Modeling infectious disease dynamics in the complex landscape of global health

#	Paper	IF	Citations
423	Manifold habitat effects on the prevalence and diversity of avian blood parasites. **2015**, 4, 421-30		86
422	Infectious disease and health systems modelling for local decision making to control neglected tropical diseases. **2015**, 9, S6		14
421	Bayesian calibration of simulation models for supporting management of the elimination of the macroparasitic disease, Lymphatic Filariasis. **2015**, 8, 522		28
420	Developing and Using Therapeutics for Emerging Infections. **2015**, 98, 346-51		2
419	The context of host competence: a role for plasticity in host-parasite dynamics. **2015**, 31, 419-25		70
418	Big city, small world: density, contact rates, and transmission of dengue across Pakistan. **2015**, 12, 20150468		47
417	Reply: Epidemiologic studies need asymptomatic controls. **2015**, 21, e53-4		3
416	Measurement and Modeling: Infectious Disease Modeling. **2016**,		1
415	Development of Nano-Carbon Biosensors Using Glycan for Host Range Detection of Influenza Virus. **2016**, 1, 7		3
414	Stochastic epidemic dynamics on extremely heterogeneous networks. **2016**, 94, 062408		6
413	Towards high-resolution spatial modeling of infectious disease dynamics: Comment on "Pattern transitions in spatial epidemics: Mechanisms and emergent properties" by Gui-Quan Sun et al. **2016**, 19, 93-94		1
412	Plasmodium knowlesi transmission: integrating quantitative approaches from epidemiology and ecology to understand malaria as a zoonosis. **2016**, 143, 389-400		32
411	Modelling the seasonality of Lyme disease risk and the potential impacts of a warming climate within the heterogeneous landscapes of Scotland. **2016**, 13,		29
410	Model-based reconstruction of an epidemic using multiple datasets: understanding influenza A/H1N1 pandemic dynamics in Israel. **2016**, 13,		5
409	Epidemiological, evolutionary, and economic determinants of eradication tails. **2016**, 405, 58-65		1
408	SIR model with local and global infective contacts: A deterministic approach and applications. **2016**, 112, 70-79		5
407	Forecasting Epidemiological and Evolutionary Dynamics of Infectious Diseases. **2016**, 31, 776-788		47

| 388 | Epidemiological features of and changes in incidence of infectious diseases in China in the first decade after the SARS outbreak: an observational trend study. **2017**, 17, 716-725 | | 137 |

| 387 | Iron and thiol redox signaling in cancer: An exquisite balance to escape ferroptosis. **2017**, 108, 610-626 | | 116 |

| 386 | Ecosystem management as a wicked problem. *Science*, **2017**, 356, 265-270 | 33.3 | 219 |

| 385 | Efficient method for comprehensive computation of agent-level epidemic dissemination in networks. **2017**, 7, 40885 | | 7 |

| 384 | Modeling Chagas disease in Chile: From vector to congenital transmission. **2017**, 156-157, 63-71 | | 7 |

| 383 | Pathways to zoonotic spillover. **2017**, 15, 502-510 | | 369 |

| 382 | Simulation Modelling in Healthcare: An Umbrella Review of Systematic Literature Reviews. **2017**, 35, 937-949 | | 43 |

| 381 | The impact of stratified immunity on the transmission dynamics of influenza. **2017**, 20, 84-93 | | 13 |

| 380 | Predicting lymphatic filariasis transmission and elimination dynamics using a multi-model ensemble framework. **2017**, 18, 16-28 | | 32 |

| 379 | An antigen to remember: regulation of B cell memory in health and disease. **2017**, 45, 89-96 | | 14 |

| 378 | Towards Identifying and Predicting Spatial Epidemics on Complex Meta-population Networks. **2017**, 129-160 | | 2 |

| 377 | The basic reproduction number (R) of measles: a systematic review. **2017**, 17, e420-e428 | | 229 |

| 376 | Heterogeneous network epidemics: real-time growth, variance and extinction of infection. **2017**, 75, 577-619 | | 9 |

| 375 | Combining indoor and outdoor methods for controlling malaria vectors: an ecological model of endectocide-treated livestock and insecticidal bed nets. **2017**, 16, 114 | | 11 |

| 374 | Simulating the world: The digital enactment of pandemics as a mode of global self-observation. **2017**, 20, 392-416 | | 10 |

| 373 | Reality mining: A prediction algorithm for disease dynamics based on mobile big data. **2017**, 379, 82-93 | | 18 |

| 372 | Self-propelled pedestrian dynamics model: Application to passenger movement and infection propagation in airplanes. **2017**, 465, 248-260 | | 21 |

| 371 | Dengue fever virus in Pakistan: effects of seasonal pattern and temperature change on distribution of vector and virus. **2017**, 27, e1899 | | 13 |

