Ryan Zurakowski

List of Publications by Year
in descending order

53 papers	**1,364** citations	623574 **14** h-index	526166 **27** g-index
55 all docs	**55** docs citations	**55** times ranked	**1784** citing authors

#	Article	IF	Citations
1	HIV-1 persistence in CD4+ T cells with stem cell–like properties. Nature Medicine, 2014, 20, 139-142.	15.2	379
2	Long-Term Antiretroviral Treatment Initiated at Primary HIV-1 Infection Affects the Size, Composition, and Decay Kinetics of the Reservoir of HIV-1-Infected CD4 T Cells. Journal of Virology, 2014, 88, 10056-10065.	1.5	242
3	A model predictive control based scheduling method for HIV therapy. Journal of Theoretical Biology, 2006, 238, 368-382.	0.8	150
4	The Tobit Kalman Filter: An Estimator for Censored Measurements. IEEE Transactions on Control Systems Technology, 2016, 24, 365-371.	3.2	79
5	HIV Model Parameter Estimates from Interruption Trial Data including Drug Efficacy and Reservoir Dynamics. PLoS ONE, 2012, 7, e40198.	1.1	71
6	Modelling HIV-1 2-LTR dynamics following raltegravir intensification. Journal of the Royal Society Interface, 2013, 10, 20130186.	1.5	39
7	Persistence of an intact HIV reservoir in phenotypically naive T cells. JCI Insight, 2020, 5, .	2.3	33
8	Nonlinear estimators for censored data: A comparison of the EKF, the UKF and the Tobit Kalman filter. , 2015, , .		31
9	Episomal HIV-1 DNA and its relationship to other markers of HIV-1 persistence. Retrovirology, 2018, 15, 15.	0.9	29
10	Model-driven approaches for in vitro combination therapy using ONYX-015 replicating oncolytic adenovirus. Journal of Theoretical Biology, 2007, 245, 1-8.	0.8	24
11	Estimation of saturated data using the Tobit Kalman filter. , 2014, , .		23
12	Optimal Antiviral Switching to Minimize Resistance Risk in HIV Therapy. PLoS ONE, 2011, 6, e27047.	1.1	22
13	Ballistic Roll Estimation using EKF Frequency Tracking and Adaptive Noise Cancellation. IEEE Transactions on Aerospace and Electronic Systems, 2013, 49, 2546-2553.	2.6	22
14	Nonlinear observer output-feedback MPC treatment scheduling for HIV. BioMedical Engineering OnLine, 2011, 10, 40.	1.3	21
15	Spatial modeling of HIV cryptic viremia and 2-LTR formation during raltegravir intensification. Journal of Theoretical Biology, 2014, 345, 61-69.	0.8	20
16	Controlling the evolution of resistance. Journal of Process Control, 2011, 21, 367-378.	1.7	16
17	Modeling Uncertainty in Single-Copy Assays for HIV. Journal of Clinical Microbiology, 2012, 50, 3381-3382.	1.8	15
18	Naive infection predicts reservoir diversity and is a formidable hurdle to HIV eradication. JCI Insight, 2021, 6, .	2.3	15

