

Bert L Semler

List of Publications by Year in descending order

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120
papers

6,849
citations

66343
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74163
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122
all docs

122
docs citations

122
times ranked

4150
citing authors

#	ARTICLE	IF	CITATIONS
1	Genotoxic stress and viral infection induce transient expression of APOBEC3A and pro-inflammatory genes through two distinct pathways. <i>Nature Communications</i> , 2021, 12, 4917.	12.8	28
2	Structure of the PCBP2/stem-loop IV complex underlying translation initiation mediated by the poliovirus type I IRES. <i>Nucleic Acids Research</i> , 2020, 48, 8006-8021.	14.5	18
3	Picornavirus Cellular Remodeling: Doubling Down in Response to Viral-Induced Inflammation. <i>Current Clinical Microbiology Reports</i> , 2020, 7, 31-37.	3.4	5
4	Effects of TDP2/VPg Unlinkase Activity on Picornavirus Infections Downstream of Virus Translation. <i>Viruses</i> , 2020, 12, 166.	3.3	7
5	Picornaviruses and RNA Metabolism: Local and Global Effects of Infection. <i>Journal of Virology</i> , 2019, 93, .	3.4	8
6	Enterovirus Persistence in Cardiac Cells of Patients With Idiopathic Dilated Cardiomyopathy Is Linked to 5'™ Terminal Genomic RNA-Deleted Viral Populations With Viral-Encoded Proteinase Activities. <i>Circulation</i> , 2019, 139, 2326-2338.	1.6	39
7	VPg unlinkase/TDP2 in cardiovirus infected cells: Re-localization and proteolytic cleavage. <i>Virology</i> , 2018, 516, 139-146.	2.4	3
8	Direct and Indirect Effects on Viral Translation and RNA Replication Are Required for AUF1 Restriction of Enterovirus Infections in Human Cells. <i>MBio</i> , 2018, 9, .	4.1	16
9	Exploitation of nuclear functions by human rhinovirus, a cytoplasmic RNA virus. <i>PLoS Pathogens</i> , 2018, 14, e1007277.	4.7	16
10	Hijacking Host Functions for Translation and RNA Replication by Enteroviruses. , 2018, , .		2
11	Functional Consequences of RNA 5'€²-Terminal Deletions on Coxsackievirus B3 RNA Replication and Ribonucleoprotein Complex Formation. <i>Journal of Virology</i> , 2017, 91, .	3.4	27
12	Mammalian Polycistronic mRNAs and Disease. <i>Trends in Genetics</i> , 2017, 33, 129-142.	6.7	36
13	Generation of Recombinant Polioviruses Harboring RNA Affinity Tags in the 5'€² and 3'€² Noncoding Regions of Genomic RNAs. <i>Viruses</i> , 2016, 8, 39.	3.3	4
14	Diverse Strategies Used by Picornaviruses to Escape Host RNA Decay Pathways. <i>Viruses</i> , 2016, 8, 335.	3.3	18
15	Viral Determinants of miR-122-Independent Hepatitis C Virus Replication. <i>MSphere</i> , 2016, 1, .	2.9	28
16	Divergent Requirement for a DNA Repair Enzyme during Enterovirus Infections. <i>MBio</i> , 2016, 7, e01931-15.	4.1	13
17	Construction of a subgenomic CV-B3 replicon expressing emerald green fluorescent protein to assess viral replication of a cardiotropic enterovirus strain in cultured human cells. <i>Journal of Virological Methods</i> , 2016, 230, 1-8.	2.1	2
18	Picornaviruses and nuclear functions: targeting a cellular compartment distinct from the replication site of a positive-strand RNA virus. <i>Frontiers in Microbiology</i> , 2015, 6, 594.	3.5	73

