

Списък с цитиранията за участие в конкурса

за доцент в област на висше образование

4. Природни науки, математика и информатика, професионално направление 4.5. Математика, научна специалност „Математическо моделиране и приложение на математиката“ (Математическа биология) обявен от ИМИ-БАН в „Държавен вестник“, бр. 14 от 10.02.2023 г.
на кандидата гл. ас. д-р Милен Колев Борисов от ИМИ-БАН

- **Звено:** (ИМИ) Институт по математика и информатика
- **Секция:** (ИМИ) Математическо моделиране и числен анализ
- **Име:** (ИМИ/0130) Борисов, Милен Колев

Брой цитирани публикации: 8

Брой цитиращи източници: 32

от тях 32 в WoS или Scopus

2012

1. **Borisov M., N. Dimitrova, V. Beschkov.** Stability Analysis of a Bioreactor Model for Biodegradation of Xenobiotics. Computers and Mathematics with Applications, 64, 3, Elsevier, 2012, ISSN:0898-1221, DOI:0.1016/j.camwa.2012.0.067, 361-373. JCR-IF (Web of Science):2.069

Цитира се в:

1. Iliev Anton, Nikolay Kyurkchiev, Asen Rahnev: A special choice of nutrient supply for cell growth in logistic differential model. Some applications. October 2019, AIP Conference Proceedings 2159(1):030016, <https://doi.org/10.1063/1.5127481>, Conference Renewable Energy Sources and Technologies, @2019 [Линк](#) WoS, Scopus
2. G. Martalò, C. Bianchi, B. Buonomo, M. Chiappini, V. Vespri: Mathematical modeling of oxygen control in biocell composting plants. Mathematics and Computers in Simulation, vol. 177, 2020, 105-119, DOI:10.1016/j.matcom.2020.04.011, @2020 [Линк](#) WoS, Scopus
3. Martalò, G., C. Bianchi, B. Buonomo, M. Chiappini, V. Vespri: A minimum time control problem for aerobic degradation processes in biocell composting plants. Optimal Control, Applications and Methods, Wiley online library, 41(4), pp. 1251-1266, First published: 22 April 2020, @2020 [Линк](#) WoS, Scopus
4. Lecca, P.; Re, A. On the asymptotic stability of advection-diffusion equations of mass transport in a bubble column bioreactor. November 2021, Journal of Physics Conference Series 2090(1):012035, <https://doi.org/10.1088/1742-6596/2090/1/012035>, @2021 [Линк](#) WoS, Scopus
5. Martalò, G., Bianchi, C., Buonomo, B., Chiappini, M., Vespri, V. (2022). Optimal Control Strategies for Composting Processes in Biocells with L1 -Type and L2 -Type Cost Objectives. In: Chiappini, M., Vespri, V. (eds) Applied Mathematical Problems in Geophysics. Lecture Notes in Mathematics, Springer, Cham, vol. 2308., 5-21, 2022, @2022 [Линк](#) WoS, Scopus

2016

2. **Borisov, M., Dimitrova, N., Simeonov, I..** Mathematical Modelling of Anaerobic Digestion with Hydrogen and Methane Production. In: R. Findeisen, E. Bullinger, E. Balsa-Canto, K. Bernaerts (eds.), Foundations of Systems Biology in Engineering FOSBE 2016 - Magdeburg, Germany, October 9-12, 2016, 49, 26, Elsevier, IFAC-PapersOnLine, 2016, ISSN:2405-8963, DOI:10.1016/j.ifacol.2016.12.131, 231-238. SJR:0.263

Цитира се в:

6. Gurubel, Kelly J., Edgar Sanchez, Alberto Coronado, Virgilio Zunga, Belkis Sulbaran. Optimal Neural Control of A Two Stages Anaerobic Digestion Model for Biofuels Production. 2018, DOI: 10.1109/IJCNN.2018.8489189; International Joint Conference on Neural Networks (IJCNN), IEEEExplore, E-ISSN: 2161-4407, @2018 [Линк](#) WoS, Scopus
7. 159. Zlateva, P. V.: Sliding mode control of biogas production by anaerobic digestion with addition of acetate . E3S Web of Conferences, Volume 93, 2019, article number 03002, <https://doi.org/10.1051/e3sconf/20199303002>, @2019 [Линк](#) WoS, Scopus
8. Kelly J. Gurubel, Edgar Sanchez, Alberto Coronado, Virgilio Zúñiga Grajeda, Belkis Sulbaran, Luz Breton-Deval: Inverse optimal neural control via passivity approach for nonlinear anaerobic bioprocesses with biofuels production. Optimal Control Applications and Methods, May 2019, @2019 [Линк](#) WoS, Scopus
9. Abdalah, M., Modeling reactor-focused energy balances for multi-stage CSTR anaerobic digestion systems. Journal of Renewable and Sustainable Energy, 2020, 12(6), 065502, @2020 [Линк](#) WoS, Scopus
10. Dholawala M. J., Christian R. A. A Unique Variable Selection Approach in Fuzzy Modeling to Predict Biogas Production in Upflow Anaerobic Sludge Blanket Reactor (UASBR) Treating Distillery Wastewater. Arabian Journal for Science and Engineering, June 2020, <https://doi.org/10.1007/s13369-020-04582-8>, @2020 [Линк](#) WoS, Scopus

