Robert E Oswald

List of Publications by Year
in descending order

52 papers	1,781 citations	236925 25 h-index	265206 42 g-index
53 all docs	53 docs citations	53 times ranked	1422 citing authors

#	Article	IF	Citations
1	Unraveling the modular design of glutamate-gated ion channels. Trends in Neurosciences, 1995, 18, 161-168.	8.6	264
2	Impacts of Gas Drilling on Human and Animal Health. New Solutions, 2012, 22, 51-77.	1.2	185
3	Solution Structure of Peptide Toxins That Block Mechanosensitive Ion Channels. Journal of Biological Chemistry, 2002, 277, 34443-34450.	3.4	88
4	Structural Mobility of the Extracellular Ligand-Binding Core of an Ionotropic Glutamate Receptor. Analysis of NMR Relaxation Dynamics. Biochemistry, 2002, 41, 10472-10481.	2.5	84
5	Crosslinking of Î±-bungarotoxin to the acetylcholine receptor from Torpedo marmorata by ultraviolet light irradiation. FEBS Letters, 1982, 139, 225-229.	2.8	76
6	cDNA sequence and in vitro folding of GsMTx4, a specific peptide inhibitor of mechanosensitive channels. Toxicon, 2003, 42, 263-274.	1.6	74
7	Probing the Allosteric Modulator Binding Site of GluR2 with Thiazide Derivatives. Biochemistry, 2009, 48, 8594-8602.	2.5	65
8	Piracetam Defines a New Binding Site for Allosteric Modulators of Î±-Amino-3-hydroxy-5-methyl-4-isoxazole-propionic Acid (AMPA) Receptors. Journal of Medicinal Chemistry, 2010, 53, 2197-2203.	6.4	58
9	Emerging structural explanations of ionotropic glutamate receptor function. FASEB Journal, 2004, 18, 428-438.	0.5	54
10	Backbone Dynamics of Inactive, Active, and Effector-Bound Cdc42Hs from Measurements of15N Relaxation Parameters at Multiple Field Strengthsâ€. Biochemistry, 1999, 38, 12547-12557.	2.5	49
11	Dynamics of the S1S2 Glutamate Binding Domain of GluR2 Measured Using 19F NMR Spectroscopy. Journal of Biological Chemistry, 2007, 282, 12773-12784.	3.4	44
12	Structure of the S1S2 glutamate binding domain of GLuR3. Proteins: Structure, Function and Bioinformatics, 2009, 75, 628-637.	2.6	44
13	Mechanisms of Modal Activation of GluA3 Receptors. Molecular Pharmacology, 2011, 80, 49-59.	2.3	41
14	7-Phenoxy-Substituted 3,4-Dihydro-2<i>H</i>-1,2,4-benzothiadiazine 1,1-Dioxides as Positive Allosteric Modulators of Î±-Amino-3-hydroxy-5-methyl-4-isoxazolepropionic Acid (AMPA) Receptors with Nanomolar Potency. Journal of Medicinal Chemistry, 2018, 61, 251-264.	6.4	41
15	Mechanism of AMPA Receptor Activation by Partial Agonists. Journal of Biological Chemistry, 2011, 286, 35257-35266.	3.4	39
16	Identification of the Binding Surface on Cdc42Hs for p21-Activated Kinaseâ€. Biochemistry, 1998, 37, 14030-14037.	2.5	38
17	Mechanism of Partial Agonism at the GluR2 AMPA Receptor: Measurements of Lobe Orientation in Solution. Biochemistry, 2008, 47, 10600-10610.	2.5	38
18	Mechanisms of Antagonism of the GluR2 AMPA Receptor: Structure and Dynamics of the Complex of Two Willardiine Antagonists with the Glutamate Binding Domain. Biochemistry, 2009, 48, 3894-3903.	2.5	37