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19	A 21st Century Perspective of Poliovirus Replication. PLoS Pathogens, 2015, 11, e1004825.	4.7	25
20	Poliovirus RNA Replication and Genetic Complementation in Cell-Free Reactions. , 2014, , 461-469.		5
21	History of Poliomyelitis and Poliomyelitis Research. , 2014, , 1-14.		2
22	Revelations from a bicistronic calcium channel gene. Cell Cycle, 2014, 13, 875-876.	2.6	3
23	Differential restriction patterns of mRNA decay factor AUF1 during picornavirus infections. Journal of General Virology, 2014, 95, 1488-1492.	2.9	13
24	Modification of picornavirus genomic RNA using "click" chemistry shows that unlinking of the VPg peptide is dispensable for translation and replication of the incoming viral RNA. Nucleic Acids Research, 2014, 42, 2473-2482.	14.5	27
25	In Memoriam John J. Holland (1929-2013): a Pioneer in Molecular Virology. Journal of Virology, 2014, 88, 5903-5905.	3.4	0
26	Differential cleavage of IRES trans-acting factors (ITAFs) in cells infected by human rhinovirus. Virology, 2014, 449, 35-44.	2.4	9
27	Inhibition of Poliovirus-Induced Cleavage of Cellular Protein PCBP2 Reduces the Levels of Viral RNA Replication. Journal of Virology, 2014, 88, 3192-3201.	3.4	34
28	A novel Bcr-Abl/mTOR/eIF4A axis regulates IRES-mediated translation of LEF-1. Open Biology, 2014, 4, 140180.	3.6	21
29	Poliovirus infection induces the co-localization of cellular protein SRp20 with TIA-1, a cytoplasmic stress granule protein. Virus Research, 2013, 176, 223-231.	2.2	17
30	Cellular mRNA Decay Protein AUF1 Negatively Regulates Enterovirus and Human Rhinovirus Infections. Journal of Virology, 2013, 87, 10423-10434.	3.4	58
31	Methods to study RNA virus molecular biology. Methods, 2013, 59, 165-166.	3.8	0
32	Viral Proteinase Requirements for the Nucleocytoplasmic Relocalization of Cellular Splicing Factor SRp20 during Picornavirus Infections. Journal of Virology, 2013, 87, 2390-2400.	3.4	38
33	Viral subversion of host functions for picornavirus translation and RNA replication. Future Virology, 2012, 7, 179-191.	1.8	50
34	An RNA virus hijacks an incognito function of a DNA repair enzyme. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 14634-14639.	7.1	77
35	Picornavirus Modification of a Host mRNA Decay Protein. MBio, 2012, 3, e00431-12.	4.1	56
36	MDA5 Detects the Double-Stranded RNA Replicative Form in Picornavirus-Infected Cells. Cell Reports, 2012, 2, 1187-1196.	6.4	190

