Timofei Zatsepin

List of Publications by Year in Descending Order

131 papers	1,758 citations	20 h-index	36 g-index
157 ext. papers	2,196 ext. citations	5.4 avg, IF	4.78 L-index

#	Paper	IF	Citations
131	Glycosylation of Receptor Binding Domain of SARS-CoV-2 S-Protein Influences on Binding to Immobilized DNA Aptamers.. *International Journal of Molecular Sciences*, **2022**, 23,	6.3	1
130	Role of RNA Biogenesis Factors in the Processing and Transport of Human Telomerase RNA. *Biomedicines*, **2022**, 10, 1275	4.8	1
129	Determination of the Affinity of Eukaryotic DDX3 RNA Helicase to the Characteristic Elements of mRNA Secondary Structure. *Doklady Biochemistry and Biophysics*, **2021**, 500, 297-299	0.8	
128	Design and Validation of siRNA Targeting Gankyrin in the Murine Liver. *Russian Journal of Bioorganic Chemistry*, **2021**, 47, 441-446	1	
127	RNA Helicases as Shadow Modulators of Cell Cycle Progression. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	4
126	Glucocorticoid-induced leucine zipper regulates liver fibrosis by suppressing CCL2-mediated leukocyte recruitment. *Cell Death and Disease*, **2021**, 12, 421	9.8	0
125	Multifunctional nanostructured drug delivery carriers for cancer therapy: Multimodal imaging and ultrasound-induced drug release. *Colloids and Surfaces B: Biointerfaces*, **2021**, 200, 111576	6	17
124	Indocyanine green dye based bimodal contrast agent tested by photoacoustic/fluorescence tomography setup. *Biomedical Optics Express*, **2021**, 12, 3181-3195	3.5	4
123	Template-Assisted Assembly of DNA Nanostructures from Branched Oligonucleotides. *Russian Journal of Bioorganic Chemistry*, **2021**, 47, 700-712	1	
122	Silver(I)-mediated base pairing in DNA involving the artificial nucleobase 7,8-dihydro-8-oxo-1,N-ethenoadenine. *Journal of Inorganic Biochemistry*, **2021**, 219, 111369	4.2	2
121	Hematopoietically-expressed homeobox protein HHEX regulates adipogenesis in preadipocytes. *Biochimie*, **2021**, 185, 68-77	4.6	4
120	Mesyl Phosphoramidate Oligonucleotides as Potential Splice-Switching Agents: Impact of Backbone Structure on Activity and Intracellular Localization. *Nucleic Acid Therapeutics*, **2021**, 31, 190-200	4.8	5
119	Anisotropic expansion of hepatocyte lumina enforced by apical bulkheads. *Journal of Cell Biology*, **2021**, 220,	7.3	3
118	Panel of potential lncRNA biomarkers can distinguish various types of liver malignant and benign tumors. *Journal of Cancer Research and Clinical Oncology*, **2021**, 147, 49-59	4.9	4
117	Barnase encapsulation into submicron porous CaCO particles: studies of loading and enzyme activity. *Journal of Materials Chemistry B*, **2021**, 9, 8823-8831	7.3	3
116	Phenoxazine pseudonucleotides in DNA i-motifs allow precise profiling of small molecule binders by fluorescence monitoring. *Analyst, The*, **2021**, 146, 4436-4440	5	3
115	Novel Lipid-Oligonucleotide Conjugates Containing Long-Chain Sulfonyl Phosphoramidate Groups: Synthesis and Biological Properties. *Applied Sciences (Switzerland)*, **2021**, 11, 1174	2.6	6

114	Identification of a long non-coding RNA regulator of liver carcinoma cell survival. *Cell Death and Disease*, **2021**, 12, 178	9.8	1
113	Improved Electroactivity of Redox Probes onto Electropolymerized Azidomethyl-PEDOT: Enabling Click Chemistry for Advanced (Bio)Sensors. *ACS Applied Polymer Materials*, **2021**, 3, 1518-1524	4.3	5
112	Genomic DNA i-motifs as fast sensors responsive to near-physiological pH microchanges. *Biosensors and Bioelectronics*, **2021**, 175, 112864	11.8	3
