

**UNIVERZITA KOMENSKÉHO
FAKULTA MATEMATIKY, FYZIKY A INFORMATIKY**

Zoznam publikačnej činnosti

Mgr. Pavol Bokes, PhD.

ACB Vysokoškolské učebnice vydané v domácich vydavateľstvách

ACB01 Janková, Katarína [UKOMFKAMS] (40%) - Kilianová, Soňa [UKOMFKAMS] (30%) - Brunovský, Pavol [UKOMFKAMS] (15%) - Bokes, Pavol [UKOMFKAMS] (15%): Markovove reťazce a ich aplikácie. - 1. vyd. - Bratislava : Epos, 2014. - 206 s.
ISBN 978-80-562-0075-9

ADC Vedecké práce v zahraničných karentovaných časopisoch

ADC01 Bokes, Pavol [UKOMFKAMS] (100%) : A uniqueness result for a semilinear parabolic system
Lit. 10 záz.

In: Journal of Mathematical Analysis and Applications. - Vol. 331, No. 1 (2007), s. 567-584

Indikátor časopisu:

IF (JCR) 2007=0,872

SJR (SCOPUS) 2007=1,459

SNIP (SCOPUS) 2007=1,621

Ohlasy (3):

[o3] 2008 Mateus, E.: Auto-similaridade e unicidade para um sistema semilinear, e existencia de solucao com dado singular para e equacao da onda semilinear. Recife : Universidade Federal de Pernambuco, 2008, S. 10

[o1] 2010 Ferreira, L. C. F. - Mateus, E.: Self-similarity and uniqueness of solutions for semilinear reaction-diffusion systems. In: Advances in Differential Equations, Vol. 15, No. 1-2, 2010, s. 73-98 - SCI ; SCOPUS

[o3] 2014 Gladkov, A. - Nikitin, A.: A reaction-diffusion system with nonlinear nonlocal boundary condtions.

In: International Journal of Partial Differential Equations, Vol. 2014 (2014), Art. No. ID 523656

ADC02 Bokes, Pavol [UKOMFKAMS] (34%) - King, John R. - Loose, Matthew: A bistable genetic switch which does not require high co-operativity at the promoter: A two-timescale model for the PU.1-GATA-1 interaction
Lit. 24 záz., 5 obr.

In: Mathematical Medicine and Biology. - Vol. 26, No. 2 (2009), s. 117-132

Indikátor časopisu:

IF (JCR) 2009=1,025

SJR (SCOPUS) 2009=0,598

SNIP (SCOPUS) 2009=0,667

Ohlasy (10):

[o1] 2009 Foster, D. V. - Foster, J. G. - Huang, S. - Kauffman, S. A.: A model of sequential branching in hierarchical cell fate determination. In: Journal of Theoretical Biology, Vol. 260, No. 4, 2009, s. 589-597 - SCI ; SCOPUS

[o1] 2010 Brown, G. - Hughes, P. J. - Michell, R. H. - Ceredig, R.: The versatility of haematopoietic stem cells: Implications for leukaemia. In: Critical Reviews in Clinical Laboratory Sciences, Vol. 47, No. 4, 2013, s. 171-180 - SCI ; SCOPUS

[o1] 2011 Andrecut, M. - Halley, J. D. - Winkler, D. A. - Huang, S.: A general model for binary cell fate decision gene circuits with degeneracy: Indeterminacy and switch behavior in the absence of cooperativity. In: PLoS ONE, Vol. 6, No. 5, 2011, Art. No. e19358 - SCI ; SCOPUS

[o1] 2011 Michaels, J. L. - Naudot, V. - Liebovitch, L. S.: Dynamic stabilization in the PU1-GATA1 circuit using a model with time-dependent kinetic change. In: Bulletin of Mathematical Biology, Vol. 73, No. 9, 2011,

s. 2132-2151 - SCI ;SCOPUS

[o1] 2011 Zhou, J. X. - Bruschi, L. - Huang, S.: Predicting pancreas cell fate decisions and reprogramming with a hierarchical multi-attractor model. In: PLoS ONE, Vol. 6, No. 3, 2011, Art. No. e14752 - SCI ; SCOPUS

