John Yin

List of Publications by Year in descending order

67 papers	1,839 citations	257450 24 h-index	330143 37 g-index
67 all docs	67 docs citations	67 times ranked	1920 citing authors

#	Article	IF	Citations
1	Effects of Escherichia coli Physiology on Growth of Phage T7 In Vivo and In Silico. Journal of Bacteriology, 2002, 184, 1888-1894.	2.2	146
2	Quantitative Intracellular Kinetics of HIV Type 1. AIDS Research and Human Retroviruses, 1999, 15, 273-283.	1.1	101
3	Intracellular kinetics of a growing virus: A genetically structured simulation for bacteriophage T7. , 1997, 55, 375-389.		94
4	Growth of an RNA virus in single cells reveals a broad fitness distribution. Virology, 2009, 385, 39-46.	2.4	78
5	Kinetics of virus production from single cells. Virology, 2012, 424, 11-17.	2.4	77
6	Dependence of Epistasis on Environment and Mutation Severity as Revealed by in Silico Mutagenesis of Phage T7. Genetics, 2002, 160, 1273-1281.	2.9	66
7	Amplification and Spread of Viruses in a Growing Plaque. Journal of Theoretical Biology, 1999, 200, 365-373.	1.7	65
8	Population dynamics of an RNA virus and its defective interfering particles in passage cultures. Virology Journal, 2010, 7, 257.	3.4	62
9	Kinetic Modeling of Virus Growth in Cells. Microbiology and Molecular Biology Reviews, 2018, 82, .	6.6	49
10	A quantifiable phenotype of viral propagation. Biochemical and Biophysical Research Communications, 1991, 174, 1009-1014.	2.1	46
11	Subsurface oxidation of polyethylene. , 1998, 42, 523-529.		45
12	High-Throughput Single-Cell Kinetics of Virus Infections in the Presence of Defective Interfering Particles. Journal of Virology, 2016, 90, 1599-1612.	3.4	40
13	Multiple-hit inhibition of infection by defective interfering particles. Journal of General Virology, 2009, 90, 888-899.	2.9	40
14	Arrested spread of vesicular stomatitis virus infections in vitro depends on interferon-mediated antiviral activity. Biotechnology and Bioengineering, 2005, 90, 793-804.	3.3	37
15	Tools for Single-Cell Kinetic Analysis of Virus-Host Interactions. PLoS ONE, 2016, 11, e0145081.	2.5	35
16	Dynamics of viral infections: incorporating both the intracellular and extracellular levels. Computers and Chemical Engineering, 2005, 29, 675-686.	3.8	34
17	Image-Guided Modeling of Virus Growth and Spread. Bulletin of Mathematical Biology, 2008, 70, 1730-1748.	1.9	33
18	Model-Based Design of Growth-Attenuated Viruses. PLoS Computational Biology, 2006, 2, e116.	3.2	32

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19	Stochastic Kinetic Modeling of Vesicular Stomatitis Virus Intracellular Growth. Bulletin of Mathematical Biology, 2009, 71, 1671-1692.	1.9	31
20	Kinetic Differences and Synergistic Antiviral Effects Between Type I and Type III Interferon Signaling Indicate Pathway Independence. Journal of Interferon and Cytokine Research, 2015, 35, 734-747.	1.2	31
21	Differential Disruption of Nucleocytoplasmic Trafficking Pathways by Rhinovirus 2A Proteases. Journal of Virology, 2017, 91, .	3.4	30
22	Quantitative Characterization of Defective Virus Emergence by Deep Sequencing. Journal of Virology, 2014, 88, 2623-2632.	3.4	29
23	Characterization of vesicular stomatitis virus populations by tunable resistive pulse sensing. Journal of Virological Methods, 2015, 218, 71-76.	2.1	28
24	Spatial-Temporal Patterns of Viral Amplification and Interference Initiated by a Single Infected Cell. Journal of Virology, 2016, 90, 7552-7566.	3.4	28
25	Patterns of Regulation from mRNA and Protein Time Series. Metabolic Engineering, 2000, 2, 210-217.	7.0	27
26	Energy-efficient growth of phage Q? inEscherichia coli. Biotechnology and Bioengineering, 2004, 88, 148-156.	3.3	27
27	Toward Antiviral Strategies That Resist Viral Escape. Antimicrobial Agents and Chemotherapy, 2000, 44, 1097-1099.	3.2	26
28	Infection on a chip: a microscale platform for simple and sensitive cell-based virus assays. Biomedical Microdevices, 2009, 11, 565-570.	2.8	25
29	Robust Growth of Human Immunodeficiency Virus Type 1 (HIV-1). Biophysical Journal, 2005, 89, 2210-2221.	0.5	23
30	Neucode Labels for Multiplexed, Absolute Protein Quantification. Analytical Chemistry, 2016, 88, 3295-3303.	6.5	23
31	Formation of peptides in the dry state. Peptides, 2006, 27, 607-610.	2.4	22
32	Quantifying Viral Propagation in Vitro: Toward a Method for Characterization of Complex Phenotypes. Biotechnology Progress, 2001, 17, 1156-1165.	2.6	21
33	A quantitative infection assay for human type I, II, and III interferon antiviral activities. Virology Journal, 2013, 10, 224.	3.4	21
34	Sterol Carrier Protein 2, a Critical Host Factor for Dengue Virus Infection, Alters the Cholesterol Distribution in Mosquito Aag2 Cells. Journal of Medical Entomology, 2015, 52, 1124-1134.	1.8	21
35	Rapid induction and persistence of paracrine-induced cellular antiviral states arrest viral infection spread in A549 cells. Virology, 2016, 496, 59-66.	2.4	21
36	Visualizing infection spread: Dualâ€color fluorescent reporting of virusâ€“host interactions. Biotechnology and Bioengineering, 2014, 111, 1200-1209.	3.3	20

