

David D Thomas

List of Publications by Year in descending order

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281
papers

10,490
citations

38720

50
h-index

71651

76
g-index

304
all docs

304
docs citations

304
times ranked

7039
citing authors

#	ARTICLE	IF	CITATIONS
1	Rotational diffusion studied by passage saturation transfer electron paramagnetic resonance. <i>Journal of Chemical Physics</i> , 1976, 65, 3006-3024.	1.2	410
2	Orientation of spin labels attached to cross-bridges in contracting muscle fibres. <i>Nature</i> , 1982, 300, 776-778.	13.7	259
3	Mutation and Phosphorylation Change the Oligomeric Structure of Phospholamban in Lipid Bilayers. <i>Biochemistry</i> , 1997, 36, 2960-2967.	1.2	179
4	Cofilin Increases the Torsional Flexibility and Dynamics of Actin Filaments. <i>Journal of Molecular Biology</i> , 2005, 353, 990-1000.	2.0	143
5	NMR Solution Structure and Topological Orientation of Monomeric Phospholamban in Dodecylphosphocholine Micelles. <i>Biophysical Journal</i> , 2003, 85, 2589-2598.	0.2	140
6	Rotational dynamics of spin-labeled F-actin in the sub-millisecond time range. <i>Journal of Molecular Biology</i> , 1979, 132, 257-273.	2.0	137
7	A Fluorescence Energy Transfer Method for Analyzing Protein Oligomeric Structure: Application to Phospholamban. <i>Biophysical Journal</i> , 1999, 76, 2587-2599.	0.2	136
8	Electron paramagnetic resonance reveals age-related myosin structural changes in rat skeletal muscle fibers. <i>American Journal of Physiology - Cell Physiology</i> , 2001, 280, C540-C547.	2.1	123
9	Phospholamban structural dynamics in lipid bilayers probed by a spin label rigidly coupled to the peptide backbone. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 14437-14442.	3.3	110
10	Mavacamten stabilizes an autoinhibited state of two-headed cardiac myosin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E7486-E7494.	3.3	109
11	Mapping the interaction surface of a membrane protein: Unveiling the conformational switch of phospholamban in calcium pump regulation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 4747-4752.	3.3	101
12	Phosphorylation-dependent Conformational Switch in Spin-labeled Phospholamban Bound to SERCA. <i>Journal of Molecular Biology</i> , 2006, 358, 1032-1040.	2.0	101
13	Spectroscopic validation of the pentameric structure of phospholamban. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 14676-14681.	3.3	101
14	Depolymerization of Phospholamban in the Presence of Calcium Pump: A Fluorescence Energy Transfer Study. <i>Biochemistry</i> , 1999, 38, 3954-3962.	1.2	98
15	Cooperativity in F-Actin: Binding of Gelsolin at the Barbed End Affects Structure and Dynamics of the Whole Filament. <i>Journal of Molecular Biology</i> , 1996, 260, 756-766.	2.0	95
16	Functional, structural, and chemical changes in myosin associated with hydrogen peroxide treatment of skeletal muscle fibers. <i>American Journal of Physiology - Cell Physiology</i> , 2008, 294, C613-C626.	2.1	92
17	Effects of Membrane Thickness on the Molecular Dynamics and Enzymic Activity of Reconstituted Ca-ATPase. <i>Biochemistry</i> , 1994, 33, 2912-2920.	1.2	91
18	Oxidation of ryanodine receptor (RyR) and calmodulin enhance Ca release and pathologically alter, RyR structure and calmodulin affinity. <i>Journal of Molecular and Cellular Cardiology</i> , 2015, 85, 240-248.	0.9	91

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19	Discovery of Enzyme Modulators via High-Throughput Time-Resolved FRET in Living Cells. <i>Journal of Biomolecular Screening</i> , 2014, 19, 215-222.	2.6	88
20	Temperature dependence of the rotational dynamics of protein and lipid in sarcoplasmic reticulum membranes. <i>Biochemistry</i> , 1986, 25, 194-202.	1.2	85
21	Calculation of paramagnetic resonance spectra sensitive to very slow rotational motion. <i>Chemical Physics Letters</i> , 1974, 25, 470-475.	1.2	84
22	Microsecond rotational motions of eosin-labeled myosin measured by time-resolved anisotropy of absorption and phosphorescence. <i>Journal of Molecular Biology</i> , 1984, 179, 55-81.	2.0	84
23	Structure and Orientation of Sarcolipin in Lipid Environments. <i>Biochemistry</i> , 2002, 41, 475-482.	1.2	83
24	Endoplasmic reticulum protein BI-1 regulates Ca ²⁺ -mediated bioenergetics to promote autophagy. <i>Genes and Development</i> , 2012, 26, 1041-1054.	2.7	83
25	Photoacoustic lifetime contrast between methylene blue monomers and self-quenched dimers as a model for dual-labeled activatable probes. <i>Journal of Biomedical Optics</i> , 2013, 18, 056004.	1.4	83
26	Direct real-time detection of the structural and biochemical events in the myosin power stroke. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 14272-14277.	3.3	81
27	Overexpression, purification, and characterization of recombinant Ca-ATPase regulators for high-resolution solution and solid-state NMR studies. <i>Protein Expression and Purification</i> , 2003, 30, 253-261.	0.6	79
28	Heart failure drug changes the mechanoenzymology of the cardiac myosin powerstroke. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E1796-E1804.	3.3	76
29	Force generation, but not myosin ATPase activity, declines with age in rat muscle fibers. <i>American Journal of Physiology - Cell Physiology</i> , 2002, 283, C187-C192.	2.1	75
30	Phosphorylation-induced structural changes in smooth muscle myosin regulatory light chain. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 8207-8212.	3.3	74
31	High-Throughput FRET Assay Yields Allosteric SERCA Activators. <i>Journal of Biomolecular Screening</i> , 2013, 18, 97-107.	2.6	74
32	Direct Detection of Phospholamban and Sarcoplasmic Reticulum Ca-ATPase Interaction in Membranes Using Fluorescence Resonance Energy Transfer. <i>Biochemistry</i> , 2004, 43, 8754-8765.	1.2	73
33	Synthetic Null-Cysteine Phospholamban Analogue and the Corresponding Transmembrane Domain Inhibit the Ca-ATPase. <i>Biochemistry</i> , 2000, 39, 10892-10897.	1.2	70
34	Solid-State NMR and Rigid Body Molecular Dynamics To Determine Domain Orientations of Monomeric Phospholamban. <i>Journal of the American Chemical Society</i> , 2002, 124, 9392-9393.	6.6	70
35	Structural Dynamics of Actin during Active Interaction with Myosin: Different Effects of Weakly and Strongly Bound Myosin Heads. <i>Biochemistry</i> , 2004, 43, 10642-10652.	1.2	70
36	¹ H/ ¹⁵ N Heteronuclear NMR Spectroscopy Shows Four Dynamic Domains for Phospholamban Reconstituted in Dodecylphosphocholine Micelles. <i>Biophysical Journal</i> , 2004, 87, 1205-1214.	0.2	70

