Literatura

[1] ADLER, Roy L., KONHEIM, Allan G. a McANDREW, Harry M. Topological entropy. *Transactions of the American Mathematical Society*. 1965, vol. 114, no. 2, s. 309-319. ISSN 0002-9947.

[2] AHMED, N., NATARAJAN, T. a RAO, K. R. Discrete cosine transform. *IEEE Trans. Computers*. 1974, vol. C-23, no. 1, s. 90-93. ISSN 0018-9340.

[3] ALDRICH, Eric. Wavelets: A package of funtions for computing wavelet filters, wavelet transforms and multiresolution analyses. R package version 0.2-6. 2010.

[4] ALLAIN, Catherine a CLOITRE, Michel. Characterizing the lacunarity of random and deterministic fractal sets. *Physical Review A*. 1991, vol. 44, no. 6, s. 3552-3558. ISSN 1050-2947.

[5] ALLIGOOD, Kathleen T., SAUER, Tim D. a YORKE, James A. *CHAOS: An Introduction to Dynamical Systems*. Harrisonburg: Springer, 1996. ISBN 0-387-94677-2.

[6] ARLINGHAUS, Sandra L. Central place fractals: Theoretical geography in an urban setting. N.Siu-Ngan Lam, DeCola (Eds): *Fractals in geography. Engelwood Cliffs*. Prentice Hall, 1993.

[7] AVISHAI, Yshai a BEREND, Daniel. Transmission through a Thue–Morse chain. *Physical Review B*. 1992, vol. 45, no. 6, s. 2717-2724. ISSN 1098-0121.

[8] BADARIOTTI, Dominique. Des fractales pour l'urbanisme? Quelques pistes de refléxion a partir de l'exemple de Strasbourg-Kehl. *Revue de Géographique du Québec*. 2005, vol. 137.

[9] BAILEY, Trevor C. a GATRELL, Anthony C. Interactive spatial data analysis. *Essex, Longman Scientific & Technical*. 1995.

[10] BAILLY, E. *Modèle de simulation fractale et croissance urbaine. Etude de cas: Nice, Marseille, Gênes.* 1999. Disertační práce. University of Nice Sophia-Antipolis, ISBN 978-05-8224-493-1.

[11] BALIBREA, Francisco, GARCÍA GUIRAO, Juan Luis, LAMPART, Marek a LLIBRE, Juame. Dynamics of a Lotka-Volterra map. *Fundamenta Mathematicae*. 2006, vol. 191, no. 3, s. 265-279. ISSN 0016-2736.

[12] BANKS, John, BROOKS, Jaysson, CAIRNS, G., DAVIS, Graham a STACEY, Peter. On Devaney's definition of chaos. *The American Mathematical Monthly*. 1992, vol. 99, no. 4, s. 332-334. ISSN 0002-9890.

[13] BARNSLEY, Michael F. *Fielding: Fractals Everywhere*. Academic Press Professional. 2nd ed. Boston, XIV, 531 s, 1993.

[14] BATTY, Michael. *Cities and complexity*. MIT Press, 2007. 592 s. ISBN 978-02-6252-479-7.

[15] BATTY, Michael. Fifty Years of Urban Modeling: Macro-Statics to Micro-Dynamics. ALBEVERIO, Sergio, ANDREY, Denise, GIORDANO, Denise a VANCHERI, Alberto (eds.). *The Dynamics of Complex Urban Systems*. Mendrisio: Physica-Verlag, 2008, s. 1-20. ISBN 978-3-7908-1936-6.

[16] BATTY, Michael a LONGLEY, Paul A. *Fractal cities: a Geometry of Form and Function*. Academic Press, London, 394 s., 1994, ISBN 978-0-1245-5570-9.

[17] BATTY, Michael, XIE, Yichun a SUN, Zhanli. Modeling Urban Dynamics Through GIS-Based Cellular Automata. Computers. *Environments and Urban Systems*. 1999, vol. 23, no. 3, s. 205-233. ISSN 0198-9715.

[18] BC Ministry of Environment, Environmental Protection Division. Estimating A Global Mean. Contaminated Sites Statistical Applications Guidance Document No. 12-9, 2001. Dostupné z: `http://www.env.gov.bc.ca/epd/remediation/guidance/technical/pdf/12/gd09_all.pdf`

[19] BENGUIGUI, Lucien, CHAMANSKI, Daniel, MARINOV, Maria a PORTUGALI, Yuval. When and where is a city fractal? *Environ. Planning B*. 2000, vol. 27, no. 4. s. 507 – 519. ISSN 0265-8135.

[20] BENGUIGUI, Lucien a DAOUD, M. Is the Suburban Railway System a Fractal? *Geographical analysis*. 1991, vol. 23, no. 4, s. 362 – 368. ISSN 1538-4632.

