Robert J Perz-Edwards

List of Publications by Year in Descending Order

39 papers	1,353 citations	18 h-index	36 g-index
45 ext. papers	2,248 ext. citations	13.1 avg, IF	4.89 L-index

#	Paper	IF	Citations
39	Structural diversity of the SARS-CoV-2 Omicron spike. **2022**,		1
38	Mouse and human antibodies bind HLA-E-leader peptide complexes and enhance NK cell cytotoxicity.. *Communications Biology*, **2022**, 5, 271	6.7	1
37	mRNA-encoded HIV-1 Env trimer ferritin nanoparticles induce monoclonal antibodies that neutralize heterologous HIV-1 isolates in mice.. *Cell Reports*, **2022**, 38, 110514	10.6	2
36	Structural basis of glycan276-dependent recognition by HIV-1 broadly neutralizing antibodies. *Cell Reports*, **2021**, 37, 109922	10.6	1
35	A broadly cross-reactive antibody neutralizes and protects against sarbecovirus challenge in mice. *Science Translational Medicine*, **2021**, eabj7125	17.5	24
34	The myosin II coiled-coil domain atomic structure in its native environment. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	1
33	Effect of natural mutations of SARS-CoV-2 on spike structure, conformation and antigenicity **2021**,		24
32	A broadly neutralizing antibody protects against SARS-CoV, pre-emergent bat CoVs, and SARS-CoV-2 variants in mice **2021**,		24
31	Neutralizing antibody vaccine for pandemic and pre-emergent coronaviruses. *Nature*, **2021**, 594, 553-559	50.4	85
30	Functional Homology for Antibody-Dependent Phagocytosis Across Humans and Rhesus Macaques. *Frontiers in Immunology*, **2021**, 12, 678511	8.4	4
29	Effect of natural mutations of SARS-CoV-2 on spike structure, conformation, and antigenicity. *Science*, **2021**, 373,	33.3	121
28	D614G Spike Mutation Increases SARS CoV-2 Susceptibility to Neutralization. *Cell Host and Microbe*, **2021**, 29, 23-31.e4	23.4	198
27	The functions of SARS-CoV-2 neutralizing and infection-enhancing antibodies in vitro and in mice and nonhuman primates **2021**,		27
26	D614G Mutation Alters SARS-CoV-2 Spike Conformation and Enhances Protease Cleavage at the S1/S2 Junction. *Cell Reports*, **2021**, 34, 108630	10.6	123
25	SARS-CoV-2 vaccination induces neutralizing antibodies against pandemic and pre-emergent SARS-related coronaviruses in monkeys **2021**,		4
24	In vitro and in vivo functions of SARS-CoV-2 infection-enhancing and neutralizing antibodies. *Cell*, **2021**, 184, 4203-4219.e32	56.2	89
23	Ability of nucleoside-modified mRNA to encode HIV-1 envelope trimer nanoparticles **2021**,		1

22	Cold sensitivity of the SARS-CoV-2 spike ectodomain. *Nature Structural and Molecular Biology*, **2021**, 28, 128-131	17.6	34
21	Polyclonal Broadly Neutralizing Antibody Activity Characterized by CD4 Binding Site and V3-Glycan Antibodies in a Subset of HIV-1 Virus Controllers.. *Frontiers in Immunology*, **2021**, 12, 670561	8.4	0
20	How Does HIV Env Structure Informs Vaccine Design?. *Microscopy and Microanalysis*, **2020**, 26, 574-575	0.5	
19	Glycans on the SARS-CoV-2 Spike Control the Receptor Binding Domain Conformation **2020**,		25
18	A glycan cluster on the SARS-CoV-2 spike ectodomain is recognized by Fab-dimerized glycan-reactive antibodies **2020**,		18
17	Controlling the SARS-CoV-2 spike glycoprotein conformation. *Nature Structural and Molecular Biology*, **2020**, 27, 925-933	17.6	200
16	Neutralization-guided design of HIV-1 envelope trimers with high affinity for the unmutated common ancestor of CH235 lineage CD4bs broadly neutralizing antibodies. *PLoS Pathogens*, **2019**, 15, e1008026	7.6	33
15	Suspending samples over carbon holey films increases heterogeneity of molecular orientations in negative stain electron microscopy. *MethodsX*, **2019**, 6, 582-586	1.9	
14	Insights into Actin-Myosin Interactions within Muscle from 3D Electron Microscopy. *International Journal of Molecular Sciences*, **2019**, 20,	6.3	10
13	Difficult-to-neutralize global HIV-1 isolates are neutralized by antibodies targeting open envelope conformations. *Nature Communications*, **2019**, 10, 2898	17.4	24
12	Targeted selection of HIV-specific antibody mutations by engineering B cell maturation. *Science*, **2019**, 366,	33.3	60
11	Coupling between myosin head conformation and the thick filament backbone structure. *Journal of Structural Biology*, **2017**, 200, 334-342	3.4	6
10	The Prohormone VGF Regulates β Cell Function via Insulin Secretory Granule Biogenesis. *Cell Reports*, **2017**, 20, 2480-2489	10.6	28
9	Myosin II sequences for Lethocerus indicus. *Journal of Muscle Research and Cell Motility*, **2017**, 38, 193-200	3.5	6
8	Stretch activation properties of Drosophila and Lethocerus indirect flight muscle suggest similar calcium-dependent mechanisms. *American Journal of Physiology - Cell Physiology*, **2017**, 313, C621-C631	5.4	5
7	The Structure of the Relaxed Thick Filaments from Lethocerus Flight Muscle. *Microscopy and Microanalysis*, **2016**, 22, 1106-1107	0.5	
6	Structure of myosin filaments from relaxed flight muscle by cryo-EM at 6 Å resolution. *Science Advances*, **2016**, 2, e1600058	14.3	55
5	Structural changes in isometrically contracting insect flight muscle trapped following a mechanical perturbation. *PLoS ONE*, **2012**, 7, e39422	3.7	10

4	Electron microscopy and x-ray diffraction evidence for two Z-band structural states. *Biophysical Journal*, **2011**, 101, 709-17	2.9	12
3	The basketweave form of the Z-band is expanded relative to the small-square form. *Journal of Muscle Research and Cell Motility*, **2011**, 31, 307-8	3.5	
2	X-ray diffraction evidence for myosin-troponin connections and tropomyosin movement during stretch activation of insect flight muscle. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 120-5	11.5	69
1	The Z-band lattice in skeletal muscle in rigor. *Journal of Structural Biology*, **1989**, 102, 59-65		10