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37	Tumor Necrosis Factor-related Apoptosis-inducing Ligand (TRAIL) Induces Death Receptor 5 Networks That Are Highly Organized. <i>Journal of Biological Chemistry</i> , 2012, 287, 21265-21278.	1.6	70
38	Rotational dynamics of the calcium ATPase in sarcoplasmic reticulum studied by time-resolved phosphorescence anisotropy. <i>Biochemistry</i> , 1990, 29, 3904-3914.	1.2	69
39	Molecular Dynamics Simulations Reveal a Disorder-to-Order Transition on Phosphorylation of Smooth Muscle Myosin. <i>Biophysical Journal</i> , 2007, 93, 2083-2090.	0.2	64
40	Sarcolipin, the Shorter Homologue of Phospholamban, Forms Oligomeric Structures in Detergent Micelles and in Liposomes. <i>Journal of Biological Chemistry</i> , 2001, 276, 30845-30852.	1.6	62
41	A dynamic mechanism for allosteric activation of Aurora kinase A by activation loop phosphorylation. <i>ELife</i> , 2018, 7, .	2.8	62
42	Foerster Transfer Recovery Reveals That Phospholamban Exchanges Slowly From Pentamers but Rapidly From the SERCA Regulatory Complex. <i>Circulation Research</i> , 2007, 101, 1123-1129.	2.0	61
43	Defining the Molecular Components of Calcium Transport Regulation in a Reconstituted Membrane System. <i>Biochemistry</i> , 2003, 42, 4585-4592.	1.2	60
44	Microsecond Rotational Dynamics of Actin: Spectroscopic Detection and Theoretical Simulation. <i>Journal of Molecular Biology</i> , 1996, 255, 446-457.	2.0	59
45	High-Throughput Spectral and Lifetime-Based FRET Screening in Living Cells to Identify Small-Molecule Effectors of SERCA. <i>SLAS Discovery</i> , 2017, 22, 262-273.	1.4	58
46	Temporal sequence of major biochemical events during blood bank storage of packed red blood cells. <i>Blood Transfusion</i> , 2012, 10, 453-61.	0.3	58
47	Thermodynamic and Structural Basis of Phosphorylation-Induced Disorder-to-Order Transition in the Regulatory Light Chain of Smooth Muscle Myosin. <i>Journal of the American Chemical Society</i> , 2008, 130, 12208-12209.	6.6	57
48	Effects of melittin on molecular dynamics and calcium-ATPase activity in sarcoplasmic reticulum membranes: time-resolved optical anisotropy. <i>Biochemistry</i> , 1991, 30, 7498-7506.	1.2	56
49	Phospholamban Pentamer Quaternary Conformation Determined by In-Gel Fluorescence Anisotropy. <i>Biochemistry</i> , 2005, 44, 4302-4311.	1.2	56
50	Controlling the Inhibition of the Sarcoplasmic Ca ²⁺ -ATPase by Tuning Phospholamban Structural Dynamics. <i>Journal of Biological Chemistry</i> , 2007, 282, 37205-37214.	1.6	55
51	High-performance time-resolved fluorescence by direct waveform recording. <i>Review of Scientific Instruments</i> , 2010, 81, 103101.	0.6	55
52	FRET-based mapping of calmodulin bound to the RyR1 Ca ²⁺ release channel. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 6128-6133.	3.3	54
53	Oxidation increases the strength of the methionine-aromatic interaction. <i>Nature Chemical Biology</i> , 2016, 12, 860-866.	3.9	53
54	Structural basis for high-affinity actin binding revealed by a Î²-III-spectrin SCA5 missense mutation. <i>Nature Communications</i> , 2017, 8, 1350.	5.8	53

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55	Targeting the ensemble of heterogeneous tau oligomers in cells: A novel small molecule screening platform for tauopathies. <i>Alzheimer's and Dementia</i> , 2019, 15, 1489-1502.	0.4	53
56	Rotational dynamics of actin-bound myosin heads in active myofibrils. <i>Biochemistry</i> , 1993, 32, 3812-3821.	1.2	52
57	Direct real-time detection of the actin-activated power stroke within the myosin catalytic domain. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 7211-7216.	3.3	52
58	Quantitative conformational profiling of kinase inhibitors reveals origins of selectivity for Aurora kinase activation states. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E11894-E11903.	3.3	52
59	Resolution of conformational states of spin-labeled myosin during steady-state ATP hydrolysis. <i>Biochemistry</i> , 1987, 26, 314-323.	1.2	51
60	Cysteine Reactivity and Oligomeric Structures of Phospholamban and Its Mutants. <i>Biochemistry</i> , 1998, 37, 12074-12081.	1.2	51
61	Age-related decline in actomyosin structure and function. <i>Experimental Gerontology</i> , 2007, 42, 931-938.	1.2	51
62	Structural dynamics of the myosin relay helix by time-resolved EPR and FRET. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 21625-21630.	3.3	51
63	High-Throughput Screens to Discover Small-Molecule Modulators of Ryanodine Receptor Calcium Release Channels. <i>SLAS Discovery</i> , 2017, 22, 176-186.	1.4	51
64	Conformational transitions in the calcium adenosine triphosphatase studied by time-resolved fluorescence resonance energy transfer. <i>Biochemistry</i> , 1989, 28, 3940-3947.	1.2	50
65	Effect of ADP on the orientation of spin-labeled myosin heads in muscle fibers: a high-resolution study with deuterated spin labels. <i>Biochemistry</i> , 1990, 29, 5865-5871.	1.2	50
66	Defining the Intramembrane Binding Mechanism of Sarcolipin to Calcium ATPase Using Solution NMR Spectroscopy. <i>Journal of Molecular Biology</i> , 2006, 358, 420-429.	2.0	50
67	Atomic-Level Characterization of the Activation Mechanism of SERCA by Calcium. <i>PLoS ONE</i> , 2011, 6, e26936.	1.1	50
68	Perturbations of Functional Interactions with Myosin Induce Long-Range Allosteric and Cooperative Structural Changes in Actin. <i>Biochemistry</i> , 1997, 36, 12845-12853.	1.2	48
69	Electron Paramagnetic Resonance Reveals a Large-Scale Conformational Change in the Cytoplasmic Domain of Phospholamban upon Binding to the Sarcoplasmic Reticulum Ca-ATPase. <i>Biochemistry</i> , 2004, 43, 5842-5852.	1.2	48
70	Microsecond rotational dynamics of phosphorescent-labeled muscle cross-bridges. <i>Biochemistry</i> , 1988, 27, 3343-3351.	1.2	47
71	Effects of melittin on molecular dynamics and calcium ATPase activity in sarcoplasmic reticulum membranes: electron paramagnetic resonance. <i>Biochemistry</i> , 1991, 30, 7171-7180.	1.2	47
72	Dual Mechanisms of sHA 14-1 in Inducing Cell Death through Endoplasmic Reticulum and Mitochondria. <i>Molecular Pharmacology</i> , 2009, 76, 667-678.	1.0	47

