

## A List of Original Research Articles Published in Journal BIOMATH

Journal Biomath vol. 1/1 (2012)

A. Prieto-Langarica, H. Kojouharov, L. Tang, Constructing One-Dimensional Continuous Models from Two-Dimensional Discrete Models of Medical Implants, Biomath 1 (2012), 1209041,  
<http://dx.doi.org/10.11145/j.biomath.2012.09.041>

C. Timofte, Multiscale Analysis of Composite Structures, Biomath 1 (2012), 1209021,  
<http://dx.doi.org/10.11145/j.biomath.2012.09.021>

P. Hingley, Exploring Family Relations between International Patent Applications, Biomath 1 (2012), 1209031  
<http://dx.doi.org/10.11145/j.biomath.2012.09.031>

N. Al-Asuoad , R. Anguelov, K. Berven, M. Shillor, Model and Simulations of a Wood Frog Population, Biomath 1 (2012), 1209032,  
<http://dx.doi.org/10.11145/j.biomath.2012.09.032>

N. Filmann, E. Herrmann, Modeling of Viral Dynamics after Liver Transplantation in Patients with Chronic Hepatitis B and D, Biomath 1 (2012), 1209022,  
<http://dx.doi.org/10.11145/j.biomath.2012.09.022>

D. Bon, C. Stephan, O. Keppler, E. Herrmann, Viral Dynamic Model of Antiretroviral Therapy Including the Integrase Inhibitor Raltegravir in Patients with HIV-1, Biomath 1 (2012), 1209251,  
<http://dx.doi.org/10.11145/j.biomath.2012.09.251>

H. Umeo, A. Nomura, A State-Efficient Zebra-Like Implementation of Synchronization Algorithms for 2D Rectangular Cellular Arrays, Biomath 1 (2012), 1209022,  
<http://dx.doi.org/10.11145/j.biomath.2012.09.022>

G. Toole, M. Hurdal, Growth in a Turing Model of Cortical Folding, Biomath 1 (2012), 1209252,  
<http://dx.doi.org/10.11145/j.biomath.2012.09.252>

N. Vitanov, Z. Dimitrova, On Waves and Distributions in Population Dynamics, Biomath 1 (2012), 1209253,  
<http://dx.doi.org/10.11145/j.biomath.2012.09.253>

Y. Coudiere, M. Saad, A. Uzureau, An Upstream Finite Volume Scheme for a Bone Healing Model, Biomath 1 (2012), 1209254,  
<http://dx.doi.org/10.11145/j.biomath.2012.09.254>

D. Knipl, G. Rost, Multiregional SIR Model with Infection during Transportation, Biomath 1 (2012), 1209255,  
<http://dx.doi.org/10.11145/j.biomath.2012.09.255>

A. Denes, G. Rost, Structure of the Global Attractors in a Model for Ectoparasite-Borne Diseases, Biomath 1 (2012), 1209256,  
<http://dx.doi.org/10.11145/j.biomath.2012.09.256>

Journal Biomath vol. 1/2 (2012)

D. de Pereda, S. Romero-Vivo, J. Bondia, On the Computation of Output Bounds for Compartmental in-Series Models under Parametric Uncertainty, Biomath 1 (2012), 1210043,  
<http://dx.doi.org/10.11145/j.biomath.2012.10.043>

O. Roeva, T. Trenkova, Modelling of a Fed-batch Culture Applying Simulated Annealing, Biomath 1 (2012), 1211114,  
<http://dx.doi.org/10.11145/j.biomath.2012.11.114>

N. Pesheva, J. Brankov, Position-Induced Phase Change in a TASEP with a Double-Chain Section (a Model of Biological Transport), *Biomath 1* (2012), 1211211,  
<http://dx.doi.org/10.11145/j.biomath.2012.11.211>

P. Petrov, M. Krachounov, O. Kulev, M. Nisheva, D. Vassilev, Predicting and Scoring Links in Anatomical Ontology Mapping, *Biomath 1* (2012), 1211117,  
<http://dx.doi.org/10.11145/j.biomath.2012.11.117>

M. Svanadze, A. Scalia, Mathematical Problems in the Theory of Bone Poroelasticity, *Biomath 1* (2012), 1211225,  
<http://dx.doi.org/10.11145/j.biomath.2012.11.225>

M. Liu , G. Rost, Dynamics of an SIS Model on Homogeneous Networks with Delayed Reduction of Contact Numbers, *Biomath 1* (2012), 1210045,  
<http://dx.doi.org/10.11145/j.biomath.2012.10.045>

