

Jonathan B Cohen

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Identification of a GABAA Receptor Anesthetic Binding Site at Subunit Interfaces by Photolabeling with an Etomidate Analog. <i>Journal of Neuroscience</i> , 2006, 26, 11599-11605.	1.7	280
2	Equilibrium binding of [3H]tubocurarine and [3H]acetylcholine by torpedo postsynaptic membranes: stoichiometry and ligand interactions. <i>Biochemistry</i> , 1979, 18, 5464-5475.	1.2	257
3	Identifying the Lipid-Protein Interface of the Torpedo Nicotinic Acetylcholine Receptor: Secondary Structure Implications. <i>Biochemistry</i> , 1994, 33, 2859-2872.	1.2	221
4	Presence of a lattice structure in membrane fragments rich in nicotinic receptor protein from the electric organ of <i>Torpedo marmorata</i> . <i>FEBS Letters</i> , 1973, 33, 109-113.	1.3	203
5	Mapping of the acetylcholine binding site of the nicotinic acetylcholine receptor: [3H]nicotine as an agonist photoaffinity label. <i>Biochemistry</i> , 1991, 30, 6987-6997.	1.2	203
6	Purification from <i>Torpedo marmorata</i> electric tissue of membrane fragments particularly rich in cholinergic receptor protein. <i>FEBS Letters</i> , 1972, 26, 43-47.	1.3	154
7	The 87K postsynaptic membrane protein from torpedo is a protein-tyrosine kinase substrate homologous to dystrophin. <i>Neuron</i> , 1993, 10, 511-522.	3.8	152
8	Mapping the lipid-exposed regions in the <i>Torpedo californica</i> nicotinic acetylcholine receptor. <i>Biochemistry</i> , 1992, 31, 3738-3750.	1.2	149
9	Kinetics of binding of [3H]acetylcholine and [3H]carbamoylcholine to <i>Torpedo</i> postsynaptic membranes: slow conformational transitions of the cholinergic receptor. <i>Biochemistry</i> , 1980, 19, 5344-5353.	1.2	144
10	Conformations of <i>Torpedo</i> acetylcholine receptor associated with ion transport and desensitization. <i>Biochemistry</i> , 1982, 21, 3460-3467.	1.2	141
11	Specificity of Intersubunit General Anesthetic-binding Sites in the Transmembrane Domain of the Human $\alpha 1 \beta 2 \gamma 2$ $\beta 3$ -Aminobutyric Acid Type A (GABAA) Receptor*. <i>Journal of Biological Chemistry</i> , 2013, 288, 19343-19357.	1.6	124
12	Desensitization of membrane-bound <i>Torpedo</i> acetylcholine receptor by amine noncompetitive antagonists and aliphatic alcohols: studies of [3H]acetylcholine binding and sodium-22 ion fluxes. <i>Biochemistry</i> , 1984, 23, 4023-4033.	1.2	117
13	Role of Rapsyn Tetratricopeptide Repeat and Coiled-coil Domains in Self-association and Nicotinic Acetylcholine Receptor Clustering. <i>Journal of Biological Chemistry</i> , 2001, 276, 7475-7483.	1.6	110
14	Multiple Propofol-binding Sites in a $\beta 3$ -Aminobutyric Acid Type A Receptor (GABAAR) Identified Using a Photoreactive Propofol Analog. <i>Journal of Biological Chemistry</i> , 2014, 289, 27456-27468.	1.6	106
15	Photolabeling of membrane-bound <i>Torpedo</i> nicotinic acetylcholine receptor with the hydrophobic probe 3-trifluoromethyl-3-(m-[125I]iodophenyl) diazirine. <i>Biochemistry</i> , 1988, 27, 8741-8751.	1.2	98
16	Mapping General Anesthetic Binding Site(s) in Human $\alpha 1 \beta 2 \gamma 2 \beta 3$ -Aminobutyric Acid Type A Receptors with [³ H]TDBzl-Etomidate, a Photoreactive Etomidate Analogue. <i>Biochemistry</i> , 2012, 51, 836-847.	1.2	98