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37	Alphacoronavirus Transmissible Gastroenteritis Virus nsp1 Protein Suppresses Protein Translation in Mammalian Cells and in Cell-Free HeLa Cell Extracts but Not in Rabbit Reticulocyte Lysate. <i>Journal of Virology</i> , 2011, 85, 638-643.	3.4	73
38	Mechanistic Intersections Between Picornavirus Translation and RNA Replication. <i>Advances in Virus Research</i> , 2011, 80, 1-24.	2.1	24
39	SARS Coronavirus nsp1 Protein Induces Template-Dependent Endonucleolytic Cleavage of mRNAs: Viral mRNAs Are Resistant to nsp1-Induced RNA Cleavage. <i>PLoS Pathogens</i> , 2011, 7, e1002433.	4.7	308
40	Re-localization of Cellular Protein SRp20 during Poliovirus Infection: Bridging a Viral IRES to the Host Cell Translation Apparatus. <i>PLoS Pathogens</i> , 2011, 7, e1002127.	4.7	52
41	Engineered Picornavirus VPg-RNA Substrates: Analysis of a Tyrosyl-RNA Phosphodiesterase Activity. <i>PLoS ONE</i> , 2011, 6, e16559.	2.5	11
42	Delayed kinetics of poliovirus RNA synthesis in a human cell line with reduced levels of hnRNP C proteins. <i>Virology</i> , 2010, 400, 240-247.	2.4	40
43	Mechanistic Consequences of hnRNP C Binding to Both RNA Termini of Poliovirus Negative-Strand RNA Intermediates. <i>Journal of Virology</i> , 2010, 84, 4229-4242.	3.4	56
44	Stress-Inducible Alternative Translation Initiation of Human Cytomegalovirus Latency Protein pUL138. <i>Journal of Virology</i> , 2010, 84, 9472-9486.	3.4	62
45	Altered interactions between stem-loop IV within the 5' noncoding region of coxsackievirus RNA and poly(rC) binding protein 2: Effects on IRES-mediated translation and viral infectivity. <i>Virology</i> , 2009, 389, 45-58.	2.4	58
46	Bridging IRES elements in mRNAs to the eukaryotic translation apparatus. <i>Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms</i> , 2009, 1789, 518-528.	1.9	151
47	The linker domain of poly(rC) binding protein 2 is a major determinant in poliovirus cap-independent translation. <i>Virology</i> , 2008, 378, 243-253.	2.4	38
48	IRES-mediated pathways to polysomes: nuclear versus cytoplasmic routes. <i>Trends in Microbiology</i> , 2008, 16, 1-5.	7.7	64
49	Alternative polyadenylation signals in the 3' non-coding region of a voltage-gated potassium channel gene are major determinants of mRNA isoform expression. <i>Gene</i> , 2008, 408, 133-145.	2.2	2
50	Cellular Protein Modification by Poliovirus: the Two Faces of Poly(rC)-Binding Protein. <i>Journal of Virology</i> , 2007, 81, 8919-8932.	3.4	135
51	A nucleo-cytoplasmic SR protein functions in viral IRES-mediated translation initiation. <i>EMBO Journal</i> , 2007, 26, 459-467.	7.8	156
52	Resistance is futile. <i>Nature Genetics</i> , 2005, 37, 665-666.	21.4	4
53	Functional Interaction of Heterogeneous Nuclear Ribonucleoprotein C with Poliovirus RNA Synthesis Initiation Complexes. <i>Journal of Virology</i> , 2005, 79, 3254-3266.	3.4	91
54	Allosteric Effects of Ligands and Mutations on Poliovirus RNA-Dependent RNA Polymerase. <i>Journal of Virology</i> , 2005, 79, 7803-7811.	3.4	24

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55	An Authentic 3' UTR Noncoding Region Is Necessary for Efficient Poliovirus Replication. <i>Journal of Virology</i> , 2005, 79, 11962-11973.	3.4	39
56	An internal ribosome entry site mediates translation of lymphoid enhancer factor-1. <i>Rna</i> , 2005, 11, 1385-1399.	3.5	33
57	Atomic Force Microscopy Analysis of Icosahedral Virus RNA. <i>Journal of Molecular Biology</i> , 2005, 347, 41-52.	4.2	94
58	Strand-Specific RNA Synthesis Determinants in the RNA-Dependent RNA Polymerase of Poliovirus. <i>Journal of Virology</i> , 2004, 78, 4397-4407.	3.4	17
59	Cell-Dependent Role for the Poliovirus 3' UTR Noncoding Region in Positive-Strand RNA Synthesis. <i>Journal of Virology</i> , 2004, 78, 1344-1351.	3.4	43
60	Structurally Distinct Elements Mediate Internal Ribosome Entry within the 5' UTR-Noncoding Region of a Voltage-gated Potassium Channel mRNA. <i>Journal of Biological Chemistry</i> , 2004, 279, 47419-47430.	3.4	23
61	Differential Rescue of Poliovirus RNA Replication Functions by Genetically Modified RNA Polymerase Precursors. <i>Journal of Virology</i> , 2004, 78, 13007-13018.	3.4	12
62	Regulation of picornavirus gene expression. <i>Microbes and Infection</i> , 2004, 6, 702-713.	1.9	140
63	Poliovirus proves IRES-istible in vivo. <i>Journal of Clinical Investigation</i> , 2004, 113, 1678-1681.	8.2	9
64	Multimerization of poly(rC) binding protein 2 is required for translation initiation mediated by a viral IRES. <i>Rna</i> , 2004, 10, 1266-1276.	3.5	44
65	Functional conservation of the hydrophobic domain of polypeptide 3AB between human rhinovirus and poliovirus. <i>Virology</i> , 2003, 314, 432-442.	2.4	12
66	Distinct Poly(rC) Binding Protein KH Domain Determinants for Poliovirus Translation Initiation and Viral RNA Replication. <i>Journal of Virology</i> , 2002, 76, 12008-12022.	3.4	126
67	Subdomain Specific Functions of the RNA Polymerase Region of Poliovirus 3CD Polypeptide. <i>Virology</i> , 2002, 298, 200-213.	2.4	25
68	Requirements for Assembly of Poliovirus Replication Complexes and Negative-Strand RNA Synthesis. <i>Journal of Virology</i> , 2001, 75, 3841-3850.	3.4	71
69	A Group B Coxsackievirus/Poliovirus 5' UTR Nontranslated Region Chimera Can Act as an Attenuated Vaccine Strain in Mice. <i>Journal of Virology</i> , 2000, 74, 4047-4056.	3.4	51
70	Differential utilization of poly(rC) binding protein 2 in translation directed by picornavirus IRES elements. <i>Rna</i> , 1999, 5, 1570-1585.	3.5	133
71	Modulation of the RNA Binding and Protein Processing Activities of Poliovirus Polypeptide 3CD by the Viral RNA Polymerase Domain. <i>Journal of Biological Chemistry</i> , 1999, 274, 12867-12876.	3.4	55
72	Pyrimidine-Rich Region Mutations Compensate for a Stem-Loop V Lesion in the 5' UTR Noncoding Region of Poliovirus Genomic RNA. <i>Virology</i> , 1999, 264, 385-397.	2.4	6

