

# Jenny J Yang

## List of Publications by Year in descending order

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106  
papers

4,021  
citations

109264

35  
h-index

143943

57  
g-index

106  
all docs

106  
docs citations

106  
times ranked

4826  
citing authors

#	ARTICLE	IF	CITATIONS
1	Viral calciomics: Interplays between Ca <sup>2+</sup> and virus. <i>Cell Calcium</i> , 2009, 46, 1-17.	1.1	286
2	Identification of 70 calcium-sensing receptor mutations in hyper- and hypo-calcaemic patients: evidence for clustering of extracellular domain mutations at calcium-binding sites. <i>Human Molecular Genetics</i> , 2012, 21, 2768-2778.	1.4	154
3	Prediction of EF-hand calcium-binding proteins and analysis of bacterial EF-hand proteins. <i>Proteins: Structure, Function and Bioinformatics</i> , 2006, 65, 643-655.	1.5	136
4	Structural analysis, identification, and design of calcium-binding sites in proteins. <i>Proteins: Structure, Function and Bioinformatics</i> , 2002, 47, 344-356.	1.5	125
5	Conformational Properties of Four Peptides Spanning the Sequence of Hen Lysozyme. <i>Journal of Molecular Biology</i> , 1995, 252, 483-491.	2.0	121
6	Structural basis for regulation of human calcium-sensing receptor by magnesium ions and an unexpected tryptophan derivative co-agonist. <i>Science Advances</i> , 2016, 2, e1600241.	4.7	116
7	Multiple Ca <sup>2+</sup> -Binding Sites in the Extracellular Domain of the Ca <sup>2+</sup> -Sensing Receptor Corresponding to Cooperative Ca <sup>2+</sup> Response. <i>Biochemistry</i> , 2009, 48, 388-398.	1.2	115
8	Rational Design of Protein-Based MRI Contrast Agents. <i>Journal of the American Chemical Society</i> , 2008, 130, 9260-9267.	6.6	111
9	Probing Site-Specific Calmodulin Calcium and Lanthanide Affinity by Grafting. <i>Journal of the American Chemical Society</i> , 2005, 127, 3743-3750.	6.6	96
10	Design and application of a class of sensors to monitor Ca <sup>2+</sup> dynamics in high Ca <sup>2+</sup> concentration cellular compartments. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 16265-16270.	3.3	96
11	Identification and Dissection of Ca <sup>2+</sup> -binding Sites in the Extracellular Domain of Ca <sup>2+</sup> -sensing Receptor. <i>Journal of Biological Chemistry</i> , 2007, 282, 19000-19010.	1.6	93
12	Biochemical and Biophysical Investigation of the Brain-derived Neurotrophic Factor Mimetic 7,8-Dihydroxyflavone in the Binding and Activation of the TrkB Receptor. <i>Journal of Biological Chemistry</i> , 2014, 289, 27571-27584.	1.6	88
13	Identification of the Calmodulin Binding Domain of Connexin 43. <i>Journal of Biological Chemistry</i> , 2007, 282, 35005-35017.	1.6	79
14	Protein MRI contrast agent with unprecedented metal selectivity and sensitivity for liver cancer imaging. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 6607-6612.	3.3	78
15	Calciomics: integrative studies of Ca <sup>2+</sup> -binding proteins and their interactomes in biological systems. <i>Metallomics</i> , 2013, 5, 29-42.	1.0	77
16	Pyruvate Kinase M2 in Blood Circulation Facilitates Tumor Growth by Promoting Angiogenesis. <i>Journal of Biological Chemistry</i> , 2014, 289, 25812-25821.	1.6	67
17	Metal toxicity and opportunistic binding of Pb <sup>2+</sup> in proteins. <i>Journal of Inorganic Biochemistry</i> , 2013, 125, 40-49.	1.5	66
18	Structural differences between Pb <sup>2+</sup> and Ca <sup>2+</sup> -binding sites in proteins: Implications with respect to toxicity. <i>Journal of Inorganic Biochemistry</i> , 2008, 102, 1901-1909.	1.5	63