[21] BENENSON, I. a TORRENS, P. *Geographic automata systems: A new paradigm for integrating GIS and geographic simulation.* Tel Aviv university Israel, University of Utah USA. 2003. Dostupné z `http://www.geocomputation.org/2003/Papers/Benenson_Paper.pdf`

[22] BERRYMAN, Alan A. a MILLSTEIN, J. A. Are Ecological Systems Chaotic – And If Not, Why Not?. *Trends in Ecology & Evolution*. 1989, vol. 4, no. 1, s. 26-28. ISSN 0169-5347.

[23] BISHOP, Michael a SHRODER, John F. *Geographic Information Science and Mountain Geomorphology*. Berlin: Springer, 2004. ISBN 3-540-42640-X.

[24] BLANCHARD, François, GLASNER, Eli, KOLYADA, Sergii a MAASS, Alejandro. On Li-Yorke pairs. *Journal für die reine und angewandte Mathematik*. 2002, vol. 2002, no. 547, s. 51-68. ISSN 1435-5345.

[25] BLOCK, Louis Stuart a COPPEL, William Andrew. *Dynamics in one dimension*. Berlin: Springer, 1991. ISBN 3-540-55309-6.

[26] BONNET, E., BOUR, Olivier, ODLING, Noelle E., DAVY, Philippe, MAIN, Ian, COWIE, Patience a BERKOWITZ, Brian. Scaling of fracture systems in geological media. *Rev. Geophys.*. 2001, vol. 39, no. 3, s. 347 – 383. ISSN 8755-1209.

[27] BROCK, William A., DECHERT, Davis W., SCHEINKMAN, Jose A. a LeBARON, Blake. A Test for independence based on the correlation dimension. *Econometric Reviews*. 1996, vol. 15, no. 3, s. 197-235. ISSN 0747-4938.

[28] BROWN, Clifford a LIEBOVITCH, Larry. *Fractal Analysis*. SAGE. 2010, 165 s. ISBN 978-4129-7165-2

[29] BRUCKS, Karen M. a BRUIN, Henk. *Topics from One-Dimensional dynamics*. London Mathematical Society, Student Texts 62, Cambridge UK, 2004. ISBN 0-521-83896-7.

[30] CAGLIONI Matteo a RABINO Giovanni. Contribution to fractal analysis of cities: a study of metropolitan area of Milan. *Cybergeo: European Journal of Geography*. 2004,no, 269. ISSN 1278-3366.

[31] CAVAILHES Jean, FRANKHAUSER, Pierre, PEETERS, Dominique a THOMAS, Isabelle. Where Alonso meets Sierpinski: an urban economic model of a fractal metropolitan area. *Environmental and Planning A*. 2004, vol. 36, s. 1471-1498. ISSN 0308-518X.

[32] CECEN, Aydin A., AGIRDAS, Cagdas, UGUR, Ahmet a TUZCU, Volkan. From Market Crashes to Heart Attacks: On the Empirics of Nonlinear Dynamics and Chaos in Nature and Society. *Journal of Economic and Social Research*. 2004, vol. 6, no. 2, s. 1-32. ISSN 1302-1060.

[33] CECEN, Aydin A. a ERKAL, Cahit. Distinguishing between stochastic and deterministic behavior in high frequency foreign exchange returns: Further evidence. *Economics Letters*. 1996, vol. 51, no. 3, s. 323-329. ISSN 0165-1765.

[34] CHAN, Grace, HALL, Peter a POSKITT, D. S. Periodogram-based estimators of fractal properties. *Ann. Statist.*. 1995, vol. 23, no. 5, s. 1684 – 1711. DOI: 10.1214/aos/1176324319.

[35] CHAN, Grace a WOOD, Andrew T. A. Increment-based estimators of fractal dimension for two-dimensional surface data. *Statist. Sinica*. 2000, vol. 10, no. 2, s. 343 – 376. ISSN 1017-0405.

[36] CHEN, Yanguang a LIN, Jingyi. Modeling the self-affine structure and optimalization conditions of systems city using the idea from fractals. *Chaos, Solitons & Fractals*. 2009, vol. 41, no. 2, s. 615-629. ISSN 0960-0779.

[37] CHEN Yanguang a FENG Jian. Fractal-based exponential distribution of urban density and self-affine fractal forms of cities. *Chaos, Solitons & Fractals*. 2012, vol. 45, no. 11, s. 1404-1416. ISSN 0960-0779.

[38] CHEN, Yanguang a XU, Feng. Modeling Complex Spatial Dynamics of Two-Population Interaction in Urbanization Process. *Journal of Geography and Geology*. 2010, vol. 2, no. 1, s. 2-17. ISSN 1916-9787.