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73	Requirements for RNA Replication of a Poliovirus Replicon by Coxsackievirus B3 RNA Polymerase. Journal of Virology, 1999, 73, 9413-9421.	3.4	32
74	Translation Initiation of a Cardiac Voltage-gated Potassium Channel by Internal Ribosome Entry. Journal of Biological Chemistry, 1998, 273, 20109-20113.	3.4	36
75	Rescue of Defective Poliovirus RNA Replication by 3AB-Containing Precursor Polypeptides. Journal of Virology, 1998, 72, 7191-7200.	3.4	63
76	RNA Determinants of Picornavirus Cap-Independent Translation Initiation. Seminars in Virology, 1997, 8, 242-255.	3.9	58
77	Translation and Replication Properties of the Human Rhinovirus Genome in Vivo and in Vitro. Virology, 1997, 229, 90-97.	2.4	56
78	Determinants of Membrane Association for Poliovirus Protein 3AB. Journal of Biological Chemistry, 1996, 271, 26810-26818.	3.4	138
79	Mutations in the Poliovirus 3CD Proteinase S1-Specificity Pocket Affect Substrate Recognition and RNA Binding. Virology, 1996, 218, 1-13.	2.4	40
80	Stem-Loop Structure Synergy in Binding Cellular Proteins to the 5' Noncoding Region of Poliovirus RNA. Virology, 1995, 206, 923-934.	2.4	60
81	3CD Cleavage of the Poliovirus P1 Precursor: A Model for Complex Proteinase/Substrate Interactions. , 1993, , 225-244.		2
82	Alternate poliovirus nonstructural protein processing cascades generated by primary sites of 3C proteinase cleavage. Virology, 1992, 191, 309-320.	2.4	63
83	Self-cleaving proteases. Current Opinion in Cell Biology, 1991, 3, 1039-1045.	5.4	20
84	Poliovirus translation initiation: Differential effects of directed and selected mutations in the 5' noncoding region of viral RNAs. Virology, 1991, 182, 742-752.	2.4	30
85	A genetic locus in mutant poliovirus genomes involved in overproduction of RNA polymerase and 3C proteinase. Virology, 1990, 174, 504-514.	2.4	17
86	Protein 3CD is the major poliovirus proteinase responsible for cleavage of the p1 capsid precursor. Virology, 1988, 166, 265-270.	2.4	374
87	Defined recombinants of poliovirus and coxsackievirus: Sequence-specific deletions and functional substitutions in the 5' noncoding regions of viral RNAs. Virology, 1988, 162, 47-57.	2.4	94
88	The Development of New Poliovirus Vaccines Based on Molecular Cloning. , 1988, , 43-54.		2
89	in vitro molecular genetics as a tool for determining the differential cleavage specificities of the poliovirus 3C proteinase. Nucleic Acids Research, 1987, 15, 2069-2088.	14.5	111
90	Expression of the poliovirus genome from infectious cDNA is dependent upon arrangements of eukaryotic and prokaryotic sequences in recombinant plasmids. Virology, 1987, 157, 560-564.	2.4	28