111	Magnetic Nanoparticles as a Tool for Remote DNA Manipulations at a Single-Molecule Level. *ACS Applied Materials & Interfaces*, **2021**, 13, 14458-14469	9.5	2
110	Probing GFP Chromophore Analogs as Anti-HIV Agents Targeting LTR-III G-Quadruplex. *Biomolecules*, **2021**, 11,	5.9	1
109	Synthesis of GalNAc-Oligonucleotide Conjugates Using GalNAc Phosphoramidite and Triple-GalNAc CPG Solid Support. *Methods in Molecular Biology*, **2021**, 2282, 101-118	1.4	0
108	Translation at first sight: the influence of leading codons. *Nucleic Acids Research*, **2020**, 48, 6931-6942	20.1	10
107	Optical clearing for photoacoustic lympho- and angiography beyond conventional depth limit. *Photoacoustics*, **2020**, 20, 100186	9	10
106	Influence of the spacer region between the Shine-Dalgarno box and the start codon for fine-tuning of the translation efficiency in Escherichia coli. *Microbial Biotechnology*, **2020**, 13, 1254-1261	6.3	6
105	DNA detection by dye labeled oligonucleotides using surface enhanced Raman spectroscopy. *Mendeleev Communications*, **2020**, 30, 18-21	1.9	7
104	The Arg/N-Degron Pathway-A Potential Running Back in Fine-Tuning the Inflammatory Response?. *Biomolecules*, **2020**, 10,	5.9	1
103	Analysis of RNA binding properties of human Ku protein reveals its interactions with 7SK snRNA and protein components of 7SK snRNP complex. *Biochimie*, **2020**, 171-172, 110-123	4.6	4
102	Downregulation of the Arg/N-degron Pathway Sensitizes Cancer Cells to Chemotherapy In Vivo. *Molecular Therapy*, **2020**, 28, 1092-1104	11.7	9
101	Biodegradable Polymeric Multilayer Capsules for Therapy of Lung Cancer. *ACS Applied Materials & Interfaces*, **2020**, 12, 5610-5623	9.5	24
100	Modification of Adenosine196 by Mettl3 Methyltransferase in the 5'-External Transcribed Spacer of 47S Pre-rRNA Affects rRNA Maturation. *Cells*, **2020**, 9,	7.9	4
99	Excimer-FRET Cascade in Dual DNA Probes: Open Access to Large Stokes Shift, Enhanced Acceptor Light up, and Robust RNA Sensing. *Analytical Chemistry*, **2020**, 92, 7028-7036	7.8	5
98	RT-qPCR Detection of Low-Copy HIV RNA with Yin-Yang Probes. *Methods in Molecular Biology*, **2020**, 2063, 27-35	1.4	
97	In Vivo RNAi-Mediated eIF3m Knockdown Affects Ribosome Biogenesis and Transcription but Has Limited Impact on mRNA-Specific Translation. *Molecular Therapy - Nucleic Acids*, **2020**, 19, 252-266	10.7	9

96	Upregulation of Mcl-1S Causes Cell-Cycle Perturbations and DNA Damage Accumulation. *Frontiers in Cell and Developmental Biology*, **2020**, 8, 543066	5.7	3
95	Toehold-Mediated Selective Assembly of Compact Discrete DNA Nanostructures. *Langmuir*, **2020**, 36, 15119-15127	4	4
94	Murine Long Noncoding RNA Morrbid Contributes in the Regulation of NRAS Splicing in Hepatocytes In Vitro. *International Journal of Molecular Sciences*, **2020**, 21,	6.3	3
93	Red light-triggered photoreduction on a nucleic acid template. *Chemical Communications*, **2020**, 56, 10026810029	5.8	19
92	Translation elongation factor 2 depletion by siRNA in mouse liver leads to mTOR-independent translational upregulation of ribosomal protein genes. *Scientific Reports*, **2020**, 10, 15473	4.9	5
91	Comparative Analysis of Long Noncoding RNA Expression in Human Hepatocyte Cell Lines and Liver. *Doklady Biochemistry and Biophysics*, **2020**, 493, 181-184	0.8	0
90	Noncoding RNA in Liver Regeneration-From Molecular Mechanisms to Clinical Implications. *Seminars in Liver Disease*, **2020**, 40, 70-83	7.3	4