[39] CHOE Geon Ho. *Computational Ergodic Theory. Algorithms and Computation in Mathematics*. Heidelberg: Springer–Verlag, 2005. ISBN 3-540-23121-8.

[40] CLARKE, Keith C. Computation of the fractal dimension of topographic surfaces using the triangular prism surface area method. *Computers and Geosciences* . 1980, vol. 12, no. 5, s. 713-722. ISSN 0098-3004.

[41] COEURJOLLY, Jean-François. Hurst exponent estimation of locally self-similar Gaussian processes using sample quantiles. *Ann. Statist.*. 2008, vol. 36, no. 3, s. 1404-1434. ISSN 0090-5364.

[42] CONSTANTINE, A. G. a HALL, Peter. Characterizing surface smoothness via estimation of effective fractal dimension. *J. Roy. Statist. Soc. Ser. B* . 1994, vol. 56, no. 1, s. 97 – 113. ISSN 1369-7412.

[43] CRESSIE, Noel a WIKLE, Christopher K. *Statistics for spatio-temporal data*. New Jersey: John Wiley & Sons, 2011. ISBN 978-0-471-69274-4.

[44] CREUTZBURG, R. a IVANOV, E. Fast Algorithm for computing fractal dimensions of image segments. *In Cantoni V., Creutzburg R., Levialdi S., Wolf G. (eds.). Recent issues in pattern analysis and recognition. Lecture notes in Computer Science 399*. 1985. Berlin, Springer

[45] DAUPHINÉ, André. *Fractal Geography*. Wiley, 2012. ISBN 978-1-84821-328-9.

[46] DAVIES, Steve a HALL, Peter. Fractal analysis of surface roughness by using spatial data. With discussion and a reply by the authors. *J. R. Stat. Soc. Ser. B Stat. Methodol.*. 1999, vol. 61, no. 1, s. 3-37. ISSN 1369-7412. ISSN 1538-4632.

[47] DAY, Richard H. *Economics Dynamics, Volume 1: An Introduction to Dynamical Systems and Market Mechanisms*. Cambridge: MIT Press, 1994. ISBN 0-262-04141-3.

[48] DE KEERSMAECKER, Marie-Laurence, FRANKHAUSER, Pierre a THOMAS, Isabelle. Using Fractal Dimensions for Characterizing Intra-urban Diversity:The Example of Brussels. *Geographical Analysis*. 2003, vol. 35, no. 4. s. 310-328.

[49] DE KEERSMAECKER, Marie-Laurence, FRANKHAUSER, Pierre a THOMAS, Isabelle. Dimensions fractales et réalités périurbainnes. L' exemple du Sud de Bruxelles. *L'Espace Geographique*. 2004, vol. 33, no. 3, s. 219 – 240. ISSN 0046-2497.

[50] DENDRINOS, Dimitrios. The structural stability of the US regions: evidence and theoretical underpinnings. *Environment and Planning A*. 1984, vol. 16, no. 11, s. 1433 – 1443. ISSN 0308-518X.

[51] DENDRINOS, Dimitrios. *On the Incongruous Spatial Employment Dynamics, Technological Change, Employment and Spatial Dynamics*. NIJKAMP, Peter (ed.) Technological Change, Employment and Spatial Dynamics. Berlin: Springer Verlag, 1986, s. 321-339. ISBN 978-3-540-16478-4.

[52] DENDRINOS, Dimitrios a SONIS, Michael. *Chaos and Socio-Spatial Dynamics*. Berlin: Springer, 1990. ISBN 978-0-387-97283-1.

[53] DEVANEY, Robert L. *An introduction to chaotic dynamical systems*. Boulder: Westview Press, 2003. ISBN 0-8133-4085-3.

[54] DI SANTIS, Angelo, FEDI, Maurizio a QUARTA, Tatiana. A revisitation of the triangular prism surface method for estimating the fractal dimension of the fractal surfaces. *Annali di Geofysica*. 1997, vol. 40, no. 4, s. 811-821. ISSN 0365-2556.

[55] Documentation of Fractalyse Software, 2013. Dostupné z: `http://www.fractalyse.org/en-doc-1.2_The_counting_methods.html`.

[56] DOUVINET, Johnny, DELAHAYE, Daniel a LANGLOIS, Patrice. Modélisation de la dynamique potentielle d'un basin versant et mesure de son efficacit structurelle. *CyberGeo*. Paris, 2008. DOI : 10.4000/cybergeo.16103.

[57] DUBUC, Benoit, QUINIOU, J. F., ROQUES-CARMES, Claude, TRICOT, Claude a ZUCKER, Steven W. Evaluating the fractal dimension of profiles. *Phys. Rev. A* . 1989, vol. 39, no. 3, s. 1500-1512. ISSN 1050-2947.