352	epidemix-An interactive multi-model application for teaching and visualizing infectious disease transmission. **2018**, 23, 49-54	6
351	Multiple peaks patterns of epidemic spreading in multi-layer networks. **2018**, 107, 135-142	9
350	Characteristics of human encounters and social mixing patterns relevant to infectious diseases spread by close contact: a survey in Southwest Uganda. **2018**, 18, 172	49
349	Relatedness of the incidence decay with exponential adjustment (IDEA) model, "Farr's law" and SIR compartmental difference equation models. **2018**, 3, 1-12	11
348	The RAPIDD ebola forecasting challenge: Synthesis and lessons learnt. **2018**, 22, 13-21	106
347	Branching process approach for epidemics in dynamic partnership network. **2018**, 76, 265-294	6
346	Review: Host-pathogen dynamics of seagrass diseases under future global change. **2018**, 134, 75-88	31
345	Addressing the Unknowns of Antimicrobial Resistance: Quantifying and Mapping the Drivers of Burden. **2018**, 66, 612-616	11
344	A model for interactions between immune cells and HIV considering drug treatments. **2018**, 37, 282-295	1
343	Dynamics and control of infections on social networks of population types. **2018**, 23, 11-18	0
342	From Experiment to Theory: What Can We Learn from Growth Curves?. **2018**, 80, 151-174	5
341	Individual preventive social distancing during an epidemic may have negative population-level outcomes. **2018**, 15,	21
340	Drivers for Livestock-Associated Methicillin-Resistant Staphylococcus Aureus Spread Among Danish Pig Herds - A Simulation Study. **2018**, 8, 16962	10
339	Spatial infectious disease epidemiology: on the cusp. **2018**, 16, 192	19
338	Improving early epidemiological assessment of emerging Aedes-transmitted epidemics using historical data. **2018**, 12, e0006526	3
337	Send more data: a systematic review of mathematical models of antimicrobial resistance. **2018**, 7, 117	16
336	Modeling a single season of Aedes albopictus populations based on host-seeking data in response to temperature and precipitation in eastern Tennessee. **2018**, 43, 138-147	9
335	Evolutionary emergence of infectious diseases in heterogeneous host populations. **2018**, 16, e2006738	49

| 316 | A new view of multiscale stochastic impulsive systems for modeling and control of epidemics. **2019**, 48, 242-249 | 9 |

| 315 | The asymptotic profile of a dengue fever model on a periodically evolving domain. **2019**, 362, 124531 | 4 |

| 314 | Bigger and Better? Representativeness of the Influenza A Surveillance Using One Consolidated Clinical Microbiology Laboratory Data Set as Compared to the Belgian Sentinel Network of Laboratories. **2019**, 7, 150 | 4 |

| 313 | Epidemic prevalence information on social networks can mediate emergent collective outcomes in voluntary vaccine schemes. **2019**, 15, e1006977 | 5 |

| 312 | Identifying current and emerging resources and tools utilized for detection, prediction, and visualization of viral zoonotic disease clusters: a Delphi study. **2019**, 2, 306-311 | |

| 311 | A Binary Particle Swarm Optimizer With Priority Planning and Hierarchical Learning for Networked Epidemic Control. **2019**, 1-15 | 7 |

| 310 | Hamiltonian dynamics of the SIS epidemic model with stochastic fluctuations. **2019**, 9, 15841 | 12 |

| 309 | Effective binding of sugar chains to influenza virus on the surface by bovine serum albumin localization. **2019**, 58, SIID03 | |

| 308 | Using hospital-based studies of community-onset bloodstream infections to make inferences about typhoid fever incidence. **2019**, 24, 1369-1383 | 2 |

| 307 | Forecasting the seasonality and trend of pulmonary tuberculosis in Jiangsu Province of China using advanced statistical time-series analyses. **2019**, 12, 2311-2322 | 44 |

| 306 | Contrasting the value of targeted versus area-wide mosquito control scenarios to limit arbovirus transmission with human mobility patterns based on different tropical urban population centers. **2019**, 13, e0007479 | 7 |

| 305 | Investigating the relationships between health and innovation systems to guide innovation adoption. **2019**, | 2 |

| 304 | Modelling microbial infection to address global health challenges. **2019**, 4, 1612-1619 | 23 |