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73	Lipid-Mediated Folding/Unfolding of Phospholamban as a Regulatory Mechanism for the Sarcoplasmic Reticulum Ca ²⁺ -ATPase. <i>Journal of Molecular Biology</i> , 2011, 408, 755-765.	2.0	47
74	Site-directed spectroscopy of cardiac myosin-binding protein C reveals effects of phosphorylation on protein structural dynamics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 3233-3238.	3.3	47
75	Targeting protein-protein interactions for therapeutic discovery via FRET-based high-throughput screening in living cells. <i>Scientific Reports</i> , 2018, 8, 12560.	1.6	47
76	Site-Directed Spectroscopic Probes of Actomyosin Structural Dynamics. <i>Annual Review of Biophysics</i> , 2009, 38, 347-369.	4.5	46
77	Structural kinetics of myosin by transient time-resolved FRET. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 1891-1896.	3.3	46
78	Direct measurements of the coordination of lever arm swing and the catalytic cycle in myosin V. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 14593-14598.	3.3	46
79	Mechanochemical Coupling in Spin-Labeled, Active, Isometric Muscle. <i>Biophysical Journal</i> , 1999, 77, 2657-2664.	0.2	45
80	Molecular Dynamics Simulation of Site-Directed Spin Labeling: Experimental Validation in Muscle Fibers. <i>Biophysical Journal</i> , 2002, 83, 1854-1866.	0.2	45
81	Effects of Ser16 Phosphorylation on the Allosteric Transitions of Phospholamban/Ca ²⁺ -ATPase Complex. <i>Journal of Molecular Biology</i> , 2006, 358, 1041-1050.	2.0	45
82	Mapping the Ryanodine Receptor FK506-binding Protein Subunit Using Fluorescence Resonance Energy Transfer. <i>Journal of Biological Chemistry</i> , 2010, 285, 19219-19226.	1.6	45
83	Phosphorylated Phospholamban Stabilizes a Compact Conformation of the Cardiac Calcium-ATPase. <i>Biophysical Journal</i> , 2013, 105, 1812-1821.	0.2	45
84	An Innovative High-Throughput Screening Approach for Discovery of Small Molecules That Inhibit TNF Receptors. <i>SLAS Discovery</i> , 2017, 22, 950-961.	1.4	45
85	Synthesis of TOAC spin-labeled proteins and reconstitution in lipid membranes. <i>Nature Protocols</i> , 2007, 2, 42-49.	5.5	44
86	Actin-binding cleft closure in myosin II probed by site-directed spin labeling and pulsed EPR. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 12867-12872.	3.3	44
87	Molecular mechanism of calcium-ATPase activation by halothane in sarcoplasmic reticulum. <i>Biochemistry</i> , 1993, 32, 7503-7511.	1.2	42
88	Direct Spectroscopic Detection of Molecular Dynamics and Interactions of the Calcium Pump and Phospholamban a. <i>Annals of the New York Academy of Sciences</i> , 1998, 853, 186-194.	1.8	42
89	Calmodulin Oxidation and Methionine to Glutamine Substitutions Reveal Methionine Residues Critical for Functional Interaction with Ryanodine Receptor-1. <i>Journal of Biological Chemistry</i> , 2003, 278, 15615-15621.	1.6	42
90	Site-directed spin labeling reveals a conformational switch in the phosphorylation domain of smooth muscle myosin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 4000-4005.	3.3	42

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91	Age-Related Decline in Actomyosin Function. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2005, 60, 425-431.	1.7	42
92	Rotational Dynamics of Phospholamban Determined by Multifrequency Electron Paramagnetic Resonance. <i>Biophysical Journal</i> , 2007, 93, 2805-2812.	0.2	42
93	Changes in Band 3 oligomeric state precede cell membrane phospholipid loss during blood bank storage of red blood cells. <i>Transfusion</i> , 2009, 49, 1435-1442.	0.8	42
94	Myosin Isoform Determines the Conformational Dynamics and Cooperativity of Actin Filaments in the Strongly Bound Actomyosin Complex. <i>Journal of Molecular Biology</i> , 2010, 396, 501-509.	2.0	42
95	Oligomeric Interactions of Sarcolipin and the Ca-ATPase. <i>Journal of Biological Chemistry</i> , 2011, 286, 31697-31706.	1.6	42
96	Time-resolved rotational dynamics of phosphorescent-labeled myosin heads in contracting muscle fibers. <i>Biochemistry</i> , 1990, 29, 10023-10031.	1.2	40
97	Halothane and Cyclopiazonic Acid Modulate Ca-ATPase Oligomeric State and Function in Sarcoplasmic Reticulum. <i>Biochemistry</i> , 1994, 33, 13928-13937.	1.2	40
98	Interdomain Fluorescence Resonance Energy Transfer in SERCA Probed by Cyan-Fluorescent Protein Fused to the Actuator Domain. <i>Biochemistry</i> , 2008, 47, 4246-4256.	1.2	40
99	Dystrophin and utrophin have distinct effects on the structural dynamics of actin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 7822-7827.	3.3	40
100	Noncompetitive inhibitors of TNFR1 probe conformational activation states. <i>Science Signaling</i> , 2019, 12, .	1.6	40
101	2-Color Calcium Pump Reveals Closure of the Cytoplasmic Headpiece with Calcium Binding. <i>PLoS ONE</i> , 2012, 7, e40369.	1.1	40
102	Microsecond Molecular Dynamics Simulations of Mg ²⁺ and K ⁺ Bound E1 Intermediate States of the Calcium Pump. <i>PLoS ONE</i> , 2014, 9, e95979.	1.1	39
103	Time-resolved FRET reveals the structural mechanism of SERCA's PLB regulation. <i>Biochemical and Biophysical Research Communications</i> , 2014, 449, 196-201.	1.0	39
104	The structural kinetics of switch-1 and the neck linker explain the functions of kinesin-1 and Eg5. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, E6606-13.	3.3	39
105	Sarcolipin Promotes Uncoupling of the SERCA Ca ²⁺ Pump by Inducing a Structural Rearrangement in the Energy-Transduction Domain. <i>Biochemistry</i> , 2016, 55, 6083-6086.	1.2	39
106	Red-Shifted FRET Biosensors for High-Throughput Fluorescence Lifetime Screening. <i>Biosensors</i> , 2018, 8, 99.	2.3	39
107	Co-reconstitution of Phospholamban Mutants with the Ca-ATPase Reveals Dependence of Inhibitory Function on Phospholamban Structure. <i>Journal of Biological Chemistry</i> , 1999, 274, 7649-7655.	1.6	38
108	The α -Helical Propensity of the Cytoplasmic Domain of Phospholamban: A Molecular Dynamics Simulation of the Effect of Phosphorylation and Mutation. <i>Biophysical Journal</i> , 2005, 88, 3243-3251.	0.2	38

