



Original Research Articles in Peer-Reviewed Journals from Past BIOMATH Conferences

The four past Biomath conferences in Sofia (1995, 2011, 2012, 2013) resulted in a total number of 116 original research articles, as follows: 4 articles in J.UCS, 59 articles in Elsevier journal CAMWA, 14 articles in B&BE and 39 articles in journal BIOMATH. A list of titles of these articles follows.

Journal of Universal Computer Science (J. UCS), Volume 2, Issue 2, Pages 59–95

<http://dx.doi.org/10.3217/jucs-002-02>

S. M. Markov, Y. Akyildiz, Curve Fitting and Interpolation of Biological Data Under Uncertainties, Journal of Universal Computer Science (J. UCS), vol. 2, no. 2 (1996), 59–69

<http://dx.doi.org/10.3217/jucs-002-02-0058>

P. Tsanova Andreeva, Inexact Information Systems and its Application to Approximate Reasoning, Journal of Universal Computer Science (J. UCS), vol. 2, no. 2 (1996), 70–76

<http://dx.doi.org/10.3217/jucs-002-02-0070>

D. Lavenier, Dedicated Hardware for Biological Sequence Comparison, Journal of Universal Computer Science (J. UCS), vol. 2, no. 2 (1996), 77–86

<http://dx.doi.org/10.3217/jucs-002-02-0077>

D. A. Mac Dónail, On the Scalability of Molecular Computational Solutions to NP Problems, Journal of Universal Computer Science (J. UCS), vol. 2, no. 2 (1996), 87–95

<http://dx.doi.org/10.3217/jucs-002-02-0087>

Computers & Mathematics with Applications, Volume 32, Issue 11, Pages 1–123 (December 1996)

I. Aradi, P. Érdi, Signal generation and propagation in the olfactory bulb: Multicompartmental modeling, Computers & Mathematics with Applica-

- tions, Vol. 32, Issue 11, 1–27.
[http://dx.doi.org/10.1016/S0898-1221\(96\)00193-9](http://dx.doi.org/10.1016/S0898-1221(96)00193-9)
- D. A. Mac Dónaill, N. H. Buttimore, The exploitation of assembly language instructions in biological text manipulation: I. Nucleotide sequences, *Computers & Mathematics with Applications*, Vol. 32, Issue 11, 29–38.
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- N. H. Buttimore, D. A. Mac Dónaill, The exploitation of assembly language instructions in biological text manipulation: II. Amino acid sequences, *Computers & Mathematics with Applications*, Vol. 32, Issue 11, 39–45.
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- C. E. A. Grigorescu, K. B. Radev, V. Chesaru, T. Necsoiu, I. Pricop, Thermal fluxes from the human body, *Computers & Mathematics with Applications*, Vol. 32, Issue 11, 47–55.
[http://dx.doi.org/10.1016/S0898-1221\(96\)00196-4](http://dx.doi.org/10.1016/S0898-1221(96)00196-4)
- T. Kostova, J. Li, Oscillations and stability due to juvenile competitive effects on adult fertility, *Computers & Mathematics with Applications*, Vol. 32, Issue 11, 57–70.
[http://dx.doi.org/10.1016/S0898-1221\(96\)00197-6](http://dx.doi.org/10.1016/S0898-1221(96)00197-6)
- P. K. Maini, Spatial and spatiotemporal pattern formation in generalised turing systems, *Computers & Mathematics with Applications*, Vol. 32, Issue 11, 71–77.
[http://dx.doi.org/10.1016/S0898-1221\(96\)00198-8](http://dx.doi.org/10.1016/S0898-1221(96)00198-8)
- H. -S. Niwa , Mathematical model for the size distribution of fish schools, *Computers & Mathematics with Applications*, Vol. 32, Issue 11, 79–88.
[http://dx.doi.org/10.1016/S0898-1221\(96\)00199-X](http://dx.doi.org/10.1016/S0898-1221(96)00199-X)
- K. B. Radev, C. E. A. Grigorescu, K. Berovski, B. Logofatu, Nonlinear signal processing in bioenergetics, *Computers & Mathematics with Applications*, Vol. 32, Issue 11 , 89–91.
[http://dx.doi.org/10.1016/S0898-1221\(96\)00200-3](http://dx.doi.org/10.1016/S0898-1221(96)00200-3)
- A. G. Rigas, D. S. Tsitsis, Spectral analysis techniques of stationary point processes: Extensions and applications to neurophysiological problems, *Computers & Mathematics with Applications*, Vol. 32, Issue 11, 93–99.
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- Z. Zlatev, J. Fenger, L. Mortensen, Relationships between emission sources and excess ozone concentrations, *Computers & Mathematics with Applications*, Vol. 32, Issue 11, 101–123.
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**Computers & Mathematics with Applications, Volume 64,
Issue 3, Pages 161–390 (August 2012)**

Alicia Prieto-Langarica, Hristo V. Kojouharov, Benito M. Chen-Charpentier, Discrete and continuous approaches to modeling cell movement in the presence of a foreign stimulus, *Computers & Mathematics with Applications* 64 (3), 2012, 167–174.

<http://dx.doi.org/10.1016/j.camwa.2011.11.058>

Robert Strehl, Andriy Sokolov, Stefan Turek, Efficient, accurate and flexible finite element solvers for chemotaxis problems, *Computers & Mathematics with Applications* 64 (3), 2012, 175–189.

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Angel G. Angelov, Maroussia Slavtchova-Bojkova, Bayesian estimation of the offspring mean in branching processes: Application to infectious disease data, *Computers & Mathematics with Applications* 64 (3), 2012, 229–235.

<http://dx.doi.org/10.1016/j.camwa.2012.01.049>

A. Gómez-Corral, M. López García, On the number of births and deaths during an extinction cycle, and the survival of a certain individual in a competition process, *Computers & Mathematics with Applications* 64 (3), 2012, 236–259.

<http://dx.doi.org/10.1016/j.camwa.2012.01.058>

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G. Chamoun, M. Saad, R. Talhouk, A coupled anisotropic chemotaxis-fluid model: the case of twosidely degenerate diffusion

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