K Christopher Garcia

List of Publications by Year in Descending Order

131 papers	12,924 citations	59 h-index	113 g-index
153 ext. papers	18,029 ext. citations	26.9 avg, IF	6.28 L-index

#	Paper	IF	Citations
131	Atypical structural snapshots of human cytomegalovirus GPCR interactions with host G proteins.. *Science Advances*, **2022**, 8, eabl5442	14.3	0
130	Clonally Expanded B Cells in Multiple Sclerosis Bind EBV EBNA1 and GlialCAM.. *Nature*, **2022**,	50.4	51
129	Mesenchymal-epithelial crosstalk shapes intestinal regionalisation via Wnt and Shh signalling.. *Nature Communications*, **2022**, 13, 715	17.4	0
128	Interleukin-2 superkines by computational design.. *Proceedings of the National Academy of Sciences of the United States of America*, **2022**, 119, e2117401119	11.5	1
127	Design of protein binding proteins from target structure alone.. *Nature*, **2022**,	50.4	13
126	Tuning T cell receptor sensitivity through catch bond engineering.. *Science*, **2022**, 376, eabl5282	33.3	0
125	Structure of a Janus kinase cytokine receptor complex reveals the basis for dimeric activation.. *Science*, **2022**, 376, eabn8933	33.3	11
124	Facile discovery of surrogate cytokine agonists.. *Cell*, **2022**,	56.2	3
123	Synergy of a STING agonist and an IL-2 superkine in cancer immunotherapy against MHC I-deficient and MHC I tumors.. *Proceedings of the National Academy of Sciences of the United States of America*, **2022**, 119, e2200568119	11.5	1
122	A human orthogonal IL-2 and IL-2Rα system enhances CAR T cell expansion and antitumor activity in a murine model of leukemia.. *Science Translational Medicine*, **2021**, 13, eabg6986	17.5	6
121	RTN4/NoGo-receptor binding to BAI adhesion-GPCRs regulates neuronal development. *Cell*, **2021**, 184, 5869-5885.e25	56.2	7
120	A Conversation with Dr. K. Christopher Garcia. *Journal of Interferon and Cytokine Research*, **2021**, 41, 355-359	3.3	
119	Tuning MPL signaling to influence hematopoietic stem cell differentiation and inhibit essential thrombocythemia progenitors. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	5
118	Structure-based decoupling of the pro- and anti-inflammatory functions of interleukin-10. *Science*, **2021**, 371,	33.3	19
117	Global analysis of shared T cell specificities in human non-small cell lung cancer enables HLA inference and antigen discovery. *Immunity*, **2021**, 54, 586-602.e8	32.3	16
116	The tissue protective functions of interleukin-22 can be decoupled from pro-inflammatory actions through structure-based design. *Immunity*, **2021**, 54, 660-672.e9	32.3	11
115	Selective expansion of regulatory T cells using an orthogonal IL-2/IL-2 receptor system facilitates transplantation tolerance. *Journal of Clinical Investigation*, **2021**, 131,	15.9	6