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109	Site-Specific Methionine Oxidation Initiates Calmodulin Degradation by the 20S Proteasome. <i>Biochemistry</i> , 2009, 48, 3005-3016.	1.2	38
110	On the Function of Pentameric Phospholamban: Ion Channel or Storage Form?. <i>Biophysical Journal</i> , 2009, 96, L60-L62.	0.2	38
111	Structural and Functional Dynamics of an Integral Membrane Protein Complex Modulated by Lipid Headgroup Charge. <i>Journal of Molecular Biology</i> , 2012, 418, 379-389.	2.0	38
112	Fluorescence lifetime plate reader: Resolution and precision meet high-throughput. <i>Review of Scientific Instruments</i> , 2014, 85, 113101.	0.6	38
113	Conformational Transitions of the Sarcoplasmic Reticulum Ca-ATPase Studied by Time-Resolved EPR and Quenched-Flow Kinetics. <i>Biochemistry</i> , 1995, 34, 4864-4879.	1.2	37
114	A thermodynamic muscle model and a chemical basis for A.V. Hill's muscle equation. , 2000, 21, 335-344.		37
115	Muscle activity and aging affect myosin structural distribution and force generation in rat fibers. <i>Journal of Applied Physiology</i> , 2004, 96, 498-506.	1.2	36
116	An Electrochemical Investigation of Sarcolipin Reconstituted into a Mercury-Supported Lipid Bilayer. <i>Biophysical Journal</i> , 2007, 93, 2678-2687.	0.2	36
117	Changes in Actin Structural Transitions Associated with Oxidative Inhibition of Muscle Contraction. <i>Biochemistry</i> , 2008, 47, 11811-11817.	1.2	36
118	Large-scale opening of utrophin's tandem calponin homology (CH) domains upon actin binding by an induced-fit mechanism. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 12729-12733.	3.3	36
119	Transient detection of spin-labeled myosin subfragment 1 conformational states during ATP hydrolysis. <i>Biochemistry</i> , 1993, 32, 6712-6720.	1.2	35
120	Role of Cysteine Residues in Structural Stability and Function of a Transmembrane Helix Bundle. <i>Journal of Biological Chemistry</i> , 2001, 276, 38814-38819.	1.6	35
121	Atomic-Level Mechanisms for Phospholamban Regulation of the Calcium Pump. <i>Biophysical Journal</i> , 2015, 108, 1697-1708.	0.2	35
122	Phosphomimetic S3D cofilin binds but only weakly severs actin filaments. <i>Journal of Biological Chemistry</i> , 2017, 292, 19565-19579.	1.6	35
123	Generalized limits to the number of light particle degrees of freedom from big bang nucleosynthesis. <i>Astroparticle Physics</i> , 1999, 11, 403-411.	1.9	33
124	Hexanol and Lidocaine Affect the Oligomeric State of the Ca-ATPase of Sarcoplasmic Reticulum. <i>Biochemistry</i> , 1994, 33, 13208-13222.	1.2	32
125	Microsecond Rotational Dynamics of Spin-Labeled Myosin Regulatory Light Chain Induced by Relaxation and Contraction of Scallop Muscle. <i>Biochemistry</i> , 1998, 37, 14428-14436.	1.2	32
126	Structure and function of integral membrane protein domains resolved by peptide-amphiphiles: Application to phospholamban. <i>Biopolymers</i> , 2003, 69, 283-292.	1.2	32

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127	Actin-Myosin Interaction: Structure, Function and Drug Discovery. International Journal of Molecular Sciences, 2018, 19, 2628.	1.8	32
128	Protein-Protein Interactions in Calcium Transport Regulation Probed by Saturation Transfer Electron Paramagnetic Resonance. Biophysical Journal, 2012, 103, 1370-1378.	0.2	31
129	Sarcolipin and phospholamban inhibit the calcium pump by populating a similar metal ion-free intermediate state. Biochemical and Biophysical Research Communications, 2015, 463, 37-41.	1.0	31
130	Î²-III-spectrin spinocerebellar ataxia type 5 mutation reveals a dominant cytoskeletal mechanism that underlies dendritic arborization. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E9376-E9385.	3.3	30
131	RyR1-targeted drug discovery pipeline integrating FRET-based high-throughput screening and human myofiber dynamic Ca ²⁺ assays. Scientific Reports, 2020, 10, 1791.	1.6	30
132	Complex Kinetic Behavior in the Na,K-and Ca-ATPases. Evidence for Subunit-Subunit Interactions and Energy Conservation during Catalysis. Annals of the New York Academy of Sciences, 1997, 834, 280-296.	1.8	29
133	Phosphorylation-Induced Structural Change in Phospholamban and Its Mutants, Detected by Intrinsic Fluorescence. Biochemistry, 1998, 37, 7869-7877.	1.2	29
134	Enhanced EPR Sensitivity from a Ferroelectric Cavity Insert. Journal of Magnetic Resonance, 2001, 153, 7-14.	1.2	29
135	A Novel SERCA Inhibitor Demonstrates Synergy with Classic SERCA Inhibitors and Targets Multidrug-Resistant AML. Molecular Pharmaceutics, 2013, 10, 4358-4366.	2.3	29
136	Amplitude of the actomyosin power stroke depends strongly on the isoform of the myosin essential light chain. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 4660-4665.	3.3	29
137	Direct detection of the myosin super-relaxed state and interacting-heads motif in solution. Journal of Biological Chemistry, 2021, 297, 101157.	1.6	29
138	Mechanical factors tune the sensitivity of mdx muscle to eccentric strength loss and its protection by antioxidant and calcium modulators. Skeletal Muscle, 2020, 10, 3.	1.9	29
139	Protein and lipid rotational dynamics in cardiac and skeletal sarcoplasmic reticulum detected by EPR and phosphorescence anisotropy. Biochemistry, 1993, 32, 9445-9453.	1.2	28
140	Nucleotide Activation of the Ca-ATPase. Journal of Biological Chemistry, 2012, 287, 39070-39082.	1.6	28
141	Impact of methionine oxidation on calmodulin structural dynamics. Biochemical and Biophysical Research Communications, 2015, 456, 567-572.	1.0	28
142	Spectral Unmixing Plate Reader: High-Throughput, High-Precision FRET Assays in Living Cells. SLAS Discovery, 2017, 22, 250-261.	1.4	28
143	Differences in Structural Dynamics of Muscle and Yeast Actin Accompany Differences in Functional Interactions with Myosin. Biochemistry, 1999, 38, 14860-14867.	1.2	27
144	Molecular and cellular contractile dysfunction of dystrophic muscle from young mice. Muscle and Nerve, 2006, 34, 92-100.	1.0	27

