing. <i>Nature Neuroscience</i> , 2004 , 7, 1381-6	25.5	578
26	A selective, cell-permeable optical probe for hydrogen peroxide in living cells. <i>Journal of the American Chemical Society</i> , 2004 , 126, 15392-3	16.4	532
25	Single ion channel imaging. <i>Methods in Enzymology</i> , 2003 , 361, 304-19	1.7	8
24	Neurexin mediates the assembly of presynaptic terminals. <i>Nature Neuroscience</i> , 2003 , 6, 708-16	25.5	482
23	Protein surface recognition by rational design: nanomolar ligands for potassium channels. <i>Journal of the American Chemical Society</i> , 2003 , 125, 12668-9	16.4	61

22	The orientation and molecular movement of a k(+) channel voltage-sensing domain. <i>Neuron</i> , 2003 , 40, 515-25	13.9	110
21	How Do Voltage-Gated Channels Sense the Membrane Potential? 2003 , 209-214		0
20	Structural rearrangements in single ion channels detected optically in living cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002 , 99, 12759-64	11.5	97
19	Molecular models of voltage sensing. <i>Journal of General Physiology</i> , 2002 , 120, 455-63	3.4	108
18	Tuning FlaSh: redesign of the dynamics, voltage range, and color of the genetically encoded optical sensor of membrane potential. <i>Biophysical Journal</i> , 2002 , 83, 3607-18	2.9	95
17	Conformational switch between slow and fast gating modes: allosteric regulation of voltage sensor mobility in the EAG K+ channel. <i>Neuron</i> , 2002 , 35, 935-49	13.9	51
16	Genetically encoded optical sensors of neuronal activity and cellular function. <i>Current Opinion in Neurobiology</i> , 2001 , 11, 601-7	7.6	34
15	Green fluorescent protein-based sensors for detecting signal transduction and monitoring ion channel function. <i>Methods in Enzymology</i> , 2000 , 327, 249-59	1.7	3
14	Independence and cooperativity in rearrangements of a potassium channel voltage sensor revealed by single subunit fluorescence. <i>Journal of General Physiology</i> , 2000 , 115, 257-68	3.4	84
13	Molecular coupling of S4 to a K(+) channel's slow inactivation gate. <i>Journal of General Physiology</i> , 2000 , 116, 623-36	3.4	95
12	Reconstructing voltage sensor-pore interaction from a fluorescence scan of a voltage-gated K+ channel. <i>Neuron</i> , 2000 , 27, 585-95	13.9	89
11	Watching a synapse grow: noninvasive confocal imaging of synaptic growth in <i>Drosophila</i> . <i>Neuron</i> , 1999 , 22, 719-29	13.9	190
10	Functional identification of a goldfish odorant receptor. <i>Neuron</i> , 1999 , 23, 487-98	13.9	212
9	Synaptic clustering of Fascilin II and Shaker: essential targeting sequences and role of Dlg. <i>Neuron</i> , 1997 , 19, 1007-16	13.9	183
8	A genetically encoded optical probe of membrane voltage. <i>Neuron</i> , 1997 , 19, 735-41	13.9	361
7	Transmembrane movement of the shaker K+ channel S4. <i>Neuron</i> , 1996 , 16, 387-97	13.9	462
6	Assembly of potassium channels. <i>Annals of the New York Academy of Sciences</i> , 1993 , 707, 51-9	6.5	7
5	Molecular basis of K+ channel inactivation gating. <i>Exs</i> , 1993 , 63, 338-51		4

- 4 Putative receptor for the cytoplasmic inactivation gate in the Shaker K⁺ channel. *Nature*, **1991**, 353, 86-90.4 313
- 3 Evidence for the formation of heteromultimeric potassium channels in *Xenopus* oocytes. *Nature*, **1990**, 345, 530-4 50.4 427
- 2 Slow cardioacceleration mediated by noncholinergic transmission in the stellate ganglion of the cat. *Canadian Journal of Physiology and Pharmacology*, **1988**, 66, 1066-74 2.4 7
- 1 Multiplexed temporally focused light shaping for high-resolution multi-cell targeting 2