[58] DURRANI, Salman. 2000. Dostupné z: `http://www.mathworks.com/matlabcentral/fileexchange/301-koch-m`

[59] ELAYDI, Saber N. *Discrete Chaos: With Applications in Science and Engineering*. Boca Raton:Chapman & Hall/CRC, 2008. ISBN 978-1-58488-592-4.

[60] EMERSON, Charles W., LAM, Nina Slu-Ngan a QUATTROCHI, Dale A. Multiscale fractal analysis of image texture and pattern. *Photogrammetric Engineering & Remote Sensing*. 1999, vol. 65, no. 1, s. 51-61. ISSN 0099-1112.

[61] FALCONER, Kenneth. *Fractal Geometry*. New York: John Wiley & Sons, 2003. ISBN 0-471-92287-0.

[62] FALCONER, Kenneth. *Fractal Geometry. Mathematical Foundations and Applications*. Wiley. 2006. ISBN 978-0-470-84861-6.

[63] FIORELLO, Davide, FERMI, Francesca a BIELANSKA, Dorota. The ASTRA model for strategic assessment of transport policies. *System Dynamics Review*. 2010, vol. 26, no. 3, s. 283-290. ISSN 1099-1727.

[64] FISCHER, Manfred M., NIJKAMP, Peter a PAPAGEORGIOU Yorgos. *Spatial Choices and Processes*. Amsterdam: North-Holland, 1990. ISBN 978-0-444-88195-3.

[65] FLAKE, Garry W. *The Computational Beauty of Nature: Computer Explorations of Fractals, Chaos, Complex Systems, and Adaptations*. Cambridge: MIT Press, 1998. ISBN 978-0-262-56127-3.

[66] FLORINDO, João Batista a BRUNO, Odemir Martinez. Fractal descriptors based on Fourier spectrum applied to texture analysis. *Physica A*. 2012, vol. 391, no. 20, s. 4909 – 4922. ISSN 0378-4371.

[67] FORRIEZ, Maxime a MARTIN, Philippe. Structures hiérarchiques en géographie: des modèles linéaires aux modèles non linéaires (lois de puissance et corrections log-périodiques). *Foltête, Jean-Christophe. Actes des Huitièmes Rencontres de Théo Quant, Besançon, THEMA*. 2009, 10 s. ISSN 1769-6895.

[68] FRANKHAUSER, Pierre. *La fractalité des structures urbaines*. Paris, 1993. Disertační práce. Anthropos, coll. Villes.

[69] FRANKHAUSER, Pierre a PUMAIN, Denise. Fractals and Geography. Sanders Lena (ed.) Models in Spatial Analysis. London: ISTE Ltd., 2007.

[70] GAGGERMEIER, Ch. a LUCKE B. *Pension Schemes and Population Growth*, University of Hamburg, 2002.

[71] GARCÍA GUIRAO, Juan Luis a LAMPART, Marek. Transitivity of Lotka-Volterra map. *Discrete and Continuous Dynamical Systems – Series B*. 2008, vol. 9, no. 1, s. 75-82. ISSN 1531-3492.

[72] GEIST, Karlheinz, PARLITZ, Ulrich a LAUTERBORN, Werner. Comparison of Different Methods for Computing Lyapunov Exponents. *Progress of Theoretical Physics*. 1990, vol. 83, no.5, s. 875-893. ISSN 0033-068X.

[73] GENTON, Marc G. Highly robust variogram estimation. *Math. Geol.*. 1998, vol. 30, no. 2, s. 213 – 221. ISSN 0882-8121.

[74] GERAETS, Wil G.M. a van der STELT, Paul F. Fractal properties of bone. *Dentomaxillofacial Radiology*. 2000, no. 29, s. 144 – 153. doi: 10.1038/sj/dmfr/4600524.

[75] GENRE-GRANDPIERRE, Cyrille. *Forme et foncionnement des réseaux de transport: approche fractale et réflexions sur l'aménagement des villes*. Besançon, 2000. Disertační práce. Franche-Comté University.

[76] GIL, Julio, GIMENO, Miguel, LABORDA, Jesús, NUVIALA, Javier a SECCIONADOS, Ignacio. Tangential Algorithm for Calculation of the Fractal Dimension of Kidney Tubuli Section. *Int. J. Morphol*. 2006, vol. 24, no. 1, s. 31 – 34. ISSN 0717-9367.

[77] GNEITING, Tilmann, ŠEVČÍKOVÁ, Hana a PERCIVAL, Donald. B. Estimators of Fractal Dimension: Assessing the Roughness of Time Series and Spatial Data. *Statistical Science*. 2012, vol. 27, no. 2, s. 247 – 277. DOI: 10.1214/11-STS370. ISSN 0883-4237.