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145	Protein structural dynamics revealed by site-directed spin labeling and multifrequency EPR. <i>Biophysical Reviews</i> , 2010, 2, 91-99.	1.5	27
146	S100A1 Protein Does Not Compete with Calmodulin for Ryanodine Receptor Binding but Structurally Alters the Ryanodine Receptor-Calmodulin Complex. <i>Journal of Biological Chemistry</i> , 2016, 291, 15896-15907.	1.6	27
147	Rotational dynamics of actin-bound intermediates in the myosin ATPase cycle. <i>Biochemistry</i> , 1991, 30, 11036-11045.	1.2	26
148	Mechanism of Ca-ATPase Inhibition by Melittin in Skeletal Sarcoplasmic Reticulum. <i>Biochemistry</i> , 1995, 34, 930-939.	1.2	26
149	Structural Dynamics of the Actin-Myosin Interface by Site-directed Spectroscopy. <i>Journal of Molecular Biology</i> , 2006, 356, 1107-1117.	2.0	26
150	Muscle and nonmuscle myosins probed by a spin label at equivalent sites in the force-generating domain. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 13397-13402.	3.3	26
151	Functional and physical competition between phospholamban and its mutants provides insight into the molecular mechanism of gene therapy for heart failure. <i>Biochemical and Biophysical Research Communications</i> , 2011, 408, 388-392.	1.0	26
152	Phospholamban mutants compete with wild type for SERCA binding in living cells. <i>Biochemical and Biophysical Research Communications</i> , 2012, 420, 236-240.	1.0	26
153	Loop L5 Assumes Three Distinct Orientations during the ATPase Cycle of the Mitotic Kinesin Eg5. <i>Journal of Biological Chemistry</i> , 2013, 288, 34839-34849.	1.6	26
154	Orientation and rotational mobility of spin-labelled myosin heads in insect flight muscle in rigor. <i>Journal of Muscle Research and Cell Motility</i> , 1983, 4, 367-378.	0.9	25
155	Site-Specific Mutations in the Myosin Binding Sites of Actin Affect Structural Transitions That Control Myosin Binding. <i>Biochemistry</i> , 2001, 40, 13933-13940.	1.2	25
156	Methane Monooxygenase Hydroxylase and B Component Interactions. <i>Biochemistry</i> , 2006, 45, 2913-2926.	1.2	25
157	Structure and Dynamics of the Force-Generating Domain of Myosin Probed by Multifrequency Electron Paramagnetic Resonance. <i>Biophysical Journal</i> , 2008, 95, 247-256.	0.2	25
158	A human β -III-spectrin spinocerebellar ataxia type 5 mutation causes high-affinity F-actin binding. <i>Scientific Reports</i> , 2016, 6, 21375.	1.6	25
159	Functional and transcriptomic insights into pathogenesis of R9C phospholamban mutation using human induced pluripotent stem cell-derived cardiomyocytes. <i>Journal of Molecular and Cellular Cardiology</i> , 2018, 119, 147-154.	0.9	25
160	Structural Dynamics of the Actomyosin Complex Probed by a Bifunctional Spin Label that Cross-Links SH1 and SH2. <i>Biophysical Journal</i> , 2008, 95, 5238-5246.	0.2	24
161	Impacts of Dystrophin and Utrophin Domains on Actin Structural Dynamics: Implications for Therapeutic Design. <i>Journal of Molecular Biology</i> , 2012, 420, 87-98.	2.0	24
162	A posttranslational modification of the mitotic kinesin Eg5 that enhances its mechanochemical coupling and alters its mitotic function. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E1779-E1788.	3.3	24

#	ARTICLE	IF	CITATIONS
163	Changes in Actin and Myosin Structural Dynamics Due to Their Weak and Strong Interactions. Results and Problems in Cell Differentiation, 2002, 36, 7-19.	0.2	24
164	Myosin Light-Chain Domain Rotates upon Muscle Activation but Not ATP Hydrolysis. Biochemistry, 1999, 38, 12607-12613.	1.2	23
165	SERCA Structural Dynamics Induced by ATP and Calcium. Biochemistry, 2004, 43, 12846-12854.	1.2	23
166	Cardiac myosin binding protein-C restricts intrafilament torsional dynamics of actin in a phosphorylation-dependent manner. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 20437-20442.	3.3	23
167	The myosin super-relaxed state is disrupted by estradiol deficiency. Biochemical and Biophysical Research Communications, 2015, 456, 151-155.	1.0	23
168	Aqueous sample in an EPR cavity: sensitivity considerations. Journal of Magnetic Resonance, 2004, 167, 138-146.	1.2	22
169	Potent inhibitors of toxic alpha-synuclein identified via cellular time-resolved FRET biosensors. Npj Parkinson's Disease, 2021, 7, 52.	2.5	22
170	FRET and optical trapping reveal mechanisms of actin activation of the power stroke and phosphate release in myosin V. Journal of Biological Chemistry, 2020, 295, 17383-17397.	1.6	22
171	Direct Detection of Calmodulin Tuning by Ryanodine Receptor Channel Targets Using a Ca ²⁺ -Sensitive Acrylodan-Labeled Calmodulin. Biochemistry, 2005, 44, 278-284.	1.2	21
172	Structural and Functional Impact of Site-Directed Methionine Oxidation in Myosin. Biochemistry, 2011, 50, 10318-10327.	1.2	21
173	High-throughput screen, using time-resolved FRET, yields actin-binding compounds that modulate actin-myosin structure and function. Journal of Biological Chemistry, 2018, 293, 12288-12298.	1.6	21
174	Live-Cell Cardiac-Specific High-Throughput Screening Platform for Drug-Like Molecules That Enhance Ca ²⁺ Transport. Cells, 2020, 9, 1170.	1.8	21
175	Defective internal allosteric network imparts dysfunctional ATP/substrate-binding cooperativity in oncogenic chimera of protein kinase A. Communications Biology, 2021, 4, 321.	2.0	21
176	The transmembrane peptide DWORF activates SERCA2a via dual mechanisms. Journal of Biological Chemistry, 2021, 296, 100412.	1.6	21
177	Binding of Dystrophin's Tandem Calponin Homology Domain to F-Actin Is Modulated by Actin's Structure. Biophysical Journal, 2001, 80, 1926-1931.	0.2	20
178	A Cardiomyopathy Mutation in the Myosin Essential Light Chain Alters Actomyosin Structure. Biophysical Journal, 2017, 113, 91-100.	0.2	20
179	Discovery of Small Molecule Inhibitors of Huntingtin Exon 1 Aggregation by FRET-Based High-Throughput Screening in Living Cells. ACS Chemical Neuroscience, 2020, 11, 2286-2295.	1.7	20
180	Microsecond rotational dynamics of spin-labeled calcium-ATPase during enzymic cycling initiated by photolysis of caged ATP. Biochemistry, 1991, 30, 8331-8339.	1.2	19