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19	Predicting calcium-binding sites in proteins—A graph theory and geometry approach. <i>Proteins: Structure, Function and Bioinformatics</i> , 2006, 64, 34-42.	1.5	62
20	Rational Design of a Calcium-Binding Protein. <i>Journal of the American Chemical Society</i> , 2003, 125, 6165-6171.	6.6	60
21	Design of a Calcium-Binding Protein with Desired Structure in a Cell Adhesion Molecule. <i>Journal of the American Chemical Society</i> , 2005, 127, 2085-2093.	6.6	60
22	Calcium Dynamics Mediated by the Endoplasmic/Sarcoplasmic Reticulum and Related Diseases. <i>International Journal of Molecular Sciences</i> , 2017, 18, 1024.	1.8	59
23	Early detection and staging of chronic liver diseases with a protein MRI contrast agent. <i>Nature Communications</i> , 2019, 10, 4777.	5.8	54
24	Gating of connexin 43 gap junctions by a cytoplasmic loop calmodulin binding domain. <i>American Journal of Physiology - Cell Physiology</i> , 2012, 302, C1548-C1556.	2.1	53
25	Statistical analysis of structural characteristics of protein Ca <sup>2+</sup> -binding sites. <i>Journal of Biological Inorganic Chemistry</i> , 2008, 13, 1169-1181.	1.1	52
26	Towards predicting Ca <sup>2+</sup> -binding sites with different coordination numbers in proteins with atomic resolution. <i>Proteins: Structure, Function and Bioinformatics</i> , 2009, 75, 787-798.	1.5	51
27	Defining potential roles of Pb <sup>2+</sup> in neurotoxicity from a calciomics approach. <i>Metallomics</i> , 2016, 8, 563-578.	1.0	50
28	Gap junction regulation by calmodulin. <i>FEBS Letters</i> , 2014, 588, 1430-1438.	1.3	48
29	Molecular Basis of the Extracellular Ligands Mediated Signaling by the Calcium Sensing Receptor. <i>Frontiers in Physiology</i> , 2016, 7, 441.	1.3	48
30	Developing Sensors for Real-Time Measurement of High Ca <sup>2+</sup> Concentrations. <i>Biochemistry</i> , 2007, 46, 12275-12288.	1.2	45
31	Molecular interaction and functional regulation of connexin50 gap junctions by calmodulin. <i>Biochemical Journal</i> , 2011, 435, 711-722.	1.7	45
32	The calcium sensing receptor: from calcium sensing to signaling. <i>Science China Life Sciences</i> , 2015, 58, 14-27.	2.3	44
33	Calmodulin Mediates the Ca <sup>2+</sup> -Dependent Regulation of Cx44 Gap Junctions. <i>Biophysical Journal</i> , 2009, 96, 2832-2848.	0.2	42
34	HER2 Targeted Molecular MR Imaging Using a De Novo Designed Protein Contrast Agent. <i>PLoS ONE</i> , 2011, 6, e18103.	1.1	40
35	Design of a novel class of protein-based magnetic resonance imaging contrast agents for the molecular imaging of cancer biomarkers. <i>Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology</i> , 2013, 5, 163-179.	3.3	37
36	Metal binding affinity and structural properties of an isolated EF-loop in a scaffold protein. <i>Protein Engineering, Design and Selection</i> , 2001, 14, 1001-1013.	1.0	35