17	Identification of Nicotinic Acetylcholine Receptor Amino Acids Photolabeled by the Volatile Anesthetic Halothane. <i>Biochemistry</i> , 2003, 42, 13457-13467.	1.2	95
18	The Agrin/MuSK Signaling Pathway Is Spatially Segregated from the Neuregulin/ErbB Receptor Signaling Pathway at the Neuromuscular Junction. <i>Journal of Neuroscience</i> , 2000, 20, 8762-8770.	1.7	93

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19	Identification of Amino Acids Contributing to High and Low Affinity d-Tubocurarine Sites in the Torpedo Nicotinic Acetylcholine Receptor. <i>Journal of Biological Chemistry</i> , 1997, 272, 32940-32950.	1.6	90
20	Interactions of the Rapsyn RING-H2 Domain with Dystroglycan. <i>Journal of Biological Chemistry</i> , 2001, 276, 24911-24917.	1.6	89
21	2-(3-Methyl-3H-diaziren-3-yl)ethyl 1-(1-phenylethyl)-1H-imidazole-5-carboxylate: A Derivative of the Stereoselective General Anesthetic Etomidate for Photolabeling Ligand-Gated Ion Channels. <i>Journal of Medicinal Chemistry</i> , 2003, 46, 1257-1265.	2.9	83
22	Cholesterol Interacts with Transmembrane \pm -Helices M1, M3, and M4 of the Torpedo Nicotinic Acetylcholine Receptor: A Photolabeling Studies Using [3 H]Azicholesterol. <i>Biochemistry</i> , 2006, 45, 976-986.	1.2	79
23	Numerous Classes of General Anesthetics Inhibit Etomidate Binding to 3 -Aminobutyric Acid Type A (GABAA) Receptors. <i>Journal of Biological Chemistry</i> , 2010, 285, 8615-8620.	1.6	75
24	Identification of Binding Sites in the Nicotinic Acetylcholine Receptor for [3 H]Azietomidate, a Photoactivatable General Anesthetic. <i>Journal of Biological Chemistry</i> , 2004, 279, 17640-17649.	1.6	71
25	Identification of Sites of Incorporation in the Nicotinic Acetylcholine Receptor of a Photoactivatable General Anesthetic. <i>Journal of Biological Chemistry</i> , 2000, 275, 29441-29451.	1.6	70
26	Identification of Propofol Binding Sites in a Nicotinic Acetylcholine Receptor with a Photoreactive Propofol Analog*. <i>Journal of Biological Chemistry</i> , 2013, 288, 6178-6189.	1.6	69
27	Interaction of a fluorescent ligand with membrane-bound cholinergic receptor from <i>Torpedo marmorata</i> . <i>Biochemistry</i> , 1973, 12, 4855-4864.	1.2	66
28	Neurosteroids Allosterically Modulate Binding of the Anesthetic Etomidate to 3 -Aminobutyric Acid Type A Receptors. <i>Journal of Biological Chemistry</i> , 2009, 284, 11771-11775.	1.6	64
29	Identification of Binding Sites in the Nicotinic Acetylcholine Receptor for TDBzl-etomidate, a Photoreactive Positive Allosteric Effector. <i>Journal of Biological Chemistry</i> , 2008, 283, 22051-22062.	1.6	63
30	The 43 kilodalton protein of Torpedo nicotinic postsynaptic membranes: purification and determination of primary structure. <i>Biochemistry</i> , 1987, 26, 7090-7102.	1.2	61
31	Structure of the Agonist-Binding Sites of the Torpedo Nicotinic Acetylcholine Receptor: Affinity-Labeling and Mutational Analyses Identify 3 Tyr-111/ 3 Arg-113 as Antagonist Affinity Determinants. <i>Biochemistry</i> , 1999, 38, 6689-6698.	1.2	60
32	The Steroid Promegetone Is a Noncompetitive Antagonist of the Torpedo Nicotinic Acetylcholine Receptor that Interacts with the Lipid-Protein Interface. <i>Molecular Pharmacology</i> , 1999, 55, 269-278.	1.0	58
