

Nikolai B Gusev

List of Publications by Year in descending order

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94
papers

3,535
citations

136950

32
h-index

155660

55
g-index

95
all docs

95
docs citations

95
times ranked

2848
citing authors

#	ARTICLE	IF	CITATIONS
1	Large Potentials of Small Heat Shock Proteins. <i>Physiological Reviews</i> , 2011, 91, 1123-1159.	28.8	359
2	Troponin I is released in bloodstream of patients with acute myocardial infarction not in free form but as complex. <i>Clinical Chemistry</i> , 1997, 43, 1379-1385.	3.2	234
3	Degradation of cardiac troponin I: implication for reliable immunodetection. <i>Clinical Chemistry</i> , 1998, 44, 2433-2440.	3.2	215
4	The growing world of small heat shock proteins: from structure to functions. <i>Cell Stress and Chaperones</i> , 2017, 22, 601-611.	2.9	158
5	Some properties of human small heat shock protein Hsp20 (HspB6). <i>FEBS Journal</i> , 2004, 271, 291-302.	0.2	109
6	Structural Basis for the Interaction of a Human Small Heat Shock Protein with the 14-3-3 Universal Signaling Regulator. <i>Structure</i> , 2017, 25, 305-316.	3.3	101
7	Heterooligomeric complexes of human small heat shock proteins. <i>Cell Stress and Chaperones</i> , 2012, 17, 157-169.	2.9	83
8	Moonlighting chaperone-like activity of the universal regulatory 14-3-3 proteins. <i>FEBS Journal</i> , 2017, 284, 1279-1295.	4.7	79
9	Effects of small heat shock proteins on the thermal denaturation and aggregation of F-actin. <i>Biochemical and Biophysical Research Communications</i> , 2005, 331, 1548-1553.	2.1	76
10	Small heat shock protein Hsp20 (HspB6) as a partner of 14-3-3 β . <i>Molecular and Cellular Biochemistry</i> , 2007, 295, 9-17.	3.1	71
11	The Role of Intrinsically Disordered Regions in the Structure and Functioning of Small Heat Shock Proteins. <i>Current Protein and Peptide Science</i> , 2012, 13, 76-85.	1.4	70
12	Small heat shock protein Hsp27 prevents heat-induced aggregation of F-actin by forming soluble complexes with denatured actin. <i>FEBS Journal</i> , 2007, 274, 5937-5948.	4.7	69
13	Heterooligomeric complexes formed by human small heat shock proteins HspB1 (Hsp27) and HspB6 (Hsp20). <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2009, 1794, 486-495.	2.3	68
14	Oligomeric structure of 14-3-3 protein: What do we know about monomers?. <i>FEBS Letters</i> , 2012, 586, 4249-4256.	2.8	60
15	Molecular structure and dynamics of the dimeric human small heat shock protein HSPB6. <i>Journal of Structural Biology</i> , 2014, 185, 342-354.	2.8	59
16	Some properties of human small heat shock protein Hsp22 (H11 or HspB8). <i>Biochemical and Biophysical Research Communications</i> , 2004, 315, 796-801.	2.1	55
17	The pivotal role of the β 27 strand in the intersubunit contacts of different human small heat shock proteins. <i>Cell Stress and Chaperones</i> , 2010, 15, 365-377.	2.9	49
18	Biochemical characterization of small heat shock protein HspB8 (Hsp22)-Bag3 interaction. <i>Archives of Biochemistry and Biophysics</i> , 2011, 513, 1-9.	3.0	49

