Eduard V Bocharov

List of Publications by Citations

55 papers	1,603 citations	25 h-index	39 g-index
59 ext. papers	1,860 ext. citations	4.2 avg, IF	4.19 L-index

#	Paper	IF	Citations
55	Spatial structure of the dimeric transmembrane domain of the growth factor receptor ErbB2 presumably corresponding to the receptor active state. *Journal of Biological Chemistry*, **2008**, 283, 6950-6	5.4	164
54	Unique dimeric structure of BNip3 transmembrane domain suggests membrane permeabilization as a cell death trigger. *Journal of Biological Chemistry*, **2007**, 282, 16256-66	5.4	106
53	Spatial structure of the transmembrane domain heterodimer of ErbB1 and ErbB2 receptor tyrosine kinases. *Journal of Molecular Biology*, **2010**, 400, 231-43	6.5	99
52	Left-handed dimer of EphA2 transmembrane domain: Helix packing diversity among receptor tyrosine kinases. *Biophysical Journal*, **2010**, 98, 881-9	2.9	87
51	Spatial structure and pH-dependent conformational diversity of dimeric transmembrane domain of the receptor tyrosine kinase EphA1. *Journal of Biological Chemistry*, **2008**, 283, 29385-95	5.4	86
50	From structure and dynamics of protein L7/L12 to molecular switching in ribosome. *Journal of Biological Chemistry*, **2004**, 279, 17697-706	5.4	79
49	Dimeric structure of transmembrane domain of amyloid precursor protein in micellar environment. *FEBS Letters*, **2012**, 586, 1687-92	3.8	63
48	HER2 Transmembrane Domain (TMD) Mutations (V659/G660) That Stabilize Homo- and Heterodimerization Are Rare Oncogenic Drivers in Lung Adenocarcinoma That Respond to Afatinib. *Journal of Thoracic Oncology*, **2017**, 12, 446-457	8.9	59
47	Structure of FGFR3 transmembrane domain dimer: implications for signaling and human pathologies. *Structure*, **2013**, 21, 2087-93	5.2	56
46	Alternative packing of EGFR transmembrane domain suggests that protein-lipid interactions underlie signal conduction across membrane. *Biochimica Et Biophysica Acta - Biomembranes*, **2016**, 1858, 1254-61	3.8	51
45	New binding site on common molecular scaffold provides HERG channel specificity of scorpion toxin BeKm-1. *Journal of Biological Chemistry*, **2002**, 277, 43104-9	5.4	51
44	Structural and thermodynamic insight into the process of "weak" dimerization of the ErbB4 transmembrane domain by solution NMR. *Biochimica Et Biophysica Acta - Biomembranes*, **2012**, 1818, 2158-70	3.8	50
43	Helix-helix interactions in membrane domains of bitopic proteins: Specificity and role of lipid environment. *Biochimica Et Biophysica Acta - Biomembranes*, **2017**, 1859, 561-576	3.8	49
42	Membrane binding motif of the P-type cardiotoxin. *Journal of Molecular Biology*, **2001**, 305, 137-49	6.5	48
41	HER2 Transmembrane Domain Dimerization Coupled with Self-Association of Membrane-Embedded Cytoplasmic Juxtamembrane Regions. *Journal of Molecular Biology*, **2016**, 428, 52-61	6.5	39
40	Dynamics-modulated biological activity of transforming growth factor beta3. *Journal of Biological Chemistry*, **2002**, 277, 46273-9	5.4	34
39	New Insights into Molecular Organization of Human Neuraminidase-1: Transmembrane Topology and Dimerization Ability. *Scientific Reports*, **2016**, 6, 38363	4.9	34

38	Structure elucidation of dimeric transmembrane domains of bitopic proteins. *Cell Adhesion and Migration*, **2010**, 4, 284-98	3.2	29
37	Point mutations in dimerization motifs of the transmembrane domain stabilize active or inactive state of the EphA2 receptor tyrosine kinase. *Journal of Biological Chemistry*, **2014**, 289, 14955-64	5.4	28
36	NMR-based approach to measure the free energy of transmembrane helix-helix interactions. *Biochimica Et Biophysica Acta - Biomembranes*, **2014**, 1838, 164-72	3.8	27
35	Towards structure determination of neurotoxin II bound to nicotinic acetylcholine receptor: a solid-state NMR approach. *FEBS Letters*, **2004**, 564, 319-24	3.8	27
34	Two forms of cytotoxin II (cardiotoxin) from Naja naja oxiana in aqueous solution: spatial structures with tightly bound water molecules. *FEBS Journal*, **1999**, 263, 152-62		27
33	The Conformation of the Epidermal Growth Factor Receptor Transmembrane Domain Dimer Dynamically Adapts to the Local Membrane Environment. *Biochemistry*, **2017**, 56, 1697-1705	3.2	26
32	Specific membrane binding of neurotoxin II can facilitate its delivery to acetylcholine receptor. *Biophysical Journal*, **2009**, 97, 2089-97	2.9	26
31	Uncharged AZT and D4T derivatives of phosphonoformic and phosphonoacetic acids as anti-HIV pronucleosides. *Journal of Medicinal Chemistry*, **2004**, 47, 3606-14	8.3	25
30	The Membrane Mimetic Affects the Spatial Structure and Mobility of EGFR Transmembrane and Juxtamembrane Domains. *Biochemistry*, **2015**, 54, 6295-8	3.2	24
29	Conformational transitions and interactions underlying the function of membrane embedded receptor protein kinases. *Biochimica Et Biophysica Acta - Biomembranes*, **2017**, 1859, 1417-1429	3.8	23
28	Antiamoebin I in methanol solution: rapid exchange between right-handed and left-handed 3(10)-helical conformations. *Chemistry and Biodiversity*, **2007**, 4, 1219-42	2.5	23
27	Loop 3 of short neurotoxin II is an additional interaction site with membrane-bound nicotinic acetylcholine receptor as detected by solid-state NMR spectroscopy. *Journal of Molecular Biology*, **2009**, 390, 662-71	6.5	22
26	Role of dimerization efficiency of transmembrane domains in activation of fibroblast growth factor receptor 3. *Journal of the American Chemical Society*, **2013**, 135, 8105-8	16.4	19
25	Structural basis of the signal transduction via transmembrane domain of the human growth hormone receptor. *Biochimica Et Biophysica Acta - General Subjects*, **2018**, 1862, 1410-1420	4	17
24	Backbone dynamics of the channel-forming antibiotic zervamicin IIB studied by 15N NMR relaxation. *FEBS Letters*, **2001**, 495, 52-5	3.8	15
23	Cell-free expression of the APP transmembrane fragments with Alzheimer's disease mutations using algal amino acid mixture for structural NMR studies. *Protein Expression and Purification*, **2016**, 123, 105-11	2	9
22	Familial L723P Mutation Can Shift the Distribution between the Alternative APP Transmembrane Domain Cleavage Cascades by Local Unfolding of the ε-Cleavage Site Suggesting a Straightforward Mechanism of Alzheimer's Disease Pathogenesis. *ACS Chemical Biology*, **2019**, 14, 1573-1582	4.9	8
21	Enhanced conformational flexibility of the histone-like (HU) protein from Mycoplasma gallisepticum. *Journal of Biomolecular Structure and Dynamics*, **2018**, 36, 45-53	3.6	8

