

# David D Thomas

## List of Publications by Citations

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281  
papers

8,773  
citations

48  
h-index

72  
g-index

304  
ext. papers

9,785  
ext. citations

5.1  
avg, IF

6.06  
L-index

#	Paper	IF	Citations
281	Rotational diffusion studied by passage saturation transfer electron paramagnetic resonance. <i>Journal of Chemical Physics</i> , <b>1976</b> , 65, 3006-3024	3.9	375
280	Orientation of spin labels attached to cross-bridges in contracting muscle fibres. <i>Nature</i> , <b>1982</b> , 300, 776-80.4	30.4	234
279	Mutation and phosphorylation change the oligomeric structure of phospholamban in lipid bilayers. <i>Biochemistry</i> , <b>1997</b> , 36, 2960-7	3.2	164
278	NMR solution structure and topological orientation of monomeric phospholamban in dodecylphosphocholine micelles. <i>Biophysical Journal</i> , <b>2003</b> , 85, 2589-98	2.9	137
277	A fluorescence energy transfer method for analyzing protein oligomeric structure: application to phospholamban. <i>Biophysical Journal</i> , <b>1999</b> , 76, 2587-99	2.9	128
276	Rotational dynamics of spin-labeled F-actin in the sub-millisecond time range. <i>Journal of Molecular Biology</i> , <b>1979</b> , 132, 257-73	6.5	125
275	Cofilin increases the torsional flexibility and dynamics of actin filaments. <i>Journal of Molecular Biology</i> , <b>2005</b> , 353, 990-1000	6.5	123
274	Electron paramagnetic resonance reveals age-related myosin structural changes in rat skeletal muscle fibers. <i>American Journal of Physiology - Cell Physiology</i> , <b>2001</b> , 280, C540-7	5.4	113
273	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> , <b>2004</b> , 101, 14437-42	11.5	102
272	Spectroscopic validation of the pentameric structure of phospholamban. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2007</b> , 104, 14676-81	11.5	97
271	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> , <b>2005</b> , 102, 4747-52	11.5	93
270	Phosphorylation-dependent conformational switch in spin-labeled phospholamban bound to SERCA. <i>Journal of Molecular Biology</i> , <b>2006</b> , 358, 1032-40	6.5	92
269	Depolymerization of phospholamban in the presence of calcium pump: a fluorescence energy transfer study. <i>Biochemistry</i> , <b>1999</b> , 38, 3954-62	3.2	90
268	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> , <b>1996</b> , 260, 756-66	6.5	88
267	Effects of membrane thickness on the molecular dynamics and enzymatic activity of reconstituted Ca-ATPase. <i>Biochemistry</i> , <b>1994</b> , 33, 2912-20	3.2	83
266	Calculation of paramagnetic resonance spectra sensitive to very slow rotational motion. <i>Chemical Physics Letters</i> , <b>1974</b> , 25, 470-475	2.5	83
265	Structure and orientation of sarcolipin in lipid environments. <i>Biochemistry</i> , <b>2002</b> , 41, 475-82	3.2	82