| 303 | From Physical to Spiritual: A Qualitative Study of Jakartans Health & Sickness. **2019**, 16, | 1 |

| 302 | Fuzzy logic approach for infectious disease diagnosis: A methodical evaluation, literature and classification. **2019**, 39, 937-955 | 31 |

| 301 | Individual and temporal variation in pathogen load predicts long-term impacts of an emerging infectious disease. **2019**, 100, e02613 | 20 |

| 300 | Extreme Competence: Keystone Hosts of Infections. **2019**, 34, 303-314 | 28 |

| 299 | Multiple Equilibria in a Non-smooth Epidemic Model with Medical-Resource Constraints. **2019**, 81, 963-994 | 7 |

| 280 | Comparing alternative cholera vaccination strategies in Maela refugee camp: using a transmission model in public health practice. **2019**, 19, 1075 | 5 |

| 279 | Applying infectious disease forecasting to public health: a path forward using influenza forecasting examples. **2019**, 19, 1659 | 33 |

| 278 | Reconstruction and prediction of viral disease epidemics. **2018**, 147, e34 | 22 |

| 277 | Artificial Intelligence for infectious disease Big Data Analytics. **2019**, 24, 44-48 | 102 |

| 276 | Fogarty International Center collaborative networks in infectious disease modeling: Lessons learnt in research and capacity building. **2019**, 26, 116-127 | 10 |

| 275 | Threshold of island anthropogenic disturbance based on ecological vulnerability Assessment A case study of Zhujiajian Island. **2019**, 167, 127-136 | 17 |

| 274 | Dengue modeling in rural Cambodia: Statistical performance versus epidemiological relevance. **2019**, 26, 43-57 | 6 |

| 273 | Spectral Analysis of Epidemic Thresholds of Temporal Networks. **2020**, 50, 1965-1977 | 44 |

| 272 | Exploring the threshold of epidemic spreading for a stochastic SIR model with local and global contacts. **2020**, 540, 123208 | 5 |

| 271 | Real-time forecasting of epidemic trajectories using computational dynamic ensembles. **2019**, 30, 100379 | 38 |

| 270 | Choices and trade-offs in inference with infectious disease models. **2019**, 30, 100383 | 11 |

| 269 | Effect of Acute Illness on Contact Patterns, Malawi, 2017. **2020**, 26, 44-50 | 4 |

| 268 | Adaptive Bayesian Learning and Forecasting of Epidemic Evolution-Data Analysis of the COVID-19 Outbreak. **2020**, 8, 175244-175264 | 14 |

| 267 | Infectious or Recovered? Optimizing the Infectious Disease Detection Process for Epidemic Control and Prevention Based on Social Media. **2020**, 17, | 4 |

| 266 | Transmission-dynamics models for the SARS Coronavirus-2. **2020**, 32, e23512 | 4 |

| 265 | Molecular epidemiology of leprosy: An update. **2020**, 86, 104581 | 6 |

| 264 | Influencing public health policy with data-informed mathematical models of infectious diseases: Recent developments and new challenges. **2020**, 32, 100393 | 14 |

| 263 | A Phenomenological Epidemic Model Based On the Spatio-Temporal Evolution of a Gaussian Probability Density Function. **2020**, 8, 2000 | 0 |

| 244 | Virus detection using nanoparticles and deep neural network-enabled smartphone system. **2020**, 6, | 18 |

| 243 | A Comparative Study of the Innate Humoral Immune Response to Avian Influenza Virus in Wild and Domestic Mallards. **2020**, 11, 608274 | 4 |

| 242 | Transmission dynamics of brucellosis: Mathematical modelling and applications in China. **2020**, 18, 3843-3860 | 15 |

| 241 | Statistical methods for linking geostatistical maps and transmission models: Application to lymphatic filariasis in East Africa. **2020**, 100391 | 0 |

| 240 | Vaccine strategies to reduce the burden of pneumococcal disease in HIV-infected adults in Africa. **2020**, 19, 1085-1092 | 1 |

| 239 | Distribution of COVID-19 Morbidity Rate in Association with Social and Economic Factors in Wuhan, China: Implications for Urban Development. **2020**, 17, | 62 |

| 238 | A multiscale model of virus pandemic: Heterogeneous interactive entities in a globally connected world.. **2020**, 30, 1591-1651 | 63 |

| 237 | CHRONIC WASTING DISEASE MODELING: AN OVERVIEW. **2020**, 56, 741-758 | 5 |

| 236 | Modeling canine rabies virus transmission dynamics. **2020**, 655-670 | 1 |