[78] GORELLI, S., SANTUCCI, Alessandro, LORENZINI, Giacomo a NALI, Cristina. Validation of air pollution biomonitoring networks and related data modelling: a geostatistical approach. *J. Environ. Monit.* 2009, vol. 11, no. 4, s. 793 – 797. ISSN 1464-0325.

[79] GOTTWALD, Georg a MELBOURNE, Ian. A new test for chaos in deterministic systems. *Proceedings of the Royal Society A*. 2004, vol. 460, no. 2042, s. 603-611. ISSN 1471-2946.

[80] GOTTWALD, Georg a MELBOURNE, Ian. On the Implementation of the 0-1 Test for Chaos. *SIAM Journal on Applied Dynamical Systems*. 2009, vol. 8, no. 1, s. 129-145. ISSN 1536-0040.

[81] GRASSBERGER, Peter a PROCACCIA, Itamar. Measuring the strangeness of strange attractors. *Physica D*. 1983, vol. 9, no. 1-2, s. 189-208. ISSN 0167-2789.

[82] HAAG, Günter. *Dynamic Decision Theory: Applications to Urban and Regional Topics*. Springer, 1989. ISBN 978-94-010-6912-0.

[83] HALL, Peter a WOOD, Andrew. On the performance of box-counting estimators of fractal dimension. *Biometrika*. 1993, vol. 80, no. 1, s. 246 – 252. ISSN 0006-3444.

[84] HEGGER, Reiner, KANTZ, Holger a SCHREIBER, Thomas. Practical implementation of nonlinear time series methods: The TISEAN package. *Chaos*, 1999, vol. 9, no. 2, s. 413-435. ISSN 1054-1500.

[85] HELBIG, Dirk. *Verkehrsdynamik, neue physikalische Modellierungskonzepte*. Berlin: Springer, 1997. ISBN 978-3-540-61927-7.

[86] HEIJDRA, Ben J. 2011. Dostupné z: `http://www.heijdra.org/SlidesLecture4A.pdf`

[87] HORÁK, Jiří. Zpracování dat v GIS. Ostrava: VŠB-TU Ostrava, 240 s., 2011.

[88] HORÁK, Jiří. Prostorová analýza dat. Ostrava: VŠB-TU Ostrava, 2012.

[89] HU, Shougeng, CHENG, Qiuming, WANG a Le, XIE, Shuyun. Multifractal characterization of urban residential land price in space and time. *Applied Geography*, 2012, vol. 34 , s. 161-170. ISSN 0143-6228.

[90] HUANG, Wen a YE, Xiangdong. Devaney's chaos or 2-scattering implies Li-Yorke's chaos. *Topology and Its Applications*. 2002, vol. 117, no. 3, s. 259-272. ISSN 0166-8641.

[91] HUTCHINSON, John. Fractals and self-similarity. *Indiana University Mathematics Journal*. 1981, vol. 30, no. 5, s. 713-747. ISSN 0022-2518.

[92] IMRE, Attila R., NOVOTNÝ, Josef a ROCCHINI, Duccio. The Korcak-exponent: A non-fractal descriptor for landscape patchiness. *Ecological Complexity*. 2012, vol. 12, s. 70 – 74. Dostupné z: `http://gis.cri.fmach.it/uploads/ECOCOM_2012_Korcak.pdf`.

[93] JANOŠKA, Zbyněk. *Hausdorfova dimenze při studiu sídel*. Diplomová práce. 2011. Olomouc.

[94] JENERETTE G. D. a WU, J. Analysis and simulation of land-use change in the central Arizona- Phoenix region, USA. *Landscape ecology*. 2001, vol. 16, no. 7, s. 611 – 626. ISSN 0921-2973.

[95] KANEVSKI, Mikchail (Ed.). Advanced mapping of Environmental Data. *Wiley*. 2008. 328 s. ISBN 978-18-4821-060-8.

[96] KANEVSKI, Mikchail a MAIGNAN, Michel. *Analysis and modelling of spatial environmental data*. EPFL Press. 2004. 300 s. ISBN 978-08-2475-981-0.

[97] KENT, John T. a WOOD, Andrew, T. A. Estimating the fractal dimension of a locally self-similar Gaussian process by using increments. *J. Roy. Statist. Soc. Ser. B* . 1997, vol. 59, no. 3, s. 679 – 699. ISSN 1369-7412.

[98] KOÇAK, Hüseyin a PALMER, Kenneth J. Lyapunov Exponents and Sensitive Dependence. *Journal of Dynamics and Differential Equations*. 2010, vol. 22, no. 3, s. 381-398. ISSN 1040-7294.

[99] KOLMOGOROV, Andrey Nikolaevich. Local structure of turbulence in an incompressible liquid for every large Reynolds numbers. *Doklady demii Nauk SSSR*. 1941, vol. 30, no. 4, s. 299-303. ISSN 0002-3264.