264	Functional, structural, and chemical changes in myosin associated with hydrogen peroxide treatment of skeletal muscle fibers. <i>American Journal of Physiology - Cell Physiology</i> , <b>2008</b> , 294, C613-26	5.4	79
263	Enhanced synaptotagmin plasticity derived from pairing intrinsic disorder with synaptic vesicle lipids. <i>Communicative and Integrative Biology</i> , <b>2017</b> , 10, e1343772	1.7	78
262	Overexpression, purification, and characterization of recombinant Ca-ATPase regulators for high-resolution solution and solid-state NMR studies. <i>Protein Expression and Purification</i> , <b>2003</b> , 30, 253-61	3.1	75
261	Microsecond rotational motions of eosin-labeled myosin measured by time-resolved anisotropy of absorption and phosphorescence. <i>Journal of Molecular Biology</i> , <b>1984</b> , 179, 55-81	6.5	74
260	Temperature dependence of rotational dynamics of protein and lipid in sarcoplasmic reticulum membranes. <i>Biochemistry</i> , <b>1986</b> , 25, 194-202	3.2	74
259	Endoplasmic reticulum protein BI-1 regulates Ca <sup>2+</sup> -mediated bioenergetics to promote autophagy. <i>Genes and Development</i> , <b>2012</b> , 26, 1041-54	12.6	71
258	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> , <b>2015</b> , 85, 240-8	5.8	69
257	Direct detection of phospholamban and sarcoplasmic reticulum Ca-ATPase interaction in membranes using fluorescence resonance energy transfer. <i>Biochemistry</i> , <b>2004</b> , 43, 8754-65	3.2	68
256	Structural dynamics of actin during active interaction with myosin: different effects of weakly and strongly bound myosin heads. <i>Biochemistry</i> , <b>2004</b> , 43, 10642-52	3.2	68
255	(1)H/(15)N heteronuclear NMR spectroscopy shows four dynamic domains for phospholamban reconstituted in dodecylphosphocholine micelles. <i>Biophysical Journal</i> , <b>2004</b> , 87, 1205-14	2.9	68
254	Force generation, but not myosin ATPase activity, declines with age in rat muscle fibers. <i>American Journal of Physiology - Cell Physiology</i> , <b>2002</b> , 283, C187-92	5.4	67
253	Solid-state NMR and rigid body molecular dynamics to determine domain orientations of monomeric phospholamban. <i>Journal of the American Chemical Society</i> , <b>2002</b> , 124, 9392-3	16.4	67
252	Synthetic null-cysteine phospholamban analogue and the corresponding transmembrane domain inhibit the Ca-ATPase. <i>Biochemistry</i> , <b>2000</b> , 39, 10892-7	3.2	67
251	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> , <b>2013</b> , 18, 56004	3.5	65
250	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> , <b>2010</b> , 107, 8207-12	11.5	62
249	Discovery of enzyme modulators via high-throughput time-resolved FRET in living cells. <i>Journal of Biomolecular Screening</i> , <b>2014</b> , 19, 215-22		60
248	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> , <b>2015</b> , 112, 14272-7	11.5	58
247	Rotational dynamics of the Ca-ATPase in sarcoplasmic reticulum studied by time-resolved phosphorescence anisotropy. <i>Biochemistry</i> , <b>1990</b> , 29, 3904-14	3.2	58

246	Microsecond rotational dynamics of actin: spectroscopic detection and theoretical simulation. <i>Journal of Molecular Biology</i> , <b>1996</b> , 255, 446-57	6.5	56
245	Sarcolipin, the shorter homologue of phospholamban, forms oligomeric structures in detergent micelles and in liposomes. <i>Journal of Biological Chemistry</i> , <b>2001</b> , 276, 30845-52	5.4	55
244	Tumor necrosis factor-related apoptosis-inducing ligand (TRAIL) induces death receptor 5 networks that are highly organized. <i>Journal of Biological Chemistry</i> , <b>2012</b> , 287, 21265-78	5.4	54
243	Molecular dynamics simulations reveal a disorder-to-order transition on phosphorylation of smooth muscle myosin. <i>Biophysical Journal</i> , <b>2007</b> , 93, 2083-90	2.9	54
242	Faster transfer recovery reveals that phospholamban exchanges slowly from pentamers but rapidly from the SERCA regulatory complex. <i>Circulation Research</i> , <b>2007</b> , 101, 1123-9	15.7	54
241	Phospholamban pentamer quaternary conformation determined by in-gel fluorescence anisotropy. <i>Biochemistry</i> , <b>2005</b> , 44, 4302-11	3.2	54
240	Defining the molecular components of calcium transport regulation in a reconstituted membrane system. <i>Biochemistry</i> , <b>2003</b> , 42, 4585-92	3.2	53
239	Rotational dynamics of actin-bound myosin heads in active myofibrils. <i>Biochemistry</i> , <b>1993</b> , 32, 3812-21	3.2	52
238	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> , <b>2018</b> , 115, E7486-E7494	11.5	51
237	Effects of melittin on molecular dynamics and Ca-ATPase activity in sarcoplasmic reticulum membranes: time-resolved optical anisotropy. <i>Biochemistry</i> , <b>1991</b> , 30, 7498-506	3.2	51
236	Controlling the inhibition of the sarcoplasmic Ca <sup>2+</sup> -ATPase by tuning phospholamban structural dynamics. <i>Journal of Biological Chemistry</i> , <b>2007</b> , 282, 37205-14	5.4	50
235	Cysteine reactivity and oligomeric structures of phospholamban and its mutants. <i>Biochemistry</i> , <b>1998</b> , 37, 12074-81	3.2	50
234	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> , <b>2008</b> , 130, 12208-9	16.4	49
233	Defining the intramembrane binding mechanism of sarcolipin to calcium ATPase using solution NMR spectroscopy. <i>Journal of Molecular Biology</i> , <b>2006</b> , 358, 420-9	6.5	48
232	High-throughput FRET assay yields allosteric SERCA activators. <i>Journal of Biomolecular Screening</i> , <b>2013</b> , 18, 97-107		47
231	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> , <b>2009</b> , 106, 21625-30	11.5	47
230	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> , <b>1990</b> , 29, 5865-71	3.2	47
229	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> , <b>2017</b> , 114, E1796-E1804	11.5	46