20	The dimeric ectodomain of the alkali-sensing insulin receptor-related receptor (ectoIRR) has a droplike shape. *Journal of Biological Chemistry*, **2019**, 294, 17790-17798	5.4	8
19	Two types of conformational dynamics and thermo-sensor properties of praseodymium-DOTA by 1H/13C NMR. *Inorganica Chimica Acta*, **2019**, 486, 340-344	2.7	8
18	New Development in the Solid-State Isotope Exchange with Spillover Hydrogen in Organic Compounds. *Journal of Physical Chemistry C*, **2013**, 117, 16878-16884	3.8	7
17	NMR relaxation parameters of methyl groups as a tool to map the interfaces of helix-helix interactions in membrane proteins. *Journal of Biomolecular NMR*, **2017**, 69, 165-179	3	5
16	New strategy for high-level expression and purification of biologically active monomeric TGF-1/C77S in Escherichia coli. *Molecular Biotechnology*, **2015**, 57, 160-71	3	5
15	Transmembrane Peptides as a New Strategy to Inhibit Neuraminidase-1 Activation. *Frontiers in Cell and Developmental Biology*, **2020**, 8, 611121	5.7	5
14	Structural plasticity and thermal stability of the histone-like protein from Spiroplasma melliferum are due to phenylalanine insertions into the conservative scaffold. *Journal of Biomolecular Structure and Dynamics*, **2018**, 36, 4392-4404	3.6	4
13	Structure-based inhibitors targeting the alpha-helical domain of the Spiroplasma melliferum histone-like HU protein. *Scientific Reports*, **2020**, 10, 15128	4.9	4
12	Atomistic mechanism of the constitutive activation of PDGFRA via its transmembrane domain. *Biochimica Et Biophysica Acta - General Subjects*, **2019**, 1863, 82-95	4	4
11	Modulation of the Bioactive Conformation of Transforming Growth Factor Possible Implications of Cation Binding for Biological Function. *Topics in Current Chemistry*, **2008**, 273, 155-81		3
10	Dimeric states of transmembrane domains of insulin and IGF-1R receptors: Structures and possible role in activation. *Biochimica Et Biophysica Acta - Biomembranes*, **2020**, 1862, 183417	3.8	3
9	Structural Studies Providing Insights into Production and Conformational Behavior of Amyloid- Peptide Associated with Alzheimer's Disease Development. *Molecules*, **2021**, 26,	4.8	3
8	Activity-dependent conformational transitions of the insulin receptor-related receptor. *Journal of Biological Chemistry*, **2021**, 296, 100534	5.4	3
7	Unambiguous Tracking of Protein Phosphorylation by Fast High-Resolution FOSY NMR*. *Angewandte Chemie - International Edition*, **2021**, 60, 23540-23544	16.4	2
6	Accurate measurement of dipole/dipole transverse cross-correlated relaxation [Formula: see text] in methylenes and primary amines of uniformly [Formula: see text]-labeled proteins. *Journal of Biomolecular NMR*, **2019**, 73, 245-260	3	1
5	AlldEnantiomeric Peptide D3 Designed for Alzheimer's Disease Treatment Dynamically Interacts with Membrane-Bound Amyloid- Precursors. *Journal of Medicinal Chemistry*, **2021**, 64, 16464-16479	8.3	0
4	NMR assignments and secondary structure distribution of emfourin, a novel proteinaceous protease inhibitor. *Biomolecular NMR Assignments*, **2021**, 15, 361	0.7	0
3	Alternative dimerization of receptor tyrosine kinases with signal transduction through a cellular membrane. *Russian Journal of Bioorganic Chemistry*, **2017**, 43, 477-486	1	

2	Backbone and side-chain chemical shift assignments for the ribosome-inactivating protein trichobakin (TBK). *Biomolecular NMR Assignments*, **2020**, 14, 55-61	0.7
1	Unambiguous Tracking of Protein Phosphorylation by Fast High-Resolution FOSY NMR**. *Angewandte Chemie*, **2021**, 133, 23732	3.6