

Pentru verificarea îndeplinirii standardelor I și I_{recent}

| N. Pub. | Ref. Pub. | 7 ani? | RIS | N | RIS/N |
|------------|---|-----------|-------|---|--------|
| 1 | Jäntschi, L., Popescu, V., Bolboaca, S.D. Toxicity caused by para-substituted phenols on Tetrahymena pyriformis: The structure-activity relationships (2008) Electronic Journal of Biotechnology, 11 (3) Article Number: 9 | X | 0.553 | 3 | 0.1844 |
| 2 | Jäntschi, L., Bolboaca, S.D. Exact probabilities and confidence limits for binomial samples: Applied to the difference between two proportions (2010) TheScientificWorldJournal, 10, pp. 865-878. | X | 0.621 | 2 | 0.3104 |
| 3 | Bolboaca, S.D., Jäntschi, L. Comparison of quantitative structure-activity relationship model performances on carboquinone derivatives (2009) TheScientificWorldJournal, 9, pp. 1148-1166. | X | 0.621 | 2 | 0.3104 |
| 4 | Jäntschi, L., Bolboaca, S.D., Furdui, C.M. Characteristic and counting polynomials: Modelling nonane isomers properties (2009) Molecular Simulation, 35 (3), pp. 220-227. | X | 0.734 | 3 | 0.2446 |
| 5 | Jantschi, L., Bolboaca, S.-D. Modeling the octanol-water partition coefficient of substituted phenols by the use of structure information (2007) International Journal of Quantum Chemistry, 107 (8), pp. 1736-1744. | X | 0.744 | 2 | 0.3722 |
| 6 | Bolboaca, S.D., Jäntschi, L. A structural informatics study on collagen (2008) Chemical Biology and Drug Design, 71 (2), pp. 173-179. | X | 0.800 | 2 | 0.4002 |
| 7 | Bolboaca, S.D., Pica, E.M., Cimpoi, C.V., Jäntschi, L. Statistical assessment of solvent mixture models used for separation of biological active compounds (2008) Molecules, 13 (8), pp. 1617-1639. | X | 0.824 | 4 | 0.2059 |
| 8 | Balan, M.C., Damian, M., Jantschi, L. Preliminary results on design and implementation of a solar radiation monitoring system (2008) Sensors, 8 (2), pp. 963-978. | X | 1.149 | 3 | 0.3829 |
| 9 | Jantschi, L., Diudea, M.V. Subgraphs of pair vertices (2009) Journal of Mathematical Chemistry, 45 (2), pp. 364-371. | X | 1.214 | 2 | 0.6071 |
| 10 | Jäntschi, L., Bolboaca, S.D., Sestras, R.E. A study of genetic algorithm evolution on the lipophilicity of polychlorinated biphenyls (2010) Chemistry and Biodiversity, 7 (8), pp. 1978-1989. | X | 1.334 | 3 | 0.4448 |
| 11 | Suci, I., Cosma, C., Todica, M., Bolboaca, S.D., Jäntschi, L. Analysis of soil heavy metal pollution and pattern in central Transylvania (2008) International Journal of Molecular Sciences, 9 (4), pp. 434-453. | X | 1.572 | 5 | 0.3144 |
| 12 | Cosma, C., Suci, I., Jäntschi, L., Bolboaca, S.D. Ion-molecule reactions and chemical composition of emanated from herculane Spa geothermal sources (2008) International Journal of Molecular Sciences, 9 (6), pp. 1024-1033. | X | 1.572 | 4 | 0.3930 |
| 13 | Jäntschi, L., Bolboaca, S.D., Diudea, M.V. Chromatographic retention times of polychlorinated biphenyls: From structural information to property characterization (2007) International Journal of Molecular Sciences, 8 (11), pp. 1125-1157. | X | 1.572 | 3 | 0.5239 |
| 14 | Bolboaca, S.D., Jäntschi, L. Predictivity approach for quantitative structure-property models. Application for blood-brain barrier permeation of diverse drug-like compounds (2011) International Journal of Molecular Sciences, 12 (7), pp. 4348-4364. | X | 1.572 | 2 | 0.7859 |