| 235 | The use of mixture density networks in the emulation of complex epidemiological individual-based models. **2020**, 16, e1006869 | 5 |

| 234 | Molecular network-based intervention brings us closer to ending the HIV pandemic. **2020**, 14, 136-148 | 12 |

| 233 | Community context for mechanisms of disease dilution: insights from linking epidemiology and plant-soil feedback theory. **2020**, 1469, 65-85 | 7 |

| 232 | A population model for the 2017/18 listeriosis outbreak in South Africa. **2020**, 15, e0229901 | 3 |

| 231 | Dengue importation into Europe: A network connectivity-based approach. **2020**, 15, e0230274 | 7 |

| 230 | Optimal devoted resource strategies to epidemic extinction by increasing recovery rate. **2020**, 31, 2050010 | 0 |

| 229 | Winter is coming: Pathogen emergence in seasonal environments. **2020**, 16, e1007954 | 3 |

| 228 | Analysing the Combined Health, Social and Economic Impacts of the Corovanvirus Pandemic Using Agent-Based Social Simulation. **2020**, 30, 1-18 | 20 |

| 227 | Phase transitions in information spreading on structured populations. **2020**, 16, 590-596 | 16 |

226 Disease modeling for public health: added value, challenges, and institutional constraints. **2020**, 41, 39-51   13

225 Operational research: A multidisciplinary approach for the management of infectious disease in a global context. **2021**, 291, 929-934   9

224 Migration rate estimation in an epidemic network. **2021**, 89, 1949-1964   5

223 Global analysis of the COVID-19 pandemic using simple epidemiological models. **2021**, 90, 995-1008   16

222 Transmission dynamics and control methodology of COVID-19: A modeling study. **2021**, 89, 1983-1998   18

221 Development and dissemination of infectious disease dynamic transmission models during the COVID-19 pandemic: what can we learn from other pathogens and how can we move forward?. **2021**, 3, e41-e50   8

220 Modelling of optimal vaccination strategies in response to a bioterrorism associated smallpox outbreak. **2021**, 17, 738-746   1

219 Spheroids and organoids as humanized 3D scaffold-free engineered tissues for SARS-CoV-2 viral infection and drug screening. **2021**, 45, 548-558   4

218 Future Developments in Geographical Agent-Based Models: Challenges and Opportunities. **2021**, 53, 76-91   18

217 Stability analysis in COVID-19 within-host model with immune response. **2021**, 95, 105584   17

216 COVID-19 epidemic prediction and the impact of public health interventions: A review of COVID-19 epidemic models. **2021**, 6, 324-342   26

215 Conclusions. **2021**, 139-162

214 Quantifying Uncertainty in Mechanistic Models of Infectious Disease. **2021**, 190, 1377-1385   5

213 Mathematical modeling as a tool for policy decision making: Applications to the COVID-19 pandemic. **2021**, 291-326   2

212 Combining machine learning and mathematical models of disease dynamics to guide development of novel malaria interventions.   1

211 Mathematical modeling of transmission dynamics of COVID-19. **2021**, 6, 12-25   2

210 The value of infectious disease modeling and trend assessment: a public health perspective. **2021**, 19, 1135-1145   1

209 Estimating the local spatio-temporal distribution of malaria from routine health information systems in areas of low health care access and reporting. **2021**, 20, 8   1

208   Endogenous social distancing and its underappreciated impact on the epidemic curve. **2021**, 11, 3093   6

207   Different disease, same challenges: Social determinants of tuberculosis and COVID-19. **2021**, 27, 338-344   11

206   Geodemography, environment and societal characteristics drive the global diversity of emerging, zoonotic and human pathogens. **2021**,   2

205   Fine scale infectious disease modeling using satellite-derived data. **2021**, 11, 6946   0

204   Unveiling social distancing mechanisms via a fish-robot hybrid interaction. **2021**, 115, 565-573   7

203   Short-Range Forecasting of COVID-19 During Early Onset at County, Health District, and State Geographic Levels Using Seven Methods: Comparative Forecasting Study. **2021**, 23, e24925   9

202   Epidemiological dynamics of viral infection in a marine picoeukaryote.

201   Dynamics of COVID-19 transmission with comorbidity: a data driven modelling based approach. **2021**, 106, 1-15   7

200   Testing, tracing and isolation in compartmental models. **2021**, 17, e1008633   15

199   Nowcasting epidemics of novel pathogens: lessons from COVID-19. **2021**, 27, 388-395   11

198   Modeling the role of mortality-based response triggers on the effectiveness of African swine fever control strategies.   0