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19	Structure, properties, and functions of the human small heat shock protein HSP22 (HspB8, H11, E2IG1): A critical review. <i>Journal of Neuroscience Research</i> , 2008, 86, 264-269.	2.9	48
20	Properties of the Monomeric Form of Human 14-3-3 η Protein and Its Interaction with Tau and HspB6. <i>Biochemistry</i> , 2011, 50, 9797-9808.	2.5	47
21	Phosphorylation of smooth muscle caldesmon by three protein kinases: Implication for domain mapping. <i>FEBS Letters</i> , 1988, 236, 321-324.	2.8	45
22	Monomeric 14-3-3 η Has a Chaperone-Like Activity and Is Stabilized by Phosphorylated HspB6. <i>Biochemistry</i> , 2012, 51, 6127-6138.	2.5	44
23	Interaction of smooth muscle caldesmon with S-100 protein. <i>FEBS Letters</i> , 1989, 257, 380-382.	2.8	43
24	Interaction of the small heat shock protein with molecular mass 25 kDa (hsp25) with actin. <i>FEBS Journal</i> , 2003, 270, 892-901.	0.2	43
25	Phosphorylation of more than one site is required for tight interaction of human tau protein with 14-3-3 η . <i>FEBS Letters</i> , 2009, 583, 2739-2742.	2.8	41
26	Structure and properties of K141E mutant of small heat shock protein HSP22 (HspB8, H11) that is expressed in human neuromuscular disorders. <i>Archives of Biochemistry and Biophysics</i> , 2006, 454, 32-41.	3.0	40
27	Characterization of Mutants of Human Small Heat Shock Protein HspB1 Carrying Replacements in the N-Terminal Domain and Associated with Hereditary Motor Neuron Diseases. <i>PLoS ONE</i> , 2015, 10, e0126248.	2.5	40
28	Thermally induced structural changes of intrinsically disordered small heat shock protein Hsp22. <i>Biophysical Chemistry</i> , 2009, 145, 79-85.	2.8	36
29	Complexes of smooth muscle tropomyosin with F-actin studied by differential scanning calorimetry. <i>FEBS Journal</i> , 2000, 267, 1869-1877.	0.2	34
30	Characterization of human small heat shock protein HSPB1 β -crystallin domain localized mutants associated with hereditary motor neuron diseases. <i>Scientific Reports</i> , 2018, 8, 688.	3.3	34
31	Effect of mutations mimicking phosphorylation on the structure and properties of human 14-3-3 η . <i>Archives of Biochemistry and Biophysics</i> , 2008, 477, 305-312.	3.0	33
32	Effect of phosphorylation on interaction of human tau protein with 14-3-3 η . <i>Biochemical and Biophysical Research Communications</i> , 2009, 379, 990-994.	2.1	33
33	Phosphomimicking mutations of human 14-3-3 η affect its interaction with tau protein and small heat shock protein HspB6. <i>Archives of Biochemistry and Biophysics</i> , 2011, 506, 24-34.	3.0	33
34	Effect of mutations in the β 27 loop on the structure and properties of human small heat shock protein HSP22 (HspB8, H11). <i>FEBS Journal</i> , 2007, 274, 5628-5642.	4.7	31
35	Physico-chemical properties of R140G and K141Q mutants of human small heat shock protein HspB1 associated with hereditary peripheral neuropathies. <i>Biochimie</i> , 2013, 95, 1582-1592.	2.6	30
36	The functional effects of mutations Thr673 \rightarrow Asp and Ser702 \rightarrow Asp at the Pro-directed kinase phosphorylation sites in the C-terminus of chicken gizzard caldesmon. <i>FEBS Letters</i> , 1993, 327, 85-89.	2.8	29

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37	Interaction of smooth muscle calponin with phospholipids. FEBS Letters, 1995, 371, 123-126.	2.8	29
38	Small heat shock protein Hsp27 protects myosin S1 from heat-induced aggregation, but not from thermal denaturation and ATPase inactivation. FEBS Letters, 2008, 582, 1407-1412.	2.8	29
39	Characterization of human small heat shock protein HspB1 that carries C-terminal domain mutations associated with hereditary motor neuron diseases. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2014, 1844, 2116-2126.	2.3	27
40	Identification of the site phosphorylated by casein kinase II in smooth muscle caldesmon. FEBS Letters, 1991, 289, 213-216.	2.8	25
41	Interaction of isoforms of S100 protein with smooth muscle caldesmon. FEBS Letters, 1998, 422, 235-239.	2.8	25
42	Interaction of smooth muscle calponin and desmin. FEBS Letters, 1996, 392, 255-258.	2.8	24
43	Interaction of Hsp27 with Native Phosphorylase Kinase under Crowding Conditions. Macromolecular Bioscience, 2010, 10, 783-789.	4.1	24
44	Structure and properties of G84R and L99M mutants of human small heat shock protein HspB1 correlating with motor neuropathy. Archives of Biochemistry and Biophysics, 2013, 538, 16-24.	3.0	24
45	pH-induced changes of the structure of small heat shock proteins with molecular mass 24/27kDa (HspB1). Biochemical and Biophysical Research Communications, 2004, 324, 1199-1203.	2.1	21
46	Versatility of the small heat shock protein HSPB6 (Hsp20). Cell Stress and Chaperones, 2010, 15, 233-236.	2.9	21
47	Effect of disulfide crosslinking on thermal transitions and chaperone-like activity of human small heat shock protein HspB1. Cell Stress and Chaperones, 2014, 19, 963-972.	2.9	21
48	Modulation of 14-3-3/Phosphotarget Interaction by Physiological Concentrations of Phosphate and Glycerophosphates. PLoS ONE, 2013, 8, e72597.	2.5	20
49	Interaction of small heat shock proteins with light component of neurofilaments (NFL). Cell Stress and Chaperones, 2017, 22, 467-479.	2.9	20
50	Phosphorylation of human small heat shock protein HspB8 (Hsp22) by ERK1 protein kinase. Molecular and Cellular Biochemistry, 2011, 355, 47-55.	3.1	19
51	Cofilin weakly interacts with 14-3-3 and therefore can only indirectly participate in regulation of cell motility by small heat shock protein HspB6 (Hsp20). Archives of Biochemistry and Biophysics, 2012, 521, 62-70.	3.0	19
52	Structure and properties of avian small heat shock protein with molecular weight 25 kDa. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2002, 1601, 64-74.	2.3	18
53	Small heat shock protein with apparent molecular mass 20 kDa (Hsp20, HspB6) is not a genuine actin-binding protein. Journal of Muscle Research and Cell Motility, 2005, 26, 175-181.	2.0	18
54	Utilization of fluorescent chimeras for investigation of heterooligomeric complexes formed by human small heat shock proteins. Biochimie, 2012, 94, 1794-1804.	2.6	18