Fișă de verificare a îndeplinirii standardelor minime. Domeniu 'matematică'

| | | | | | |
|---------------|---|---|-----------------------|---------|--------|
| 15 | Bolboaca, S.D., Jantschi, L. How good can the characteristic polynomial be for correlations? (2007) International Journal of Molecular Sciences, 8 (4), pp. 335-345. | X | 1.572 | 2 | 0.7859 |
| 16 | Jäntschi, L., Bolboaca, S.-D. Results from the use of molecular descriptors family on structure property/activity relationships (2007) International Journal of Molecular Sciences, 8 (3), pp. 189-203. | X | 1.572 | 2 | 0.7859 |
| 17 | Bolboaca, S.-D., Jantschi, L. Modelling the property of compounds from structure: Statistical methods for models validation (2008) Environmental Chemistry Letters, 6 (3), pp. 175-181. | X | 1.680 | 2 | 0.8402 |
| 18 | Jäntschi, L., Bolboaca, S.D., Sestras, R.E. Meta-heuristics on quantitative structure-activity relationships: Study on polychlorinated biphenyls (2010) Journal of Molecular Modeling, 16 (2), pp. 377-386. | X | 1.812 | 3 | 0.6041 |
| 19 | Jantschi, L., Bolboaca, S.D. A structural modelling study on marine sediments toxicity (2008) Marine Drugs, 6 (2), pp. 372-388. | X | 1.824 | 2 | 0.9121 |
| 20 | Bolboaca, S.D., Jantschi, L. Modelling analysis of amino acids hydrophobicity (2008) Match, 60 (3), pp. 1021-1032. | X | 2.167 | 2 | 1.0836 |
| 21 | Jantschi, L., Katona, G., Diudea, M.V. Modeling Molecular Properties by Cluj Indices (2000) Match, 41, pp. 151-188. | | 2.167 | 3 | 0.7224 |
| Total: | | | I= | 11.2143 | |
| | | | I _{recent} = | 10.4919 | |

Pentru verificarea îndeplinirii standardului C

1 Jantschi L., Bolboaca S.D., Diudea M.V. Chromatographic retention times of polychlorinated biphenyls: From structural information to property characterization 2007 International Journal of Molecular Sciences, 8 (11), pp. 1125-1157.

| | | |
|---|--|-------|
| 1 | QSRR-based evaluating and predicting of the relative retention time of polychlorinated biphenyl congeners on 18 different high resolution GC columns Ghavami, R., Sadeghi, F. 2009 CHROMATOGRAPHIA 70 (5-6), pp. 851-868 | 0.584 |
| 2 | Semi-empirical topological method for prediction of the relative retention time of polychlorinated biphenyl congeners on 18 different HR GC columns Ghavami, R., Mohammad Sajadi, S. 2010 CHROMATOGRAPHIA 72 (5-6), pp. 523-533 | 0.584 |
| 3 | Diffusion coefficients of polychlorinated biphenyls and polycyclic aromatic hydrocarbons in polydimethylsiloxane and low-density polyethylene polymers Rusina, T.P., Smedes, F., Klanova, J. 2010 J APPL POLYM SCI 116 (3), pp. 1803-1810 | 1.000 |
| 4 | Cross-column prediction of gas-chromatographic retention of polychlorinated biphenyls by artificial neural networks Angelo Antonio D'Archivio, Angela Incani, Fabrizio Ruggieri. 2011 J CHROMATOGRAF A 1218(48), pp. 8679-8690 | 1.760 |
| 5 | Retention modelling of polychlorinated biphenyls in comprehensive two-dimensional gas chromatography D'Archivio, A.A., Incani, A., Ruggieri, F. 2011 ANAL BIOANAL CHEM 399 (2), pp. 903-913 | 1.954 |

2 Modeling Molecular Properties by Cluj Indices Jäntschi, L., Katona, G., Diudea, M.V. 2000 Match 41, pp. 151-188

| | | |
|---|---|-------|
| 6 | Generation and graph-theoretical properties of C4-TORI Diudea, M.V., Graovac, A. 2001 MATCH-COMMUN MATH CO 44, pp. 93-102 | 2.167 |
| 7 | MOLGEN-COMB, a Software Package for Combinatorial Chemistry Gugisch, R., Kerber, A., Laue, R., Meringer, M., Weidinger, J. 2000 MATCH-COMMUN MATH CO 41, pp. 189-203 | 2.167 |
| 8 | Cluj CJ and PIv polynomials Diudea, M.V., Ilić, A., Ghorbani, M., Ashrafi, A.R. 2010 CROAT CHEM ACTA 83 (3), pp. 283-289 | 0.815 |
| 9 | Cluj polynomials Diudea, M.V. 2009 J MATH CHEM 45 (2), pp. 295-308 | 1.214 |

3 Bolboaca S.D., Jäntschi L. How good can the characteristic polynomial be for correlations? 2007 International Journal of Molecular Sciences, 8 (4), pp. 335-345.

