Tzyh-Chang Hwang

List of Publications by Citations

33 papers	980 citations	19 h-index	31 g-index
35 ext. papers	1,136 ext. citations	4.1 avg, IF	4.41 L-index

#	Paper	IF	Citations
33	Gating of the CFTR Cl- channel by ATP-driven nucleotide-binding domain dimerisation. *Journal of Physiology*, **2009**, 587, 2151-61	3.9	134
32	Deletion of phenylalanine 508 causes attenuated phosphorylation-dependent activation of CFTR chloride channels. *Journal of Physiology*, **2000**, 524 Pt 3, 637-48	3.9	83
31	Stable ATP binding mediated by a partial NBD dimer of the CFTR chloride channel. *Journal of General Physiology*, **2010**, 135, 399-414	3.4	72
30	The two ATP binding sites of cystic fibrosis transmembrane conductance regulator (CFTR) play distinct roles in gating kinetics and energetics. *Journal of General Physiology*, **2006**, 128, 413-22	3.4	62
29	CFTR gating I: Characterization of the ATP-dependent gating of a phosphorylation-independent CFTR channel (DeltaR-CFTR). *Journal of General Physiology*, **2005**, 125, 361-75	3.4	54
28	Structural mechanisms of CFTR function and dysfunction. *Journal of General Physiology*, **2018**, 150, 539-570	3.4	53
27	Potentiation of disease-associated cystic fibrosis transmembrane conductance regulator mutants by hydrolyzable ATP analogs. *Journal of Biological Chemistry*, **2010**, 285, 19967-75	5.4	48
26	State-dependent modulation of CFTR gating by pyrophosphate. *Journal of General Physiology*, **2009** , 133, 405-19	3.4	46
25	Voltage-dependent flickery block of an open cystic fibrosis transmembrane conductance regulator (CFTR) channel pore. *Journal of Physiology*, **2001**, 532, 435-48	3.9	46
24	The most common cystic fibrosis-associated mutation destabilizes the dimeric state of the nucleotide-binding domains of CFTR. *Journal of Physiology*, **2011**, 589, 2719-31	3.9	37
23	Modulation of CFTR gating by permeant ions. *Journal of General Physiology*, **2015**, 145, 47-60	3.4	35
22	A common mechanism for CFTR potentiators. *Journal of General Physiology*, **2017**, 149, 1105-1118	3.4	33
21	Nonequilibrium gating of CFTR on an equilibrium theme. *Physiology*, **2012**, 27, 351-61	9.8	31
20	Identifying the molecular target sites for CFTR potentiators GLPG1837 and VX-770. *Journal of General Physiology*, **2019**, 151, 912-928	3.4	27
19	On the mechanism of gating defects caused by the R117H mutation in cystic fibrosis transmembrane conductance regulator. *Journal of Physiology*, **2016**, 594, 3227-44	3.9	27
18	Synergistic Potentiation of Cystic Fibrosis Transmembrane Conductance Regulator Gating by Two Chemically Distinct Potentiators, Ivacaftor (VX-770) and 5-Nitro-2-(3-Phenylpropylamino) Benzoate. *Molecular Pharmacology*, **2016**, 90, 275-85	4.3	24
17	CFTR potentiators: from bench to bedside. *Current Opinion in Pharmacology*, **2017**, 34, 98-104	5.1	22

16	Identification and Characterization of Novel CFTR Potentiators. *Frontiers in Pharmacology*, **2018**, 9, 1221	5.6	22
15	A single amino acid substitution in CFTR converts ATP to an inhibitory ligand. *Journal of General Physiology*, **2014**, 144, 311-20	3.4	19
14	Identification of a novel post-hydrolytic state in CFTR gating. *Journal of General Physiology*, **2012**, 139, 359-70	3.4	18
13	Optimization of the degenerated interfacial ATP binding site improves the function of disease-related mutant cystic fibrosis transmembrane conductance regulator (CFTR) channels. *Journal of Biological Chemistry*, **2010**, 285, 37663-71	5.4	16
12	Physiological and pharmacological characterization of the N1303K mutant CFTR. *Journal of Cystic Fibrosis*, **2018**, 17, 573-581	4.1	14
11	Identification of GLPG/ABBV-2737, a Novel Class of Corrector, Which Exerts Functional Synergy With Other CFTR Modulators. *Frontiers in Pharmacology*, **2019**, 10, 514	5.6	13
10	Biological Characterization of F508delCFTR Protein Processing by the CFTR Corrector ABBV-2222/GLPG2222. *Journal of Pharmacology and Experimental Therapeutics*, **2020**, 372, 107-118	4.7	12
9	Spatial positioning of CFTRs pore-lining residues affirms an asymmetrical contribution of transmembrane segments to the anion permeation pathway. *Journal of General Physiology*, **2016**, 147, 407-22	3.4	11
8	CFTR: New insights into structure and function and implications for modulation by small molecules. *Journal of Cystic Fibrosis*, **2020**, 19 Suppl 1, S19-S24	4.1	7
7	Organoids as a personalized medicine tool for ultra-rare mutations in cystic fibrosis: The case of S955P and 1717-2A>G. *Biochimica Et Biophysica Acta - Molecular Basis of Disease*, **2020**, 1866, 165905	6.9	6
6	Characterization of [G970-T1122)-CFTR, the most frequent CFTR mutant identified in Japanese cystic fibrosis patients. *Journal of Physiological Sciences*, **2019**, 69, 103-112	2.3	3
5	Cystic fibrosis research topics featured at the 14th ECFS Basic Science Conference: Chairmans summary. *Journal of Cystic Fibrosis*, **2018**, 17, S1-S4	4.1	3
4	Functional stability of CFTR depends on tight binding of ATP at its degenerate ATP-binding site. *Journal of Physiology*, **2021**, 599, 4625-4642	3.9	2
3	The physiology of anion transport: tales of the bizarre and unexpected. *Experimental Physiology*, **2006**, 91, 121-122	2.4	0
2	CFTR: a missing link between exocrine and endocrine pancreas?. *Science China Life Sciences*, **2014**, 57, 1044-5	8.5	
1	Generation of human induced pluripotent stem cells from cystic fibrosis patient carrying nonsense mutation (p.S308X) in CFTR gene.. *Stem Cell Research*, **2022**, 60, 102683	1.6	