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37	Prostate-specific membrane antigen targeted protein contrast agents for molecular imaging of prostate cancer by MRI. <i>Nanoscale</i> , 2016, 8, 12668-12682.	2.8	34
38	A single EF-hand isolated from STIM1 forms dimer in the absence and presence of Ca <sup>2+</sup> . <i>FEBS Journal</i> , 2009, 276, 5589-5597.	2.2	33
39	Obtaining Site-Specific Calcium-Binding Affinities Of Calmodulin. <i>Protein and Peptide Letters</i> , 2003, 10, 331-345.	0.4	32
40	Rational design of a protein that binds integrin $\alpha_5\beta_3$ outside the ligand binding site. <i>Nature Communications</i> , 2016, 7, 11675.	5.8	31
41	Role of Calcium in Metalloenzymes: Effects of Calcium Removal on the Axial Ligation Geometry and Magnetic Properties of the Catalytic Diheme Center in MauG. <i>Biochemistry</i> , 2012, 51, 1586-1597.	1.2	30
42	Design of ProCAs (Protein-Based Gd <sup>3+</sup> MRI Contrast Agents) with High Dose Efficiency and Capability for Molecular Imaging of Cancer Biomarkers. <i>Medicinal Research Reviews</i> , 2014, 34, 1070-1099.	5.0	30
43	Identification of an L-Phenylalanine Binding Site Enhancing the Cooperative Responses of the Calcium-sensing Receptor to Calcium. <i>Journal of Biological Chemistry</i> , 2014, 289, 5296-5309.	1.6	30
44	Identification of a Ca <sup>2+</sup> -Binding Domain in the Rubella Virus Nonstructural Protease. <i>Journal of Virology</i> , 2007, 81, 7517-7528.	1.5	29
45	Designing Protease Sensors for Real-Time Imaging of Trypsin Activation in Pancreatic Cancer Cells. <i>Biochemistry</i> , 2009, 48, 3519-3526.	1.2	28
46	Simultaneously targeting cancer-associated fibroblasts and angiogenic vessel as a treatment for TNBC. <i>Journal of Experimental Medicine</i> , 2021, 218, .	4.2	28
47	Elucidation of a Novel Extracellular Calcium-binding Site on Metabotropic Glutamate Receptor 1 $\pm$ (mGluR1 $\pm$ ) That Controls Receptor Activation*. <i>Journal of Biological Chemistry</i> , 2010, 285, 33463-33474.	1.6	27
48	Calmodulin Regulates Ca <sup>2+</sup> -sensing Receptor-mediated Ca <sup>2+</sup> Signaling and Its Cell Surface Expression. <i>Journal of Biological Chemistry</i> , 2010, 285, 35919-35931.	1.6	27
49	Structural Aspects and Prediction of Calmodulin-Binding Proteins. <i>International Journal of Molecular Sciences</i> , 2021, 22, 308.	1.8	27
50	Structural Biology of the Cell Adhesion Protein CD2 Alternatively Folded States and Structure-function Relation. <i>Current Protein and Peptide Science</i> , 2001, 2, 1-17.	0.7	26
51	Analysis and prediction of calcium-binding pockets from apo-protein structures exhibiting calcium-induced localized conformational changes. <i>Protein Science</i> , 2010, 19, 1180-1190.	3.1	26
52	Direct visualization of interaction between calmodulin and connexin45. <i>Biochemical Journal</i> , 2017, 474, 4035-4051.	1.7	26
53	A grafting approach to obtain site-specific metal-binding properties of EF-hand proteins. <i>Protein Engineering, Design and Selection</i> , 2003, 16, 429-434.	1.0	25
54	Protein-Based MRI Contrast Agents for Molecular Imaging of Prostate Cancer. <i>Molecular Imaging and Biology</i> , 2011, 13, 416-423.	1.3	24