89	Focused ultrasound-mediated fluorescence of composite microcapsules loaded with magnetite nanoparticles: In vitro and in vivo study. *Colloids and Surfaces B: Biointerfaces*, **2019**, 181, 680-687	6	17
88	Robust technique for dispersion of single-walled carbon nanotubes in aqueous solutions with tRNA. *Carbon*, **2019**, 151, 175-180	10.4	2
87	Direct injection of SWCNTs into liquid after supercritical nitrogen treatment. *Carbon*, **2019**, 152, 66-69	10.4	3
86	eIF4G2 balances its own mRNA translation via a PCBP2-based feedback loop. *Rna*, **2019**, 25, 757-767	5.8	4
85	Oligonucleotide Primers with G-Clamp Modifications for RT-qPCR Detection of the Low-Copy dsRNA. *Methods in Molecular Biology*, **2019**, 1973, 281-297	1.4	1
84	DNA -Motifs With Guanidino--Clamp Residues: The Counterplay Between Kinetics and Thermodynamics and Implications for the Design of pH Sensors. *Computational and Structural Biotechnology Journal*, **2019**, 17, 527-536	6.8	2
83	Integrator is a key component of human telomerase RNA biogenesis. *Scientific Reports*, **2019**, 9, 1701	4.9	20
82	Silver(I)-mediated base pairing in parallel-stranded DNA involving the luminescent cytosine analog 1,3-diaza-2-oxophenoxazine. *Journal of Biological Inorganic Chemistry*, **2019**, 24, 693-702	3.7	9
81	Synthesis of Diketone DNA Derivatives for Affinity Modification of Proteins. *Russian Journal of Bioorganic Chemistry*, **2019**, 45, 144-154	1	4
80	NHEJ pathway is involved in post-integrational DNA repair due to Ku70 binding to HIV-1 integrase. *Retrovirology*, **2019**, 16, 30	3.6	12
79	Long Noncoding RNA LL35/Falcor Regulates Expression of Transcription Factor Foxa2 in Hepatocytes in Normal and Fibrotic Mouse Liver. *Acta Naturae*, **2019**, 11, 66-74	2.1	2

78	Design and Visualization of DNA/RNA Nanostructures from Branched Oligonucleotides Using Blender Software. *Russian Journal of Bioorganic Chemistry*, **2019**, 45, 608-618	1	2
77	Novel homo Yin-Yang probes improve sensitivity in RT-qPCR detection of low copy HIV RNA. *Talanta*, **2019**, 194, 226-232	6.2	8
76	i-Clamp phenoxazine for the fine tuning of DNA i-motif stability. *Nucleic Acids Research*, **2018**, 46, 2751-2764	20.1	18
75	Structure and function of the N-terminal domain of the yeast telomerase reverse transcriptase. *Nucleic Acids Research*, **2018**, 46, 1525-1540	20.1	15
74	Novel Cluster and Monomer-Based GalNAc Structures Induce Effective Uptake of siRNAs in Vitro and in Vivo. *Bioconjugate Chemistry*, **2018**, 29, 2478-2488	6.3	18
73	Synthesis and biological evaluation of novel mono- and bivalent ASGP-R-targeted drug-conjugates. *Bioorganic and Medicinal Chemistry Letters*, **2018**, 28, 382-387	2.9	11
72	Synthesis and biological evaluation of novel doxorubicin-containing ASGP-R-targeted drug-conjugates. *Bioorganic and Medicinal Chemistry Letters*, **2018**, 28, 503-508	2.9	10
71	A study on endonuclease BspD6I and its stimulus-responsive switching by modified oligonucleotides. *PLoS ONE*, **2018**, 13, e0207302	3.7	2
70	Specificity of SNP detection with molecular beacons is improved by stem and loop separation with spacers. *Analyst, The*, **2017**, 142, 945-950	5	9
69	Design of 2?-phenylethynylpyrene excimer forming DNA/RNA probes for homogeneous SNP detection: The attachment manner matters. *Tetrahedron*, **2017**, 73, 3220-3230	2.4	7
68	Oligonucleotide inhibitors of HIV-1 integrase efficiently inhibit HIV-1 reverse transcriptase. *Russian Journal of Bioorganic Chemistry*, **2017**, 43, 135-139	1	