33	Probing the Structure of the Nicotinic Acetylcholine Receptor Ion Channel with the Uncharged Photoactivatable Compound [3 H]Diazofluorene. <i>Journal of Biological Chemistry</i> , 1998, 273, 8659-8668.	1.6	57
34	Photoaffinity Labeling the Torpedo Nicotinic Acetylcholine Receptor with [3 H]Tetracaine, a Nondesensitizing Noncompetitive Antagonist. <i>Molecular Pharmacology</i> , 1999, 56, 290-299.	1.0	52
35	Identification of the Bovine 3 -Aminobutyric Acid Type A Receptor \pm Subunit Residues Photolabeled by the Imidazobenzodiazepine [3 H]Ro15-4513. <i>Journal of Biological Chemistry</i> , 2002, 277, 50036-50045.	1.6	49
36	Physostigmine and Galanthamine Bind in the Presence of Agonist at the Canonical and Noncanonical Subunit Interfaces of a Nicotinic Acetylcholine Receptor. <i>Journal of Neuroscience</i> , 2013, 33, 485-494.	1.7	49

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37	Rotational energy transfer in pure HCN and in HCN/rare gas mixtures by microwave double resonance and pressure broadening. <i>Journal of Chemical Physics</i> , 1973, 58, 442-455.	1.2	47
38	Gating-enhanced Accessibility of Hydrophobic Sites within the Transmembrane Region of the Nicotinic Acetylcholine Receptor's β -Subunit. <i>Journal of Biological Chemistry</i> , 2005, 280, 13631-13640.	1.6	47
39	Mapping the Agonist Binding Site of the Nicotinic Acetylcholine Receptor. <i>Journal of Biological Chemistry</i> , 2000, 275, 12651-12660.	1.6	46
40	Allylm-Trifluoromethyl diazine Mephobarbital: An Unusually Potent Enantioselective and Photoreactive Barbiturate General Anesthetic. <i>Journal of Medicinal Chemistry</i> , 2012, 55, 6554-6565.	2.9	46
41	Identification of tryptophan 55 as the primary site of [3 H]nicotine photoincorporation in the β -subunit of the Torpedonicotinic acetylcholine receptor. <i>FEBS Letters</i> , 1998, 423, 223-226.	1.3	45
42	Synthesis and Properties of 3-(2-Hydroxyethyl)-3-n-pentyl diazine, a Photoactivable General Anesthetic. <i>Journal of Medicinal Chemistry</i> , 1999, 42, 3300-3307.	2.9	43
43	Synthesis of Trifluoromethylaryl Diazine and Benzophenone Derivatives of Etomidate that Are Potent General Anesthetics and Effective Photolabels for Probing Sites on Ligand-Gated Ion Channels. <i>Journal of Medicinal Chemistry</i> , 2006, 49, 4818-4825.	2.9	43
44	Identification of Amino Acids of the Torpedo Nicotinic Acetylcholine Receptor Contributing to the Binding Site for the Noncompetitive Antagonist [3 H]Tetracaine. <i>Molecular Pharmacology</i> , 1999, 56, 300-307.	1.0	42
45	Spatial structure of the M3 transmembrane segment of the nicotinic acetylcholine receptor alpha subunit. <i>FEBS Journal</i> , 1998, 255, 455-461.	0.2	40
46	Contributions of Torpedo Nicotinic Acetylcholine Receptor β Trp-55 and β Trp-57 to Agonist and Competitive Antagonist Function. <i>Journal of Biological Chemistry</i> , 2001, 276, 2417-2426.	1.6	40
47	Multiple Non-Equivalent Interfaces Mediate Direct Activation of GABA _A Receptors by Propofol. <i>Current Neuropharmacology</i> , 2016, 14, 772-780.	1.4	37
48	Multiple Transmembrane Binding Sites for p-Trifluoromethyl diazirinyl-etomidate, a Photoreactive Torpedo Nicotinic Acetylcholine Receptor Allosteric Inhibitor. <i>Journal of Biological Chemistry</i> , 2011, 286, 20466-20477.	1.6	36