[o1] 2012 Duff, C. - Smith-Miles, K. - Lopes, L. - Tian, T.: Mathematical modelling of stem cell differentiation: The PU.1-GATA-1 interaction. In: Journal of Mathematical Biology, Vol. 64, No. 3, 2012, s. 449-468 - SCI ; SCOPUS

[o1] 2012 Marr, C. - Strasser, M. - Schwarzfischer, M. - Schroeder, T. - Theis, F. J.: Multi-scale modeling of GMP differentiation based on single-cell genealogies. In: FEBS Journal, Vol. 279, No. 18, 2012, s. 3488-3500 - SCI ; SCOPUS

[o1] 2013 Antebi, Y. E. - Reich-Zeliger, S. - Hart, Y. - Mayo, A. - Eizenberg, I. - Rimer, J. - Putheti, P. - Pe'er, D. - Friedman, N.: Mapping differentiation under mixed culture conditions reveals a tunable continuum of T cell fates. In: PLoS Biology, Vol. 11, No. 7, 2013, Art. No. e1001616 - SCI

[o1] 2014 Tian, T. - Smith-Miles, K.: Mathematical modeling of GATA-switching for regulating the differentiation of hematopoietic stem cell. In: BMC Systems Biology, Vol. 8, 2014, Art. No. S8 - SCI

[o1] 2015 Pal, M. - Ghosh, S. - Bose, I.: Non-genetic heterogeneity, criticality and cell differentiation. In: Physical Biology, Vol. 12, No. 1, 2015, Art. No. 016001 - SCI ; SCOPUS

ADC03 Bokes, Pavol [UKOMFKAMS] (25%) - King, John R. (25%) - Wood, Andrew T. A. (25%) - Loose, Matthew (25%): Exact and approximate distributions of protein and mRNA levels in the low-copy regime of gene expression

Lit. 63 zázň., 3 obr., 1 tab.

In: Journal of Mathematical Biology. - Vol. 64, No. 5 (2012), s. 829-854

Indikátor časopisu:

IF (JCR) 2012=2,366

SJR (SCOPUS) 2012=1,432

SNIP (SCOPUS) 2012=1,804

Ohlasy (10):

[o1] 2013 Pendar, H. - Platini, T. - Kulkarni, R. V.: Exact protein distributions for stochastic models of gene expression using partitioning of Poisson processes. In: Physical Review E, Vol. 87, No. 4, 2013, Art. No. 042720 - SCI ; SCOPUS

[o1] 2013 Sharma, R. - Cherayil, B. J.: Reaction dynamics under confinement: an exact path integral treatment of a two-stage model of stochastic gene expression. In: Journal of Statistical Mechanics-Theory and Experiment, 2013, Art. No. P10029 - SCI ; SCOPUS

[o1] 2013 Singh, A. - Soltani, M.: Quantifying intrinsic and extrinsic variability in stochastic gene expression models. In: PLoS ONE, Vol. 8, No. 12, 2013, Art. No. e84301 - SCI ; SCOPUS

[o1] 2013 Vandecan, Y. - Blossey, R.: Self-regulatory gene: An exact solution for the gene gate model. In: Physical Review E, Vol. 87, No. 4, 2013, Art. No. 042705 - SCI ; SCOPUS

[o1] 2014 Bhattacharyya, B. - Kalay, Z.: Distribution of population-averaged observables in stochastic gene expression. In: Physical Review E, Vol. 89, No. 1, 2014, Art. No. 012715 - SCI

[o1] 2014 Sanchez-Osorio, I. - Ramos, F. - Mayorga, P. - Dantan, E.: Foundations for modeling the dynamics of gene regulatory networks: A multilevel-perspective review. In: Journal of Bioinformatics and Computational Biology, Vol. 12, No. 1, 2014, Art. No. 1330003 - SCOPUS