197   Adding Space to Disease Models: A Case Study with COVID-19 in Oregon, USA. **2021**, 10, 438   0

196   A call for epidemic modeling to examine historical and structural drivers of racial disparities in infectious disease. **2021**, 276, 113833   0

195   Accounting for farmers' control decisions in a model of pathogen spread through animal trade. **2021**, 11, 9581   2

194   Modelling the Impact of Robotics on Infectious Spread Among Healthcare Workers. **2021**, 8, 652685   1

193   Mathematical model of COVID-19 with comorbidity and controlling using non-pharmaceutical interventions and vaccination. **2021**, 106, 1-15   17

192   Future risk evaluation of the global COVID-19 pandemic.

191   Fine-scale heterogeneity in population density predicts wave dynamics in dengue epidemics.

190	An approximate Bayesian approach for estimation of the reproduction number under misreported epidemic data.	0
189	A dose response model for Staphylococcus aureus. **2021**, 11, 12542	
188	A review and agenda for integrated disease models including social and behavioural factors. **2021**, 5, 834-846	15
187	Reducing Face-Touches to Limit COVID-19 Outbreak: an Overview of Solutions. **2021**,	0
186	Data-driven methods for present and future pandemics: Monitoring, modelling and managing. **2021** , 52, 448-464	6
185	Yearly and Daily Relationship Assessment between Air Pollution and Early-Stage COVID-19 Incidence: Evidence from 231 Countries and Regions. **2021**, 10, 401	4
184	Possible future waves of SARS-CoV-2 infection generated by variants of concern with a range of characteristics.	3
183	Thinking clearly about social aspects of infectious disease transmission. **2021**, 595, 205-213	18
182	Epidemic spread simulation in an area with a high-density crowd using a SEIR-based model. **2021**, 16, e0253220	0
181	Could a New COVID-19 Mutant Strain Undermine Vaccination Efforts? A Mathematical Modelling Approach for Estimating the Spread of B.1.1.7 Using Ontario, Canada, as a Case Study. **2021**, 9,	4
180	The collaboration between infectious disease modeling and public health decision-making based on the COVID-19. **2021**, 2, 69-76	1
179	Heterogeneity of contact patterns with Ebola virus disease cases. **2021**, 82, 276-316	1
178	Community health and human-animal contacts on the edges of Bwindi Impenetrable National Park, Uganda.	
177	When time-dependence in disease outcome risk is not captured by impact evaluation modeling studies: a measles vaccination case study.	
176	Overlapping Time Scales Obscure Early Warning Signals of the Second COVID-19 Wave.	4
175	Pneumococcal exposure routes for infants, a nested cross-sectional survey in Nha Trang, Vietnam.	0
174	Epidemics, the Ising-model and percolation theory: A comprehensive review focused on Covid-19. **2021**, 573, 125963	13
173	Optimal test-kit-based intervention strategy of epidemic spreading in heterogeneous complex networks. **2021**, 31, 071101	4

| 172 | Transmission modelling of environmentally persistent zoonotic diseases: a systematic review. **2021**, 5, e466-e478 | 3 |

| 171 | The Role of Movement Patterns in Epidemic Models on Complex Networks. **2021**, 83, 98 | 1 |

| 170 | A Review of the Environmental Trigger and Transmission Components for Prediction of Cholera. **2021**, 6, | 1 |

| 169 | Dynamical Variations of the Global COVID-19 Pandemic Based on a SEICR Disease Model: A New Approach of Yi Hua Jie Mu. **2021**, 5, e2021GH000455 | 1 |

| 168 | Parameter Space Exploration in Pedestrian Queue Design to Mitigate Infectious Disease Spread. **2021**, 101, 1-11 | 1 |

| 167 | Coevolution of COVID-19 research and China's policies. **2021**, 19, 121 | 1 |

| 166 | Development of software tools based on multi-agent modeling and implemented in the new generation geographic information system for solving epidemiological problems. **2021**, 98, 468-480 | 1 |

| 165 | Microbiome-pathogen interactions drive epidemiological dynamics of antibiotic resistance: A modeling study applied to nosocomial pathogen control. **2021**, 10, | 0 |

| 164 | Mathematical modeling applied to epidemics: an overview. 1 | 0 |

| 163 | Possible future waves of SARS-CoV-2 infection generated by variants of concern with a range of characteristics. **2021**, 12, 5730 | 26 |

| 162 | Challenges and Controversies in COVID-19: Masking the General Population may Attenuate This Pandemic's Outbreak. **2021**, 9, 643991 | |