49	Photoaffinity Labeling the Propofol Binding Site in GLIC. <i>Biochemistry</i> , 2014, 53, 135-142.	1.2	36
50	(4-Azidopentyl)propofol: A Potent Photoreactive General Anesthetic Derivative of Propofol. <i>Journal of Medicinal Chemistry</i> , 2011, 54, 8124-8135.	2.9	35
51	[3 H]Chlorpromazine Photolabeling of the Torpedo Nicotinic Acetylcholine Receptor Identifies Two State-Dependent Binding Sites in the Ion Channel. <i>Biochemistry</i> , 2009, 48, 10066-10077.	1.2	34
52	Conformational Changes in the Nicotinic Acetylcholine Receptor during Gating and Desensitization. <i>Biochemistry</i> , 2010, 49, 156-165.	1.2	34
53	Probing the Structure of the Affinity-Purified and Lipid-Reconstituted Torpedo Nicotinic Acetylcholine Receptor. <i>Biochemistry</i> , 2008, 47, 12787-12794.	1.2	33
54	Photoaffinity Labeling of Nicotinic Receptors: Diversity of Drug Binding Sites!. <i>Journal of Molecular Neuroscience</i> , 2014, 53, 480-486.	1.1	32

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55	[³ H]Benzophenone Photolabeling Identifies State-Dependent Changes in Nicotinic Acetylcholine Receptor Structure. <i>Biochemistry</i> , 2007, 46, 10296-10307.	1.2	30
56	Time-Resolved Photolabeling of the Nicotinic Acetylcholine Receptor by [³ H]Azetomidate, an Open-State Inhibitor. <i>Molecular Pharmacology</i> , 2009, 75, 1084-1095.	1.0	29
57	Positive and Negative Allosteric Modulation of an $\hat{1}\hat{2}\hat{3}\hat{2}$ $\hat{1}^3$ -Aminobutyric Acid Type A (GABAA) Receptor by Binding to a Site in the Transmembrane Domain at the $\hat{1}^3$ - $\hat{1}^2\hat{a}$ Interface. <i>Journal of Biological Chemistry</i> , 2015, 290, 23432-23446.	1.6	28
58	Probing the Structure of the Nicotinic Acetylcholine Receptor with 4-Benzoylbenzoylcholine, a Novel Photoaffinity Competitive Antagonist. <i>Journal of Biological Chemistry</i> , 2000, 275, 28666-28674.	1.6	26
59	Mapping the Agonist Binding Site of the Nicotinic Acetylcholine Receptor by Cysteine Scanning Mutagenesis: Antagonist Footprint and Secondary Structure Prediction. <i>Molecular Pharmacology</i> , 2002, 61, 463-472.	1.0	25
60	Identification of the Sites of Incorporation of [3H]Ethidium Diazide within the Torpedo Nicotinic Acetylcholine Receptor Ion Channel. <i>Biochemistry</i> , 2000, 39, 11452-11462.	1.2	24
61	p-Trifluoromethyl diazirinyl-etomidate: A Potent Photoreactive General Anesthetic Derivative of Etomidate That Is Selective for Ligand-Gated Cationic Ion Channels. <i>Journal of Medicinal Chemistry</i> , 2010, 53, 6432-6444.	2.9	24
62	Bupropion Binds to Two Sites in the Torpedo Nicotinic Acetylcholine Receptor Transmembrane Domain: A Photoaffinity Labeling Study with the Bupropion Analogue [125I]-SADU-3-72. <i>Biochemistry</i> , 2012, 51, 2425-2435.	1.2	24
63	Identifying Barbiturate Binding Sites in a Nicotinic Acetylcholine Receptor with [³ H]Allyl <i>m</i> -Trifluoromethyl diazirine Mephobarbital, a Photoreactive Barbiturate. <i>Molecular Pharmacology</i> , 2014, 85, 735-746.	1.0	23
64	Microwave double resonance studies of rotational relaxation in polar gases. <i>Journal of Chemical Physics</i> , 1973, 58, 456-467.	1.2	22