114	Calibration of cell-intrinsic interleukin-2 response thresholds guides design of a regulatory T cell biased agonist. *ELife*, **2021**, 10,	8.9	4
113	Selective targeting of ligand-dependent and -independent signaling by GPCR conformation-specific anti-US28 intrabodies. *Nature Communications*, **2021**, 12, 4357	17.4	2
112	Structural basis for the constitutive activity and immunomodulatory properties of the Epstein-Barr virus-encoded G protein-coupled receptor BILF1. *Immunity*, **2021**, 54, 1405-1416.e7	32.3	3
111	Structural basis for IL-12 and IL-23 receptor sharing reveals a gateway for shaping actions on T versus NK cells. *Cell*, **2021**, 184, 983-999.e24	56.2	21
110	Accurate prediction of protein structures and interactions using a three-track neural network. *Science*, **2021**, 373, 871-876	33.3	522
109	An engineered IL-2 partial agonist promotes CD8 T cell stemness. *Nature*, **2021**, 597, 544-548	50.4	14
108	Super-enhancer-based identification of a BATF3/IL-2R-module reveals vulnerabilities in anaplastic large cell lymphoma. *Nature Communications*, **2021**, 12, 5577	17.4	1
107	T cells targeted to TdT kill leukemic lymphoblasts while sparing normal lymphocytes. *Nature Biotechnology*, **2021**,	44.5	5
106	Progenitor identification and SARS-CoV-2 infection in human distal lung organoids. *Nature*, **2020**, 588, 670-675	50.4	103
105	Mutational signature in colorectal cancer caused by genotoxic pks E. coli. *Nature*, **2020**, 580, 269-273	50.4	286
104	Wnt Activation and Reduced Cell-Cell Contact Synergistically Induce Massive Expansion of Functional Human iPSC-Derived Cardiomyocytes. *Cell Stem Cell*, **2020**, 27, 50-63.e5	18	45
103	Structure and selectivity engineering of the M muscarinic receptor toxin complex. *Science*, **2020**, 369, 161-167	33.3	13
102	Mechanism of homodimeric cytokine receptor activation and dysregulation by oncogenic mutations. *Science*, **2020**, 367, 643-652	33.3	47
101	Interleukin-2 druggability is modulated by global conformational transitions controlled by a helical capping switch. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 7183-7192	11.5	10
100	Interrogating the recognition landscape of a conserved HIV-specific TCR reveals distinct bacterial peptide cross-reactivity. *ELife*, **2020**, 9,	8.9	2
99	Discovery of surrogate agonists for visceral fat Treg cells that modulate metabolic indices in vivo. *ELife*, **2020**, 9,	8.9	7
98	Structure of human Frizzled5 by fiducial-assisted cryo-EM supports a heterodimeric mechanism of canonical Wnt signaling. *ELife*, **2020**, 9,	8.9	23
97	Progenitor identification and SARS-CoV-2 infection in long-term human distal lung organoid cultures **2020**,		17

96	Surrogate R-spondins for tissue-specific potentiation of Wnt Signaling. *PLoS ONE*, **2020**, 15, e0226928	3.7	8
95	-endocytosis of intact IL-15R L-15 complex from presenting cells into NK cells favors signaling for proliferation. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 522-531	11.5	19
94	Next-Generation Surrogate Wnts Support Organoid Growth and Deconvolute Frizzled Pleiotropy In Vivo. *Cell Stem Cell*, **2020**, 27, 840-851.e6	18	33
93	Immune receptor inhibition through enforced phosphatase recruitment. *Nature*, **2020**, 586, 779-784	50.4	14
92	A Human IgSF Cell-Surface Interactome Reveals a Complex Network of Protein-Protein Interactions. *Cell*, **2020**, 182, 1027-1043.e17	56.2	18
91	Dual Arms of Adaptive Immunity: Division of Labor and Collaboration between B and T Cells. *Cell*, **2019**, 179, 3-7	56.2	9
90	Topological control of cytokine receptor signaling induces differential effects in hematopoiesis. *Science*, **2019**, 364,	33.3	47
89	Receptor subtype discrimination using extensive shape complementary designed interfaces. *Nature Structural and Molecular Biology*, **2019**, 26, 407-414	17.6	19
88	Opposing T cell responses in experimental autoimmune encephalomyelitis. *Nature*, **2019**, 572, 481-487	50.4	70
87	A strategy for the selection of monovalent antibodies that span protein dimer interfaces. *Journal of Biological Chemistry*, **2019**, 294, 13876-13886	5.4	8
86	RasGRP1 is a potential biomarker to stratify anti-EGFR therapy response in colorectal cancer. *JCI Insight*, **2019**, 5,	9.9	9
85	Structure of the IFN receptor complex guides design of biased agonists. *Nature*, **2019**, 567, 56-60	50.4	41
84	In vivo molecular imaging for immunotherapy using ultra-bright near-infrared-IIb rare-earth nanoparticles. *Nature Biotechnology*, **2019**, 37, 1322-1331	44.5	198
83	De novo design of potent and selective mimics of IL-2 and IL-15. *Nature*, **2019**, 565, 186-191	50.4	184
82	Selective targeting of engineered T cells using orthogonal IL-2 cytokine-receptor complexes. *Science*, **2018**, 359, 1037-1042	33.3	149
81	Antigen Identification for Orphan T Cell Receptors Expressed on Tumor-Infiltrating Lymphocytes. *Cell*, **2018**, 172, 549-563.e16	56.2	160
80	Isolation of a Structural Mechanism for Uncoupling T Cell Receptor Signaling from Peptide-MHC Binding. *Cell*, **2018**, 174, 672-687.e27	56.2	141
79	Stress-testing the relationship between T cell receptor/peptide-MHC affinity and cross-reactivity using peptide velcro. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, E7369-E7378	11.5	19