| 161 | Review of fractional epidemic models. **2021**, 97, 281-307 | 10 |

| 160 | Effect of human behavior on the evolution of viral strains during an epidemic. | 0 |

| 159 | Modelling the role of mortality-based response triggers on the effectiveness of African swine fever control strategies. **2021**, | 0 |

| 158 | Book review. **2021**, 188, 363-367 | |

| 157 | Rule-based epidemic models. **2021**, 530, 110851 | 1 |

| 156 | Scenario prediction of public health emergencies using infectious disease dynamics model and dynamic Bayes. **2022**, 127, 334-346 | 0 |

| 155 | THE STATISTICAL CHALLENGES OF MODELLING COVID-19. **2021**, 257, 46-82 | 2 |

154   A Pathway to Differential Modelling of Nipah Virus. **2021**, 164-184

153   Introduction to networks and diseases. **2017**, 1-26   1

152   From inspiration to translation: Closing the gap between research and control of helminth zoonoses in Southeast Asia. **2019**, 105, 111-124   2

151   Responsible modelling: Unit testing for infectious disease epidemiology. **2020**, 33, 100425   4

150   Disease control across urban-rural gradients. **2020**, 17, 20200775   5

149   Characteristics of human encounters and social mixing patterns relevant to infectious diseases spread by close contact: A survey in southwest Uganda.   1

148   The impact of social distancing and epicenter lockdown on the COVID-19 epidemic in mainland China: A data-driven SEIQR model study.   54

147   COVID-19 containment policies through time may cost more lives at metapopulation level.   2

146   Testing, tracing and isolation in compartmental models.   12

145   Estimating the local spatio-temporal distribution of disease from routine health information systems: the case of malaria in rural Madagascar.   1

144   The 2017 plague outbreak in Madagascar: data descriptions and epidemic modelling.   3

143   Evolutionary emergence of infectious diseases in heterogeneous host populations.   1

142   After the honeymoon, the divorce: unexpected outcomes of disease control measures against endemic infections.   2

141   Winter is coming: pathogen emergence in seasonal environments.   1

140   Causality assessment of adverse events following immunization: the problem of multifactorial pathology. **2020**, 9, 170   11

139   Causality assessment of adverse events following immunization: the problem of multifactorial pathology. **2020**, 9, 170   10

138   Invasion Dynamics of Teratogenic Infections in Light of Rubella Control: Implications for Zika Virus. **2016**, 8,   5

137   Control fast or control smart: When should invading pathogens be controlled?. **2018**, 14, e1006014   30

118	Individual and temporal variation in pathogen load predicts long-term impacts of an emerging infectious disease.	
117	Applying optimal control theory to complex epidemiological models to inform real-world disease management.	
116	A decision-support framework to optimize border control for global outbreak mitigation.	0
115	Regional reinfection by Dengue: a network approach using data from Mexico.	
114	Comparing alternative cholera vaccination strategies in Maela refugee camp using a transmission model.	
113	Perspectives and Future Research Directions on Climate Change and Health in China. **2019**, 191-196	
112	Modeling Approaches Toward Understanding Infectious Disease Transmission. **2019**, 227-243	1
111	The use of mixture-density networks in the emulation of complex epidemiological individual-based models.	0
110	Reduction of Fluctuation of the Binding Activity of SGP to Influenza Viruses. **2019**, 62, 470-475	
109	Predicting lymphatic filariasis elimination in data-limited settings: a reconstructive computational framework for combining data generation and model discovery.	
108	Mathematical modeling of directed acyclic graphs to explore competing causal mechanisms underlying epidemiological study data.	
107	Dengue importation into Europe: a network connectivity-based approach.	
106	Prediction of the Transition From Subexponential to the Exponential Transmission of SARS-CoV-2 in Chennai, India: Epidemic Nowcasting (Preprint).	
105	Utilising sigmoid models to predict the spread of antimicrobial resistance at the country level. **2020**, 25,	1
104	Predictive Accuracy of a Hierarchical Logistic Model of Cumulative SARS-CoV-2 Case Growth.	1
103	Responsible modelling: Unit testing for infectious disease epidemiology.	1
102	Data assimilation and agent-based modelling: towards the incorporation of categorical agent parameters. 1, 131	1
101	Forecasting the final disease size: comparing calibrations of Bertalanffy-Pütter models. **2020**, 149, e6	1