#	ARTICLE	IF	CITATIONS
181	Thermodynamics and Kinetics of a Molecular Motor Ensemble. <i>Biophysical Journal</i> , 2000, 79, 1731-1736.	0.2	19
182	Interprotein Electron Transfer in a Confined Space: Å Uncoupling Protein Dynamics from Electron Transfer by Solâˆ™Gel Encapsulation. <i>Journal of the American Chemical Society</i> , 2002, 124, 9404-9411.	6.6	19
183	Role of calmodulin methionine residues in mediating productive association with cardiac ryanodine receptors. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2006, 290, H794-H799.	1.5	19
184	The Role of Sarcolipin and ATP in the Transport of Phosphate Ion into the Sarcoplasmic Reticulum. <i>Biophysical Journal</i> , 2009, 97, 2693-2699.	0.2	19
185	Tarantula myosin free head regulatory light chain phosphorylation stiffens N-terminal extension, releasing it and blocking its docking back. <i>Molecular BioSystems</i> , 2015, 11, 2180-2189.	2.9	19
186	Age affects myosin relaxation states in skeletal muscle fibers of female but not male mice. <i>PLoS ONE</i> , 2018, 13, e0199062.	1.1	19
187	Converter domain mutations in myosin alter structural kinetics and motor function. <i>Journal of Biological Chemistry</i> , 2019, 294, 1554-1567.	1.6	19
188	Viral expression of a SERCA2a-activating PLB mutant improves calcium cycling and synchronicity in dilated cardiomyopathic hiPSC-CMs. <i>Journal of Molecular and Cellular Cardiology</i> , 2020, 138, 59-65.	0.9	19
189	Different Anesthetic Sensitivities of Skeletal and Cardiac Isoforms of the Ca-ATPaseâ€€. <i>Biochemistry</i> , 1999, 38, 9301-9307.	1.2	18
190	Three Distinct Actin-Attached Structural States of Myosin in Muscle Fibers. <i>Biophysical Journal</i> , 2012, 102, 1088-1096.	0.2	18
191	Redox-sensitive residue in the actin-binding interface of myosin. <i>Biochemical and Biophysical Research Communications</i> , 2014, 453, 345-349.	1.0	18
192	ATPâ€“Binding Cassette Transporter Structure Changes Detected by Intramolecular Fluorescence Energy Transfer for High-Throughput Screening. <i>Molecular Pharmacology</i> , 2015, 88, 84-94.	1.0	18
193	Electron Paramagnetic Resonance: A High-Resolution Tool for Muscle Physiology. <i>Exercise and Sport Sciences Reviews</i> , 2001, 29, 3-6.	1.6	17
194	A continuous fluorescence displacement assay for BioA: An enzyme involved in biotin biosynthesis. <i>Analytical Biochemistry</i> , 2011, 416, 27-38.	1.1	17
195	Structural dynamics of muscle protein phosphorylation. <i>Journal of Muscle Research and Cell Motility</i> , 2012, 33, 419-429.	0.9	17
196	The Carboxy-Terminal Third of Dystrophin Enhances Actin Binding Activity. <i>Journal of Molecular Biology</i> , 2012, 416, 414-424.	2.0	17
197	Effect of Phosphorylation on Interactions between Transmembrane Domains of SERCA and Phospholamban. <i>Biophysical Journal</i> , 2018, 114, 2573-2583.	0.2	17
198	Allostery governs Cdk2 activation and differential recognition of CDK inhibitors. <i>Nature Chemical Biology</i> , 2021, 17, 456-464.	3.9	17

#	ARTICLE	IF	CITATIONS
199	The Time-Dependent Distribution of Phosphorylated Intermediates in Native Sarcoplasmic Reticulum Ca ²⁺ -ATPase from Skeletal Muscle Is Not Compatible with a Linear Kinetic Model. <i>Biochemistry</i> , 2004, 43, 4400-4416.	1.2	16
200	Measurement of myocardial free radical production during exercise using EPR spectroscopy. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2006, 290, H2453-H2458.	1.5	16
201	Accurate quantitation of phospholamban phosphorylation by immunoblot. <i>Analytical Biochemistry</i> , 2012, 425, 68-75.	1.1	16
202	Magnesium Impacts Myosin V Motor Activity by Altering Key Conformational Changes in the Mechanochemical Cycle. <i>Biochemistry</i> , 2013, 52, 4710-4722.	1.2	16
203	Synthetic Phosphopeptides Enable Quantitation of the Content and Function of the Four Phosphorylation States of Phospholamban in Cardiac Muscle. <i>Journal of Biological Chemistry</i> , 2014, 289, 29397-29405.	1.6	16
204	Open and Closed Conformations of the Isolated Transmembrane Domain of Death Receptor 5 Support a New Model of Activation. <i>Biophysical Journal</i> , 2014, 106, L21-L24.	0.2	16
205	FRET-Based Trilateration of Probes Bound within Functional Ryanodine Receptors. <i>Biophysical Journal</i> , 2014, 107, 2037-2048.	0.2	16
206	A Novel Fluorescence Resonance Energy Transfer-Based Screen in High-Throughput Format To Identify Inhibitors of Malarial and Human Glucose Transporters. <i>Antimicrobial Agents and Chemotherapy</i> , 2016, 60, 7407-7414.	1.4	16
207	Super-relaxed state of myosin in human skeletal muscle is fiber-type dependent. <i>American Journal of Physiology - Cell Physiology</i> , 2020, 319, C1158-C1162.	2.1	16
208	Multi-state recognition pathway of the intrinsically disordered protein kinase inhibitor by protein kinase A. <i>ELife</i> , 2020, 9, .	2.8	16
209	Rotational Dynamics of the Regulatory Light Chain in Scallop Muscle Detected by Time-Resolved Phosphorescence Anisotropy. <i>Biochemistry</i> , 1999, 38, 9097-9104.	1.2	15
210	Talin Influences the Dynamics of the Myosin VII-Membrane Interaction. <i>Molecular Biology of the Cell</i> , 2007, 18, 4074-4084.	0.9	15
211	Characterization of a Myosin VII MyTH/FERM Domain. <i>Journal of Molecular Biology</i> , 2011, 413, 17-23.	2.0	15
212	Effects of pseudophosphorylation mutants on the structural dynamics of smooth muscle myosin regulatory light chain. <i>Molecular BioSystems</i> , 2014, 10, 2693-2698.	2.9	15
213	Sequential myosin phosphorylation activates tarantula thick filament via a disorder→order transition. <i>Molecular BioSystems</i> , 2015, 11, 2167-2179.	2.9	15
214	Resolved conformational states of spin-labeled calcium-ATPase during the enzymic cycle. <i>Biochemistry</i> , 1992, 31, 7381-7389.	1.2	14
215	Phospholamban-Dependent Effects of C12E8 on Calcium Transport and Molecular Dynamics in Cardiac Sarcoplasmic Reticulum. <i>Biochemistry</i> , 1996, 35, 13393-13399.	1.2	14
216	Conformationally Trapping the Actin-binding Cleft of Myosin with a Bifunctional Spin Label. <i>Journal of Biological Chemistry</i> , 2013, 288, 3016-3024.	1.6	14

