

Peter P Cherepanov

List of Publications by Year in descending order

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100
papers

12,745
citations

29994

54
h-index

34900

98
g-index

116
all docs

116
docs citations

116
times ranked

13108
citing authors

#	ARTICLE	IF	CITATIONS
1	Gene disruption in Escherichia coli: TcR and KmR cassettes with the option of Flp-catalyzed excision of the antibiotic-resistance determinant. <i>Gene</i> , 1995, 158, 9-14.	1.0	1,694
2	Preexisting and de novo humoral immunity to SARS-CoV-2 in humans. <i>Science</i> , 2020, 370, 1339-1343.	6.0	735
3	Retroviral intasome assembly and inhibition of DNA strand transfer. <i>Nature</i> , 2010, 464, 232-236.	13.7	620
4	HIV-1 Integrase Forms Stable Tetramers and Associates with LEDGF/p75 Protein in Human Cells. <i>Journal of Biological Chemistry</i> , 2003, 278, 372-381.	1.6	608
5	LEDGF/p75 Is Essential for Nuclear and Chromosomal Targeting of HIV-1 Integrase in Human Cells. <i>Journal of Biological Chemistry</i> , 2003, 278, 33528-33539.	1.6	432
6	LEDGF/p75 functions downstream from preintegration complex formation to effect gene-specific HIV-1 integration. <i>Genes and Development</i> , 2007, 21, 1767-1778.	2.7	408
7	Structural basis for the recognition between HIV-1 integrase and transcriptional coactivator p75. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 17308-17313.	3.3	379
8	The mechanism of retroviral integration from X-ray structures of its key intermediates. <i>Nature</i> , 2010, 468, 326-329.	13.7	280
9	Molecular mechanisms of retroviral integrase inhibition and the evolution of viral resistance. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 20057-20062.	3.3	275
10	The structural biology of HIV-1: mechanistic and therapeutic insights. <i>Nature Reviews Microbiology</i> , 2012, 10, 279-290.	13.6	272
11	Identification of an Evolutionarily Conserved Domain in Human Lens Epithelium-derived Growth Factor/Transcriptional Co-activator p75 (LEDGF/p75) That Binds HIV-1 Integrase. <i>Journal of Biological Chemistry</i> , 2004, 279, 48883-48892.	1.6	248
12	Structural and Functional Analyses of the Second-Generation Integrase Strand Transfer Inhibitor Dolutegravir (S/GSK1349572). <i>Molecular Pharmacology</i> , 2011, 80, 565-572.	1.0	223
13	Solution structure of the HIV-1 integrase-binding domain in LEDGF/p75. <i>Nature Structural and Molecular Biology</i> , 2005, 12, 526-532.	3.6	221
14	Retroviral Integrase Structure and DNA Recombination Mechanism. <i>Microbiology Spectrum</i> , 2014, 2, 1-22.	1.2	205
15	The effect of spike mutations on SARS-CoV-2 neutralization. <i>Cell Reports</i> , 2021, 34, 108890.	2.9	200
16	The Lentiviral Integrase Binding Protein LEDGF/p75 and HIV-1 Replication. <i>PLoS Pathogens</i> , 2008, 4, e1000046.	2.1	199
17	Pandemic peak SARS-CoV-2 infection and seroconversion rates in London frontline health-care workers. <i>Lancet</i> , The, 2020, 396, e6-e7.	6.3	196
18	Structure-based modeling of the functional HIV-1 intasome and its inhibition. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 15910-15915.	3.3	184