11. Dholawala, M. J., Christian, R. A. Prediction of Biogas Production in Upflow Anaerobic Sludge Blanket Reactor Based on Fuzzy Rule. August 2020, International Journal of Sustainable Development and Planning, vol. 15, No 5, 721-733 <https://doi.org/10.18280/ijstdp.150514>, @2020 [Линк](#) WoS, Scopus
12. Sadaf Hemmati, M. Mostafa Elnegihi, Chee Hoong Lee, Darren Yu Lun Chong et al. Synthesis of Large-Scale Bio-Hydrogen Network Using Waste Gas from Landfill and Anaerobic Digestion: A P-Graph Approach, April 2020, Processes 8(5):505 <https://doi.org/10.3390/pr8050505>, @2020 [Линк](#) WoS, Scopus
13. Abdalah, M. The structured modeling framework of anaerobic digestion in Modelica: development of ADMLib package. SIMULATION: Transactions of The Society for Modeling and Simulation International, First Published May 24, 2021, @2021 [Линк](#) WoS, Scopus

2018

3. Anguelov, R., Borisov, M., Iliev, A., Kyurkchiev, N., Markov, S.. On the chemical meaning of some growth models possessing Gompertzian-type property. Mathematical Methods in the Applied Sciences, 41, 18, 2018, ISSN:1099-1476, DOI:10.1002/mma.4539, 8365-8376. JCR-IF (Web of Science):1.18

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14. T. Terzieva, H. Kiskinov, O. Rahneva, V. Kyurkchiev, On the Approximation of the Step Function by a New Modified Laplace Cumulative Distribution Function, International Journal of Pure and Applied Mathematics, Volume 120 No. 3 2018, 401-414, ISSN: 1311-8080, SJR: 0.139, doi: 10.12732/ijpam.v120i3.10., @2018 [Линк](#) WoS, Scopus
15. E. Angelova, A. Malinova, V. Kyurkchiev, O. Rahneva, A note on the xgamma cumulative sigmoid. Some applications, AIP Conference Proceedings 2159, 030001 (2019), ISSN: 0000-1984, SJR: 0.182, doi: 10.1063/1.5127466., @2019 [Линк](#) WoS, Scopus
16. M. Zarei, K. Javadi, A. Kalhor, Perturbed Tumor Immunotherapy Domain of Attraction Estimation via the Arc-Length Function, Conference: Biomedical Engineering (ICBME), 2nd International Conference on, 2018.At: Iran, Индексирана в СКОПУС., @2019 [Линк](#) WoS, Scopus
17. Castorina, P., Carco', D. Nutrient supply, cell spatial correlation and Gompertzian tumor growth. Theory Biosci. (2021), IF: 1.303., @2021 [Линк](#) WoS, Scopus
18. Dong, S., Wang, G., Kang, Y., Ma, Q., Wan, S. "Soil water and salinity dynamics under the improved drip-irrigation scheduling for ecological restoration in the saline area of Yellow River basin", Agricultural Water Management, Volume 264, 30 April 2022, 107255, IF: 4.516, 2022, @2022 [Линк](#) WoS, Scopus
19. Lavrova, A.I., Dogonadze, M.Z., Sychev, A.V., Manicheva, O.A., Postnikov, E.B. "Ensemble density-dependent synchronization of mycobacterial growth: BACTEC MGIT 960 fluorescence-based analysis and mathematical modelling of coupled biophysical and chemical processes" [J]. AIMS Microbiology, 2022, 8(2): 208-226. SJR: 0.809, doi: 10.3934/microbiol.2022017, 2022, @2022 [Линк](#) WoS, Scopus

2019

4. Borisov, Milen K., Neli S. Dimitrova, Mikhail I. Krastanov. Model-based stabilization of a fermentation process using output feedback with discrete time delay. Lecture Notes in Computer Science, 11189, Springer, 2019, ISBN:978-3-030-10692-8, ISSN:0302-9743, DOI:https://doi.org/10.1007/978-3-030-10692-8_38, 342-350. SJR (Scopus):0.295

Цитира се в:

20. Yu, T., Yuan, S., Zhang, T., "The effect of delay interval on the feedback control for a turbidostat model". Journal of the Franklin Institute 358(15), pp. 7628-7649, 2021, @2021 [Линк](#) WoS, Scopus

5. Borisov, M, Dimitriu, G, Rashkov, P. Modelling the Host Immune Response to Mature and Immature Dengue Viruses. Bulletin of Mathematical Biology, 81, 12, Springer US, 2019, ISSN:0092-8240, DOI:10.1007/s11538-019-00664-3, 4951-4976. SJR (Scopus):0.652, JCR-IF (Web of Science):1.812

Цитира се в:

21. A.A. Raezah, A.M. Elaiw, A.S. Alofi. "Global stability of a secondary dengue viral infection model" Applied Mathematics and Information Sciences 14(4): 635-643, @2020 [Линк](#) WoS, Scopus
22. Elaiw A.M. , Alofi A.S. "Global dynamics of secondary DENV infection with diffusion " Journal of Mathematics, 5585175, @2021 [Линк](#) WoS, Scopus
23. Nguyen H.D., Chaudhury S., Waickman A. T., Friberg H., Currier J.R., Wallqvist A. "Stochastic Model of the Adaptive Immune Response Predicts Disease Severity and Captures Enhanced Cross-Reactivity in Natural Dengue Infections." Frontiers in Immunology 12: 696755, @2021 [Линк](#) WoS, Scopus
24. Alshaikh, M.A., Elnahary, E.K., Elaiw, A.M. "Stability of a secondary dengue viral infection model with multi-target cells" Alexandria Engineering Journal 61(9): 7075-7087, @2022 [Линк](#) WoS, Scopus
25. M. Aguiar, V. Anam, K. B. Blyuss, C. D. S. Estadilla, B. V. Guerrero, D. Knopoff, B. W. Kooi, A. K. Srivastav, V. Steindorf, N. Stollenwerk, "Mathematical models for dengue fever epidemiology: a 10-year systematic review". Physics of Life Reviews. 40, 65-92, @2022 [Линк](#) WoS, Scopus
26. Raezah, A. A. "Dynamical Analysis of Secondary Dengue Viral Infection with Multiple Target Cells and Diffusion by Mathematical Model". Discrete Dynamics in Nature and Society. Article ID 2106910., @2022 [Линк](#) WoS, Scopus

6. **Borisov, M.**, Denchev, D., Simeonov, I.. Mathematical Modelling of a Two-stage Anaerobic Digestion Process with Hydrogen and Methane Production Using ADM1. Ecological Engineering and Environment Protection, 1, National Society of Ecological Engineering and Environment Protection, 2020, ISSN:1311-8668, DOI:10.32006/eeep.2020.1.1829, 18-29

Цитирана се в:

27. Sunil, S., Arif, M., Ray, K. "Modelling of Anaerobic Digester for the Conversion of Organic Waste Into Hydrogen and Methane." Materials Today: Proceedings, Elsevier BV, Aug. 2022, <https://doi.org/10.1016/j.matpr.2022.07.294.>, @2022 [Линк](#) WoS, Scopus

7. **Borisov, M., Dimitrova, N.**, Simeonov, I. Mathematical Modeling and Stability Analysis of a Two-Phase Biosystem. Processes, 8, 7, MDPI, 2020, ISSN:2227-9717, DOI:<https://doi.org/10.3390/pr8070791>, 791. SJR (Scopus):0.403, JCR-IF (Web of Science):2.753

Цитирана се в:

28. Bertacchi, S.; M. Ruusunen, A. Sorsa, A. Sirviö, P. Branduardi. Mathematical Analysis and Update of ADM1 Model for Biomethane Production by Anaerobic Digestion. MDPI Fermentation 2021, 7(4), 237, @2021 [Линк](#) WoS, Scopus
29. Sari, T. Best Operating Conditions for Biogas Production in Some Simple Anaerobic Digestion Models. Processes 2022, 10, 258. <https://doi.org/10.3390/pr10020258>, @2022 [Линк](#) WoS, Scopus

8. **Borisov, M. K., Markov, S.** The two-step exponential decay reaction network: analysis of the solutions and relation to epidemiological SIR models with logistic and Gompertz type infection contact patterns. Journal of Mathematical Chemistry, 59, 5, Springer, 2021, ISSN:0259-9791, DOI:<https://doi.org/10.1007/s10910-021-01240-8>, 1283-1315. SJR (Scopus):0.421, JCR-IF (Web of Science):2.357

Цитирана се в:

30. Kyurkchiev, N., Kyurkchiev, V., Iliev, A., Rahnev, Asen. "A New Modifications of the SIR/SEIR Models with "Intervention Polynomial Factor". Methodological Aspects". International Journal of Differential Equations and Applications. Volume20, No. 1 (2021), pages: 15-30, 2021, @2021 [Линк](#) WoS, Scopus
31. Kyurkchiev, N., Zaevski, T., Iliev, A., Rahnev, A. "A Modified Three-parameter Kies Cumulative Distribution Function in the Light of Reaction Network Analysis." International Journal of Differential Equations and Applications, Volume 21, No. 2 (2022), pages: 1-17, 2022, @2022 [Линк](#) WoS, Scopus
32. Rongdi T., Daoxin G., Yaocheng D., Sheng X., Jie D., Ling Li, Zhanpeng Z., Jiangfu Z., Long Su, Lihua Y. "π-π Stacked step-scheme PDI/g-C₃N₄/TiO₂@Ti₃C₂ photocatalyst with enhanced visible photocatalytic degradation towards atrazine via peroxymonosulfate activation", Chemical Engineering Journal, Volume 427, 2022, 131809, ISSN 1385-8947, 2022, @2022 [Линк](#) WoS, Scopus