

# Alexander G Gabibov

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

72  
papers

1,500  
citations

24  
h-index

36  
g-index

102  
ext. papers

1,800  
ext. citations

5.9  
avg, IF

3.66  
L-index

#	Paper	IF	Citations
72	Autoantibodies to myelin basic protein catalyze site-specific degradation of their antigen. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2006</b> , 103, 281-6	11.5	144
71	Microfluidic droplet platform for ultrahigh-throughput single-cell screening of biodiversity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2017</b> , 114, 2550-2555	11.5	124
70	Recognition and degradation of myelin basic protein peptides by serum autoantibodies: novel biomarker for multiple sclerosis. <i>Journal of Immunology</i> , <b>2008</b> , 180, 1258-67	5.3	91
69	Chemical polysialylation of human recombinant butyrylcholinesterase delivers a long-acting bioscavenger for nerve agents in vivo. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2013</b> , 110, 1243-8	11.5	69
68	Peptidoglycan recognition protein tag7 forms a cytotoxic complex with heat shock protein 70 in solution and in lymphocytes. <i>Journal of Biological Chemistry</i> , <b>2004</b> , 279, 2117-24	5.4	57
67	Combinatorial antibody library from multiple sclerosis patients reveals antibodies that cross-react with myelin basic protein and EBV antigen. <i>FASEB Journal</i> , <b>2011</b> , 25, 4211-21	0.9	54
66	Catalytic antibodies in clinical and experimental pathology: human and mouse models. <i>Journal of Immunological Methods</i> , <b>2002</b> , 269, 197-211	2.5	49
65	DNA hydrolysis by monoclonal anti-ssDNA autoantibody BV 04-01: origins of catalytic activity. <i>Molecular Immunology</i> , <b>1997</b> , 34, 1083-93	4.3	43
64	Ultrahigh-throughput functional profiling of microbiota communities. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, 9551-9556	11.5	43
63	Reactibodies generated by kinetic selection couple chemical reactivity with favorable protein dynamics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2011</b> , 108, 15954-9	11.5	39
62	Catalytic activity of autoantibodies toward myelin basic protein correlates with the scores on the multiple sclerosis expanded disability status scale. <i>Immunology Letters</i> , <b>2006</b> , 103, 45-50	4.1	39
61	Liposome-encapsulated peptides protect against experimental allergic encephalitis. <i>FASEB Journal</i> , <b>2013</b> , 27, 222-31	0.9	38
60	Strategies for induction of catalytic antibodies toward HIV-1 glycoprotein gp120 in autoimmune prone mice. <i>Molecular Immunology</i> , <b>2009</b> , 47, 87-95	4.3	36
59	Routes to covalent catalysis by reactive selection for nascent protein nucleophiles. <i>Journal of the American Chemical Society</i> , <b>2007</b> , 129, 16175-82	16.4	34
58	Design of targeted B cell killing agents. <i>PLoS ONE</i> , <b>2011</b> , 6, e20991	3.7	34
57	Tag7 (PGLYRP1) in Complex with Hsp70 Induces Alternative Cytotoxic Processes in Tumor Cells via TNFR1 Receptor. <i>Journal of Biological Chemistry</i> , <b>2015</b> , 290, 21724-31	5.4	32
56	Ubiquitin-independent proteosomal degradation of myelin basic protein contributes to development of neurodegenerative autoimmunity. <i>FASEB Journal</i> , <b>2015</b> , 29, 1901-13	0.9	32