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37	Virus-like Particles: Measures and Biological Functions. Viruses, 2022, 14, 383.	3.3	20
38	Propagation of viruses on micropatterned host cells. Biotechnology and Bioengineering, 2003, 81, 719-725.	3.3	19
39	Inhibition of infection spread by co-transmitted defective interfering particles. PLoS ONE, 2017, 12, e0184029.	2.5	19
40	Trimetaphosphate Activates Prebiotic Peptide Synthesis across a Wide Range of Temperature and pH. Origins of Life and Evolution of Biospheres, 2018, 48, 277-287.	1.9	19
41	Chemical engineering and virology: Challenges and opportunities at the interface. AICHE Journal, 2007, 53, 2202-2209.	3.6	18
42	A quantitative comet assay: Imaging and analysis of virus plaques formed with a liquid overlay. Journal of Virological Methods, 2007, 139, 100-102.	2.1	17
43	Imaging the propagation of viruses. , 2000, 52, 438-442.		14
44	Quantitative Analysis of a Parasitic Antiviral Strategy. Antimicrobial Agents and Chemotherapy, 2004, 48, 1017-1020.	3.2	14
45	Robust kinetics of an RNA virus: Transcription rates are set by genome levels. Biotechnology and Bioengineering, 2015, 112, 1655-1662.	3.3	14
46	Effects of Trimetaphosphate on Abiotic Formation and Hydrolysis of Peptides. Life, 2017, 7, 50.	2.4	14
47	Dynamics of virus spread in the presence of fluid flow. Integrative Biology (United Kingdom), 2009, 1, 664.	1.3	12
48	Temperature gradients drive radial fluid flow in petri dishes and multiwell plates. AICHE Journal, 2016, 62, 2227-2233.	3.6	12
49	Implications of decoupling the intracellular and extracellular levels in multiâ€level models of virus growth. Biotechnology and Bioengineering, 2008, 101, 811-820.	3.3	11
50	Quantitative profiling of innate immune activation by viral infection in single cells. Integrative Biology (United Kingdom), 2017, 9, 782-791.	1.3	11
51	A quantitative comet infection assay for influenza virus. Journal of Virological Methods, 2012, 179, 351-358.	2.1	10
52	Genome rearrangement affects RNA virus adaptability on prostate cancer cells. Frontiers in Genetics, 2015, 6, 121.	2.3	9
53	Computational Fitness Landscape for All Gene-Order Permutations of an RNA Virus. PLoS Computational Biology, 2009, 5, e1000283.	3.2	8
54	Toward Molecular Cooperation by De Novo Peptides. Origins of Life and Evolution of Biospheres, 2021, 51, 71-82.	1.9	7

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55	Patterns of virus growth across the diversity of life. Integrative Biology (United Kingdom), 2021, 13, 44-59.	1.3	7
56	Resolving the Rules of Robustness and Resilience in Biology Across Scales. Integrative and Comparative Biology, 2022, 61, 2163-2179.	2.0	7
57	Whole-virus Vaccine Development by Continuous Culture on a Complementing Host. Nature Biotechnology, 1995, 13, 583-586.	17.5	6
58	Dynamic tradeoffs in the raft-mediated entry of human immunodeficiency virus type 1 into cells. Biotechnology and Bioengineering, 2006, 93, 246-257.	3.3	6
59	Mathematical modeling of the lower urinary tract: A review. Neurourology and Urodynamics, 2022, 41, 1305-1315.	1.5	6
60	Antiserum inhibition of propagating viruses. , 1997, 55, 542-546.		5
61	Spatial patterns of protein expression in focal infections of human cytomegalovirus. Biotechnology and Bioengineering, 2006, 93, 1029-1039.	3.3	5
62	Metal recognition by in-vitro selection. Biotechnology and Bioengineering, 1995, 45, 458-462.	3.3	4
63	SIMULATING THE GROWTH OF VIRUSES. , 2000, , 532-43.		4
64	In silico mutagenesis of RNA splicing in HIV-1. Biotechnology and Bioengineering, 2005, 91, 877-893.	3.3	3
65	Kinetics of Asian and African Zika virus lineages over singleâ€cycle and multiâ€cycle growth in culture: Gene expression, cell killing, virus production, and mathematical modeling. Biotechnology and Bioengineering, 2021, 118, 4231-4245.	3.3	2
66	Evolvix BEST Names for semantic reproducibility across code2brain interfaces. Annals of the New York Academy of Sciences, 2017, 1387, 124-144.	3.8	1
67	Subsurface oxidation of polyethylene. Journal of Biomedical Materials Research Part B, 1998, 42, 523-529.	3.1	1