Jean-Pierre Changeux

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348 papers	45,842 citations	99 h-index	208 g-index
366 ext. papers	49,455 ext. citations	8.8 avg, IF	7.58 L-index

#	Paper	IF	Citations
348	ON THE NATURE OF ALLOSTERIC TRANSITIONS: A PLAUSIBLE MODEL. *Journal of Molecular Biology*, **1965**, 12, 88-118	6.5	7436
347	Allosteric proteins and cellular control systems. *Journal of Molecular Biology*, **1963**, 6, 306-29	6.5	1794
346	Conscious, preconscious, and subliminal processing: a testable taxonomy. *Trends in Cognitive Sciences*, **2006**, 10, 204-11	14	1343
345	Experimental and theoretical approaches to conscious processing. *Neuron*, **2011**, 70, 200-27	13.9	1328
344	Selective stabilisation of developing synapses as a mechanism for the specification of neuronal networks. *Nature*, **1976**, 264, 705-12	50.4	1323
343	Acetylcholine receptors containing the beta2 subunit are involved in the reinforcing properties of nicotine. *Nature*, **1998**, 391, 173-7	50.4	1111
342	Nicotinic receptors at the amino acid level. *Annual Review of Pharmacology and Toxicology*, **2000**, 40, 431-58	17.9	711
341	Development of elementary numerical abilities: a neuronal model. *Journal of Cognitive Neuroscience*, **1993**, 5, 390-407	3.1	620
340	Molecular and physiological diversity of nicotinic acetylcholine receptors in the midbrain dopaminergic nuclei. *Journal of Neuroscience*, **2001**, 21, 1452-63	6.6	589
339	X-ray structure of a pentameric ligand-gated ion channel in an apparently open conformation. *Nature*, **2009**, 457, 111-4	50.4	585
338	Allosteric mechanisms of signal transduction. *Science*, **2005**, 308, 1424-8	33.3	585
337	A neuronal network model linking subjective reports and objective physiological data during conscious perception. *Proceedings of the National Academy of Sciences of the United States of America*, **2003**, 100, 8520-5	11.5	575
336	Abnormal avoidance learning in mice lacking functional high-affinity nicotine receptor in the brain. *Nature*, **1995**, 374, 65-7	50.4	560
335	Nicotinic receptors: allosteric transitions and therapeutic targets in the nervous system. *Nature Reviews Drug Discovery*, **2009**, 8, 733-50	64.1	521
334	Reduced antinociception in mice lacking neuronal nicotinic receptor subunits. *Nature*, **1999**, 398, 805-10	50.4	486
333	Subunit composition of functional nicotinic receptors in dopaminergic neurons investigated with knock-out mice. *Journal of Neuroscience*, **2003**, 23, 7820-9	6.6	440
332	Allosteric receptors after 30 years. *Neuron*, **1998**, 21, 959-80	13.9	381

331	Mutations in the channel domain of a neuronal nicotinic receptor convert ion selectivity from cationic to anionic. *Nature*, **1992**, 359, 500-5	50.4	376
330	Chimaeric nicotinic-serotonergic receptor combines distinct ligand binding and channel specificities. *Nature*, **1993**, 366, 479-83	50.4	373
329	X-ray structures of general anaesthetics bound to a pentameric ligand-gated ion channel. *Nature*, **2011**, 469, 428-31	50.4	363
328	Identification of four classes of brain nicotinic receptors using beta2 mutant mice. *Journal of Neuroscience*, **1998**, 18, 4461-72	6.6	361
327	A neuronal model of predictive coding accounting for the mismatch negativity. *Journal of Neuroscience*, **2012**, 32, 3665-78	6.6	355
326	Calcium influx through nicotinic receptor in rat central neurons: its relevance to cellular regulation. *Neuron*, **1992**, 8, 135-43	13.9	355
325	Molecular evolution of the nicotinic acetylcholine receptor: an example of multigene family in excitable cells. *Journal of Molecular Evolution*, **1995**, 40, 155-72	3.1	345
324	Neuronal nicotinic receptor alpha 6 subunit mRNA is selectively concentrated in catecholaminergic nuclei of the rat brain. *European Journal of Neuroscience*, **1996**, 8, 2428-39	3.5	336
323	The diversity of subunit composition in nAChRs: evolutionary origins, physiologic and pharmacologic consequences. *Journal of Neurobiology*, **2002**, 53, 447-56		325
322	Nicotine addiction and nicotinic receptors: lessons from genetically modified mice. *Nature Reviews Neuroscience*, **2010**, 11, 389-401	13.5	322
321	Large-scale purification of the acetylcholine-receptor protein in its membrane-bound and detergent-extracted forms from Torpedo marmorata electric organ. *FEBS Journal*, **1977**, 80, 215-24		321
320	Calcitonin gene-related peptide, a peptide present in spinal cord motoneurons, increases the number of acetylcholine receptors in primary cultures of chick embryo myotubes. *Neuroscience Letters*, **1986**, 71, 59-65	3.3	309
319	Distribution and pharmacology of alpha 6-containing nicotinic acetylcholine receptors analyzed with mutant mice. *Journal of Neuroscience*, **2002**, 22, 1208-17	6.6	307
318	On the nature of allosteric transitions: implications of non-exclusive ligand binding. *Journal of Molecular Biology*, **1966**, 21, 265-74	6.5	298
317	Allostery and the Monod-Wyman-Changeux model after 50 years. *Annual Review of Biophysics*, **2012** , 41, 103-33	21.1	265
316	Nicotinic receptor function: new perspectives from knockout mice. *Trends in Pharmacological Sciences*, **2000**, 21, 211-7	13.2	263
315	Transsynaptic degeneration in cascade in the cerebellar cortex of staggerer mutant mice. *Brain Research*, **1974**, 67, 519-26	3.7	262
314	A prokaryotic proton-gated ion channel from the nicotinic acetylcholine receptor family. *Nature*, **2007**, 445, 116-9	50.4	257