#	Article	IF	Citations
19	A new strategy to decrease risk of resistance emerging during therapy switching in HIV treatment. , 2008, , .		10
20	A generalized multi-strain model of HIV evolution with implications for drug-resistance management. , 2009, , .		10
21	Treatment interruptions to decrease risk of resistance emerging during therapy switching in HIV treatment. , 2007, , .		9
22	Estimation of mobile vehicle range &amp; position using the tobit Kalman filter. , 2014, , .		9
23	An Integrated Spatial Dynamicsâ€"Pharmacokinetic Model Explaining Poor Penetration of Anti-retroviral Drugs in Lymph Nodes. Frontiers in Bioengineering and Biotechnology, 2020, 8, 667.	2.0	8
24	Robust Closed-Loop Minimal Sampling Method for HIV Therapy Switching Strategies. IEEE Transactions on Biomedical Engineering, 2012, 59, 2227-2234.	2.5	7
25	Prospective HIV clinical trial comparison by expected Kullback-Leibler Divergence. , 2016, 2016, 1295-1300.		7
26	Modeling-error robustness of a viral-load preconditioning strategy for HIV treatment switching. , 2010, 2010, 5155-5160.		6
27	Closed-loop minimal sampling method for determining viral-load minima during switching. , 2010, 2010, 460-461.		6
28	A compartment based model for the formation of 2-LTR circles after raltegravir intensification. , 2012, , .		6
29	Next-Generation Sequencing in a Direct Model of HIV Infection Reveals Important Parallels to and Differences from In Vivo Reservoir Dynamics. Journal of Virology, 2020, 94, .	1.5	6
30	Significant Unresolved Questions and Opportunities for Bioengineering in Understanding and Treating COVID-19 Disease Progression. Cellular and Molecular Bioengineering, 2020, 13, 259-284.	1.0	5
31	Kalman filter-based tracking of multiple similar objects from a moving camera platform. , 2012, , .		4
32	Conditions for invasion of synapse-forming HIV variants. , 2013, , .		4
33	Synaptic transmission may provide an evolutionary benefit to HIV through modulation of latency. Journal of Theoretical Biology, 2018, 455, 261-268.	0.8	4
34	Resistance Risk Management in HIV Therapy Switching with Explicit Quiescent T-Cell Modeling. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 10325-10330.	0.4	3
35	Measurement error robustness of a closed-loop minimal sampling method for HIV therapy switching. , 2011, 2011, 116-9.		3
36	Approximate-model closed-loop minimal sampling method for HIV viral-load minima detection. , 2011, , 5418-5419.		3

#	Article	IF	Citations
37	Order preservation of expected information content using Unscented Transform approximation of multivariate prior distributions in HIV 2-LTR experiment design. , 2016, 2016, 5597-5602.		3
38	Recursive estimation with quantized and censored measurements. , 2016, , .		3
39	Increased inflammation in sanctuary sites may explain viral blips in HIV infection. IET Systems Biology, 2016, 10, 153-166.	0.8	3
40	Treatment scheduling for HIV using robust nonlinear model predictive control. Australian Journal of Electrical and Electronics Engineering, 2005, 2, 49-58.	0.7	2
41	Evaluation of HIV 2-LTR formation models using monotone system theory. , 2014, , .		2
42	HIV 2-LTR experiment design optimization. PLoS ONE, 2018, 13, e0206700.	1.1	2
43	Positive Feedback Through Inflammation Creates Bistable Behavior in HIV Tissue Sanctuaries. , 2019, 2019, 3456-3461.		2
44	Modeling and analysis of gene-therapeutic combination chemotherapy for pancreatic cancer. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 14217-14222.	0.4	1
45	Resistance evolution in HIV &#x2014; Modeling when to intervene. , 2012, 2012, 4053-4058.		1
46	Analysis of HIV-1 compartmental model parameters using Bayesian MCMC estimation. , 2014, , .		1
47	Using the Tools we Have: Low-efficacy Vaccines and HIV. EBioMedicine, 2015, 2, 1867-1868.	2.7	1
48	Quantitative analysis of viral persistence and transient viral load rebound from HIV clinical data. , 2011, 2011, 3585-8.		0
49	Optimal multi-drug approaches for reduction of the latent pool in HIV. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 784-789.	0.4	0
50	Experiment design for early molecular events in HIV infection. , 2017, 2017, 122-127.		0
51	The effect of multiplicity of infection on the temperateness of a bacteriophage: Implications for viral fitness. , 2017, , .		0
52	Implications of measurement assay type in design of HIV experiments. , 2017, 2017, 4106-4111.		0
53	Optimal control modulation of HIV reservoir formation rate by antigen infusion *. , 2019, 2019, 5662-5667.		0