67	Synthesis of oligonucleotides containing novel G-clamp analogue with C8-tethered group in phenoxazine ring: Implication to qPCR detection of the low-copy Kemerovo virus dsRNA. *Bioorganic and Medicinal Chemistry*, **2017**, 25, 3597-3605	3.4	6
66	Application of sorting and next generation sequencing to study 5′UTR influence on translation efficiency in Escherichia coli. *Nucleic Acids Research*, **2017**, 45, 3487-3502	20.1	23
65	Fine Tuning of Pyrene Excimer Fluorescence in Molecular Beacons by Alteration of the Monomer Structure. *Journal of Organic Chemistry*, **2017**, 82, 10015-10024	4.2	23
64	Automated Solid-Phase Click Synthesis of Oligonucleotide Conjugates: From Small Molecules to Diverse N-Acetylgalactosamine Clusters. *Bioconjugate Chemistry*, **2017**, 28, 2599-2607	6.3	27
63	Characterization of HIV-1 integrase interaction with human Ku70 protein and initial implications for drug targeting. *Scientific Reports*, **2017**, 7, 5649	4.9	10
62	Human Ku70 protein binds hairpin RNA and double stranded DNA through two different sites. *Biochimie*, **2017**, 132, 85-93	4.6	9
61	Structure-guided chemical modification of guide RNA enables potent non-viral in vivo genome editing. *Nature Biotechnology*, **2017**, 35, 1179-1187	44.5	255

60	mRNA-Based Therapeutics: Advances and Perspectives. *Biochemistry (Moscow)*, **2016**, 81, 709-22	2.9	36
59	Analysis of the Cleavage Mechanism by Protein-Only RNase P Using Precursor tRNA Substrates with Modifications at the Cleavage Site. *Journal of Molecular Biology*, **2016**, 428, 4917-4928	6.5	4
58	lncRNA in the liver: Prospects for fundamental research and therapy by RNA interference. *Biochimie* , **2016**, 131, 159-172	4.6	24
57	Cy5/BHQ dye–quencher pairs in fluorogenic qPCR probes: effects of charge and hydrophobicity. *Analytical Methods*, **2016**, 8, 5826-5831	3.2	7
56	Tetrahedral DNA conjugates from pentaerythritol-based polyazides. *Tetrahedron*, **2016**, 72, 2386-2391	2.4	9
55	1-Phenylethynylpyrene (PEPy) as a novel blue-emitting dye for qPCR assay. *Analyst, The*, **2016**, 141, 1331–8	7	
54	Lipid nanoparticles for targeted siRNA delivery - going from bench to bedside. *International Journal of Nanomedicine*, **2016**, 11, 3077-86	7.3	106
53	TERRA mimicking ssRNAs prevail over the DNA substrate for telomerase in vitro due to interactions with the alternative binding site. *Journal of Molecular Recognition*, **2016**, 29, 242-7	2.6	5
52	Suicide inactivation of covalent peroxidase-mimicking DNAzyme with hydrogen peroxide and its protection by a reductant substrate. *Talanta*, **2016**, 155, 212-5	6.2	3
51	Molecular beacons with JOE dye: Influence of linker and 3' couple quencher. *Molecular and Cellular Probes*, **2016**, 30, 285-290	3.3	4
50	Structure–activity relationship study for design of highly active covalent peroxidase-mimicking DNAzyme. *RSC Advances*, **2015**, 5, 51672-51677	3.7	13
49	Oligonucleotide inhibitors of telomerase: prospects for anticancer therapy and diagnostics. *Biochemistry (Moscow)*, **2015**, 80, 251-9	2.9	6
48	Solid- and solution-phase synthesis and application of R6G dual-labeled oligonucleotide probes. *Bioorganic and Medicinal Chemistry*, **2015**, 23, 6749-56	3.4	6
47	A new approach to the synthesis of ligands of asialoglycoprotein receptor for targeted delivery of oligonucleotides to hepatocytes. *Russian Chemical Bulletin*, **2015**, 64, 1655-1662	1.7	5
46	Influence of Drug Resistance Mutations on the Activity of HIV-1 Subtypes A and B Integrases: a Comparative Study. *Acta Naturae*, **2015**, 7, 78-86	2.1	2