228	Resolution of conformational states of spin-labeled myosin during steady-state ATP hydrolysis. <i>Biochemistry</i> , <b>1987</b> , 26, 314-23	3.2	46
227	Temporal sequence of major biochemical events during blood bank storage of packed red blood cells. <i>Blood Transfusion</i> , <b>2012</b> , 10, 453-61	3.6	46
226	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> , <b>2013</b> , 110, 7211-6	11.5	45
225	Lipid-mediated folding/unfolding of phospholamban as a regulatory mechanism for the sarcoplasmic reticulum Ca <sup>2+</sup> -ATPase. <i>Journal of Molecular Biology</i> , <b>2011</b> , 408, 755-65	6.5	45
224	FRET-based mapping of calmodulin bound to the RyR1 Ca <sup>2+</sup> release channel. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2009</b> , 106, 6128-33	11.5	45
223	Structural kinetics of myosin by transient time-resolved FRET. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2011</b> , 108, 1891-6	11.5	45
222	Effects of melittin on molecular dynamics and Ca-ATPase activity in sarcoplasmic reticulum membranes: electron paramagnetic resonance. <i>Biochemistry</i> , <b>1991</b> , 30, 7171-80	3.2	45
221	Site-directed spectroscopic probes of actomyosin structural dynamics. <i>Annual Review of Biophysics</i> , <b>2009</b> , 38, 347-69	21.1	44
220	Perturbations of functional interactions with myosin induce long-range allosteric and cooperative structural changes in actin. <i>Biochemistry</i> , <b>1997</b> , 36, 12845-53	3.2	44
219	Age-related decline in actomyosin structure and function. <i>Experimental Gerontology</i> , <b>2007</b> , 42, 931-8	4.5	44
218	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> , <b>2004</b> , 43, 5842-52	3.2	44
217	Oxidation increases the strength of the methionine-aromatic interaction. <i>Nature Chemical Biology</i> , <b>2016</b> , 12, 860-6	11.7	43
216	High-performance time-resolved fluorescence by direct waveform recording. <i>Review of Scientific Instruments</i> , <b>2010</b> , 81, 103101	1.7	43
215	Effects of Ser16 phosphorylation on the allosteric transitions of phospholamban/Ca(2+)-ATPase complex. <i>Journal of Molecular Biology</i> , <b>2006</b> , 358, 1041-50	6.5	43
214	A dynamic mechanism for allosteric activation of Aurora kinase A by activation loop phosphorylation. <i>ELife</i> , <b>2018</b> , 7,	8.9	43
213	Direct spectroscopic detection of molecular dynamics and interactions of the calcium pump and phospholamban. <i>Annals of the New York Academy of Sciences</i> , <b>1998</b> , 853, 186-94	6.5	42
212	Molecular dynamics simulation of site-directed spin labeling: experimental validation in muscle fibers. <i>Biophysical Journal</i> , <b>2002</b> , 83, 1854-66	2.9	42
211	Conformational transitions in the calcium adenosinetriphosphatase studied by time-resolved fluorescence resonance energy transfer. <i>Biochemistry</i> , <b>1989</b> , 28, 3940-7	3.2	42