[o1] 2014 Tabbaa, O. P. - Jayaprakash, C.: Mutual information and the fidelity of response of gene regulatory models. In: Physical Biology, Vol. 11, No. 4, 2014, Art. No. 046004 - SCI ; SCOPUS

[o3] 2014 Thomas, P. - Popovič, N. - Grima, R.: SI Appendix: Phenotypic switching in gene regulatory networks. In: Proceedings of the National Academy of Sciences, Vol. 11,

2014, <http://www.pnas.org/content/suppl/2014/04/29/1400049111.DCSupplemental/pnas.1400049111.sapp.pdf>, S. 29

[o3] 2015 Antunes, D. - Singh, A.: Quantifying gene expression variability arising from randomness in cell division times. In: Journal of Mathematical Biology, Vol. 70, 2015, DOI 10.1007/s00285-014-0811-x

[o1] 2015 Jansen, M. - Pfaffelhuber, P.: Stochastic gene expression with delay. In: Journal of Theoretical Biology, Vol. 364, 2015, s. 355-363 - SCI ; SCOPUS

ADC04 Bokes, Pavol [UKOMFKAMS] (25%) - King, John R. (25%) - Wood, Andrew T. A. (25%) - Loose,

Matthew (25%): Multiscale stochastic modelling of gene expression
Lit. 60 zázň., 3 obr., 1 tab.
In: Journal of Mathematical Biology. - Vol. 65, No. 3 (2012), s. 493-520

Indikátor časopisu:

IF (JCR) 2012=2,366

SJR (SCOPUS) 2012=1,432

SNIP (SCOPUS) 2012=1,804

Ohlasy (2):

[o1] 2014 Ironi, L. - Lanzarone, E.: Assigning probabilities to qualitative dynamics of gene regulatory networks. In: Journal of Mathematical Biology, Vol. 69, No. 6-7, 2014, s. 1661-1692 - SCI

[o1] 2014 Lozada-Castillo, N. - Poznyak, A. - Chairez, I.: Control of multiplicative noise stochastic gene regulation systems by the attractive ellipsoid technique. In: International Journal of Control, Automation and Systems, Vol. 12, No. 5, 2014, s. 1018-1029 - SCI ; SCOPUS

ADC05 Gedeon, Tomáš (50%) - Bokes, Pavol [UKOMFKAMS] (50%): Delayed protein synthesis reduces the correlation between mRNA and protein fluctuations

Lit. 32 zázň., 2 obr.

In: Biophysical Journal. - Vol. 103, No. 3 (2012), s. 377-385

Indikátor časopisu:

IF (JCR) 2012=3,668

SJR (SCOPUS) 2012=2,373

SNIP (SCOPUS) 2012=1,168

Ohlasy (7):

[o1] 2013 Ivancic, M. M. - Huttlin, E. L. - Chen, X. - Pleiman, J. K. - Irving, A. A. - Hegeman, A. D. - Dove, W. F. - Sussman, M. R.: Candidate serum biomarkers for early intestinal cancer using 15N metabolic labeling and quantitative proteomics in the ApcMin/+ mouse. In: Journal of Proteome Research, Vol. 12, No. 9, 2013, s. 4152-4166 - SCOPUS

[o1] 2013 Wang, J. - Mei, H. - Zheng, C. - Qian, H. - Cui, C. - Fu, Y. - Su, J. - Liu, Z. - Yu, Z. - He, J.: The metabolic regulation of sporulation and parasporal crystal formation in Bacillus thuringiensis revealed by transcriptomics and proteomics. In: Molecular and Cellular Proteomics, Vol. 12, No. 5, 2013, s. 1363-1376 - SCI ; SCOPUS

[o1] 2013 Wang, J. - Mei, H. - Qian, H. - Tang, Q. - Liu, X. - Yu, Z. - He, J.: Expression profile and regulation of spore and parasporal crystal formation-associated genes in Bacillus thuringiensis. In: Journal of Proteome Research, Vol. 12, No. 12, 2013, s. 5487-5501 - SCI ; SCOPUS