[100] KŘÍŽ, Radko. Chaotic Analysis of the GDP Time Series. ZELINKA, Ivan, CHEN, Guanrong, RÖSSLER, Otto E., SNASEL, Vaclav a ABRAHAM, Ajith. (eds.) *Nostradamus 2013: Prediction, Modeling and Analysis of Complex Systems*. Cham: Springer, 2013, s. 353-362. ISBN 978-3-319-00541-6.

[101] KRATOCHVÍL, Ctirad a HERIBAN, Pavel. *Dynamické systémy a chaos*. Brno: Vysoké učení technické v Brně, 2010. ISBN 978-80-214-4152-1.

[102] LAMPART, Marek. *Three types of chaos on discrete dynamical systems*. Opava, 2005. Disertační práce. Slezská univerzita v Opavě, Matematický ústav.

[103] LANDINI, Gabriel a RIPPIN, J.W. Notes on the implementation of the mass-radius method of fractal dimension estimation. *Comput Appl Biosci*. 1993, vol. 9, no. 5, s. 547 – 550.

[104] LE BRAS Hervé. *La planète au village*. Editions de l' Aube. Paris, 1993.

[105] LEFEBVRE, Antoine, CORPETTI, Thomas a HUBERT-MOY, Laurence. Discrimination de textures dans des images à Très Haute Résolution Spatiale pour l'analyse du changement. *ORASIS '09, Congrès des jeunes chercheurs de vision par ordinateur*, Trégastel, 2009.

[106] LEVY, Moshe. Scale-free human migration and the geography of social networks. *Physica A*. 2010, vol. 389, no. 21, s. 4913-4917. ISSN 0378-4371.

[107] LOVEJOY, Shaun, SCHERTZER, Daniel a LADOY, Philip. Fractal characterization of inhomogeneous geophysical measuring networks. *Nature*. 1986, vol. 319, no. 6048, s. 43-44. ISSN 0028-0836.

[108] LI, Xuewei a SHANG, Pengjian. Multifractal classification of road traffic flows. *Chaos, Solitons & Fractals*. 2007, vol. 31, no. 5, s. 1089-1094. ISSN 0960-0779.

[109] LI, Tien-Yien a YORKE, James A. Period three implies chaos. *The American Mathematical Monthly*. 1975, vol. 82, no. 10, s. 985-992. ISSN 0002-9890.

[110] LIEBOVITCH, Larry S. a TOTH, Tibor. A fast algorithm to determine fractal dimensions by box counting. *Phys. Lett. A*. 1989, vol. 141, no. 8 – 9, s. 386 – 390. ISSN 0375-9601.

[111] LORENZ, Edward N. Deterministic non-periodic flow. *Journal of the Atmospheric Sciences*. 1963, vol. 20, no. 2, s. 130-141. ISSN 1520-0469.

[112] LYNCH, Stephen. *Dynamical systems with applications using Matlab®*. Basel: Birkhäuser, 2011. ISBN 0-8176-4321-4.

[113] LUNGREN, Jonas. 2010. Dostupné z: `http://www.mathworks.com/matlabcentral/fileexchange/27577-fractal-curves/content/snowflake.m`

[114] MAIGNANT, Gilles. *Pollution et développement durable des villes françaises, étude de cas: Nice, Marseille, Lyon et Paris*. 2002. Disertační práce. University of Nice.

[115] MALANSON, George P., BUTLER, David R., a WALSH, Stephen J. Chaos Theory in Physical Geography. *Physical Geography*. 1990, vol. 11, no. 4, s. 293-304. ISSN 1930-0557.

[116] MANDELBROT, Benoit B. How long is the coast of Britain? Statistical self-similarity and fractional dimension. *Science*. 1967, vol. 156, no. 3775, s. 636 – 638. doi:10.1126/science.156.3775.636.

[117] MANDELBROT, Benoit B. Earth's relief, shape and fractal dimension of coastlines, and number area for islands. *PNAS*. 1975, vol. 72, no. 10, s. 3825 – 3838.

[118] MANDELBROT, Benoit B. *The Fractal Geometry of Nature*. New Yorke: W. H. Freeman and Company, 1982. ISBN 978-0-7167-1186-5.

[119] MANDELBROT, Benoit B. *The fractal geometry of nature.* Freeman. 1982. New York. 468 s. ISBN 978-07-1671-186-5.

[120] MANDELBROT, Benoit B. *The fractal geometry of nature.* Rev. Ed. Freeman. 1983. New York. 468 s. ISBN 978-07-1671-186-5.

