

Jianxing Song

List of Publications by Year in descending order

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106
papers

3,814
citations

136740

32
h-index

168136

53
g-index

132
all docs

132
docs citations

132
times ranked

3943
citing authors

#	ARTICLE	IF	CITATIONS
1	<scp>CTD</scp> of <scp>SARS-CoV-2</scp>'s N protein is a cryptic domain for binding <scp>ATP</scp> and nucleic acid that interplay in modulating phase separation. <i>Protein Science</i> , 2022, 31, 345-356.	3.1	18
2	Myricetin Allosterically Inhibits the Dengue NS2B-NS3 Protease by Disrupting the Active and Locking the Inactive Conformations. <i>ACS Omega</i> , 2022, 7, 2798-2808.	1.6	6
3	A review of the effects of ATP and hydroxychloroquine on the phase separation of the SARS-CoV-2 nucleocapsid protein. <i>Biophysical Reviews</i> , 2022, 14, 709-715.	1.5	4
4	Tethering-induced destabilization and ATP-binding for tandem RRM domains of ALS-causing TDP-43 and hnRNPA1. <i>Scientific Reports</i> , 2021, 11, 1034.	1.6	12
5	ATP biphasically modulates LLPS of SARS-CoV-2 nucleocapsid protein and specifically binds its RNA-binding domain. <i>Biochemical and Biophysical Research Communications</i> , 2021, 541, 50-55.	1.0	36
6	Adenosine triphosphate energy independently controls protein homeostasis with unique structure and diverse mechanisms. <i>Protein Science</i> , 2021, 30, 1277-1293.	3.1	38
7	ATP biphasically modulates LLPS of TDP-43 PLD by specifically binding arginine residues. <i>Communications Biology</i> , 2021, 4, 714.	2.0	21
8	Structural basis of anti-SARS-CoV-2 activity of HCO: specific binding to N protein to disrupt its interaction with nucleic acids and LLPS. <i>QRB Discovery</i> , 2021, 2, .	0.6	1
9	ATP binds nucleic-acid-binding domains beyond RRM fold. <i>Biochemical and Biophysical Research Communications</i> , 2020, 522, 826-831.	1.0	5
10	ATP is a cryptic binder of TDP-43 RRM domains to enhance stability and inhibit ALS/AD-associated fibrillation. <i>Biochemical and Biophysical Research Communications</i> , 2020, 522, 247-253.	1.0	33
11	ATP differentially antagonizes the crowding-induced destabilization of human β S-crystallin and its four cataract-causing mutants. <i>Biochemical and Biophysical Research Communications</i> , 2020, 533, 913-918.	1.0	6
12	Cataract-causing G18V eliminates the antagonization by ATP against the crowding-induced destabilization of human β S-crystallin. <i>Biochemical and Biophysical Research Communications</i> , 2020, 530, 554-560.	1.0	4
13	ATP antagonizes the crowding-induced destabilization of the human eye-lens protein β S-crystallin. <i>Biochemical and Biophysical Research Communications</i> , 2020, 526, 1112-1117.	1.0	18
14	ALS-causing D169G mutation disrupts the ATP-binding capacity of TDP-43 RRM1 domain. <i>Biochemical and Biophysical Research Communications</i> , 2020, 524, 459-464.	1.0	16
15	Curcumin Allosterically Inhibits the Dengue NS2B-NS3 Protease by Disrupting Its Active Conformation. <i>ACS Omega</i> , 2020, 5, 25677-25686.	1.6	28
16	ATP binds and inhibits the neurodegeneration-associated fibrillization of the FUS RRM domain. <i>Communications Biology</i> , 2019, 2, 223.	2.0	65
17	A unified mechanism for LLPS of ALS/FTLD-causing FUS as well as its modulation by ATP and oligonucleic acids. <i>PLoS Biology</i> , 2019, 17, e3000327.	2.6	91
18	A novel mechanism for ATP to enhance the functional oligomerization of TDP-43 by specific binding. <i>Biochemical and Biophysical Research Communications</i> , 2019, 514, 809-814.	1.0	16