100	Inference of Naturally Acquired Immunity Using a Self-matched Negative-Control Design. **2021**, 32, 168-178	0
99	A comparison of modelling the spatio-temporal pattern of disease: a case study of schistosomiasis japonica in Anhui Province, China. **2021**,	0
98	Time-aggregated mobile phone mobility data are sufficient for modelling influenza spread: the case of Bangladesh.	
97	Inference of naturally-acquired immunity using a self-matched negative control design.	
96	Community structure mediates Sabin 2 polio vaccine virus transmission.	1
95	After the honeymoon, the divorce: Unexpected outcomes of disease control measures against endemic infections. **2020**, 16, e1008292	2
94	Variable Cognition in ABM Decision-Making: An Application to Livestock Vaccine Choice. **2020**, 7, 564290	
93	Prediction of the Transition From Subexponential to the Exponential Transmission of SARS-CoV-2 in Chennai, India: Epidemic Nowcasting. **2020**, 6, e21152	3
92	Assessing the strength of case growth trends in the coronavirus pandemic. **2020**, 7, 201622	2
91	COVID-19 control across urban-rural gradients.	
90	Short-Range Forecasting of COVID-19 During Early Onset at County, Health District, and State Geographic Levels Using Seven Methods: Comparative Forecasting Study (Preprint).	
89	A Narrative Review of Influenza: A Seasonal and Pandemic Disease. **2017**, 42, 2-13	39
88	Time Series Analysis in Modeling of Hepatitis B Incidence. **2019**, 48, 554-555	
87	Emergency preparedness for public health threats, surveillance, modelling & forecasting. **2021**, 153, 287-298	
86	Near Future Perspective of ESBL-Producing Klebsiella pneumoniae Strains Using Mathematical Modeling. **2022**, 130, 111-132	0
85	Graph, Spectra, Control and Epidemics: An Example with a SEIR Model. **2021**, 9, 2987	1
84	Community health and human-animal contacts on the edges of Bwindi Impenetrable National Park, Uganda. **2021**, 16, e0254467	0
83	Emergency preparedness for public health threats, surveillance, modelling & forecasting. **2021**, 153, 287	

| 82 | Discrete Resource Allocation in Epidemic Control with Heuristic Majority-Voting Particle Swarm Optimization. **2020**, | 0 |

| 81 | SIR Infectious Disease Model Based on Age Structure and Constant Migration Rate and its Dynamics Properties. **2020**, | |

| 80 | Global research activity on mathematical modeling of transmission and control of 23 selected infectious disease outbreak.. **2022**, 18, 4 | 3 |

| 79 | Estimating the Effects of Public Health Measures by SEIR(MH) Model of COVID-19 Epidemic in Local Geographic Areas.. **2021**, 9, 728525 | |

| 78 | Current forecast of COVID-19 in Mexico: A Bayesian and machine learning approaches.. **2022**, 17, e0259958 | 1 |

| 77 | Estimation of age-stratified contact rates during the COVID-19 pandemic using a novel inference algorithm. | 0 |

| 76 | Mathematical modeling and optimal intervention strategies of the COVID-19 outbreak.. **2022**, 1-26 | 5 |

| 75 | Modelling environmentally mediated spread of livestock-associated methicillin-resistant Staphylococcus aureus in a pig herd.. **2022**, 16, 100450 | 1 |

| 74 | "SPEECH": A literature based framework for the study of past epidemics.. **2022**, 15, 307-311 | |

| 73 | Reducing disease spread through optimization: Limiting mixture of the population is more important than limiting group sizes. **2022**, 105718 | |

| 72 | Overlapping timescales obscure early warning signals of the second COVID-19 wave.. **2022**, 289, 20211809 | 3 |

| 71 | Infectious diseases among elderly persons: Results from a population-based observational study in Shandong province, China, 2013-2017.. **2021**, 11, 08010 | 1 |

| 70 | Fine-scale heterogeneity in population density predicts wave dynamics in dengue epidemics.. **2022**, 13, 996 | 1 |

| 69 | Understanding West Nile virus spread: Mathematical modelling to determine the mechanisms with the most influence on infection dynamics. | |

| 68 | Comparison of 19 major infectious diseases during COVID-19 epidemic and previous years in Zhejiang, implications for prevention measures.. **2022**, 22, 296 | 1 |

| 67 | Emergence of synergistic and competitive pathogens in a coevolutionary spreading model.. **2022**, 105, 034308 | |

| 66 | Health care cost of crusted scabies in Aboriginal communities in the Northern Territory, Australia.. **2022**, 16, e0010288 | |

| 65 | Microfluidics-based strategies for molecular diagnostics of infectious diseases.. **2022**, 9, 11 | 0 |