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55	PEGylation of protein-based MRI contrast agents improves relaxivities and biocompatibilities. <i>Journal of Inorganic Biochemistry</i> , 2012, 107, 111-118.	1.5	24
56	Direct Determination of Multiple Ligand Interactions with the Extracellular Domain of the Calcium-sensing Receptor. <i>Journal of Biological Chemistry</i> , 2014, 289, 33529-33542.	1.6	23
57	Calcium and lanthanide affinity of the EF-loops from the C-terminal domain of calmodulin. <i>Journal of Inorganic Biochemistry</i> , 2005, 99, 1376-1383.	1.5	22
58	Extracellular Calcium Modulates Actions of Orthosteric and Allosteric Ligands on Metabotropic Glutamate Receptor 1 $\pm$ . <i>Journal of Biological Chemistry</i> , 2014, 289, 1649-1661.	1.6	22
59	GRPR-targeted Protein Contrast Agents for Molecular Imaging of Receptor Expression in Cancers by MRI. <i>Scientific Reports</i> , 2015, 5, 16214.	1.6	22
60	Molecular imaging of EGFR/HER2 cancer biomarkers by protein MRI contrast agents. <i>Journal of Biological Inorganic Chemistry</i> , 2014, 19, 259-270.	1.1	21
61	Fast kinetics of calcium signaling and sensor design. <i>Current Opinion in Chemical Biology</i> , 2015, 27, 90-97.	2.8	21
62	Interactome Analysis Reveals Regulator of G Protein Signaling 14 (RGS14) is a Novel Calcium/Calmodulin (Ca <sup>2+</sup> /CaM) and CaM Kinase II (CaMKII) Binding Partner. <i>Journal of Proteome Research</i> , 2018, 17, 1700-1711.	1.8	21
63	Modulation of Cancer-Associated Fibrotic Stroma by An Integrin $\alpha$ v $\beta$ 3 Targeting Protein for Pancreatic Cancer Treatment. <i>Cellular and Molecular Gastroenterology and Hepatology</i> , 2021, 11, 161-179.	2.3	20
64	Precision detection of liver metastasis by collagen-targeted protein MRI contrast agent. <i>Biomaterials</i> , 2019, 224, 119478.	5.7	19
65	Rapid subcellular calcium responses and dynamics by calcium sensor G-CatchER+. <i>IScience</i> , 2021, 24, 102129.	1.9	19
66	Using Protein Design To Dissect the Effect of Charged Residues on Metal Binding and Protein Stability. <i>Biochemistry</i> , 2006, 45, 5848-5856.	1.2	18
67	Site-specific modification of calmodulin Ca <sup>2+</sup> affinity tunes the skeletal muscle ryanodine receptor activation profile. <i>Biochemical Journal</i> , 2010, 432, 89-99.	1.7	18
68	Role of Ca <sup>2+</sup> and L-Phe in Regulating Functional Cooperativity of Disease-Associated $\alpha$ 1C $\epsilon$ Toggle $\alpha$ Calcium-Sensing Receptor Mutations. <i>PLoS ONE</i> , 2014, 9, e113622.	1.1	18
69	Effect of Ca <sup>2+</sup> on the Steady-State and Time-Resolved Emission Properties of the Genetically Encoded Fluorescent Sensor CatchER. <i>Journal of Physical Chemistry B</i> , 2015, 119, 2103-2111.	1.2	18
70	Electronic Cigarette Exposure Enhances Lung Inflammatory and Fibrotic Responses in COPD Mice. <i>Frontiers in Pharmacology</i> , 2021, 12, 726586.	1.6	18
71	Chemokine receptor 4 targeted protein MRI contrast agent for early detection of liver metastases. <i>Science Advances</i> , 2020, 6, eaav7504.	4.7	17
72	Pyruvate kinase M2 regulates fibrosis development and progression by controlling glycine auxotrophy in myofibroblasts. <i>Theranostics</i> , 2021, 11, 9331-9341.	4.6	17

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73	The Effects of Ca <sup>2+</sup> Binding on the Dynamic Properties of a Designed Ca <sup>2+</sup> -Binding Protein,. <i>Biochemistry</i> , 2005, 44, 8267-8273.	1.2	16
74	Rational design of a novel calcium-binding site adjacent to the ligand-binding site on CD2 increases its CD48 affinity. <i>Protein Science</i> , 2008, 17, 439-449.	3.1	16
75	Predicting Ca <sup>2+</sup> -binding sites using refined carbon clusters. <i>Proteins: Structure, Function and Bioinformatics</i> , 2012, 80, 2666-2679.	1.5	15
76	Residual sarcoplasmic reticulum Ca <sup>2+</sup> concentration after Ca <sup>2+</sup> release in skeletal myofibers from young adult and old mice. <i>Pflügers Archiv European Journal of Physiology</i> , 2012, 463, 615-624.	1.3	15
77	Radiologic and Histopathologic Correlation of Different Growth Patterns of Metastatic Uveal Melanoma to the Liver. <i>Ophthalmology</i> , 2018, 125, 597-605.	2.5	15
78	Design of Calcium-Binding Proteins to Sense Calcium. <i>Molecules</i> , 2020, 25, 2148.	1.7	15
79	Molecular imaging of extracellular matrix proteins with targeted probes using magnetic resonance imaging. <i>Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology</i> , 2020, 12, e1622.	3.3	15
80	Prostate Cancer Metastatic to Bone has Higher Expression of the Calcium-Sensing Receptor (CaSR) than Primary Prostate Cancer. <i>Receptors &amp; Clinical Investigation</i> , 2014, 1, .	0.9	14
81	Myoplasmic resting Ca <sup>2+</sup> regulation by ryanodine receptors is under the control of a novel Ca <sup>2+</sup> -binding region of the receptor. <i>Biochemical Journal</i> , 2014, 460, 261-271.	1.7	13
82	Metal-binding studies for a de novo designed calcium-binding protein. <i>Protein Engineering, Design and Selection</i> , 2002, 15, 571-574.	1.0	12
83	Rational design of a conformation-switchable Ca <sup>2+</sup> -and Tb <sup>3+</sup> -binding protein without the use of multiple coupled metal-binding sites. <i>FEBS Journal</i> , 2008, 275, 5048-5061.	2.2	12
84	Inverse tuning of metal binding affinity and protein stability by altering charged coordination residues in designed calcium binding proteins. <i>PMC Biophysics</i> , 2009, 2, 11.	2.2	12
85	Structural mechanism of cooperative regulation of calcium-sensing receptor-mediated cellular signaling. <i>Current Opinion in Physiology</i> , 2020, 17, 269-277.	0.9	10
86	Targeting integrin $\alpha$ <sub>v</sub> $\beta$ <sub>3</sub> by a rationally designed protein for chronic liver disease treatment. <i>Communications Biology</i> , 2021, 4, 1087.	2.0	10
87	Tuning Protein Dynamics to Sense Rapid Endoplasmic Reticulum Calcium Dynamics. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 23289-23298.	7.2	10
88	Towards the Molecular Imaging of Prostate Cancer Biomarkers Using Protein-based MRI Contrast Agents. <i>Current Protein and Peptide Science</i> , 2016, 17, 519-533.	0.7	10
89	Integration of Diverse Research Methods to Analyze and Engineer Ca <sup>2+</sup> - Binding Proteins: From Prediction to Production. <i>Current Bioinformatics</i> , 2010, 5, 68-80.	0.7	8
90	Extracellular calcium alters calcium-sensing receptor network integrating intracellular calcium-signaling and related key pathway. <i>Scientific Reports</i> , 2021, 11, 20576.	1.6	8