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19	Structurally- and dynamically-driven allostery of the chymotrypsin-like proteases of SARS, Dengue and Zika viruses. <i>Progress in Biophysics and Molecular Biology</i> , 2019, 143, 52-66.	1.4	22
20	TDP-43 NTD can be induced while CTD is significantly enhanced by ssDNA to undergo liquid-liquid phase separation. <i>Biochemical and Biophysical Research Communications</i> , 2018, 499, 189-195.	1.0	36
21	TMEM106B, a risk factor for FTL and aging, has an intrinsically disordered cytoplasmic domain. <i>PLoS ONE</i> , 2018, 13, e0205856.	1.1	6
22	ATP enhances at low concentrations but dissolves at high concentrations liquid-liquid phase separation (LLPS) of ALS/FTD-causing FUS. <i>Biochemical and Biophysical Research Communications</i> , 2018, 504, 545-551.	1.0	60
23	Environment-transformable sequenceâ€“structure relationship: a general mechanism for proteotoxicity. <i>Biophysical Reviews</i> , 2018, 10, 503-516.	1.5	10
24	ALS-causing cleavages of TDP-43 abolish its RRM2 structure and unlock CTD for enhanced aggregation and toxicity. <i>Biochemical and Biophysical Research Communications</i> , 2017, 485, 826-831.	1.0	12
25	RRM domain of ALS/FTD-causing FUS characteristic of irreversible unfolding spontaneously self-assembles into amyloid fibrils. <i>Scientific Reports</i> , 2017, 7, 1043.	1.6	38
26	ALS-causing profilin-1-mutant forms a non-native helical structure in membrane environments. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2017, 1859, 2161-2170.	1.4	19
27	Kinetoplastid membrane proteinâ€“1 adopts a fourâ€“helix bundle fold in <sc>DPC</sc> micelle. <i>FEBS Letters</i> , 2017, 591, 3793-3804.	1.3	5
28	Solution conformations of Zika NS2B-NS3pro and its inhibition by natural products from edible plants. <i>PLoS ONE</i> , 2017, 12, e0180632.	1.1	78
29	Transforming Cytosolic Proteins into â€œInsolubleâ€•and Membrane-toxic Forms Triggering Diseases/Aging by Genetic, Pathological or Environmental Factors. <i>Protein and Peptide Letters</i> , 2017, 24, 294-306.	0.4	10
30	ALS-Causing Mutations Significantly Perturb the Self-Assembly and Interaction with Nucleic Acid of the Intrinsically Disordered Prion-Like Domain of TDP-43. <i>PLoS Biology</i> , 2016, 14, e1002338.	2.6	160
31	C-Terminal Auto-Regulatory Motif of Hepatitis C Virus NS5B Interacts with Human VAPB-MSP to Form a Dynamic Replication Complex. <i>PLoS ONE</i> , 2016, 11, e0147278.	1.1	11
32	Germline replacement by blastula cell transplantation in the fish medaka. <i>Scientific Reports</i> , 2016, 6, 29658.	1.6	15
33	Inter-domain interactions of TDP-43 as decoded by NMR. <i>Biochemical and Biophysical Research Communications</i> , 2016, 473, 614-619.	1.0	29
34	SALS-linked WT-SOD1 adopts a highly similar helical conformation as FALS-causing L126Z-SOD1 in a membrane environment. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2016, 1858, 2223-2230.	1.4	19
35	Dnd Is a Critical Specifier of Primordial Germ Cells in the Medaka Fish. <i>Stem Cell Reports</i> , 2016, 6, 411-421.	2.3	56
36	NMR and MD Studies Reveal That the Isolated Dengue NS3 Protease Is an Intrinsically Disordered Chymotrypsin Fold Which Absolutely Requests NS2B for Correct Folding and Functional Dynamics. <i>PLoS ONE</i> , 2015, 10, e0134823.	1.1	42