[o3] 2014 Lee, T. S.: Integrative Bioinformatics in the Age of Massive Throughput Sequencing: From the Transcriptome to the Proteome in Prostate Cancer. Ann Arbor : University of Michigan, 2014, S. 244

[o1] 2014 Mazo-Vargas, A. - Park, H. - Aydin, M. - Buchler, N. E.: Measuring fast gene dynamics in single cells with time-lapse luminescence microscopy. In: Molecular Biology of the Cell, Vol. 25, No. 22, 2014, s. 3699-3708 - SCI ; SCOPUS

[o1] 2014 Pike, A. - Vadlamani, A. - Sandiford, S. L. - Gacita, A. - Dimopoulos, G.: Characterization of the Rel2-regulated transcriptome and proteome of Anopheles stephensi identifies new anti-Plasmodium factors. In: Insect Biochemistry and Molecular Biology, Vol. 52, No. 1, 2014, s. 82-93 - SCI ; SCOPUS

[o1] 2014 Saleiban, A. - Faxalv, L. - Claesson, K. - Jonsson, J. I. - Osman, A.: miR-20b regulates expression of proteinase-activated receptor-1 (PAR-1) thrombin receptor in melanoma cells. In: Pigment Cell and Melanoma Research, Vol. 27, No. 3, 2014, s. 431-441 - SCI ; SCOPUS

ADC06 Singh, Abhyudai (50%) - Bokes, Pavol [UKOMFKAMS] (50%): Consequences of mRNA transport on stochastic variability in protein levels

Lit. 55 zázň., 3 obr.

In: Biophysical Journal. - Vol. 103, No. 5 (2012), s. 1087-1096

Indikátor časopisu:

IF (JCR) 2012=3,668

SJR (SCOPUS) 2012=2,373

SNIP (SCOPUS) 2012=1,168

Ohlasy (7):

- [o3] 2013 Foley, J. E.: Systematic Dissection of the Determinants of HIV Expression Noise. Berkeley : University of California, 2013, S. 93
- [o3] 2013 Kaneko, G.: Analyse et modélisation de la stochasticité de l'expression génique dans des cellules eucaryotes. Lyon : INSA, 2013, S. 169
- [o1] 2013 Sasai, M. - Kawabata, Y. - Makishi, K. - Itoh, K. - Terada, T. P.: Time Scales in Epigenetic Dynamics and Phenotypic Heterogeneity of Embryonic Stem Cells. In: PLoS Computational Biology, Vol. 9, No. 12, 2013, Art. No. e1003380 - SCI; SCOPUS
- [o1] 2013 Sharma, R. - Cherayil, B. J.: Reaction dynamics under confinement: An exact path integral treatment of a two-stage model of stochastic gene expression. In: Journal of Statistical Mechanics: Theory and Experiment, Vol. 2013, No. 10, 2013, Art. No. P10029 - SCI ; SCOPUS
- [o1] 2014 Matsuda, H. - Putzel, G. G. - Backman, V. - Szleifer, I.: Macromolecular crowding as a regulator of gene transcription. In: Biophysical Journal, Vol. 106, No. 8, 2014, s. 1801-1810 - SCI ; SCOPUS
- [o3] 2014 Mackey, M. C. - Santillán, M. - Tyran-Kaminska, M. - Zeron, E. S.: The utility of simple mathematical models in understanding gene regulatory dynamics. In: <http://www.mcgill.ca/mathematical-physiology-lab/files/mathematical-physiology-lab/in-silico-review-final-2014.pdf>, S. 61
- [o1] 2014 Wang, Q. - Zhou, T.: Alternative-splicing-mediated gene expression. In: Physical Review E, Vol. 89, No. 1, 2014, Art. No. 012713 - SCI ; SCOPUS

ADC07 Bokes, Pavol [UKOMFKAMS] (25%) - King, John R. (25%) - Wood, Andrew T. A. (25%) - Loose, Matthew (25%): Transcriptional bursting diversifies the behaviour of a toggle switch: Hybrid simulation of stochastic gene expression
Lit. 53 zázň., 4 obr.