313	Models of the extracellular domain of the nicotinic receptors and of agonist- and Ca2+-binding sites. *Proceedings of the National Academy of Sciences of the United States of America*, **2002**, 99, 3210-5	11.5	254
312	Ivermectin: a positive allosteric effector of the alpha7 neuronal nicotinic acetylcholine receptor. *Molecular Pharmacology*, **1998**, 53, 283-94	4.3	254
311	Brain nicotinic receptors: structure and regulation, role in learning and reinforcement. *Brain Research Reviews*, **1998**, 26, 198-216		243
310	Hierarchical control of dopamine neuron-firing patterns by nicotinic receptors. *Neuron*, **2006**, 50, 911-21	13.9	237
309	In Vitro excitation of purified membrane fragments by cholinergic agonists : I. Pharmalogical properties of the excitable membrane fragments. *Journal of Membrane Biology*, **1971**, 6, 1-23	2.3	235
308	Role of Ca2+ ions in nicotinic facilitation of GABA release in mouse thalamus. *Journal of Neuroscience*, **1997**, 17, 576-85	6.6	229
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306	Working memory, response selection, and effortful processing in rats with medial prefrontal lesions.. *Behavioral Neuroscience*, **1994**, 108, 883-891	2.1	212
305	Neuronal models of cognitive functions. *Cognition*, **1989**, 33, 63-109	3.5	211
304	Ongoing spontaneous activity controls access to consciousness: a neuronal model for inattentional blindness. *PLoS Biology*, **2005**, 3, e141	9.7	206
303	Conscious Processing and the Global Neuronal Workspace Hypothesis. *Neuron*, **2020**, 105, 776-798	13.9	193
302	Neurotransmitter-gated ion channels as unconventional allosteric proteins. *Current Opinion in Structural Biology*, **1994**, 4, 554-565	8.1	189
301	Conformational selection or induced fit? 50 years of debate resolved. *F1000 Biology Reports*, **2011**, 3, 19		183
300	Presence of a lattice structure in membrane fragments rich in nicotinic receptor protein from the electric organ of Torpedo marmorata. *FEBS Letters*, **1973**, 33, 109-13	3.8	183
299	Consequences of tenotomy on the evolution of multiinnervation in developing rat soleus muscle. *Brain Research*, **1975**, 99, 354-8	3.7	176
298	Denervation increases a neurite-promoting activity in extracts of skeletal muscle. *Nature*, **1983**, 302, 609-11	50.4	175
297	Structure and pharmacology of pentameric receptor channels: from bacteria to brain. *Structure*, **2012**, 20, 941-56	5.2	170
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293	Normal mode analysis suggests a quaternary twist model for the nicotinic receptor gating mechanism. *Biophysical Journal*, **2005**, 88, 3954-65	2.9	165
292	Progress in the purification of the cholinergic receptor protein from Electrophorus electricus by affinity chromatography. *FEBS Letters*, **1972**, 28, 96-100	3.8	165
291	Allosteric Modulation as a Unifying Mechanism for Receptor Function and Regulation. *Cell*, **2016**, 166, 1084-1102	56.2	164
290	The nicotinic acetylcholine receptor: the founding father of the pentameric ligand-gated ion channel superfamily. *Journal of Biological Chemistry*, **2012**, 287, 40207-15	5.4	163
289	Abnormal functional organization in the dorsal lateral geniculate nucleus of mice lacking the beta 2 subunit of the nicotinic acetylcholine receptor. *Neuron*, **2003**, 40, 1161-72	13.9	161
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287	Allosteric modulations of the nicotinic acetylcholine receptor. *Trends in Neurosciences*, **1993**, 16, 181-6	13.3	160
286	Allostery in Its Many Disguises: From Theory to Applications. *Structure*, **2019**, 27, 566-578	5.2	158
285	International Union of Basic and Clinical Pharmacology. XC. multisite pharmacology: recommendations for the nomenclature of receptor allosterism and allosteric ligands. *Pharmacological Reviews*, **2014**, 66, 918-47	22.5	156
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282	Mutational analysis of the charge selectivity filter of the alpha7 nicotinic acetylcholine receptor. *Neuron*, **1999**, 22, 831-43	13.9	148
281	Fast kinetic studies on the interaction of a fluorescent agonist with the membrane-bound acetylcholine receptor from Torpedo marmorata. *FEBS Journal*, **1979**, 94, 255-79		143
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252	Transmembrane orientation of proteins present in acetylcholine receptor-rich membranes from Torpedo marmorata studied by selective proteolysis. *FEBS Journal*, **1980**, 106, 381-93		101
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