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19	Characterizing Single-Channel Behavior of GluA3 Receptors. Biophysical Journal, 2010, 99, 1437-1446.	0.5	37
20	Structure of Glutamate Receptors. Current Drug Targets, 2007, 8, 573-582.	2.1	33
21	NMR Spectroscopy of the Ligand-Binding Core of Ionotropic Glutamate Receptor 2 Bound to 5-Substituted Willardiine Partial Agonists. Journal of Molecular Biology, 2008, 378, 673-685.	4.2	33
22	Ionotropic Glutamate Receptor Recognition and Activation. Advances in Protein Chemistry, 2004, 68, 313-349.	4.4	32
23	Molecular Mechanism of Flop Selectivity and Subsite Recognition for an AMPA Receptor Allosteric Modulator: Structures of GluA2 and GluA3 in Complexes with PEPA. Biochemistry, 2010, 49, 2843-2850.	2.5	31
24	Long-term impacts of unconventional drilling operations on human and animal health. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2015, 50, 447-459.	1.7	28
25	Dynamics of Cleft Closure of the GluA2 Ligand-binding Domain in the Presence of Full and Partial Agonists Revealed by Hydrogen-Deuterium Exchange. Journal of Biological Chemistry, 2013, 288, 27658-27666.	3.4	27
26	On the Mechanisms of Î±-Amino-3-hydroxy-5-methylisoxazole-4-propionic Acid (AMPA) Receptor Binding to Glutamate and Kainate. Journal of Biological Chemistry, 2010, 285, 12334-12343.	3.4	26
27	Modulation of AMPA Receptor Gating by the Anticonvulsant Drug, Perampanel. ACS Medicinal Chemistry Letters, 2019, 10, 237-242.	2.8	18
28	Concerted Motion of a Proteinâ˜'Peptide Complex:Â Backbone Dynamics Studies of an15N-Labeled Peptide Derived from P21-Activated Kinase Bound to Cdc42HsÂ·GMPPCPâ€. Biochemistry, 2001, 40, 14368-14375.	2.5	16
29	Hydrophobic Side Chain Dynamics of a Glutamate Receptor Ligand Binding Domain. Journal of Biological Chemistry, 2010, 285, 10154-10162.	3.4	16
30	Effects of Calcium on the Binding of Phencyclidine to Acetylcholine Receptor-Rich Membrane Fragments from Torpedo californica Electroplaque. Journal of Neurochemistry, 1983, 41, 1077-1084.	3.9	15
31	Noncompetitive antagonists induce cooperative AMPA receptor channel gating. Journal of General Physiology, 2019, 151, 156-173.	1.9	15
32	Semi-automated backbone resonance assignments of the extracellular ligand-binding domain of an ionotropic glutamate receptor. Journal of Biomolecular NMR, 2002, 22, 297-298.	2.8	13
33	Evidence for a skeleton in acetylcholine receptor-rich membranes from Torpedo marmorata electric organ. FEBS Letters, 1982, 145, 250-257.	2.8	12
34	Extended low-resolution structure of a Leptospira antigen offers high bactericidal antibody accessibility amenable to vaccine design. ELife, 2017, 6, .	6.0	12
35	The Structure of (â˜')-Kaitocephalin Bound to the Ligand Binding Domain of the (S)-Î±-Amino-3-hydroxy-5-methyl-4-isoxazolepropionic Acid (AMPA)/Glutamate Receptor, GluA2. Journal of Biological Chemistry, 2012, 287, 41007-41013.	3.4	10
36	The Loss of an Electrostatic Contact Unique to AMPA Receptor Ligand Binding Domain 2 Slows Channel Activation. Biochemistry, 2012, 51, 4015-4027.	2.5	9

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37	Role of Stoichiometry in the Dimer-Stabilizing Effect of AMPA Receptor Allosteric Modulators. ACS Chemical Biology, 2014, 9, 128-133.	3.4	9
38	A reevaluation of the mathematical models for simulating single-channel and whole-cell ionic currents. Synapse, 1988, 2, 97-103.	1.2	8
39	Structural Insights Into NMDA Ionotropic Glutamate Receptors via Molecular Modelling. Journal of Molecular Modeling, 2000, 6, 16-25.	1.8	8
40	Thermodynamics and Mechanism of the Interaction of Willardiine Partial Agonists with a Glutamate Receptor: Implications for Drug Development. Biochemistry, 2014, 53, 3790-3795.	2.5	8
41	Asn-265 of frog kainate binding protein is a functional glycosylation site: implications for the transmembrane topology of glutamate receptors. FEBS Letters, 1995, 368, 230-234.	2.8	7
42	Analysis of ?-Bungarotoxin Binding in the Goldfish Central Nervous System. Journal of Neurochemistry, 1981, 37, 1586-1593.	3.9	6
43	Comparative screening of recombinant antigen thermostability for improved leptospirosis vaccine design. Biotechnology and Bioengineering, 2019, 116, 260-271.	3.3	6
44	Model Building Predicts an Additional Conformational Switch when GTP Binds to the CDC42HS Protein. Protein and Peptide Letters, 1994, 1, 84-91.	0.9	6
45	Molecular properties of local anesthetics as predictors of affinity for nicotinic acetylcholine receptors. Journal of Neuroscience Research, 2007, 85, 2943-2949.	2.9	5
46	Backbone chemical shift assignment of a glutamate receptor ligand binding domain in complexes with five partial agonists. Biomolecular NMR Assignments, 2007, 1, 241-243.	0.8	5
47	Effects of pineal factors on the action potentials of sympathetic neurons. Cellular and Molecular Neurobiology, 1986, 6, 381-395.	3.3	3
48	Surface water and groundwater analysis using aryl hydrocarbon and endocrine receptor biological assays and liquid chromatography-high resolution mass spectrometry in Susquehanna County, PA. Environmental Sciences: Processes and Impacts, 2019, 21, 988-998.	3.5	3
49	New Insights into the Mechanism of Ca2+-Dependent Inactivation of NMDA Receptors. Biophysical Journal, 2017, 113, 2131-2132.	0.5	2
50	Current Recording and Kinetic Analyses for Single AMPA Receptors. Neuromethods, 2016, , 257-272.	0.3	2
51	NMR Approaches to Functional Dynamics of Genetically Separated iGluR Domains. Neuromethods, 2016, , 101-118.	0.3	1
52	In Vitro Effects of (+)MK-801 (dizocilpine) and Memantine on Î²-Amyloid Peptides Linked to Alzheimerâ€™s Disease. Biochemistry, 2020, 59, 4517-4522.	2.5	0