55	Catalytic antibodies: balancing between Dr. Jekyll and Mr. Hyde. <i>BioEssays</i> , <b>2009</b> , 31, 1161-71	4.1	32
54	DNA-specific antiidiotypic antibodies in the sera of patients with autoimmune diseases. <i>FEBS Letters</i> , <b>1992</b> , 314, 259-63	3.8	31
53	Idiotypic network mimicry and antibody catalysis: lessons for the elicitation of efficient anti-idiotypic protease antibodies. <i>Journal of Immunological Methods</i> , <b>2002</b> , 269, 5-12	2.5	28
52	Catalytic autoantibodies in clinical autoimmunity and modern medicine. <i>Autoimmunity Reviews</i> , <b>2006</b> , 5, 324-30	13.6	27
51	A SARS-CoV-2 neutralizing antibody with extensive Spike binding coverage and modified for optimal therapeutic outcomes. <i>Nature Communications</i> , <b>2021</b> , 12, 2623	17.4	25
50	DNA-hydrolyzing autoantibodies. <i>Applied Biochemistry and Biotechnology</i> , <b>1994</b> , 47, 293-302; discussion 303	3.2	24
49	The Pathogenesis of the Demyelinating Form of Guillain-Barre Syndrome (GBS): Proteo-peptidomic and Immunological Profiling of Physiological Fluids. <i>Molecular and Cellular Proteomics</i> , <b>2016</b> , 15, 2366-78	7.6	24
48	A novel expression cassette delivers efficient production of exclusively tetrameric human butyrylcholinesterase with improved pharmacokinetics for protection against organophosphate poisoning. <i>Biochimie</i> , <b>2015</b> , 118, 51-9	4.6	23
47	Multiple sclerosis autoantigen myelin basic protein escapes control by ubiquitination during proteasomal degradation. <i>Journal of Biological Chemistry</i> , <b>2014</b> , 289, 17758-66	5.4	23
46	CD206-Targeted Liposomal Myelin Basic Protein Peptides in Patients with Multiple Sclerosis Resistant to First-Line Disease-Modifying Therapies: A First-in-Human, Proof-of-Concept Dose-Escalation Study. <i>Neurotherapeutics</i> , <b>2016</b> , 13, 895-904	6.4	22
45	Strategies for the selection of catalytic antibodies against organophosphorus nerve agents. <i>Chemico-Biological Interactions</i> , <b>2013</b> , 203, 196-201	5	20
44	Administration of Myelin Basic Protein Peptides Encapsulated in Mannosylated Liposomes Normalizes Level of Serum TNF- $\alpha$ and IL-2 and Chemoattractants CCL2 and CCL4 in Multiple Sclerosis Patients. <i>Mediators of Inflammation</i> , <b>2016</b> , 2016, 2847232	4.3	18
43	Substrate recognition of anthrax lethal factor examined by combinatorial and pre-steady-state kinetic approaches. <i>Journal of Biological Chemistry</i> , <b>2009</b> , 284, 17902-13	5.4	17
42	Heavy-light chain interrelations of MS-associated immunoglobulins probed by deep sequencing and rational variation. <i>Molecular Immunology</i> , <b>2014</b> , 62, 305-14	4.3	16
41	The Transcriptome of Type I Murine Astrocytes under Interferon-Gamma Exposure and Remyelination Stimulus. <i>Molecules</i> , <b>2017</b> , 22,	4.8	16
40	Role of H1-light-chain constant-domain switch in the structure and functionality of A17 reactibody. <i>Acta Crystallographica Section D: Biological Crystallography</i> , <b>2014</b> , 70, 708-19		15
39	Autocrine-based selection of ligands for personalized CAR-T therapy of lymphoma. <i>Science Advances</i> , <b>2018</b> , 4, eaau4580	14.3	13
38	Exposure to the Epstein-Barr Viral Antigen Latent Membrane Protein 1 Induces Myelin-Reactive Antibodies. <i>Frontiers in Immunology</i> , <b>2017</b> , 8, 777	8.4	11

37	Catalytic transformations of supercoiled DNA as studied by flow linear dichroism technique. <i>FEBS Journal</i> , <b>2005</b> , 272, 6336-43	5.7	11
36	Robotic QM/MM-driven maturation of antibody combining sites. <i>Science Advances</i> , <b>2016</b> , 2, e1501695	14.3	10
35	Glatiramer acetate and nanny proteins restrict access of the multiple sclerosis autoantigen myelin basic protein to the 26S proteasome. <i>BioMed Research International</i> , <b>2014</b> , 2014, 926394	3	8
34	A kinase bioscavenger provides antibiotic resistance by extremely tight substrate binding. <i>Science Advances</i> , <b>2020</b> , 6, eaaz9861	14.3	7
33	Protective Allele for Multiple Sclerosis HLA-DRB1*01:01 Provides Kinetic Discrimination of Myelin and Exogenous Antigenic Peptides. <i>Frontiers in Immunology</i> , <b>2019</b> , 10, 3088	8.4	7
32	QM/MM Description of Newly Selected Catalytic Bioscavengers Against Organophosphorus Compounds Revealed Reactivation Stimulus Mediated by Histidine Residue in the Acyl-Binding Loop. <i>Frontiers in Pharmacology</i> , <b>2018</b> , 9, 834	5.6	6
31	Divergent Immunomodulation Capacity of Individual Myelin Peptides-Components of Liposomal Therapeutic against Multiple Sclerosis. <i>Frontiers in Immunology</i> , <b>2017</b> , 8, 1335	8.4	6
30	Antibody-antigen pair probed by combinatorial approach and rational design: bringing together structural insights, directed evolution, and novel functionality. <i>FEBS Letters</i> , <b>2012</b> , 586, 2966-73	3.8	6
29	Two subforms of eukaryotic topoisomerase I. Purification and structure-function relationships. <i>FEBS Letters</i> , <b>1992</b> , 314, 267-70	3.8	6
28	Deep Functional Profiling Facilitates the Evaluation of the Antibacterial Potential of the Antibiotic Amicoumacin. <i>Antibiotics</i> , <b>2020</b> , 9,	4.9	6
27	Molecular deconvolution of the neutralizing antibodies induced by an inactivated SARS-CoV-2 virus vaccine. <i>Protein and Cell</i> , <b>2021</b> , 12, 818-823	7.2	5
26	Heterogeneous catalysis on the phage surface: Display of active human enteropeptidase. <i>Biochimie</i> , <b>2013</b> , 95, 2076-81	4.6	4
25	Peptides Against Autoimmune Neurodegeneration. <i>Current Medicinal Chemistry</i> , <b>2017</b> , 24, 1761-1771	4.3	4
24	Catalytic Antibodies <b>2012</b> , 1735-1776		4
23	DNA-hydrolyzing autoantibodies in autoimmune pathologies. <i>Annals of the New York Academy of Sciences</i> , <b>1995</b> , 750, 255-64	6.5	4
22	Studies on the mechanism of action of the histone kinase dependent on adenosine 3 $\beta$ 5Rmonophosphate. Interaction of ATP with the catalytic subunit of the pig-brain enzyme: application of the quenched-flow technique. <i>FEBS Journal</i> , <b>1981</b> , 115, 297-301		4
21	Studies on the mechanism of action of the histone kinase dependent on adenosine 3 $\beta$ 5Rmonophosphate. Investigation of protein-protein interaction by electron spin-resonance spectroscopy and stopped-flow methods. <i>FEBS Journal</i> , <b>1983</b> , 132, 339-44		4
20	Probing Surface Membrane Receptors Using Engineered Bacteriophage Bioconjugates. <i>Bioconjugate Chemistry</i> , <b>2019</b> , 30, 1500-1506	6.3	3