78	Engineering a Single-Agent Cytokine/Antibody Fusion That Selectively Expands Regulatory T Cells for Autoimmune Disease Therapy. *Journal of Immunology*, **2018**, 201, 2094-2106	5.3	25
77	Viral GPCR US28 can signal in response to chemokine agonists of nearly unlimited structural degeneracy. *ELife*, **2018**, 7,	8.9	23
76	Novel and shared neoantigen derived from histone 3 variant H3.3K27M mutation for glioma T cell therapy. *Journal of Experimental Medicine*, **2018**, 215, 141-157	16.6	118
75	Inhibition of Delta-induced Notch signaling using fucose analogs. *Nature Chemical Biology*, **2018**, 14, 65-71	11.7	35
74	Differential induction of interferon stimulated genes between type I and type III interferons is independent of interferon receptor abundance. *PLoS Pathogens*, **2018**, 14, e1007420	7.6	55
73	A RECK-WNT7 Receptor-Ligand Interaction Enables Isoform-Specific Regulation of Wnt Bioavailability. *Cell Reports*, **2018**, 25, 339-349.e9	10.6	43
72	A polymorphic residue that attenuates the antiviral potential of interferon lambda 4 in hominid lineages. *PLoS Pathogens*, **2018**, 14, e1007307	7.6	13
71	T cell receptor cross-reactivity expanded by dramatic peptide-MHC adaptability. *Nature Chemical Biology*, **2018**, 14, 934-942	11.7	43
70	Disruption of TET2 promotes the therapeutic efficacy of CD19-targeted T cells. *Nature*, **2018**, 558, 307-312	50.4	362
69	A human anti-IL-2 antibody that potentiates regulatory T cells by a structure-based mechanism. *Nature Medicine*, **2018**, 24, 1005-1014	50.5	91
68	Functional Selectivity in Cytokine Signaling Revealed Through a Pathogenic EPO Mutation. *Cell*, **2017**, 168, 1053-1064.e15	56.2	68
67	Decoupling the Functional Pleiotropy of Stem Cell Factor by Tuning c-Kit Signaling. *Cell*, **2017**, 168, 1041-1052.e18	56.2	58
66	Notch-Jagged complex structure implicates a catch bond in tuning ligand sensitivity. *Science*, **2017**, 355, 1320-1324	33.3	156
65	Intratumoural heterogeneity generated by Notch signalling promotes small-cell lung cancer. *Nature* , **2017**, 545, 360-364	50.4	193
64	Surrogate Wnt agonists that phenocopy canonical Wnt and β-catenin signalling. *Nature*, **2017**, 545, 234-237	50.4	165
63	Non-equivalence of Wnt and R-spondin ligands during Lgr5 intestinal stem-cell self-renewal. *Nature* , **2017**, 545, 238-242	50.4	209
62	The Intergenic Recombinant HLA-B*46:01 Has a Distinctive Peptidome that Includes KIR2DL3 Ligands. *Cell Reports*, **2017**, 19, 1394-1405	10.6	26
61	The IFN-λ-IFN-λR1-IL-10Rβ Complex Reveals Structural Features Underlying Type III IFN Functional Plasticity. *Immunity*, **2017**, 46, 379-392	32.3	59