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91	Site-specific mutagenesis of cDNA clones expressing a poliovirus proteinase. Journal of Cellular Biochemistry, 1987, 33, 39-51.	2.6	40
92	An Infectious cDNA clone of the poliovirus sabin strain could be used as a stable repository and inoculum for the oral polio live vaccine. Virology, 1986, 151, 21-30.	2.4	59
93	Expression of a cloned gene segment of poliovirus in E. coli: Evidence for autocatalytic production of the viral proteinase. Cell, 1984, 37, 1063-1073.	28.9	126
94	Organization of the poliovirus genome and the sites for proteolytic processing. Biochemical Society Transactions, 1984, 12, 711-711.	3.4	0
95	Poliovirus RNA synthesis in Vitro: Structuralelements and antibody inhibition. Virology, 1983, 126, 624-635.	2.4	55
96	Membrane fractions active in poliovirus RNA replication contain VPg precursor polypeptides. Virology, 1983, 128, 33-47.	2.4	178
97	A membrane-associated precursor to poliovirus VPg identified by immunoprecipitation with antibodies directed against a synthetic heptapeptide. Cell, 1982, 28, 405-412.	28.9	183
98	Cleavage sites in the polypeptide precursors of poliovirus protein P2-X. Virology, 1981, 114, 589-594.	2.4	62
99	Primary structure, gene organization and polypeptide expression of poliovirus RNA. Nature, 1981, 291, 547-553.	27.8	1,057
100	Protein-linked RNA of poliovirus is competent to form an initiation complex of translation in vitro. Nature, 1980, 287, 600-603.	27.8	39
101	Defective Interfering RNA Viruses and the Host-Cell Response. , 1980, , 137-192.		111
102	Virus protein changes and RNA termini alterations evolving during persistent infection. Cell, 1980, 19, 871-880.	28.9	66
103	The nucleotide sequence of the 5' terminus of vesicular stomatitis virus RNA. Nucleic Acids Research, 1979, 6, 3923-3934.	14.5	16
104	Evolution of multiple genome mutations during long-term persistent infection by vesicular stomatitis virus. Cell, 1979, 16, 495-504.	28.9	180
105	Picornavirus Genome: an Overview. , 0, , 125-148.		17
106	Initiation of Translation of Picornavirus RNAs: Structure and Function of the Internal Ribosome Entry Site. , 0, , 157-169.		13
107	Proteins Involved in the Function of Picornavirus Internal Ribosomal Entry Sites. , 0, , 171-183.		6
108	Processing Determinants and Functions of Cleavage Products of Picornavirus Polyproteins. , 0, , 185-197.		30

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109	Structure and Function of Picornavirus Proteinases. , 0, , 199-212.		17
110	Possible Unifying Mechanism of Picornavirus Genome Replication. , 0, , 225-246.		46
111	Molecular and Biological Basis of Picornavirus Taxonomy. , 0, , 15-24.		13
112	Role of Cellular Structures in Viral RNA Replication. , 0, , 247-253.		13
113	Picornavirus Genetics: an Overview. , 0, , 269-284.		9
114	Picornavirus Proteinase-Mediated Shutoff of Host Cell Translation: Direct Cleavage of a Cellular Initiation Factor. , 0, , 299-311.		14
115	Poliovirus-Mediated Shutoff of Host Translation: an Indirect Effect. , 0, , 313-320.		5
116	Effects of Viral Replication on Cellular Membrane Metabolism and Function. , 0, , 337-354.		6
117	Immunology of the Coxsackieviruses. , 0, , 391-403.		2
118	Translation and Host Cell Shutoff. , 0, , 113-133.		12
119	Genome Replication I: the Players. , 0, , 105-125.		0
120	Genome Replication II: the Process. , 0, , 127-140.		0