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37	A monoclonal antibody binds to threonine 49 in the non-structural 1 protein of influenza A virus and interferes with its ability to modulate viral replication. <i>Antiviral Research</i> , 2015, 116, 55-61.	1.9	5
38	Dynamic Principle for Designing Antagonistic/Agonistic Molecules for EphA4 Receptor, the Only Known ALS Modifier. <i>ACS Chemical Biology</i> , 2015, 10, 372-378.	1.6	43
39	Mechanism for transforming cytosolic SOD1 into integral membrane proteins of organelles by ALS-causing mutations. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2015, 1848, 1-7.	1.4	27
40	Insoluble Protein Characterization by Circular Dichroism (CD) Spectroscopy and Nuclear Magnetic Resonance (NMR). <i>Methods in Molecular Biology</i> , 2015, 1258, 371-385.	0.4	2
41	Dynamically-Driven Enhancement of the Catalytic Machinery of the SARS 3C-Like Protease by the S284-T285-I286/A Mutations on the Extra Domain. <i>PLoS ONE</i> , 2014, 9, e101941.	1.1	71
42	Disruption of FAT10-MAD2 binding inhibits tumor progression. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, E5282-91.	3.3	48
43	TDP-43 N terminus encodes a novel ubiquitin-like fold and its unfolded form in equilibrium that can be shifted by binding to ssDNA. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 18619-18624.	3.3	128
44	Structural study of hNck2 SH3 domain protein in solution by circular dichroism and X-ray solution scattering. <i>Biophysical Chemistry</i> , 2013, 175-176, 39-46.	1.5	4
45	ALS-causing P56S mutation and splicing variation on the hVAPB MSP domain transform its β^2 -sandwich fold into lipid-interacting helical conformations. <i>Biochemical and Biophysical Research Communications</i> , 2013, 431, 398-403.	1.0	17
46	NMR binding and crystal structure reveal that intrinsically-unstructured regulatory domain auto-inhibits PAK4 by a mechanism different from that of PAK1. <i>Biochemical and Biophysical Research Communications</i> , 2013, 438, 169-174.	1.0	21
47	Resolving the paradox for protein aggregation diseases: NMR structure and dynamics of the membrane-embedded P56S-MSP causing ALS imply a common mechanism for aggregation-prone proteins to attack membranes. <i>F1000Research</i> , 2013, 2, 221.	0.8	7
48	Why do proteins aggregate? - Intrinsically insoluble proteins and -dark mediators- revealed by studies on -insoluble proteins- solubilized in pure water. <i>F1000Research</i> , 2013, 2, 94.	0.8	40
49	Unique Structure and Dynamics of the EphA5 Ligand Binding Domain Mediate Its Binding Specificity as Revealed by X-ray Crystallography, NMR and MD Simulations. <i>PLoS ONE</i> , 2013, 8, e74040.	1.1	14
50	Distinctive binding of three antagonistic peptides to the ephrin-binding pocket of the EphA4 receptor. <i>Biochemical Journal</i> , 2012, 445, 47-56.	1.7	47
51	1PT157 Structural properties and folding process of hNck2 SH3 domain(The 50th Annual Meeting of the) Tj ETQq1_1_0.784314 rgBT 0		
52	The variable N-terminal region of DDX5 contains structural elements and auto-inhibits its interaction with NS5B of hepatitis C virus. <i>Biochemical Journal</i> , 2012, 446, 37-46.	1.7	13
53	Fusion Gene Vectors Allowing for Simultaneous Drug Selection, Cell Labeling, and Reporter Assay in Vitro and in Vivo. <i>Analytical Chemistry</i> , 2012, 84, 987-993.	3.2	24
54	Interordinal Chimera Formation Between Medaka and Zebrafish for Analyzing Stem Cell Differentiation. <i>Stem Cells and Development</i> , 2012, 21, 2333-2341.	1.1	27