45	Influence of Drug Resistance Mutations on the Activity of HIV-1 Subtypes A and B Integrases: a Comparative Study. *Acta Naturae*, **2015**, 7, 78-86	2.1	2
44	Mechanistic comparison of Bacillus subtilis 6S-1 and 6S-2 RNAs--commonalities and differences. *Rna* , **2014**, 20, 348-59	5.8	24
43	Method for site-specific detection of m6A nucleoside presence in RNA based on high-resolution melting (HRM) analysis. *Nucleic Acids Research*, **2014**, 42, e27	20.1	34

42	Chimeric bifunctional oligonucleotides as a novel tool to invade telomerase assembly. *Nucleic Acids Research*, **2014**, 42, 9531-42	20.1	8
41	Design of photocontrolled biomolecules based on azobenzene derivatives. *Russian Chemical Reviews*, **2013**, 82, 942-963	6.8	11
40	Dynamics of human telomerase RNA structure revealed by antisense oligonucleotide technique. *Biochimie*, **2013**, 95, 2423-8	4.6	4
39	Clustered DNA lesions containing 5-formyluracil and AP site: repair via the BER system. *PLoS ONE*, **2013**, 8, e68576	3.7	16
38	Usage of rRNA-methyltransferase for site-specific fluorescent labeling. *Moscow University Chemistry Bulletin*, **2012**, 67, 88-93	0.5	1
37	A new fluorometric assay for the study of DNA-binding and 3'-processing activities of retroviral integrases and its use for screening of HIV-1 integrase inhibitors. *Biochimie*, **2012**, 94, 2382-90	4.6	8
36	Structure-Activity Relationship Studies of HIV-1 Integrase Oligonucleotide Inhibitors. *ACS Medicinal Chemistry Letters*, **2011**, 2, 532-7	4.3	4
35	Modulation of HIV-1 integrase activity by single-stranded oligonucleotides and their conjugates with eosin. *Nucleosides, Nucleotides and Nucleic Acids*, **2011**, 30, 651-66	1.4	4
34	Immunolocalization of Picornavirus RNA in infected cells with antibodies to Tyr-pUp, the covalent linkage unit between VPg and RNA. *Journal of Virological Methods*, **2011**, 171, 206-11	2.6	1
33	Restriction endonuclease SsoII with photoregulated activity--a "molecular gate" approach. *Bioconjugate Chemistry*, **2011**, 22, 1366-73	6.3	17
32	Maturation of the translation inhibitor microcin C. *Journal of Bacteriology*, **2009**, 191, 2380-7	3.5	34
31	Metal ion CHElate-aSSisted LIGAtion (CHESS LIGA) for SNP detection on microarrays. *Bioorganic and Medicinal Chemistry Letters*, **2009**, 19, 4018-21	2.9	1
30	New azobenzene derivatives for directed modification of proteins. *Russian Journal of Bioorganic Chemistry*, **2009**, 35, 549-555	1	10
29	Phenylethynylpyrene excimer forming hybridization probes for fluorescence SNP detection. *Methods in Molecular Biology*, **2009**, 578, 209-22	1.4	5
28	Design and Synthesis of 2-Functionalised Oligonucleotides. Their Application for Covalent Trapping the Protein DNA Complexes. *Current Organic Chemistry*, **2009**, 13, 1029-1049	1.7	10
27	Interaction of nucleotide excision repair factors XPC-HR23B, XPA, and RPA with damaged DNA. *Biochemistry (Moscow)*, **2008**, 73, 886-96	2.9	27
26	New approach to the synthesis of modified oligonucleotides bearing an aldehyde group. *Doklady Chemistry*, **2008**, 419, 108-110	0.8	
25	Preparation of 2'-hydrazino oligonucleotides and their reaction with aldehydes and 1,3-diketones. *Nucleosides, Nucleotides and Nucleic Acids*, **2007**, 26, 795-8	1.4	2

24	Probing of HIV-1 integrase/DNA interactions using novel analogs of viral DNA. *Journal of Biological Chemistry*, **2006**, 281, 11530-40	5.4	35
23	DNA-methyltransferase SsoII as a bifunctional protein: features of the interaction with the promoter region of SsoII restriction-modification genes. *Biochemistry (Moscow)*, **2006**, 71, 1341-9	2.9	7