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19	Retroviral DNA Integration. <i>Chemical Reviews</i> , 2016, 116, 12730-12757.	23.0	177
20	A tripartite DNA-binding element, comprised of the nuclear localization signal and two AT-hook motifs, mediates the association of LEDGF/p75 with chromatin in vivo. <i>Nucleic Acids Research</i> , 2006, 34, 1653-1665.	6.5	166
21	LEDGF/p75 interacts with divergent lentiviral integrases and modulates their enzymatic activity in vitro. <i>Nucleic Acids Research</i> , 2007, 35, 113-124.	6.5	160
22	3â€²-Processing and strand transfer catalysed by retroviral integrase in crystallo. <i>EMBO Journal</i> , 2012, 31, 3020-3028.	3.5	144
23	A Novel Co-Crystal Structure Affords the Design of Gain-of-Function Lentiviral Integrase Mutants in the Presence of Modified PSIP1/LEDGF/p75. <i>PLoS Pathogens</i> , 2009, 5, e1000259.	2.1	139
24	Reduced neutralisation of the Delta (B.1.617.2) SARS-CoV-2 variant of concern following vaccination. <i>PLoS Pathogens</i> , 2021, 17, e1010022.	2.1	139
25	Bromo- and Extraterminal Domain Chromatin Regulators Serve as Cofactors for Murine Leukemia Virus Integration. <i>Journal of Virology</i> , 2013, 87, 12721-12736.	1.5	135
26	Structural basis for retroviral integration into nucleosomes. <i>Nature</i> , 2015, 523, 366-369.	13.7	133
27	Clinical and laboratory evaluation of SARS-CoV-2 lateral flow assays for use in a national COVID-19 seroprevalence survey. <i>Thorax</i> , 2020, 75, 1082-1088.	2.7	133
28	Centralspindlin links the mitotic spindle to the plasma membrane during cytokinesis. <i>Nature</i> , 2012, 492, 276-279.	13.7	131
29	Functional and structural characterization of the integrase from the prototype foamy virus. <i>Nucleic Acids Research</i> , 2009, 37, 243-255.	6.5	130
30	Structural basis for nuclear import of splicing factors by human Transportin 3. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 2728-2733.	3.3	124
31	Human Immunodeficiency Virus Glycoprotein gp120 as the Primary Target for the Antiviral Action of AR177 (Zintevir). <i>Molecular Pharmacology</i> , 1998, 53, 340-345.	1.0	118
32	Class II Integrase Mutants with Changes in Putative Nuclear Localization Signals Are Primarily Blocked at a Postnuclear Entry Step of Human Immunodeficiency Virus Type 1 Replication. <i>Journal of Virology</i> , 2004, 78, 12735-12746.	1.5	115
33	Structural Basis for Functional Tetramerization of Lentiviral Integrase. <i>PLoS Pathogens</i> , 2009, 5, e1000515.	2.1	113
34	Structural insights into the retroviral DNA integration apparatus. <i>Current Opinion in Structural Biology</i> , 2011, 21, 249-256.	2.6	112
35	Neutralization potency of monoclonal antibodies recognizing dominant and subdominant epitopes on SARS-CoV-2 Spike is impacted by the B.1.1.7 variant. <i>Immunity</i> , 2021, 54, 1276-1289.e6.	6.6	112
36	SARS-CoV-2 can recruit a heme metabolite to evade antibody immunity. <i>Science Advances</i> , 2021, 7, .	4.7	107

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37	Transcriptional co-activator p75 binds and tethers the Myc-interacting protein JPO2 to chromatin. <i>Journal of Cell Science</i> , 2006, 119, 2563-2571.	1.2	106
38	Structural biology of retroviral DNA integration. <i>Virology</i> , 2011, 411, 194-205.	1.1	106
39	New Class of HIV Integrase Inhibitors that Block Viral Replication in Cell Culture. <i>Current Biology</i> , 2002, 12, 1169-1177.	1.8	100
40	A supramolecular assembly mediates lentiviral DNA integration. <i>Science</i> , 2017, 355, 93-95.	6.0	96
41	Cryo-EM reveals a novel octameric integrase structure for betaretroviral intasome function. <i>Nature</i> , 2016, 530, 358-361.	13.7	88
42	POLE3-POLE4 Is a Histone H3-H4 Chaperone that Maintains Chromatin Integrity during DNA Replication. <i>Molecular Cell</i> , 2018, 72, 112-126.e5.	4.5	87
43	Identification and Characterization of a Functional Nuclear Localization Signal in the HIV-1 Integrase Interactor LEDGF/p75. <i>Journal of Biological Chemistry</i> , 2004, 279, 33421-33429.	1.6	86
44	HRP2 determines the efficiency and specificity of HIV-1 integration in LEDGF/p75 knockout cells but does not contribute to the antiviral activity of a potent LEDGF/p75-binding site integrase inhibitor. <i>Nucleic Acids Research</i> , 2012, 40, 11518-11530.	6.5	86
45	HIV-1 exploits importin 7 to maximize nuclear import of its DNA genome. <i>Retrovirology</i> , 2009, 6, 11.	0.9	85
46	DNA-Dependent Protein Kinase Is Not Required for Efficient Lentivirus Integration. <i>Journal of Virology</i> , 2000, 74, 11278-11285.	1.5	84
47	Mode of Interaction of G-Quartets with the Integrase of Human Immunodeficiency Virus Type 1. <i>Molecular Pharmacology</i> , 1997, 52, 771-780.	1.0	82
48	The SET Complex Acts as a Barrier to Autointegration of HIV-1. <i>PLoS Pathogens</i> , 2009, 5, e1000327.	2.1	82
49	Nuclear Localization of Human Immunodeficiency Virus Type 1 Integrase Expressed as a Fusion Protein with Green Fluorescent Protein. <i>Virology</i> , 1999, 258, 327-332.	1.1	74
50	Structural basis of second-generation HIV integrase inhibitor action and viral resistance. <i>Science</i> , 2020, 367, 806-810.	6.0	73
51	Crystal structure of human CDC7 kinase in complex with its activator DBF4. <i>Nature Structural and Molecular Biology</i> , 2012, 19, 1101-1107.	3.6	72
52	Cdt1 stabilizes an open MCM ring for helicase loading. <i>Nature Communications</i> , 2017, 8, 15720.	5.8	69
53	Characterization of humoral and SARS-CoV-2 specific T cell responses in people living with HIV. <i>Nature Communications</i> , 2021, 12, 5839.	5.8	67
54	Structure-based mutagenesis of the integrase-LEDGF/p75 interface uncouples a strict correlation between in vitro protein binding and HIV-1 fitness. <i>Virology</i> , 2007, 357, 79-90.	1.1	65