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91	Temperature-Induced Formation of a Non-Native Intermediate State of the All- $\beta$ Sheet Protein CD2. <i>Cell Biochemistry and Biophysics</i> , 2002, 36, 01-18.	0.9	7
92	Amyloid Fibril Formation by a Domain of Rat Cell Adhesion Molecule. <i>Cell Biochemistry and Biophysics</i> , 2006, 44, 241-250.	0.9	7
93	The hills and valleys of calcium signaling. <i>Science China Life Sciences</i> , 2016, 59, 743-748.	2.3	7
94	Molecular Basis for Modulation of Metabotropic Glutamate Receptors and Their Drug Actions by Extracellular Ca <sup>2+</sup> . <i>International Journal of Molecular Sciences</i> , 2017, 18, 672.	1.8	7
95	Structural basis for a hand-like site in the calcium sensor CatchER with fast kinetics. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2013, 69, 2309-2319.	2.5	6
96	Monitoring ER/SR Calcium Release with the Targeted Ca <sup>2+</sup> Sensor CatchER. <i>Journal of Visualized Experiments</i> , 2017, , .	0.2	6
97	Extracellular PKM2 facilitates organ-tissue fibrosis progression. <i>IScience</i> , 2021, 24, 103165.	1.9	6
98	Calcium and Viruses. , 2013, , 415-424.		6
99	Probing Ca <sup>2+</sup> -Binding Capability of Viral Proteins with the EF-Hand Motif by Grafting Approach. <i>Methods in Molecular Biology</i> , 2013, 963, 37-53.	0.4	6
100	Monitoring channel activities of proteoliposomes with SecA and Cx26 gap junction in single oocytes. <i>Analytical Biochemistry</i> , 2015, 480, 58-66.	1.1	4
101	ProCA1.GRPR: a new imaging agent in cancer detection. <i>Biomarkers in Medicine</i> , 2016, 10, 449-452.	0.6	4
102	Tuning Protein Dynamics to Sense Rapid Endoplasmic Reticulum Calcium Dynamics. <i>Angewandte Chemie</i> , 2021, 133, 23477.	1.6	2
103	Non-invasive detection and complementary diagnosis of liver metastases via chemokine receptor 4 imaging. <i>Cancer Gene Therapy</i> , 2022, 29, 1827-1839.	2.2	2
104	Designing Calcium-Binding Proteins for Molecular MR Imaging. <i>Methods in Molecular Biology</i> , 2019, 1929, 111-125.	0.4	1
105	Calmodulin (CALM1). , 2017, , 1-10.		1
106	Redox-Inactive Metalloproteins and Metalloenzymes. , 2021, , 878-899.		0