In: Bulletin of Mathematical Biology. - Vol. 75, No. 2 (2013), s. 351-371

Indikátor časopisu:

IF (JCR) 2013=1,292

SJR (SCOPUS) 2013=0,801

SNIP (SCOPUS) 2013=0,980

Ohlasy (2):

[o1] 2014 Newby, J. M.: Spontaneous excitability in the Morris-Lecar model with ion channel noise. In: SIAM Journal on Applied Dynamical Systems, Vol. 13, No. 4, 2014, s. 1756-1791 - SCI ; SCOPUS

[o3] 2014 Newby, J. M. - Bressloff, P. C. - Keener, J. P.: Breakdown of fast-slow analysis in an excitable system with channel noise: supplementary material. In: Physical Review Letters, Vol. 111, No. 12, 2013, Art. No. 128101, <http://www.math.utah.edu/~bressloff/publications/13-8.pdf>

ADM Vedecké práce v zahraničných časopisoch registrovaných v databázach Web of Science alebo SCOPUS

ADM01 Bokes, Pavol [UKOMFKAMS] (50%) - Singh, Abhyudai (50%): Protein copy number distributions for a self-regulating gene in the presence of decoy binding sites

Popis urobený 14.4.2015

Lit. 32 zázň., 4 obr.

In: PLoS ONE [elektronický zdroj]. - Vol. 10, No. 3 (2015), Art. No. e0120555, s. 1-19 [online]

URL: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4374843/>

Indikátor časopisu:

IF (JCR) 2015=

SJR (SCOPUS) 2015=

SNIP (SCOPUS) 2015=

Registrované v: scopus

DAI Dizertačné a habilitačné práce

DAI01 Bokes, Pavol [UKOMFKAMS] (100%) : Genetic regulatory networks. - Nottingham : [s.n.], 2010. - 186 s. Doktorandská dizertačná práca (PhD.) - University of Nottingham, Nottingham, 2010

Lit. 85 záz. n.

GHG Práce zverejnené spôsobom umožňujúcim hromadný prístup

GHG01 Slezák, Peter [UKOLFUSV] (30%) - Bokes, Pavol [UKOMFKAMS] (30%) - Námer, Pavol (10%) - Waczulíková, Iveta [UKOMFKJFB] (30%): Microsoft Excel add-in for the statistical analysis of contingency tables
Popis urobený 20.8.2014
Lit. 19 záz. n.
In: International Journal for Innovation Education and Research [elektronický zdroj]. - Vol. 2, No. 5 (2014), s. 90-100 [online]
URL:
http://www.ijer.net/assets/microsoft-excel-add-in-for-the-statistical-analysis-of-contingency-tables-ijer.net-vol-2-5_11.pdf
Ohlasy (1):
[o3] 2015 Grech, V.: Conflicts in the last fifty years and subsequent effects on the male: Female ratio at birth.
In: British Journal of Medicine and Medical Research, Vol. 5, No. 10, 2015, s. 1254

Štatistika kategórií (Záznamov spolu: 11):

ACB Vysokoškolské učebnice vydané v domácich vydavateľstvách (1)
ADC Vedecké práce v zahraničných karentovaných časopisoch (7)
ADM Vedecké práce v zahraničných časopisoch registrovaných v databázach Web of Science alebo SCOPUS (1)
DAI Dizertačné a habilitačné práce (1)
GHG Práce zverejnené spôsobom umožňujúcim hromadný prístup (1)

Štatistika ohlasov (42):

[o1] Citácie v zahraničných publikáciách registrované v citačných indexoch (32)
[o3] Citácie v zahraničných publikáciách neregistrované v citačných indexoch (10)

24.4.2015