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55	Integrase residues that determine nucleotide preferences at sites of HIV-1 integration: implications for the mechanism of target DNA binding. <i>Nucleic Acids Research</i> , 2014, 42, 5164-5176.	6.5	62
56	Transcriptional Co-activator LEDGF Interacts with Cdc7-Activator of S-phase Kinase (ASK) and Stimulates Its Enzymatic Activity. <i>Journal of Biological Chemistry</i> , 2010, 285, 541-554.	1.6	57
57	High-level expression of active HIV-1 integrase from a synthetic gene in human cells. <i>FASEB Journal</i> , 2000, 14, 1389-1399.	0.2	56
58	Key determinants of target DNA recognition by retroviral intasomes. <i>Retrovirology</i> , 2015, 12, 39.	0.9	56
59	Structure and function of retroviral integrase. <i>Nature Reviews Microbiology</i> , 2022, 20, 20-34.	13.6	52
60	Retroviral Integrase Structure and DNA Recombination Mechanism. <i>Microbiology Spectrum</i> , 2014, 2, .	1.2	50
61	A bipartite structural organization defines the SERINC family of HIV-1 restriction factors. <i>Nature Structural and Molecular Biology</i> , 2020, 27, 78-83.	3.6	50
62	SRR-SB3, a disulfide-containing macrolide that inhibits a late stage of the replicative cycle of human immunodeficiency virus. <i>Antimicrobial Agents and Chemotherapy</i> , 1997, 41, 262-268.	1.4	47
63	Activity of recombinant HIV-1 integrase on mini-HIV DNA. <i>Nucleic Acids Research</i> , 1999, 27, 2202-2210.	6.5	47
64	High-level expression of active HIV-1 integrase from a synthetic gene in human cells. <i>FASEB Journal</i> , 2000, 14, 1389-1399.	0.2	46
65	Retroviral intasomes arising. <i>Current Opinion in Structural Biology</i> , 2017, 47, 23-29.	2.6	46
66	Structural basis for spumavirus GAG tethering to chromatin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 5509-5514.	3.3	45
67	Activities, Crystal Structures, and Molecular Dynamics of Dihydro-1 <i>H</i> -isoindole Derivatives, Inhibitors of HIV-1 Integrase. <i>ACS Chemical Biology</i> , 2013, 8, 209-217.	1.6	44
68	Structure-Guided Optimization of HIV Integrase Strand Transfer Inhibitors. <i>Journal of Medicinal Chemistry</i> , 2017, 60, 7315-7332.	2.9	44
69	Retroviral integration into nucleosomes through DNA looping and sliding along the histone octamer. <i>Nature Communications</i> , 2019, 10, 4189.	5.8	43
70	env Chimeric Virus Technology for Evaluating Human Immunodeficiency Virus Susceptibility to Entry Inhibitors. <i>Antimicrobial Agents and Chemotherapy</i> , 2002, 46, 3954-3962.	1.4	39
71	Lys-34, Dispensable for Integrase Catalysis, Is Required for Preintegration Complex Function and Human Immunodeficiency Virus Type 1 Replication. <i>Journal of Virology</i> , 2005, 79, 12584-12591.	1.5	38
72	Solution Conformations of Prototype Foamy Virus Integrase and Its Stable Synaptic Complex with U5 Viral DNA. <i>Structure</i> , 2012, 20, 1918-1928.	1.6	36