[121] MARGHANY, Maged, HASHIM, Mazlan a CRACKNELL, Arthur P. Fractal Dimension Algorithm for Detecting Oil Spills Using RADARSAT-1 SAR. *Lecture Notes in Computer Science*. 2007, vol. 4705, s. 1054 – 1062. ISSN 0302-9743.

[122] MATSUBA, Ikuo a NAMATAME, Masanori. Scaling behaviour in urban development proces in Tokyo city and hierarchical dynamical structure. *Chaos, Solitons & Fractals*. 2003, vol. 16, no. 1, s. 151-165. ISSN 0960-0779.

[123] MAROTTO, Frederick R. *Introduction to Mathematical Modeling Using Discrete Dynamical Systems*. London: Brooks/Cole, 2006. ISBN 978-0-495-01865-0.

[124] MEDIO, Alfredo a GALLO, Giampaolo. Chaotic Dynamics, *Theory and Applications to Economics*. Cambridge: Cambridge University Press, 1995. ISBN 978-0-521-48461-9.

[125] MILLÁN, Humberto, GARCÍA-FORNARIS, Ivan a GONZÁLEZ-POSADA, Mario. Nonlinear spatial series analysis from unidirectional transects of soil physical properties. *CATENA*. 2009, vol. 77, no. 1, s. 56–64. ISSN 0341-8162.

[126] MILLER, Harvey J. Geocomputation. FOTHERINGHAM, Stewart A. a ROGERSON, Peter A. *The SAGE Handbook of Spatial Analysis*. London: SAGE Publications, 2009, s. 397-418. ISBN 978-1-4129-1082-8.

[127] MONOD, Jacques. The growth of bacterial cultures. *Annual Review of Microbiology*. 1949, vol. 3, s. 371-394. ISSN 0066-4227.

[128] MORENCY, Catherine a CHAPLEAU, Robert. Fractal geometry for the characterisation of urban-related states: Greater Montreal Case. *HarFA - Harmonic and Fractal Image Analysis*. 2003, s. 30 – 34.

[129] MOSEKILDE Erik, ARACIL, Javier a ALLEN, Peter M. Instabilities and Chaos in Non-Linear Dynamic Systems. *System Dynamics Review*. 1988, vol. 4, no. 1/2, s. 14-55. ISSN 1099-1727.

[130] NIJKAMP, Peter a REGGIANI, Aura. *Interaction, Evolution and Chaos in Space*. Berlin: Springer, 1992. ISBN 978-3-642-77511-6.

[131] NIJKAMP, Peter a REGGIANI, Aura. *The Economics of Complex Spatial Systems*. Amsterdam: North-Holland, 1998. ISBN 978-0-444-82931-3.

[132] NORMANT, François. *Analyse fractale des réseaux urbaines.* Paříž, 1996. Disertační práce. University of Paris.

[133] NOVOTNÝ, Josef. Korčákův zákon aneb zajímavá historie přírodní duality statistického rozložení. *Informace ČGS*. 2010, vol. 29, no. 1, s. 1 – 10.

[134] PEITGEN, Heinz-Otto, JÜRGENS, Hartmut a SAUPE, Dietmar. *Chaos and Fractals: New Frontiers of Science*. Springer. New York, 1992.

[135] PFAFFENBICHLER, Paul, EMBERGER, Günter a SHEPHERD, Simon. A system dynamics approach to land use transport interaction modelling: the strategic model MARS and its application. *System Dynamics Review*. 2010, vol. 26, no. 3, s. 262–282. ISSN 1099-1727.

[136] PHILLIPS, Jonathan D. Qualitative chaos in geomorphic systems, with an example from wetland response to sea level rise. *The Journal of Geology*. 1992, vol. 100, no. 3, s. 365-374. ISSN 0022-1376.

[137] PHILLIPS, Jonathan D. Spatial-domain chaos in landscapes. *Geographical Analysis*. 1993, vol. 25, no. 2, s. 101-117. ISSN 1538-4632.

[138] PHILLIPS, Jonathan D. Spatial analysis in physical geography and the challenge of deterministic uncertainty. *Geographical Analysis*. 1999, vol. 31, no. 4, s. 359-372. ISSN 1538-4632.

[139] PHILLIPS, Jonathan D. Sources of nonlinear complexity in geomorphic systems. *Progress in Physical Geography*. 2003, vol. 26, no. 1, s. 339-361. ISSN 0309-1333.

[127] MONOD, Jacques. The growth of bacterial cultures. *Annual Review of Microbiology*. 1949, vol. 3, s. 371-394. ISSN 0066-4227.

[128] MORENCY, Catherine a CHAPLEAU, Robert. Fractal geometry for the characterisation of urban-related states: Greater Montreal Case. *HarFA - Harmonic and Fractal Image Analysis*. 2003, s. 30 – 34.