J. Tewa, R. D. Demasse, S. Bowong, Predator-Prey Model with Prey Harvesting, Holling Response Function of Type III and SIS Disease, *Biomath 1* (2012), 1210231,  
<http://dx.doi.org/10.11145/j.biomath.2012.10.231>

C. Dufourd, Y. Dumont, Modeling and Simulations of Mosquito Dispersal. The Case of *Aedes albopictus*, *Biomath 1* (2012), 1209262,  
<http://dx.doi.org/10.11145/j.biomath.2012.09.262>

Fabris-Rotelli, Nonlinear Filters and Characterization of the Discrete Pulse Transform of Images, *Biomath 1* (2012), 1211119,  
<http://dx.doi.org/10.11145/j.biomath.2012.11.119>

K. Liolios, S. Radev, A. Liolios, I. Georgiev, K. Georgiev, A Linear Complementarity Numerical Approach to the Non-Convex Problem of Structures Environmentally Damaged and Strengthened by Cable-bracings, *Biomath 1* (2012), 1212107,  
<http://dx.doi.org/10.11145/j.biomath.2012.12.107>

## Journal Biomath vol. 2/1 (2013)

Elena Nikolova, Ivan Jordanov, Nikolay Vitanov, Dynamical Analysis of the MicroRNA - Mediated Protein Translation Process, *Biomath 2* (2013), 1210071,  
<http://dx.doi.org/10.11145/j.biomath.2012.10.071110>

Priti Kumar Roy, Abhirup Datta, Impact of Perfect Drug Adherence on Immunopathogenic Mechanism for Dynamical System of Psoriasis, *Biomath 2* (2013), 1212101,  
<http://dx.doi.org/10.11145/j.biomath.2012.12.101>

Antony Popov, Simeon Stoykov, Rough Sets in Biomedical Informatics, *Biomath 2* (2013), 1212127,  
<http://dx.doi.org/10.11145/j.biomath.2012.12.127>

Edward H. Flach, John Norbury, Santiago Schnell, More than Skew: AsymmetricWave Propagation in a Reaction-Diffusion-Convection System, *Biomath 2* (2013), 1303027,  
<http://dx.doi.org/10.11145/j.biomath.2013.03.027>

Nikolay Kyurkchiev, Anton Iliev, On Some Multipoint Methods Arrising from Optimal in the Sense of Kung-Traub Algorithms for Numerical Solution of Nonlinear Equations, *Biomath 2* (2013), 1305155,  
<http://dx.doi.org/10.11145/j.biomath.2013.05.155>

Samuel Bowong, Yves Dumont, Jean Jules Tewa, A patchy model for Chikungunya-like diseases, *Biomath 2* (2013), 1307237,  
<http://dx.doi.org/10.11145/j.biomath.2013.07.237>

Marc R Roussel, On the Distribution of Transcription Times, *Biomath* 2 (2013), 1307247,  
<http://dx.doi.org/10.11145/j.biomath.2013.07.247>

Laurens Bakker, Andrew Poelstra, Calculating Hyphal Surface Area in Models of Fungal Networks,  
*Biomath* 2 (2013), 1309087,  
<http://dx.doi.org/10.11145/j.biomath.2013.09.087>

Sorana D. Bolboaca, Lorentz Jantschi, Quantitative Structure-Activity Relationships: Linear Regression  
Modelling and Validation Strategies by Example, *Biomath* 2 (2013), 1309089,  
<http://dx.doi.org/10.11145/j.biomath.2013.09.089>

Journal *Biomath* vol. 2/2 (2013)

Jan Harm van derWalt, The Linear Space of Hausdorff Continuous Interval Functions,  
*Biomath* 2 (2013), 1311261,  
<http://dx.doi.org/10.11145/j.biomath.2013.11.261>

Claire Dufourd, Christopher Weldon, Roumen Anguelov, Yves Dumont, Parameter Identification in Population  
Models for Insects Using Trap Data, *Biomath* 2 (2013), 1312061,  
<http://dx.doi.org/10.11145/j.biomath.2013.12.061>

Georges Chamoun, Mazen Saad, Raafat Talhouk, Mathematical and Numerical Analysis of a Modified Keller-  
Segel Model with General Diffusive Tensors, *Biomath* 2 (2013), 1312071,  
<http://dx.doi.org/10.11145/j.biomath.2013.12.071>