| | | |
|----|---|-------|
| 10 | Theoretical and quantitative structural relationships of the electrochemical and electron | 1.336 |
|----|---|-------|

Fișă de verificare a îndeplinirii standardelor minime. Domeniul 'matematică'

| | | |
|----------|--|-------|
| | transfer properties of [Mx@C82]@[SWCNT(5,5)-armchair-CnH20] (x = 0, 1; for x = 1: M = Ce & Gd and n = 20-300) nanostructure complexes Taherpour, A.A. 2009 CHEM PHYS LETT 483 (4-6), pp. 233-240 | |
| 11 | Quantitative structural relationship and theoretical study of electrochemical properties of C60@[SWCN(5, 5)-Armchair-CnH20] complexes Taherpour, A.A. 2009 CHEM PHYS LETT 469 (1-3), pp. 135-139 | 1.336 |
| 12 | Theoretical and quantitative structural relationship study of the electrochemical properties of [M2@Cx@[SWCNT(5,5)-Armchair- CnH20] (M = Er and Sc, x = 82 and 84, and n = 20-300) Complexes Taherpour, A.A. 2009 J PHYS CHEM C 113 (14), pp. 5402-5408 | 2.983 |
| 4 | Balan M.C., Damian M., Jantschi L. Preliminary results on design and implementation of a solar radiation monitoring system 2008 Sensors, 8 (2), pp. 963-978. | |
| 13 | A New and Inexpensive Pyranometer for the Visible Spectral Range Martínez M.A., Andújar J.M., Enrique J.M. 2009 SENSORS-BASEL 9(6), 4615-4634 | 1.149 |
| 14 | A new automatic system for angular measurement and calibration in radiometric instruments Marquez, J.M.A., Bohórquez, M.Á.M., Garcia, J.M., Nieto, F.J.A. 2010 SENSORS-BASEL 10 (4), pp. 3703-3717 | 1.149 |
| 15 | A low cost concept for data acquisition systems applied to decentralized renewable energy plants Jucá, S.C.S., Carvalho, P.C.M., Brito, F.T. 2011 SENSORS-BASEL 11 (1), pp. 743-756 | 1.149 |
| 5 | Results from the use of molecular descriptors family on structure property/activity relationships Jäntschi, L., Bolboacă, S.-D. 2007 International Journal of Molecular Sciences 8 (3), pp. 189-203 | |
| 16 | QSPR studies on normal boiling points and molar refractivities of organic compounds by correlation-ranking-based PCR and PC-ANN analyses of new topological indices Ghavami, R., Najafi, A., Hemmateenejad, B. 2009 CAN J CHEM 87 (11), pp. 1593-1604 | 1.029 |
| 17 | Improved superaugmented eccentric connectivity indices for QSAR/QSPR part I: Development and evaluation Dutt, R., Madan, A.K. 2010 MED CHEM RES 19 (5), pp. 431-447 | 0.543 |
| 6 | Analysis of soil heavy metal pollution and pattern in central Transylvania Suciu, I., Cosma, C., Todică, M., Bolboacă, S.D., Jäntschi, L. 2008 International Journal of Molecular Sciences 9 (4), pp. 434-453 | |
| 18 | Characterisation of soil quality and mobility of Cd, Cu, Pb and Zn in the baia mare area Northwest Romania following the historical pollution Levei, E., Frentiu, T., Ponta, M., Senila, M., Miclean, M., Roman, C., Cordos, E., Cordos, E. 2009 INT J ENVIRON AN CH 89 (8-12), pp. 635-649 | 0.543 |
| 19 | Assessing how heavy metal pollution and human activity are related by using logistic regression and kriging methods Lin, Y.-P., Cheng, B.-Y., Chu, H.-J., Chang, T.-K., Yu, H.-L. 2011 GEODERMA 163 (3-4), pp. 275-282 | 1.797 |

Centralizator verificare criterii:

| Nr. | Domeniu | Criteriu1 | Criteriu2 | Criteriu3 | %C1 | %C2 | %C3 | MG(%) | Îndeplinire |
|----------|-------------------|------------------------|--------------------------------|-------------|------------|------------|------------|------------|-------------|
| 2 | Chimie | S _{med} =.534 | C _{med} =5.3 | P=15.7 | 134 | 106 | 131 | 123 | DA |
| 3 | Matematică | I=11.2 | I_{recent}=10.5 | C=19 | 224 | 420 | 158 | 246 | DA |
| 4 | Informatică | I=11.5 | S _{med} =3.16 | - | 230 | 451 | - | 322 | DA |