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55	A β -sheet structure interacting peptide for intracellular protein delivery into human pluripotent stem cells and their derivatives. <i>Biochemical and Biophysical Research Communications</i> , 2012, 421, 616-620.	1.0	0
56	Mitf is a transcriptional activator of medaka germ genes in culture. <i>Biochimie</i> , 2012, 94, 759-767.	1.3	15
57	VAPC, an Human Endogenous Inhibitor for Hepatitis C Virus (HCV) Infection, Is Intrinsically Unstructured but Forms a "Fuzzy Complex" with HCV NS5B. <i>PLoS ONE</i> , 2012, 7, e40341.	1.1	12
58	A Small Molecule Agonist of EphA2 Receptor Tyrosine Kinase Inhibits Tumor Cell Migration In Vitro and Prostate Cancer Metastasis In Vivo. <i>PLoS ONE</i> , 2012, 7, e42120.	1.1	103
59	"Dark Mediators" of Proteins as Revealed by NMR in Water: Residue-selective Anion Bindings that are Masked by Pre-existing Buffer. <i>Nature Precedings</i> , 2012, , .	0.1	0
60	Solubilization of M2 Transmembrane Peptide of Influenza A in Pure Water: Implications for Emergence of Proteins and Protein-embedded Primeval Membranes in Unsalted Oceans. <i>Nature Precedings</i> , 2012, , .	0.1	0
61	Protein dynamics at Eph receptor-ligand interfaces as revealed by crystallography, NMR and MD simulations. <i>BMC Biophysics</i> , 2012, 5, 2.	4.4	22
62	Microfibers Fabricated by Non-covalent Assembly of Peptide and DNA for Viral Vector Encapsulation and Cancer Therapy. <i>Advanced Materials</i> , 2012, 24, 3280-3284.	11.1	15
63	Intrinsically Unstructured Domain 3 of Hepatitis C Virus NS5A Forms a "Fuzzy Complex" with VAPB-MSP Domain Which Carries ALS-Causing Mutations. <i>PLoS ONE</i> , 2012, 7, e39261.	1.1	39
64	Structural, Stability, Dynamic and Binding Properties of the ALS-Causing T46I Mutant of the hVAPB MSP Domain as Revealed by NMR and MD Simulations. <i>PLoS ONE</i> , 2011, 6, e27072.	1.1	28
65	A Disalicylic Acid-Furanyl Derivative Inhibits Ephrin Binding to a Subset of Eph Receptors. <i>Chemical Biology and Drug Design</i> , 2011, 78, 667-678.	1.5	39
66	Selective and specific ion binding on proteins at physiologically-relevant concentrations. <i>FEBS Letters</i> , 2011, 585, 3126-3132.	1.3	20
67	Dynamically-Driven Inactivation of the Catalytic Machinery of the SARS 3C-Like Protease by the N214A Mutation on the Extra Domain. <i>PLoS Computational Biology</i> , 2011, 7, e1001084.	1.5	49
68	Structure of the <i>Arabidopsis thaliana</i> DCL4 DUF283 domain reveals a noncanonical double-stranded RNA-binding fold for protein-protein interaction. <i>Rna</i> , 2010, 16, 474-481.	1.6	84
69	Structural Characterization of the EphA4-Ephrin-B2 Complex Reveals New Features Enabling Eph-Ephrin Binding Promiscuity. <i>Journal of Biological Chemistry</i> , 2010, 285, 644-654.	1.6	84
70	Elimination of the Native Structure and Solubility of the hVAPB MSP Domain by the Pro56Ser Mutation That Causes Amyotrophic Lateral Sclerosis. <i>Biochemistry</i> , 2010, 49, 3887-3897.	1.2	43
71	Structural characterization reveals that viperin is a radical S-adenosyl-l-methionine (SAM) enzyme. <i>Biochemical and Biophysical Research Communications</i> , 2010, 391, 1390-1395.	1.0	79
72	Insight into "insoluble proteins" with pure water. <i>FEBS Letters</i> , 2009, 583, 953-959.	1.3	51