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73	Amplification, Next-generation Sequencing, and Genomic DNA Mapping of Retroviral Integration Sites. <i>Journal of Visualized Experiments</i> , 2016, , .	0.2	36
74	Assays for the Evaluation of HIV-1 Integrase Inhibitors. , 2001, 160, 139-155.		35
75	HIV-1 Integrase Strand Transfer Inhibitors with Reduced Susceptibility to Drug Resistant Mutant Integrases. <i>ACS Chemical Biology</i> , 2016, 11, 1074-1081.	1.6	35
76	Differential role for phosphorylation in alternative polyadenylation function versus nuclear import of SR-like protein CPSF6. <i>Nucleic Acids Research</i> , 2019, 47, 4663-4683.	6.5	35
77	Scalable and robust SARS-CoV-2 testing in an academic center. <i>Nature Biotechnology</i> , 2020, 38, 927-931.	9.4	32
78	In Search of Authentic Inhibitors of HIV-1 Integration. <i>Antiviral Chemistry and Chemotherapy</i> , 2002, 13, 1-15.	0.3	29
79	Cryo-EM structure of the deltaretroviral intasome in complex with the PP2A regulatory subunit B56 ³ . <i>Nature Communications</i> , 2020, 11, 5043.	5.8	21
80	The Interaction Between Lentiviral Integrase and LEDGF: Structural and Functional Insights. <i>Viruses</i> , 2009, 1, 780-801.	1.5	20
81	Severe Acute Respiratory Syndrome Coronavirus 2 Serosurveillance in a Patient Population Reveals Differences in Virus Exposure and Antibody-Mediated Immunity According to Host Demography and Healthcare Setting. <i>Journal of Infectious Diseases</i> , 2021, 223, 971-980.	1.9	20
82	Characterization of a <i>dam</i> Mutant of <i>Serratia marcescens</i> and Nucleotide Sequence of the <i>dam</i> Region. <i>Journal of Bacteriology</i> , 1999, 181, 3880-3885.	1.0	20
83	Integrase illuminated. <i>EMBO Reports</i> , 2010, 11, 328-328.	2.0	18
84	HIV-1 Integrase Inhibitors with Modifications That Affect Their Potencies against Drug Resistant Integrase Mutants. <i>ACS Infectious Diseases</i> , 2021, 7, 1469-1482.	1.8	14
85	Efficient transduction of LEDGF/p75 mutant cells by complementary gain-of-function HIV-1 integrase mutant viruses. <i>Molecular Therapy - Methods and Clinical Development</i> , 2014, 1, 2.	1.8	13
86	Structural Basis for the Activation and Target Site Specificity of CDC7 Kinase. <i>Structure</i> , 2020, 28, 954-962.e4.	1.6	13
87	Neutralizing Antibody Responses After SARS-CoV-2 Infection in End-Stage Kidney Disease and Protection Against Reinfection. <i>Kidney International Reports</i> , 2021, 6, 1799-1809.	0.4	13
88	Application of general formulas for the correction of a lattice-translocation defect in crystals of a lentiviral integrase in complex with LEDGF. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2009, 65, 966-973.	2.5	12
89	Multivalent interactions essential for lentiviral integrase function. <i>Nature Communications</i> , 2022, 13, 2416.	5.8	12
90	Clinical outcomes of COVID-19 in long-term care facilities for people with epilepsy. <i>Epilepsy and Behavior</i> , 2021, 115, 107602.	0.9	11

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91	Structural basis for the inhibition of HTLV-1 integration inferred from cryo-EM deltaretroviral intasome structures. <i>Nature Communications</i> , 2021, 12, 4996.	5.8	11
92	Close-up: HIV/SIV intasome structures shed new light on integrase inhibitor binding and viral escape mechanisms. <i>FEBS Journal</i> , 2021, 288, 427-433.	2.2	9
93	Interactions of Prototype Foamy Virus Capsids with Host Cell Polo-Like Kinases Are Important for Efficient Viral DNA Integration. <i>PLoS Pathogens</i> , 2016, 12, e1005860.	2.1	9
94	Detection and quantification of antibody to SARS CoV 2 receptor binding domain provides enhanced sensitivity, specificity and utility. <i>Journal of Virological Methods</i> , 2022, 302, 114475.	1.0	8
95	Mutations in Both <i>env</i> and <i>gag</i> genes are required for HIV-1 resistance to the polysulfonic dendrimer SPL2923, as corroborated by chimeric virus technology. <i>Antiviral Chemistry and Chemotherapy</i> , 2005, 16, 253-266.	0.3	6
96	Favorable antibody responses to human coronaviruses in children and adolescents with autoimmune rheumatic diseases. <i>Med</i> , 2021, 2, 1093-1109.e6.	2.2	6
97	Mapping of SARS-CoV-2 IgM and IgG in gingival crevicular fluid: Antibody dynamics and linkage to severity of COVID-19 in hospital inpatients. <i>Journal of Infection</i> , 2022, 85, 152-160.	1.7	6
98	Defining Potential Therapeutic Targets in Coronavirus Disease 2019: A Cross-Sectional Analysis of a Single-Center Cohort. , 2021, 3, e0488.		2
99	Expression of HIV-1 integrase in CEM cells inhibits HIV-1 replication. <i>Journal of Gene Medicine</i> , 2004, 6, 268-277.	1.4	1
100	158 The SET complex acts as a barrier to autointegration of HIV-1. <i>Journal of Acquired Immune Deficiency Syndromes</i> (1999), 2009, 51, .	0.9	0