210	Atomic-level characterization of the activation mechanism of SERCA by calcium. <i>PLoS ONE</i> , <b>2011</b> , 6, e26936	3.6	42
209	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> , <b>2008</b> , 105, 12867-72	11.5	41
208	Rotational dynamics of phospholamban determined by multifrequency electron paramagnetic resonance. <i>Biophysical Journal</i> , <b>2007</b> , 93, 2805-12	2.9	40
207	Microsecond rotational dynamics of phosphorescent-labeled muscle cross-bridges. <i>Biochemistry</i> , <b>1988</b> , 27, 3343-51	3.2	40
206	Dual mechanisms of sHA 14-1 in inducing cell death through endoplasmic reticulum and mitochondria. <i>Molecular Pharmacology</i> , <b>2009</b> , 76, 667-78	4.3	39
205	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> , <b>2009</b> , 106, 7822-7	11.5	38
204	Synthesis of TOAC spin-labeled proteins and reconstitution in lipid membranes. <i>Nature Protocols</i> , <b>2007</b> , 2, 42-9	18.8	38
203	Calmodulin oxidation and methionine to glutamine substitutions reveal methionine residues critical for functional interaction with ryanodine receptor-1. <i>Journal of Biological Chemistry</i> , <b>2003</b> , 278, 15615-21	5.4	38
202	Age-related decline in actomyosin function. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , <b>2005</b> , 60, 425-31	6.4	38
201	High-Throughput Spectral and Lifetime-Based FRET Screening in Living Cells to Identify Small-Molecule Effectors of SERCA. <i>SLAS Discovery</i> , <b>2017</b> , 22, 262-273	3.4	37
200	Myosin isoform determines the conformational dynamics and cooperativity of actin filaments in the strongly bound actomyosin complex. <i>Journal of Molecular Biology</i> , <b>2010</b> , 396, 501-9	6.5	37
199	Co-reconstitution of phospholamban mutants with the Ca-ATPase reveals dependence of inhibitory function on phospholamban structure. <i>Journal of Biological Chemistry</i> , <b>1999</b> , 274, 7649-55	5.4	37
198	Halothane and cyclopiazonic acid modulate Ca-ATPase oligomeric state and function in sarcoplasmic reticulum. <i>Biochemistry</i> , <b>1994</b> , 33, 13928-37	3.2	37
197	Time-resolved rotational dynamics of phosphorescent-labeled myosin heads in contracting muscle fibers. <i>Biochemistry</i> , <b>1990</b> , 29, 10023-31	3.2	37
196	Interdomain fluorescence resonance energy transfer in SERCA probed by cyan-fluorescent protein fused to the actuator domain. <i>Biochemistry</i> , <b>2008</b> , 47, 4246-56	3.2	36
195	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> , <b>2005</b> , 102, 4000-5	11.5	36
194	Conformational transitions of the sarcoplasmic reticulum Ca-ATPase studied by time-resolved EPR and quenched-flow kinetics. <i>Biochemistry</i> , <b>1995</b> , 34, 4864-79	3.2	36
193	Molecular mechanism of Ca-ATPase activation by halothane in sarcoplasmic reticulum. <i>Biochemistry</i> , <b>1993</b> , 32, 7503-11	3.2	36