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73	NMR studies reveal a novel mode for hFADD to bind with the unstructured hRTN3 which initiates the ER-stress activated apoptosis. <i>Biochemical and Biophysical Research Communications</i> , 2009, 383, 433-439.	1.0	5
74	Insights into Protein Aggregation by NMR Characterization of Insoluble SH3 Mutants Solubilized in Salt-Free Water. <i>PLoS ONE</i> , 2009, 4, e7805.	1.1	20
75	NMR structure and dynamics of human ephrinâ€B2 ectodomain: The functionally critical Câ€D and Gâ€H loops are highly dynamic in solution. <i>Proteins: Structure, Function and Bioinformatics</i> , 2008, 72, 1019-1029.	1.5	20
76	Identification, recombinant production and structural characterization of four silk proteins from the Asiatic honeybee <i>Apis cerana</i> . <i>Biomaterials</i> , 2008, 29, 2820-2828.	5.7	44
77	NMR Evidence for Forming Highly Populated Helical Conformations in the Partially Folded hNck2 SH3 Domain. <i>Biophysical Journal</i> , 2008, 95, 4803-4812.	0.2	18
78	A novel nucleolar transcriptional activator ApLLP for long-term memory formation is intrinsically unstructured but functionally active. <i>Biochemical and Biophysical Research Communications</i> , 2008, 366, 585-591.	1.0	17
79	Rational design, solution conformation and identification of functional residues of the soluble and structured Nogo-54, which mimics Nogo-66 in inhibiting the CNS neurite outgrowth. <i>Biochemical and Biophysical Research Communications</i> , 2008, 373, 498-503.	1.0	6
80	Identification and Structural Mechanism for a Novel Interaction between a Ubiquitin Ligase WWP1 and Nogo-A, a Key Inhibitor for Central Nervous System Regeneration. <i>Biochemistry</i> , 2008, 47, 13647-13658.	1.2	19
81	Crystal Structure and NMR Binding Reveal That Two Small Molecule Antagonists Target the High Affinity Ephrin-binding Channel of the EphA4 Receptor. <i>Journal of Biological Chemistry</i> , 2008, 283, 29473-29484.	1.6	66
82	Mechanism for Controlling the Dimer-Monomer Switch and Coupling Dimerization to Catalysis of the Severe Acute Respiratory Syndrome Coronavirus 3C-Like Protease. <i>Journal of Virology</i> , 2008, 82, 4620-4629.	1.5	137
83	Nogo-B receptor possesses an intrinsically unstructured ectodomain and a partially folded cytoplasmic domain. <i>Biochemical and Biophysical Research Communications</i> , 2007, 360, 128-134.	1.0	16
84	The N- and C-termini of the human Nogo molecules are intrinsically unstructured: Bioinformatics, CD, NMR characterization, and functional implications. <i>Proteins: Structure, Function and Bioinformatics</i> , 2007, 68, 100-108.	1.5	38
85	NMR Assignment of the Human EphrinB2 Ectodomain. <i>Journal of Biomolecular NMR</i> , 2007, 38, 171-171.	1.6	1
86	Resurrecting Abandoned Proteins with Pure Water: CD and NMR Studies of Protein Fragments Solubilized in Salt-Free Water. <i>Biophysical Journal</i> , 2006, 91, 4201-4209.	0.2	47
87	Structural Insight into the Binding Diversity between the Human Nck2 SH3 Domains and Proline-Rich Proteinsâ€Œ. <i>Biochemistry</i> , 2006, 45, 7171-7184.	1.2	36
88	The catalysis of the SARS 3C-like protease is under extensive regulation by its extra domain. <i>FEBS Journal</i> , 2006, 273, 1035-1045.	2.2	133
89	Nogo goes in the pure water: Solution structure of Nogo-60 and design of the structured and buffer-soluble Nogo-54 for enhancing CNS regeneration. <i>Protein Science</i> , 2006, 15, 1835-1841.	3.1	27
90	Identification of a Novel Nonstructural Protein, VP9, from White Spot Syndrome Virus: Its Structure Reveals a Ferredoxin Fold with Specific Metal Binding Sites. <i>Journal of Virology</i> , 2006, 80, 10419-10427.	1.5	29