19	Modified siRNA effectively silence inducible immunoproteasome subunits in NSO cells. <i>Biochimie</i> , <b>2016</b> , 125, 75-82	4.6	3
18	Cystathionase: high-performance liquid chromatography. Molecular cloning in lambda gt11. Nonradioactive immunodetection of fusion protein. <i>Biochimie</i> , <b>1989</b> , 71, 599-604	4.6	3
17	Studies on the mechanism of action of the histone kinase dependent on adenosine 3R5Rmonophosphate. Fast kinetics of histone H1 phosphorylation. <i>FEBS Journal</i> , <b>1983</b> , 135, 491-5		3
16	Multiscale computation delivers organophosphorus reactivity and stereoselectivity to immunoglobulin scavengers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 22841-22848	11.5	3
15	Drift of the Subgingival Periodontal Microbiome during Chronic Periodontitis in Type 2 Diabetes Mellitus Patients. <i>Pathogens</i> , <b>2021</b> , 10,	4.5	3
14	Epitope-Specific Response of Human Milk Immunoglobulins in COVID-19 Recovered Women. <i>Pathogens</i> , <b>2021</b> , 10,	4.5	3
13	Development of a recombinant immunotoxin for the immunotherapy of autoreactive lymphocytes expressing MOG-specific BCRs. <i>Biotechnology Letters</i> , <b>2016</b> , 38, 1173-80	3	3
12	Evolution of inhibitor-resistant natural mutant forms of HIV-1 protease probed by pre-steady state kinetic analysis. <i>Biochimie</i> , <b>2017</b> , 142, 125-134	4.6	2
11	Alterations in SARS-CoV-2 Omicron and Delta peptides presentation by HLA molecules.. <i>PeerJ</i> , <b>2022</b> , 10, e13354	3.1	2
10	Antibody-associated proteolysis in surveillance of autoimmune demyelination: clinical and preclinical issues. <i>Future Neurology</i> , <b>2011</b> , 6, 303-305	1.5	1
9	Neutrophil Extracellular Traps (NETs): Opportunities for Targeted Therapy. <i>Acta Naturae</i> , <b>2021</b> , 13, 15-23.	2.1	1
8	Targeting Extracellular Vesicles to Dendritic Cells and Macrophages. <i>Acta Naturae</i> , <b>2021</b> , 13, 114-121	2.1	1
7	Protein PGLYRP1/Tag7 Peptides Decrease the Proinflammatory Response in Human Blood Cells and Mouse Model of Diffuse Alveolar Damage of Lung through Blockage of the TREM-1 and TNFR1 Receptors. <i>International Journal of Molecular Sciences</i> , <b>2021</b> , 22,	6.3	1
6	Liquid drop of DNA libraries reveals total genome information. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 27300-27306	11.5	1
5	Myelin-Reactive Monoclonal Antibodies from Multiple Sclerosis Patients Cross-React with Nucleoproteins in HEp-2 Lysate. <i>BioNanoScience</i> , <b>2016</b> , 6, 322-324	3.4	1
4	Pre-Steady-State Kinetics of the SARS-CoV-2 Main Protease as a Powerful Tool for Antiviral Drug Discovery.. <i>Frontiers in Pharmacology</i> , <b>2021</b> , 12, 773198	5.6	1
3	A New Precision Minimally Invasive Method of Glial Scar Simulation in the Rat Spinal Cord Using Cryoapplication. <i>Frontiers in Surgery</i> , <b>2021</b> , 8, 607551	2.3	0
2	Clinical and experimental studies of multiple sclerosis in Russia: experience of the leading national research centers. <i>Degenerative Neurological and Neuromuscular Disease</i> , <b>2015</b> , 5, 83-90	5.4	

- 1 Avidin-peroxidase: synthesis and HPLC isolation of highly sensitive oligomers. *Journal of Proteomics*, **1990**, 21, 267-75