#	ARTICLE	IF	CITATIONS
217	Phospholamban phosphorylation, mutation, and structural dynamics: a biophysical approach to understanding and treating cardiomyopathy. <i>Biophysical Reviews</i> , 2015, 7, 63-76.	1.5	14
218	A bifunctional spin label reports the structural topology of phospholamban in magnetically-aligned bicelles. <i>Journal of Magnetic Resonance</i> , 2016, 262, 50-56.	1.2	14
219	Trajectory-Based Simulation of EPR Spectra: Models of Rotational Motion for Spin Labels on Proteins. <i>Journal of Physical Chemistry B</i> , 2019, 123, 10131-10141.	1.2	14
220	Cardiac myosin-binding protein C interaction with actin is inhibited by compounds identified in a high-throughput fluorescence lifetime screen. <i>Journal of Biological Chemistry</i> , 2021, 297, 100840.	1.6	14
221	Backbone dynamics determined by electron paramagnetic resonance to optimize solid-phase peptide synthesis of TOAC-labeled phospholamban. <i>Biopolymers</i> , 2007, 88, 29-35.	1.2	13
222	Electron Paramagnetic Resonance Resolves Effects of Oxidative Stress on Muscle Proteins. <i>Exercise and Sport Sciences Reviews</i> , 2014, 42, 30-36.	1.6	13
223	High-resolution helix orientation in actin-bound myosin determined with a bifunctional spin label. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 7972-7977.	3.3	13
224	Soluble Extracellular Domain of Death Receptor 5 Inhibits TRAIL-Induced Apoptosis by Disrupting Receptor-Receptor Interactions. <i>Journal of Molecular Biology</i> , 2017, 429, 2943-2953.	2.0	13
225	Structural Impact of Phosphorylation and Dielectric Constant Variation on Synaptotagmin's IDR. <i>Biophysical Journal</i> , 2018, 114, 550-561.	0.2	13
226	Direct detection of SERCA calcium transport and small-molecule inhibition in giant unilamellar vesicles. <i>Biochemical and Biophysical Research Communications</i> , 2016, 481, 206-211.	1.0	12
227	Structural dynamics of calmodulin-ryanodine receptor interactions: electron paramagnetic resonance using stereospecific spin labels. <i>Scientific Reports</i> , 2018, 8, 10681.	1.6	12
228	Sarcomere integrated biosensor detects myofilament-activating ligands in real time during twitch contractions in live cardiac muscle. <i>Journal of Molecular and Cellular Cardiology</i> , 2020, 147, 49-61.	0.9	12
229	Differential Effects of General Anesthetics on the Quaternary Structure of the Ca-ATPases of Cardiac and Skeletal Sarcoplasmic Reticulum. <i>Biochemistry</i> , 1998, 37, 2410-2421.	1.2	11
230	A paramagnetic molecular voltmeter. <i>Journal of Magnetic Resonance</i> , 2008, 190, 7-25.	1.2	11
231	Structural Mechanism for Regulation of Bcl-2 protein Noxa by phosphorylation. <i>Scientific Reports</i> , 2015, 5, 14557.	1.6	11
232	Bifunctional Spin Labeling of Muscle Proteins. <i>Methods in Enzymology</i> , 2015, 564, 101-123.	0.4	11
233	Effects of the Arg9Cys and Arg25Cys mutations on phospholamban's conformational equilibrium in membrane bilayers. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2018, 1860, 1335-1341.	1.4	11
234	Coding sequences of sarcoplasmic reticulum calcium ATPase regulatory peptides and expression of calcium regulatory genes in recurrent exertional rhabdomyolysis. <i>Journal of Veterinary Internal Medicine</i> , 2019, 33, 933-941.	0.6	11

#	ARTICLE	IF	CITATIONS
235	The functional significance of redox-mediated intersubunit cross-linking in regulation of human type 2 ryanodine receptor. <i>Redox Biology</i> , 2020, 37, 101729.	3.9	11
236	Fluorescence-Based TNFR1 Biosensor for Monitoring Receptor Structural and Conformational Dynamics and Discovery of Small Molecule Modulators. <i>Methods in Molecular Biology</i> , 2021, 2248, 121-137.	0.4	11
237	Transient Kinetics and Mechanics of Myosin's Force-Generating Rotation in Muscle: A Resolution of Millisecond Rotational Transitions in the Spin-Labeled Myosin Light-Chain Domain. <i>Biochemistry</i> , 2003, 42, 9797-9803.	1.2	10
238	Structural Mapping of Divergent Regions in the Type 1 Ryanodine Receptor Using Fluorescence Resonance Energy Transfer. <i>Structure</i> , 2014, 22, 1322-1332.	1.6	10
239	Structural basis for allosteric control of the SERCA-Phospholamban membrane complex by Ca ²⁺ and phosphorylation. <i>ELife</i> , 2021, 10, .	2.8	10
240	Coordination of the two heads of myosin during muscle contraction. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002, 99, 14801-14806.	3.3	9
241	Myosin lever arm orientation in muscle determined with high angular resolution using bifunctional spin labels. <i>Journal of General Physiology</i> , 2019, 151, 1007-1016.	0.9	9
242	Resolved Structural States of Calmodulin in Regulation of Skeletal Muscle Calcium Release. <i>Biophysical Journal</i> , 2020, 118, 1090-1100.	0.2	9
243	Novel drug discovery platform for spinocerebellar ataxia, using fluorescence technology targeting Î²-III-spectrin. <i>Journal of Biological Chemistry</i> , 2021, 296, 100215.	1.6	9
244	Calcium Stimulates Self-Assembly of Protein Kinase C Î± In Vitro. <i>PLoS ONE</i> , 2016, 11, e0162331.	1.1	9
245	Synergistic FRET assays for drug discovery targeting RyR2 channels. <i>Journal of Molecular and Cellular Cardiology</i> , 2022, 168, 13-23.	0.9	9
246	Orientation and rotational dynamics of spin-labeled phalloidin bound to actin in muscle fibers. <i>Proteins: Structure, Function and Bioinformatics</i> , 1993, 17, 347-354.	1.5	8
247	An Autoinhibitory Peptide from the Erythrocyte Ca-ATPase Aggregates and Inhibits Both Muscle Ca-ATPase Isoforms. <i>Biophysical Journal</i> , 1999, 76, 3058-3065.	0.2	8
248	Actin Filament Dynamics in the Actomyosin VI Complex Is Regulated Allosterically by Calcium-Calmodulin Light Chain. <i>Journal of Molecular Biology</i> , 2011, 413, 584-592.	2.0	8
249	Dynamics of Dystrophin's Actin-Binding Domain. <i>Biophysical Journal</i> , 2018, 115, 445-454.	0.2	8
250	Multibore sample cell increases EPR sensitivity for aqueous samples. <i>Journal of Magnetic Resonance</i> , 2006, 178, 318-324.	1.2	7
251	Intermolecular Interactions in the Mechanism of Skeletal Muscle Sarcoplasmic Reticulum Ca ²⁺ -ATPase (SERCA1): Evidence for a Triprotomer. <i>Biochemistry</i> , 2008, 47, 13711-13725.	1.2	7
252	Allosteric communication in Dictyostelium myosin II. <i>Journal of Muscle Research and Cell Motility</i> , 2012, 33, 305-312.	0.9	7