192	Oligomeric interactions of sarcolipin and the Ca-ATPase. <i>Journal of Biological Chemistry</i> , <b>2011</b> , 286, 31693-706	3.7	35
191	The alpha-helical propensity of the cytoplasmic domain of phospholamban: a molecular dynamics simulation of the effect of phosphorylation and mutation. <i>Biophysical Journal</i> , <b>2005</b> , 88, 3243-51	2.9	35
190	Mechanochemical coupling in spin-labeled, active, isometric muscle. <i>Biophysical Journal</i> , <b>1999</b> , 77, 2657-64	6.9	35
189	Changes in Band 3 oligomeric state precede cell membrane phospholipid loss during blood bank storage of red blood cells. <i>Transfusion</i> , <b>2009</b> , 49, 1435-42	2.9	34
188	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> , <b>2011</b> , 108, 12729-33	11.5	34
187	On the function of pentameric phospholamban: ion channel or storage form?. <i>Biophysical Journal</i> , <b>2009</b> , 96, L60-2	2.9	34
186	An electrochemical investigation of sarcolipin reconstituted into a mercury-supported lipid bilayer. <i>Biophysical Journal</i> , <b>2007</b> , 93, 2678-87	2.9	34
185	Phosphorylated phospholamban stabilizes a compact conformation of the cardiac calcium-ATPase. <i>Biophysical Journal</i> , <b>2013</b> , 105, 1812-21	2.9	33
184	Fluorescence lifetime plate reader: resolution and precision meet high-throughput. <i>Review of Scientific Instruments</i> , <b>2014</b> , 85, 113101	1.7	33
183	Mapping the ryanodine receptor FK506-binding protein subunit using fluorescence resonance energy transfer. <i>Journal of Biological Chemistry</i> , <b>2010</b> , 285, 19219-26	5.4	33
182	Site-specific methionine oxidation initiates calmodulin degradation by the 20S proteasome. <i>Biochemistry</i> , <b>2009</b> , 48, 3005-16	3.2	33
181	Muscle activity and aging affect myosin structural distribution and force generation in rat fibers. <i>Journal of Applied Physiology</i> , <b>2004</b> , 96, 498-506	3.7	33
180	Structure and function of integral membrane protein domains resolved by peptide-amphiphiles: application to phospholamban. <i>Biopolymers</i> , <b>2003</b> , 69, 283-92	2.2	32
179	Microsecond rotational dynamics of spin-labeled myosin regulatory light chain induced by relaxation and contraction of scallop muscle. <i>Biochemistry</i> , <b>1998</b> , 37, 14428-36	3.2	32
178	High-Throughput Screens to Discover Small-Molecule Modulators of Ryanodine Receptor Calcium Release Channels. <i>SLAS Discovery</i> , <b>2017</b> , 22, 176-186	3.4	31
177	Role of cysteine residues in structural stability and function of a transmembrane helix bundle. <i>Journal of Biological Chemistry</i> , <b>2001</b> , 276, 38814-9	5.4	31
176	Generalized limits to the number of light particle degrees of freedom from big bang nucleosynthesis. <i>Astroparticle Physics</i> , <b>1999</b> , 11, 403-411	2.4	31
175	Transient detection of spin-labeled myosin subfragment 1 conformational states during ATP hydrolysis. <i>Biochemistry</i> , <b>1993</b> , 32, 6712-20	3.2	31

174	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> , <b>2016</b> , 113, 3233-8	11.5	30
173	Targeting the ensemble of heterogeneous tau oligomers in cells: A novel small molecule screening platform for tauopathies. <i>Alzheimer's and Dementia</i> , <b>2019</b> , 15, 1489-1502	1.2	30
172	Structural and functional dynamics of an integral membrane protein complex modulated by lipid headgroup charge. <i>Journal of Molecular Biology</i> , <b>2012</b> , 418, 379-89	6.5	30
171	Changes in actin structural transitions associated with oxidative inhibition of muscle contraction. <i>Biochemistry</i> , <b>2008</b> , 47, 11811-7	3.2	30
170	Hexanol and lidocaine affect the oligomeric state of the Ca-ATPase of sarcoplasmic reticulum. <i>Biochemistry</i> , <b>1994</b> , 33, 13208-22	3.2	30
169	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> , <b>2018</b> , 115, E11894-E11903	11.5	30
168	An Innovative High-Throughput Screening Approach for Discovery of Small Molecules That Inhibit TNF Receptors. <i>SLAS Discovery</i> , <b>2017</b> , 22, 950-961	3.4	29
167	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> , <b>2015</b> , 112, E6606-13	11.5	29
166	Time-resolved FRET reveals the structural mechanism of SERCA-PLB regulation. <i>Biochemical and Biophysical Research Communications</i> , <b>2014</b> , 449, 196-201	3.4	29
165	Microsecond molecular dynamics simulations of Mg <sup>2+</sup> - and K <sup>+</sup> -bound E1 intermediate states of the calcium pump. <i>PLoS ONE</i> , <b>2014</b> , 9, e95979	3.7	29
164	Phosphorylation-induced structural change in phospholamban and its mutants, detected by intrinsic fluorescence. <i>Biochemistry</i> , <b>1998</b> , 37, 7869-77	3.2	29
163	Targeting protein-protein interactions for therapeutic discovery via FRET-based high-throughput screening in living cells. <i>Scientific Reports</i> , <b>2018</b> , 8, 12560	4.9	28
162	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> , <b>2015</b> , 112, 14593-8	11.5	28
161	Structural basis for high-affinity actin binding revealed by a $\beta$ -III-spectrin SCA5 missense mutation. <i>Nature Communications</i> , <b>2017</b> , 8, 1350	17.4	27
160	Enhanced EPR sensitivity from a ferroelectric cavity insert. <i>Journal of Magnetic Resonance</i> , <b>2001</b> , 153, 7-14	3	27
159	2-Color calcium pump reveals closure of the cytoplasmic headpiece with calcium binding. <i>PLoS ONE</i> , <b>2012</b> , 7, e40369	3.7	27
158	Protein-protein interactions in calcium transport regulation probed by saturation transfer electron paramagnetic resonance. <i>Biophysical Journal</i> , <b>2012</b> , 103, 1370-8	2.9	26
157	A thermodynamic muscle model and a chemical basis for A.V. Hill's muscle equation. <i>Journal of Muscle Research and Cell Motility</i> , <b>2000</b> , 21, 335-44	3.5	26