60	In vitro reconstitution of T cell receptor-mediated segregation of the CD45 phosphatase. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, E9338-E9345	11.5	50
59	Localized CD47 blockade enhances immunotherapy for murine melanoma. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 10184-10189	11.5	64
58	Ligand-induced type II interleukin-4 receptor dimers are sustained by rapid re-association within plasma membrane microcompartments. *Nature Communications*, **2017**, 8, 15976	17.4	15
57	Synthekines are surrogate cytokine and growth factor agonists that compel signaling through non-natural receptor dimers. *ELife*, **2017**, 6,	8.9	29
56	Deconstruction of the beaten Path-Sidestep interaction network provides insights into neuromuscular system development. *ELife*, **2017**, 6,	8.9	22
55	Salmonella Infection Enhances Erythropoietin Production by the Kidney and Liver, Which Correlates with Elevated Bacterial Burdens. *Infection and Immunity*, **2016**, 84, 2833-41	3.7	9
54	Data publication with the structural biology data grid supports live analysis. *Nature Communications* , **2016**, 7, 10882	17.4	78
53	Alpha and Beta Type 1 Interferon Signaling: Passage for Diverse Biologic Outcomes. *Cell*, **2016**, 164, 349-52	32.2	91
52	Structural interplay between germline interactions and adaptive recognition determines the bandwidth of TCR-peptide-MHC cross-reactivity. *Nature Immunology*, **2016**, 17, 87-94	19.1	78
51	CD47 Blockade Enhances Therapeutic Activity of TCR Mimic Antibodies to Ultra-Low Density Cancer Epitopes through Cytokine Feed Forward Mechanisms. *Blood*, **2016**, 128, 4048-4048	2.2	
50	Receptor dimer stabilization by hierarchical plasma membrane microcompartments regulates cytokine signaling. *Science Advances*, **2016**, 2, e1600452	14.3	18
49	Durable antitumor responses to CD47 blockade require adaptive immune stimulation. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, E2646-54	11.5	183
48	Genetic variation in MHC proteins is associated with T cell receptor expression biases. *Nature Genetics*, **2016**, 48, 995-1002	36.3	79
47	Self-determination in the T cell repertoire. *Immunity*, **2015**, 42, 8-10	32.3	
46	Structural biology. Structural basis for Notch1 engagement of Delta-like 4. *Science*, **2015**, 347, 847-53	33.3	173
45	Structural biology. Structural basis for chemokine recognition and activation of a viral G protein-coupled receptor. *Science*, **2015**, 347, 1113-7	33.3	211
44	Interleukin-2 activity can be fine tuned with engineered receptor signaling clamps. *Immunity*, **2015**, 42, 826-38	32.3	100
43	"Velcro" engineering of high affinity CD47 ectodomain as signal regulatory protein [SIRP] antagonists that enhance antibody-dependent cellular phagocytosis. *Journal of Biological Chemistry* , **2015**, 290, 12650-63	5.4	58

42	Rationally designed chemokine-based toxin targeting the viral G protein-coupled receptor US28 potently inhibits cytomegalovirus infection in vivo. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 8427-32	11.5	30
41	Insights into cytokine-receptor interactions from cytokine engineering. *Annual Review of Immunology*, **2015**, 33, 139-67	34.7	129
40	Wnt acylation and its functional implication in Wnt signalling regulation. *Biochemical Society Transactions*, **2015**, 43, 211-6	5.1	28
39	Antibodies to Interleukin-2 Elicit Selective T Cell Subset Potentiation through Distinct Conformational Mechanisms. *Immunity*, **2015**, 42, 815-25	32.3	111
38	Tuning cytokine receptor signaling by re-orienting dimer geometry with surrogate ligands. *Cell*, **2015**, 160, 1196-208	56.2	102
37	Instructive roles for cytokine-receptor binding parameters in determining signaling and functional potency. *Science Signaling*, **2015**, 8, ra114	8.8	35
36	Control of Synaptic Connectivity by a Network of Drosophila IgSF Cell Surface Proteins. *Cell*, **2015**, 163, 1770-1782	56.2	105
35	Non-invasive intravital imaging of cellular differentiation with a bright red-excitable fluorescent protein. *Nature Methods*, **2014**, 11, 572-8	21.6	141
34	Screening and large-scale expression of membrane proteins in mammalian cells for structural studies. *Nature Protocols*, **2014**, 9, 2574-85	18.8	331
33	Extracellular architecture of the SYG-1/SYG-2 adhesion complex instructs synaptogenesis. *Cell*, **2014**, 156, 482-94	56.2	46
32	Deconstructing the peptide-MHC specificity of T cell recognition. *Cell*, **2014**, 157, 1073-87	56.2	345
31	Molecular architecture of the αβ T cell receptor-CD3 complex. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 17576-81	11.5	81
30	Multifarious determinants of cytokine receptor signaling specificity. *Advances in Immunology*, **2014**, 121, 1-39	5.6	39
29	Activation and allosteric modulation of a muscarinic acetylcholine receptor. *Nature*, **2013**, 504, 101-6	50.4	639
28	Adrenaline-activated structure of β2-adrenoceptor stabilized by an engineered nanobody. *Nature*, **2013**, 502, 575-579	50.4	337
27	Engineered SIRPα variants as immunotherapeutic adjuvants to anticancer antibodies. *Science*, **2013**, 341, 88-91	33.3	295
26	An extracellular interactome of immunoglobulin and LRR proteins reveals receptor-ligand networks. *Cell*, **2013**, 154, 228-39	56.2	135
25	Redirecting cell-type specific cytokine responses with engineered interleukin-4 superkines. *Nature Chemical Biology*, **2012**, 8, 990-8	11.7	59