65	Desformylflustrabromine (dFBr) and [³ H]dFBr-Labeled Binding Sites in a Nicotinic Acetylcholine Receptor. <i>Molecular Pharmacology</i> , 2015, 88, 1-11.	1.0	22
66	Identifying Drugs that Bind Selectively to Intersubunit General Anesthetic Sites in the $\hat{1}\hat{2}\hat{3}\hat{2}$ GABA _A R Transmembrane Domain. <i>Molecular Pharmacology</i> , 2019, 95, 615-628.	1.0	22
67	Myristic acid is the NH ₂ -terminal blocking group of the 43-kDa protein of Torpedonicotinic post-synaptic membranes. <i>FEBS Letters</i> , 1989, 243, 65-69.	1.3	20
68	Identification of Amino Acids in the Nicotinic Acetylcholine Receptor Agonist Binding Site and Ion Channel Photolabeled by 4-[(3-Trifluoromethyl)-3H-Diazirin-3-yl]Benzoylcholine, a Novel Photoaffinity Antagonist. <i>Biochemistry</i> , 2003, 42, 271-283.	1.2	20
69	Photolabeling the Torpedo Nicotinic Acetylcholine Receptor with 4-Azido-2,3,5,6-tetrafluorobenzoylcholine, a Partial Agonist. <i>Biochemistry</i> , 2005, 44, 13447-13456.	1.2	20
70	General Anesthetic Binding Sites in Human $\hat{4}\hat{2}\hat{3}\hat{1}$ $\hat{1}^3$ -Aminobutyric Acid Type A Receptors (GABAARs). <i>Journal of Biological Chemistry</i> , 2016, 291, 26529-26539.	1.6	19
71	Reactions of 1-bromo-2-[14C]pinacolone with acetylcholinesterase from <i>Torpedo nobiliana</i> . Effects of 5-trimethylammonio-2-pentanone and diisopropyl fluorophosphate. <i>BBA - Proteins and Proteomics</i> , 1989, 997, 167-175.	2.1	18
72	Site Specificity of Agonist-Induced Opening and Desensitization of the Torpedocalifornica Nicotinic Acetylcholine Receptor. <i>Biochemistry</i> , 2006, 45, 195-204.	1.2	18

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73	alpha-Conotoxin GI benzoylphenylalanine derivatives. 1H-NMR structures and photoaffinity labeling of the Torpedo californica nicotinic acetylcholine receptor. FEBS Journal, 2006, 273, 1373-1388.	2.2	17
74	Identifying the Lipid-Protein Interface of the $\alpha 4\beta 2$ Neuronal Nicotinic Acetylcholine Receptor: Hydrophobic Photolabeling Studies with 3-(Trifluoromethyl)-3-(m-[¹²⁵ I]iodophenyl)diazirine. Biochemistry, 2007, 46, 13837-13846.	1.2	17
75	Site of Resting State Inhibition of the Nicotinic Acetylcholine Receptor by a Hydrophobic Inhibitor. Biochemistry, 2001, 40, 296-304.	1.2	15
76	Photolabeling a Nicotinic Acetylcholine Receptor (nAChR) with an $\alpha 4\beta 2$ nAChR-Selective Positive Allosteric Modulator. Molecular Pharmacology, 2016, 89, 575-584.	1.0	15
77	Identification and characterization of membrane-associated polypeptides in Torpedo nicotinic acetylcholine receptor-rich membranes by hydrophobic photolabeling. Biochimica Et Biophysica Acta - Biomembranes, 2001, 1512, 215-224.	1.4	14
78	Interactions between 3-(Trifluoromethyl)-3-(m-[¹²⁵ I]iodophenyl)diazirine and Tetracaine, Phencyclidine, or Histronicotxin in the Torpedo Species Nicotinic Acetylcholine Receptor Ion Channel. Molecular Pharmacology, 2001, 59, 1514-1522.	1.0	13
79	Mapping the Structural Requirements for Nicotinic Acetylcholine Receptor Activation by Using Tethered Alkyltrimethylammonium Agonists and Antagonists. Biochemistry, 2006, 45, 10641-10653.	1.2	13
80	Active-site peptides of acetylcholinesterase of Electrophorus electricus: labelling of His-440 by 1-bromo-[2- ¹⁴ C]pinacolone and Ser-200 by tritiated diisopropyl fluorophosphate. BBA - Proteins and Proteomics, 1994, 1208, 324-331.	2.1	12