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91	Structural Insight into the Binding Diversity between the Tyr-phosphorylated Human EphrinBs and Nck2 SH2 Domain. <i>Journal of Biological Chemistry</i> , 2005, 280, 19205-19212.	1.6	18
92	Molecular Mechanism Underlying the Thermal Stability and pH-induced Unfolding of CHABII. <i>Journal of Molecular Biology</i> , 2005, 348, 205-218.	2.0	35
93	Dissection Study on the Severe Acute Respiratory Syndrome 3C-like Protease Reveals the Critical Role of the Extra Domain in Dimerization of the Enzyme. <i>Journal of Biological Chemistry</i> , 2004, 279, 24765-24773.	1.6	166
94	Structural characterization of the human Nogo-A functional domains. <i>FEBS Journal</i> , 2004, 271, 3512-3522.	0.2	19
95	Tyrosine Phosphorylation of the Well Packed EphrinB Cytoplasmic $\hat{\Gamma}^2$ -Hairpin for Reverse Signaling. <i>Journal of Biological Chemistry</i> , 2003, 278, 24714-24720.	1.6	24
96	Solution Structure and Backbone Dynamics of the Functional Cytoplasmic Subdomain of Human Ephrin B2, a Cell-Surface Ligand with Bidirectional Signaling Properties. <i>Biochemistry</i> , 2002, 41, 10942-10949.	1.2	28
97	Stability of protein-bound conformations of bioactive peptides: The folded conformation of an epidermal growth factor-like thrombomodulin fragment is similar to that recognized by thrombin. <i>Biopolymers</i> , 2002, 65, 373-386.	1.2	2
98	A model of dynamic side-chain-side-chain interactions in the alpha-lactalbumin molten globule. <i>Protein Science</i> , 2001, 10, 55-62.	3.1	13
99	Molecular Interactions of the $\hat{\Gamma}^2$ Binding Domain of the Ste20p/PAK Family of Protein Kinases. <i>Journal of Biological Chemistry</i> , 2001, 276, 41205-41212.	1.6	14
100	The active-site residue Cys-29 is responsible for the neutral-pH inactivation and the refolding barrier of human cathepsin B. <i>FEBS Letters</i> , 2000, 475, 157-162.	1.3	18
101	A gradual disruption of tight side-chain packing: 2D ^1H -NMR characterization of acid-induced unfolding of CHABII. <i>Nature Structural Biology</i> , 1999, 6, 129-134.	9.7	36
102	NMR for the design of functional mimetics of protein-protein interactions: one key is in the building of bridges. <i>Biochemistry and Cell Biology</i> , 1998, 76, 177-188.	0.9	38
103	Contribution of individual residues to formation of the native-like tertiary topology in the $\hat{\Gamma}^{\pm}$ -lactalbumin molten globule. <i>Journal of Molecular Biology</i> , 1998, 280, 167-174.	2.0	76
104	On the Convergent Evolution of Animal Toxins. <i>Journal of Biological Chemistry</i> , 1997, 272, 4302-4309.	1.6	314
105	NMR Solution Structure of a Two-Disulfide Derivative of Charybdotoxin: Structural Evidence for Conservation of Scorpion Toxin $\hat{\Gamma}^{\pm}/\hat{\Gamma}^2$ Motif and Its Hydrophobic Side Chain Packing. <i>Biochemistry</i> , 1997, 36, 3760-3766.	1.2	31
106	Resolving the paradox for protein aggregation diseases: a common mechanism for aggregated proteins to initially attack membranes without needing aggregates. <i>F1000Research</i> , 0, 2, 221.	0.8	10