156	Differences in structural dynamics of muscle and yeast actin accompany differences in functional interactions with myosin. <i>Biochemistry</i> , <b>1999</b> , 38, 14860-7	3.2	26
155	Mechanism of Ca-ATPase inhibition by melittin in skeletal sarcoplasmic reticulum. <i>Biochemistry</i> , <b>1995</b> , 34, 930-9	3.2	26
154	Noncompetitive inhibitors of TNFR1 probe conformational activation states. <i>Science Signaling</i> , <b>2019</b> , 12,	8.8	25
153	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> , <b>2011</b> , 408, 388-92	3.4	25
152	Complex kinetic behavior in the Na,K- and Ca-ATPases. Evidence for subunit-subunit interactions and energy conservation during catalysis. <i>Annals of the New York Academy of Sciences</i> , <b>1997</b> , 834, 280-96	6.5	25
151	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> , <b>2008</b> , 105, 13397-402	11.5	25
150	Molecular and cellular contractile dysfunction of dystrophic muscle from young mice. <i>Muscle and Nerve</i> , <b>2006</b> , 34, 92-100	3.4	25
149	Sarcoplipin Promotes Uncoupling of the SERCA Ca Pump by Inducing a Structural Rearrangement in the Energy-Transduction Domain. <i>Biochemistry</i> , <b>2016</b> , 55, 6083-6086	3.2	25
148	Atomic-level mechanisms for phospholamban regulation of the calcium pump. <i>Biophysical Journal</i> , <b>2015</b> , 108, 1697-1708	2.9	24
147	Protein structural dynamics revealed by site-directed spin labeling and multifrequency EPR. <i>Biophysical Reviews</i> , <b>2010</b> , 2, 91-99	3.7	24
146	Structure and dynamics of the force-generating domain of myosin probed by multifrequency electron paramagnetic resonance. <i>Biophysical Journal</i> , <b>2008</b> , 95, 247-56	2.9	24
145	Site-specific mutations in the myosin binding sites of actin affect structural transitions that control myosin binding. <i>Biochemistry</i> , <b>2001</b> , 40, 13933-40	3.2	24
144	Protein and lipid rotational dynamics in cardiac and skeletal sarcoplasmic reticulum detected by EPR and phosphorescence anisotropy. <i>Biochemistry</i> , <b>1993</b> , 32, 9445-53	3.2	24
143	Rotational dynamics of actin-bound intermediates in the myosin ATPase cycle. <i>Biochemistry</i> , <b>1991</b> , 30, 11036-45	3.2	24
142	A novel SERCA inhibitor demonstrates synergy with classic SERCA inhibitors and targets multidrug-resistant AML. <i>Molecular Pharmaceutics</i> , <b>2013</b> , 10, 4358-66	5.6	23
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