| 64 | Differential health impact of intervention programs for time-varying disease risk: a measles vaccination modeling study.. **2022**, 20, 113 | 0 |

| 63 | Dynamic resource allocation for controlling pathogen spread on a large metapopulation network.. **2022**, 19, 20210744 | 1 |

| 62 | Global Change and Emerging Infectious Diseases. **2022**, 14, | |

| 61 | Spatial dynamics of dengue fever spreading for the coexistence of two serotypes with an application to the city of Sã Paulo, Brazil.. **2022**, 219, 106758 | |

| 60 | Social mixing patterns relevant to infectious diseases spread by close contact in urban Blantyre, Malawi. | 0 |

| 59 | Decision Support for Infection Outbreak Analysis: the case of the Diamond Princess cruise ship. **2021**, | 0 |

| 58 | Increasing COVID-19 vaccine acceptance among the general population while maintaining autonomy.. **2021**, 17, 5139-5141 | 1 |

| 57 | Data_Sheet_1.pdf. **2019**, | |

| 56 | Data_Sheet_2.pdf. **2019**, | |

| 55 | Data_Sheet_3.pdf. **2019**, | |

| 54 | Data_Sheet_4.pdf. **2019**, | |

| 53 | Agribusiness vs. Public Health: Disease Control in Resource-Asymmetric Conflict. **2022**, 89-118 | |

| 52 | Models and modelling practices for assessing the impact of outbreak response interventions to human vaccine-preventable diseases (1970-2019) - A systematic review. | |

| 51 | Leveraging mathematical models of disease dynamics and machine learning to improve development of novel malaria interventions. **2022**, 11, | 0 |

| 50 | Computing R0 of dynamic models by a definition-based method. **2022**, 7, 196-210 | 0 |

| 49 | Association of pneumococcal carriage in infants with the risk of carriage among their contacts in Nha Trang, Vietnam: A nested cross-sectional survey. **2022**, 19, e1004016 | 0 |

| 48 | TBERKLOZ TEDAVSGREN BREYLERN COVD-19 SALGINI SRESNCE KAYGI DZEYLERNN ETLDEKENLER ABINDAN NCELENMES | |

| 47 | Herd immunity under individual variation and reinfection. **2022**, 85, | 2 |

46	Evaluation and comparison of three virucidal agents on inactivation of Nipah virus. **2022**, 12,	0
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44	Data assimilation and agent-based modelling: towards the incorporation of categorical agent parameters. 1, 131	
43	COVID-19 pandemic responses may impact the spread of antibiotic-resistant bacteria: a modelling study.	
42	Estimation of age-stratified contact rates during the COVID-19 pandemic using a novel inference algorithm. **2022**, 380,	1
41	The effect of interurban movements on the spatial distribution of population. 10,	
40	The effect of information-driven resource allocation on the propagation of epidemic with incubation period.	
39	Intervention strategies with 2D cellular automata for testing SARS-CoV-2 and reopening the economy. **2022**, 12,	
38	Modeling the Transmission Dynamics of COVID-19 Among Five High Burden African Countries. Volume 14, 1013-1029	0
37	Uncertainty Modeling of a Modified SEIR Epidemic Model for COVID-19. **2022**, 11, 1157	0
36	Preface: Challenges for future pandemics. **2022**, 100621	
35	The challenges of data in future pandemics. **2022**, 40, 100612	1
34	Dynamical behavior of SIRS model incorporating government action and public response in presence of deterministic and fluctuating environments. **2022**, 164, 112643	0
33	Modelling the dynamic relationship between spread of infection and observed crowd movement patterns at large scale events. **2022**, 12,	0
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24	Modeling approaches for early warning and monitoring of pandemic situations as well as decision support. 10,	0
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16	An approximate Bayesian approach for estimation of the instantaneous reproduction number under misreported epidemic data. 2200024	0
15	An Overview of Malaria Transmission Mechanisms, Control, and Modeling. **2023**, 11, 3	0
14	study the relationship between CRP and Ferritin in people infection with COVID-19 in AL-Najaf Governorate, Iraq.. **2020**, 12, 39-45	0
13	What could drive the re-emergence of infectious diseases in a post-Covid19 era?. **2023**, 52, 102546	0
12	Systematic review of applied mathematical models for the control of Schistosoma japonicum. **2023**, 241, 106873	0
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10	Cyclopeptide self-assembly simulated epidemic sequential and synchronous complexity.	0
9	Cyclopeptide self-assembly simulated epidemic sequential and synchronous complexity.	0
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