24	Mechanistic and structural insight into the functional dichotomy between IL-2 and IL-15. *Nature Immunology*, **2012**, 13, 1187-95	19.1	148
23	Structural and dynamic determinants of type I interferon receptor assembly and their functional interpretation. *Immunological Reviews*, **2012**, 250, 317-34	11.3	149
22	Insights into immune structure, recognition, and signaling. *Immunological Reviews*, **2012**, 250, 5-9	11.3	1
21	Exploiting a natural conformational switch to engineer an interleukin-2 'superkine' *Nature*, **2012**, 484, 529-33	50.4	320
20	Reconciling views on T cell receptor germline bias for MHC. *Trends in Immunology*, **2012**, 33, 429-36	14.4	43
19	Structural basis of Wnt recognition by Frizzled. *Science*, **2012**, 337, 59-64	33.3	563
18	Structural linkage between ligand discrimination and receptor activation by type I interferons. *Cell*, **2011**, 146, 621-32	56.2	253
17	Structural snapshots of full-length Jak1, a transmembrane gp130/IL-6/IL-6Rα cytokine receptor complex, and the receptor-Jak1 holocomplex. *Structure*, **2011**, 19, 45-55	5.2	67
16	T cell receptor signaling is limited by docking geometry to peptide-major histocompatibility complex. *Immunity*, **2011**, 35, 681-93	32.3	182
15	The molecular basis of TCR germline bias for MHC is surprisingly simple. *Nature Immunology*, **2009**, 10, 143-7	19.1	179
14	Structural biology of shared cytokine receptors. *Annual Review of Immunology*, **2009**, 27, 29-60	34.7	278
13	Structural organization of a full-length gp130/LIF-R cytokine receptor transmembrane complex. *Molecular Cell*, **2008**, 31, 737-48	17.6	76
12	BacMam system for high-level expression of recombinant soluble and membrane glycoproteins for structural studies. *Protein Expression and Purification*, **2008**, 62, 160-70	2	100
11	Molecular and structural basis of cytokine receptor pleiotropy in the interleukin-4/13 system. *Cell*, **2008**, 132, 259-72	56.2	362
10	Structural insight into pre-B cell receptor function. *Science*, **2007**, 316, 291-4	33.3	81
9	Polyspecificity of T cell and B cell receptor recognition. *Seminars in Immunology*, **2007**, 19, 216-24	10.7	159
8	Structural and mechanistic insights into nerve growth factor interactions with the TrkA and p75 receptors. *Neuron*, **2007**, 53, 25-38	13.9	239
7	How the T cell receptor sees antigen--a structural view. *Cell*, **2005**, 122, 333-6	56.2	118

6	Structure of the quaternary complex of interleukin-2 with its alpha, beta, and gammac receptors. *Science*, **2005**, 310, 1159-63	33.3	315
5	Compensatory energetic mechanisms mediating the assembly of signaling complexes between interleukin-2 and its alpha, beta, and gamma(c) receptors. *Journal of Molecular Biology*, **2004**, 339, 1115-28	6.5	62
4	Hexameric structure and assembly of the interleukin-6/IL-6 alpha-receptor/gp130 complex. *Science*, **2003**, 300, 2101-4	33.3	462
3	Allosteric activation of a spring-loaded natriuretic peptide receptor dimer by hormone. *Science*, **2001**, 293, 1657-62	33.3	142
2	Structure of an extracellular gp130 cytokine receptor signaling complex. *Science*, **2001**, 291, 2150-5	33.3	216
1	Facile method for screening clinical T cell receptors for off-target peptide-HLA reactivity		2