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55	Chaperone-like activity of monomeric human 14-3-3 η on different protein substrates. Archives of Biochemistry and Biophysics, 2014, 549, 32-39.	3.0	18
56	Some properties of three α B-crystallin mutants carrying point substitutions in the C-terminal domain and associated with congenital diseases. Biochimie, 2017, 142, 168-178.	2.6	18
57	Mutations in HspB1 and hereditary neuropathies. Cell Stress and Chaperones, 2020, 25, 655-665.	2.9	18
58	Type 2 diabetes and metabolic syndrome: identification of the molecular mechanisms, key signaling pathways and transcription factors aimed to reveal new therapeutical targets. Diabetes Mellitus, 2018, 21, 364-375.	1.9	18
59	The Role of the Arginine in the Conserved N-Terminal Domain RLFDQxFG Motif of Human Small Heat Shock Proteins HspB1, HspB4, HspB5, HspB6, and HspB8. International Journal of Molecular Sciences, 2018, 19, 2112.	4.1	17
60	Interaction of smooth muscle caldesmon with calmodulin mutants. FEBS Letters, 1995, 360, 89-92.	2.8	16
61	Quaternary structure of human small heat shock protein HSPB6 (Hsp20) in crowded media modeled by trimethylamine N-oxide (TMAO): Effect of protein phosphorylation. Biochimie, 2015, 108, 68-75.	2.6	16
62	Identification of casein kinase II as a major endogeneous caldesmon kinase in sheep aorta smooth muscle. FEBS Letters, 1993, 334, 18-22.	2.8	15
63	The problem of protein kinase activity of small heat shock protein Hsp22 (H11 or HspB8). Biochemical and Biophysical Research Communications, 2004, 325, 649-652.	2.1	15
64	Chaperone-like activity of synthetic polyanions can be higher than the activity of natural chaperones at elevated temperature. Biochemical and Biophysical Research Communications, 2017, 489, 200-205.	2.1	15
65	Effect of human heat shock protein HspB6 on the solvent features of water in aqueous solutions. Journal of Biomolecular Structure and Dynamics, 2018, 36, 1520-1528.	3.5	15
66	Caldesmon150, caldesmon77 and skeletal muscle troponin T share a common antigenic determinant. FEBS Letters, 1989, 251, 65-68.	2.8	14
67	Interaction of smooth muscle caldesmon with phospholipids. FEBS Letters, 1990, 277, 134-136.	2.8	14
68	A novel Ca ²⁺ binding protein associated with caldesmon in Ca ²⁺ -regulated smooth muscle thin filaments: evidence for a structurally altered form of calmodulin. Journal of Muscle Research and Cell Motility, 2000, 21, 537-549.	2.0	14
69	The Heterooligomerization of Human Small Heat Shock Proteins Is Controlled by Conserved Motif Located in the N-Terminal Domain. International Journal of Molecular Sciences, 2020, 21, 4248.	4.1	14
70	Interaction of proteolytic fragments of calmodulin with caldesmon and calponin. Biochemical Journal, 1996, 315, 1021-1026.	3.7	13
71	Mapping of contact sites in the caldesmon-calmodulin complex. Biochemical Journal, 1997, 324, 255-262.	3.7	13
72	Localization of calponin binding sites in the structure of 90 kDa heat shock protein (Hsp90). FEBS Letters, 1999, 457, 369-374.	2.8	12