22	Synthesis of 2?-hydrazine oligonucleotides and their efficient conjugation with aldehydes and 1,3-diketones. *Tetrahedron Letters*, **2006**, 47, 5515-5518	2	7
21	Structure-based cross-linking of NF-kappaB p50 homodimer and decoy bearing a novel 2'-disulfide trapping site. *IUBMB Life*, **2006**, 58, 654-8	4.7	11
20	Use of carbonyl group addition--elimination reactions for synthesis of nucleic acid conjugates. *Bioconjugate Chemistry*, **2005**, 16, 471-89	6.3	78
19	Oligonucleotides containing 2'-O-[2-(2,3-dihydroxypropyl)amino-2-oxoethyl]uridine as suitable precursors of 2'-aldehyde oligonucleotides for chemoselective ligation. *Bioorganic and Medicinal Chemistry*, **2005**, 13, 4912-20	3.4	10
18	Synthesis of DNA conjugates by solid-phase fragment condensation via aldehyde□ucleophile coupling. *Tetrahedron Letters*, **2005**, 46, 3191-3195	2	15
17	Affinity modification of the restriction endonuclease SsoII by 2'-aldehyde-containing double stranded DNAs. *Biochemistry (Moscow)*, **2005**, 70, 941-7	2.9	6
16	Analysis of DNA-protein interactions in complexes of transcription factor NF-kappaB with DNA. *Biochemistry (Moscow)*, **2005**, 70, 1212-22	2.9	4
15	Synthesis and properties of oligodeoxyribonucleotides containing 2□O-(2,3-dihydroxypropyl)- and 2□O-(2-oxoethyl)arabinouridine residues. *Russian Chemical Bulletin*, **2005**, 54, 238-246	1.7	0
14	Conjugates of oligonucleotides and analogues with cell penetrating peptides as gene silencing agents. *Current Pharmaceutical Design*, **2005**, 11, 3639-54	3.3	82
13	Covalent binding of modified nucleic acids to proteins as a method for investigation of specific protein□ucleic acid interactions. *Russian Chemical Reviews*, **2005**, 74, 77-95	6.8	8
12	2'-Hydrazine oligonucleotides: synthesis and efficient conjugation with aldehydes. *Nucleic Acids Symposium Series*, **2005**, 133-4		3
11	2'-Functionalized nucleic acids as structural tools in molecular biology. *IUBMB Life*, **2004**, 56, 209-14	4.7	14
10	Synthesis and applications of oligonucleotide-carbohydrate conjugates. *Chemistry and Biodiversity*, **2004**, 1, 1401-17	2.5	45
9	Synthesis of (2'S)- and (2'R)-2'-deoxy-2'-[(2-methoxyethoxy)amino] pyrimidine nucleosides and oligonucleotides. *Chemistry and Biodiversity*, **2004**, 1, 1537-45	2.5	2
8	Efficient conjugation and preferential DNA binding of oligonucleotides containing 2?-O-(2-oxoethyl)arabinouridine. *Tetrahedron Letters*, **2004**, 45, 7327-7330	2	4
7	Nucleosides and oligonucleotides containing 2'-reactive groups: synthesis and applications. *Russian Chemical Reviews*, **2004**, 73, 701-733	6.8	11

6	Ferrocene-containing nucleic acids. Synthesis and electrochemical properties. *Russian Chemical Reviews*, **2003**, 72, 537-554	6.8	63
5	Synthesis of 2'-modified oligonucleotides containing aldehyde or ethylenediamine groups. *Nucleosides, Nucleotides and Nucleic Acids*, **2003**, 22, 1383-5	1.4	7
4	Crosslinking of Transcription Factor NF-B with a DNA Ligand Bearing the 2"-Aldehyde Group. *Molecular Biology*, **2002**, 36, 705-707	1.2	5
3	Synthesis of 2'-O-alkylnucleosides. *Russian Chemical Reviews*, **2002**, 71, 513-534	6.8	11
2	Synthesis of peptide-oligonucleotide conjugates with single and multiple peptides attached to 2'-aldehydes through thiazolidine, oxime, and hydrazine linkages. *Bioconjugate Chemistry*, **2002**, 13, 822-30	6.3	102
1	Synthesis of modified nucleotide building blocks containing electrophilic groups in the 2'-position. *Nucleosides, Nucleotides and Nucleic Acids*, **2000**, 19, 1693-707	1.4	18