81	[³ H]Epibatidine Photolabels Non-equivalent Amino Acids in the Agonist Binding Site of Torpedo and $\alpha 4\beta 2$ Nicotinic Acetylcholine Receptors. Journal of Biological Chemistry, 2009, 284, 24939-24947.	1.6	12
82	Synthesis and pharmacological evaluation of neurosteroid photoaffinity ligands. European Journal of Medicinal Chemistry, 2017, 136, 334-347.	2.6	12
83	Hydrophobic Photolabeling Studies Identify the Lipid-Protein Interface of the 5-HT _{3A} Receptor. Biochemistry, 2009, 48, 9278-9286.	1.2	11
84	Photoaffinity labeling identifies an intersubunit steroid-binding site in heteromeric GABA type A (GABAA) receptors. Journal of Biological Chemistry, 2020, 295, 11495-11512.	1.6	10
85	Variation in the ratio of acetylcholine receptors and the Mr 43,000 receptor-associated protein in embryonic chick myotubes and myoblasts. Developmental Biology, 1990, 140, 437-446.	0.9	9
86	Competitive Antagonism of Anesthetic Action at the $\beta 3$ -Aminobutyric Acid Type A Receptor by a Novel Etomidate Analog with Low Intrinsic Efficacy. Anesthesiology, 2017, 127, 824-837.	1.3	9
87	Etomidate and Etomidate Analog Binding and Positive Modulation of $\beta 3$ -Aminobutyric Acid Type A Receptors. Anesthesiology, 2018, 129, 959-969.	1.3	8
88	Substituted benzenes and phenols as reversible inhibitors of acetylcholinesterase: Polar, trimethyl, and synergistic effects. Bioorganic Chemistry, 1987, 15, 237-249.	2.0	7
89	Inhibitable photolabeling by neurosteroid diazirine analog in the $\beta 3$ -Subunit of human heteropentameric type A GABA receptors. European Journal of Medicinal Chemistry, 2019, 162, 810-824.	2.6	7
90	Competitive Antagonism of Etomidate Action by Diazepam. Anesthesiology, 2020, 133, 583-594.	1.3	7

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91	AGONISTS OF TORPEDO NICOTINIC RECEPTORS: ESSENTIAL ROLE OF A POSITIVE CHARGE. <i>Annals of the New York Academy of Sciences</i> , 1980, 358, 370-373.	1.8	5
92	A photoreactive analog of allopregnanolone enables identification of steroid-binding sites in a nicotinic acetylcholine receptor. <i>Journal of Biological Chemistry</i> , 2019, 294, 7892-7903.	1.6	3
93	A potent photoreactive general anesthetic with novel binding site selectivity for GABAA receptors. <i>European Journal of Medicinal Chemistry</i> , 2020, 194, 112261.	2.6	3
94	Cell-Surface MuSK Self-Association: A Crucial Role for the Putative Signal Sequence. <i>Biochemistry</i> , 2005, 44, 16229-16238.	1.2	2
95	Conformational Transitions of the Membrane-Bound Cholinergic Receptor. <i>Jerusalem Symposia on Quantum Chemistry and Biochemistry</i> , 1979, , 293-304.	0.2	2
96	Identifying an Etomidate Binding Site in Heterologously Expressed Human Alpha1/Beta3 GABAA Receptors (GABAAR) Using Photoactive Etomidate Analogs. <i>Biophysical Journal</i> , 2011, 100, 271a.	0.2	1
97	Interactions of a Photoreactive Steroid Anesthetic (F4N3-Alphaalone) with Human $\alpha 1 \beta 3 \gamma 2$ GABA-A Receptors. <i>Biophysical Journal</i> , 2016, 110, 455a.	0.2	1
98	Enantiomeric barbiturates bind distinct inter- and intrasubunit binding sites in a nicotinic acetylcholine receptor (nAChR). <i>Journal of Biological Chemistry</i> , 2017, 292, 17258-17271.	1.6	1