Diana H Knipl, Gergely Rost, Backward Bifurcation in SIVS Model with Immigration of Non-Infectives,  
*Biomath* 2 (2013), 1312051,  
<http://dx.doi.org/10.11145/j.biomath.2013.12.051>

Stefanie Sonner, A Class of Mathematical Models Describing Processes in Spatially Heterogeneous Biofilm  
Communities, *Biomath* 2 (2013), 1312311,  
<http://dx.doi.org/10.11145/j.biomath.2013.12.311>

Rene Alt, Jean-Luc Lamotte, Stochastic Arithmetic as a Tool to Study the Stability of Biological Models,  
*Biomath* 2 (2013), 1312291,  
<http://dx.doi.org/10.11145/j.biomath.2013.12.291>

Svetoslav Marinov Markov, Cell Growth Models Using Reaction Schemes: Batch Cultivation,  
*Biomath* 2 (2013), 1312301,  
<http://dx.doi.org/10.11145/j.biomath.2013.12.301>

Claudia Timofte, Multiscale Analysis of Ionic Transport in Periodic Charged Media,  
*Biomath* 2 (2013), 1312302,  
<http://dx.doi.org/10.11145/j.biomath.2013.12.302>

Journal *Biomath* vol. 3/1 (2014)

Beata Zduniak, Numerical Analysis of the Coupled Modified Van Der Pol Equations in a Model  
of the Heart Action, *Biomath* 3 (2014), 1312281,  
<http://dx.doi.org/10.11145/j.biomath.2013.12.281>

Oscar Angulo, J.C. L´opez-Marcos, M.A. L´opez-Marcos, Numerical Analysis of a Size-Structured  
Population Model with a Dynamical Resource, *Biomath* 3 (2014), 1403241,  
<http://dx.doi.org/10.11145/j.biomath.2014.03.241>

Elena Nikolova, Ivan Jordanov, Nikolay Vitanov, On Nonlinear Dynamics of the STAT5a  
Signaling Protein, *Biomath* 3 (2014), 1404131,  
<http://dx.doi.org/10.11145/j.biomath.2014.04.131>

David Fotsa, Elvis Houpa, David Bekolle, Christopher Thron, Michel Ndoumbe, Mathematical Modelling and Optimal Control of Anthracnose, *Biomath* 3 (2014), 1404161,  
<http://dx.doi.org/10.11145/j.biomath.2014.04.161>

Krasimira Kostadinova, Leda Minkova, On a Bivariate Poisson Negative Binomial Risk Process, *Biomath* 3 (2014), 1404211,  
<http://dx.doi.org/10.11145/j.biomath.2014.04.211>

Valaire Yatat, Yves Dumont, Jean Jules Tewa, Pierre Couteron, Samuel Bowong, Mathematical Analysis of a Size Structured Tree-Grass Competition Model for Savanna Ecosystems, *Biomath* 3 (2014), 1404212,  
<http://dx.doi.org/10.11145/j.biomath.2014.04.212>

Daniel Coffield, Anna Maria Spagnuolo, Steady State Stability Analysis of a Chagas Model, *Biomath* 3 (2014), 1405261,  
<http://dx.doi.org/10.11145/j.biomath.2014.05.261>

Nadja Radchenkova, Margarita Kambourova, Spasen Vassilev, Rene Alt, Svetoslav Markov, On the Mathematical Modelling of EPS Production by a Thermophilic Bacterium, *Biomath* 3 (2014), 1407121,  
<http://dx.doi.org/10.11145/j.biomath.2014.07.121>

Mamadou Diouf, Abderrahman Iggidr, Mamadou Sy, Global Stability of an Epidemic Model with two Infected Stages and Mass-Action Incidence, *Biomath* 3 (2014), 1407211,  
<http://dx.doi.org/10.11145/j.biomath.2014.07.211>

Journal *Biomath* vol. 3/2 (2014)

A. Tchuint'e Tamen, J. J. Tewa, P. Couteron, S. Bowong, Y. Dumont, A Generic Modeling of Fire Impact in a Tree-Grass Savanna Model, *Biomath* 3 (2014), 1407191,  
<http://dx.doi.org/10.11145/j.biomath.2014.07.191>

Svetoslav G. Nikolov, Modelling and Analysis of miRNA Regulation, *Biomath* 3 (2014), 1407231,  
<http://dx.doi.org/10.11145/j.biomath.2014.07.231>