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73	Computer-assistant prediction of phospholipid binding sites of caldesmon and calponin. FEBS Letters, 1995, 363, 269-272.	2.8	11
74	Commentary on paper: Small heat shock proteins and the cytoskeleton: An essential interplay for cell integrity? (Wettstein et al.). International Journal of Biochemistry and Cell Biology, 2013, 45, 344-346.	2.8	11
75	Localization of phospholipid-binding sites of caldesmon. FEBS Letters, 1994, 342, 176-180.	2.8	10
76	Thermally induced chain exchange of smooth muscle tropomyosin dimers studied by differential scanning calorimetry. FEBS Letters, 1998, 433, 241-244.	2.8	10
77	Expression, purification and some properties of fluorescent chimeras of human small heat shock proteins. Protein Expression and Purification, 2012, 82, 45-54.	1.3	10
78	Effect of methylglyoxal modification on the structure and properties of human small heat shock protein HspB6 (Hsp20). Cell Stress and Chaperones, 2016, 21, 617-629.	2.9	10
79	Effect of 67 kDa calcimedlin on caldesmon functioning. FEBS Letters, 1993, 335, 193-197.	2.8	9
80	Structure and properties of chimeric small heat shock proteins containing yellow fluorescent protein attached to their C-terminal ends. Cell Stress and Chaperones, 2014, 19, 507-518.	2.9	9
81	Oligomeric state of α -crystallin under crowded conditions. Biochemical and Biophysical Research Communications, 2019, 508, 1101-1105.	2.1	9
82	Quaternary Structure and Hetero-Oligomerization of Recombinant Human Small Heat Shock Protein HspB7 (cvHsp). International Journal of Molecular Sciences, 2021, 22, 7777.	4.1	9
83	Utilization of troponin C as a model calcium-binding protein for mapping of the calmodulin-binding sites of caldesmon. Biochemical Journal, 1997, 321, 873-878.	3.7	8
84	Mutual effects of α -actinin, calponin and filamin on actin binding. BBA - Proteins and Proteomics, 2001, 1544, 393-405.	2.1	8
85	Physico-chemical properties of two point mutants of small heat shock protein HspB6 (Hsp20) with abrogated cardioprotection. Biochimie, 2020, 174, 126-135.	2.6	7
86	Competitive binding of the troponin T-specific pool of caldesmon antibodies and tropomyosin to skeletal troponin T and smooth muscle caldesmon. FEBS Letters, 1990, 262, 263-265.	2.8	5
87	Mutation of Lys-75 affects calmodulin conformation. FEBS Letters, 1999, 450, 139-143.	2.8	5
88	Replacement of Arg in the conserved N-terminal RLFDQxFG motif affects physico-chemical properties and chaperone-like activity of human small heat shock protein HspB8 (Hsp22). PLoS ONE, 2021, 16, e0253432.	2.5	5
89	Is the small heat shock protein HspB1 (Hsp27) a real and predominant target of methylglyoxal modification?. Cell Stress and Chaperones, 2019, 24, 419-426.	2.9	4
90	Effect of cataract-associated mutations in the N-terminal domain of α -crystallin (HspB5). Experimental Eye Research, 2020, 197, 108091.	2.6	3

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91	Cardio-Vascular Heat Shock Protein (cvHsp, HspB7), an Unusual Representative of Small Heat Shock Protein Family. <i>Biochemistry (Moscow)</i> , 2021, 86, S1-S11.	1.5	3
92	Simultaneous Interaction of Actin With β -Actinin and Calponin. <i>IUBMB Life</i> , 2000, 49, 277-282.	3.4	2
93	Corrigendum to "Small heat shock protein Hsp27 protects myosin S1 from heat-induced aggregation, but not from thermal denaturation and ATPase inactivation" [FEBS Lett. 582 (2008) 1407-1412]. <i>FEBS Letters</i> , 2009, 583, 949-949.	2.8	0
94	HSPB6 (Hsp20) as a Versatile Molecular Regulator. <i>Heat Shock Proteins</i> , 2015, , 229-253.	0.2	0