#	ARTICLE	IF	CITATIONS
253	The Structural Dynamics of Actin during Active Interaction with Myosin Depends on the Isoform of the Essential Light Chain. <i>Biochemistry</i> , 2013, 52, 1622-1630.	1.2	7
254	Optimization of bicelle lipid composition and temperature for EPR spectroscopy of aligned membranes. <i>Journal of Magnetic Resonance</i> , 2015, 250, 71-75.	1.2	7
255	Calcium-Dependent Structural Dynamics of a Spin-Labeled RyR Peptide Bound to Calmodulin. <i>Biophysical Journal</i> , 2016, 111, 2387-2394.	0.2	7
256	Impaired muscle relaxation and mitochondrial fission associated with genetic ablation of cytoplasmic actin isoforms. <i>FEBS Journal</i> , 2018, 285, 481-500.	2.2	7
257	Actin-binding compounds, previously discovered by FRET-based high-throughput screening, differentially affect skeletal and cardiac muscle. <i>Journal of Biological Chemistry</i> , 2020, 295, 14100-14110.	1.6	7
258	Saturation transfer EPR. <i>Trends in Biochemical Sciences</i> , 1977, 2, N65.	3.7	4
259	Integrated Phosphoproteomics for Identifying Substrates of Human Protein Kinase A (<i>PRKACA</i>) and Its Oncogenic Mutant <i>DNAJB</i>1 <i>â€“PRKACA</i>. <i>Journal of Proteome Research</i> , 2021, 20, 4815-4830.	1.8	4
260	Muscle Chemistry and Force. <i>Biophysical Journal</i> , 2000, 79, 1687-1688.	0.2	3
261	Mechanistic analysis of actin-binding compounds that affect the kinetics of cardiac myosinâ€™actin interaction. <i>Journal of Biological Chemistry</i> , 2021, 296, 100471.	1.6	3
262	Molecular Modeling of Fluorescent SERCA Biosensors. <i>Methods in Molecular Biology</i> , 2016, 1377, 503-522.	0.4	3
263	Purification of sarcoplasmic reticulum vesicles from horse gluteal muscle. <i>Analytical Biochemistry</i> , 2020, 610, 113965.	1.1	3
264	Sarcoplasmic Reticulum from Horse Gluteal Muscle Is Poised for Enhanced Calcium Transport. <i>Veterinary Sciences</i> , 2021, 8, 289.	0.6	3
265	Insulin-dependent rescue from cardiogenic shock is not mediated by phospholamban phosphorylation. <i>Clinical Toxicology</i> , 2009, 47, 296-302.	0.8	2
266	Cardiac ryanodine receptor N-terminal region biosensors identify novel inhibitors via FRET-based high-throughput screening. <i>Journal of Biological Chemistry</i> , 2022, 298, 101412.	1.6	2
267	Mechanochemical Coupling in Muscle. <i>Biophysical Journal</i> , 2000, 78, 2730.	0.2	1
268	FRET-Based Trilateration of a Domain Peptide Bound within Functional Ryanodine Receptors in Cardiomyocytes. <i>Biophysical Journal</i> , 2014, 106, 107a.	0.2	1
269	Structural Dynamics of Calmodulin in Regulation of Cardiac Calcium Release in Health and Disease. <i>Biophysical Journal</i> , 2016, 110, 269a.	0.2	1
270	High-Throughput Spectral and Lifetime-Based FRET Screening in Living Cells to Identify Small-Molecule Effectors of SERCA. <i>Biophysical Journal</i> , 2017, 112, 331a.	0.2	1

#	ARTICLE	IF	CITATIONS
271	Atomistic Models from Orientation and Distance Constraints Using EPR of a Bifunctional Spin Label. <i>Biophysical Journal</i> , 2019, 117, 319-330.	0.2	1
272	Sarcolipin Exhibits Abundant RNA Transcription and Minimal Protein Expression in Horse Gluteal Muscle. <i>Veterinary Sciences</i> , 2020, 7, 178.	0.6	1
273	Met125 is essential for maintaining the structural integrity of calmodulin's C-terminal domain. <i>Scientific Reports</i> , 2020, 10, 21320.	1.6	1
274	Molecular dynamics resolved. <i>Nature</i> , 1986, 321, 539-540.	13.7	0
275	Contributory presentations/posters. <i>Journal of Biosciences</i> , 1999, 24, 33-198.	0.5	0
276	2SA1-05 Structural Dynamics of Myosin by Time-resolved EPR(2SA1 Electron Spin Resonance on) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 5 Butsuri, 2009, 49, S10.	0.0	0
277	Mutation that causes hypertrophic cardiomyopathy increases force production in human \hat{A} -cardiac myosin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 12507-12508.	3.3	0
278	John Gergely (1919â€“2013): a pillar in the muscle protein field. <i>Journal of Muscle Research and Cell Motility</i> , 2013, 34, 441-446.	0.9	0
279	Enhanced synaptotagmin plasticity derived from pairing intrinsic disorder with synaptic vesicle lipids. <i>Communicative and Integrative Biology</i> , 2017, 10, e1343772.	0.6	0
280	Rotational Dynamics of Spin-Labelled Muscle Proteins. <i>Novartis Foundation Symposium</i> , 1983, 93, 169-185.	1.2	0
281	Chemical approach for evaluating role of the cysteine residues in pentameric phospholamban structure: Effect on sarcoplasmic reticulum Ca^{2+} -ATPase. , 2002, , 381-382.		0