[129] MOSEKILDE Erik, ARACIL, Javier a ALLEN, Peter M. Instabilities and Chaos in Non-Linear Dynamic Systems. *System Dynamics Review*. 1988, vol. 4, no. 1/2, s. 14-55. ISSN 1099-1727.

[130] NIJKAMP, Peter a REGGIANI, Aura. *Interaction, Evolution and Chaos in Space*. Berlin: Springer, 1992. ISBN 978-3-642-77511-6.

[131] NIJKAMP, Peter a REGGIANI, Aura. *The Economics of Complex Spatial Systems*. Amsterdam: North-Holland, 1998. ISBN 978-0-444-82931-3.

[132] NORMANT, François. *Analyse fractale des réseaux urbaines.* Paříž, 1996. Disertační práce. University of Paris.

[133] NOVOTNÝ, Josef. Korčákův zákon aneb zajímavá historie přírodní duality statistického rozložení. *Informace ČGS*. 2010, vol. 29, no. 1, s. 1 – 10.

[134] PEITGEN, Heinz-Otto, JÜRGENS, Hartmut a SAUPE, Dietmar. *Chaos and Fractals: New Frontiers of Science*. Springer. New York, 1992.

[135] PFAFFENBICHLER, Paul, EMBERGER, Günter a SHEPHERD, Simon. A system dynamics approach to land use transport interaction modelling: the strategic model MARS and its application. *System Dynamics Review*. 2010, vol. 26, no. 3, s. 262–282. ISSN 1099-1727.

[136] PHILLIPS, Jonathan D. Qualitative chaos in geomorphic systems, with an example from wetland response to sea level rise. *The Journal of Geology*. 1992, vol. 100, no. 3, s. 365-374. ISSN 0022-1376.

[137] PHILLIPS, Jonathan D. Spatial-domain chaos in landscapes. *Geographical Analysis*. 1993, vol. 25, no. 2, s. 101-117. ISSN 1538-4632.

[138] PHILLIPS, Jonathan D. Spatial analysis in physical geography and the challenge of deterministic uncertainty. *Geographical Analysis*. 1999, vol. 31, no. 4, s. 359-372. ISSN 1538-4632.

[139] PHILLIPS, Jonathan D. Sources of nonlinear complexity in geomorphic systems. *Progress in Physical Geography*. 2003, vol. 26, no. 1, s. 339-361. ISSN 0309-1333.

[140] PHILLIPS, Jonathan D. Weathering, instability, and landscape evolution. *Geomorphology*. 2005, vol. 67, no. 1-2, s. 255-272. ISSN 0169-555X.

[141] PHILLIPS, Jonathan D. Deterministic chaos and historical geomorphology: A review and look forward. *Geomorphology*. 2006, vol. 76, no. 1-2, s. 109-121. ISSN 0169-555X.

[142] PLUMMER, Paul a SHEPPARD, Eric. Geography matters: agency, structures and dynamics at the intersection of economics and geography. *Journal of Economic Geography*. 2006, vol. 6, no. 5, s. 619-637. ISSN 1468-2702.

[143] POINCARÉ, Henri. *The Foundations of Science: Science and Hypothesis.* The Value of Science, Science and Method. Science Press, 1913.

[144] POZYBILL, Martin. Ist Verkehr chaotisch? *Strassenverkehrtechnik*. 1998, vol. 42, no. 10, s. 538-545. ISSN 0039-2219.

[145] PŘIBYL, Pavel a MACH, Radim. *Řídicí systémy silniční dopravy*. Praha: ČVÚT, 2003. ISBN 978-80-01-02811-7.

[146] QUACKENBUSH, Lindi J. Calculating fractal dimension using the triangular prism method. *ASPRS Annual Conference*. 2005, no. 2, s. 892-904. Baltimore, Maryland, 9 – 11 March. ISBN 978-15-7083-076-1.

[147] REINER, Rolf, MUNZ, Martin a WEIDLICH, Wolfgang. Migratory dynamics of interacting subpopulations: Regular and chaotic behavior. *System Dynamics Review*. 1988, vol. 4, no. 1-2, s. 179–199. ISSN 1099-1727.

[148] PRÜGEL Bennett, Adam a SHAPIRO, Jonathan L. Analysis of genetic algorithms using statistical mechanics. *Physical Review Letters*. 1994, vol. 72, no. 9, s. 1305-1309. ISSN 0031-9007.

[149] REYNOSO, Carlos. The impact of chaos and complexity theories on spatial analysis - problems and perspectives. *Proceedings of 24th Research Symposium: Reading Historical Spatial Information from around the World: Studies of Culture and Civilization Based on GIS Data*. 2005, Kyoto Japan, 7-11 February.

[150] RIKLUND, Rolf, SEVERIN, Mattias a LIU, Youyan. The Thue-Morse aperiodic crystal, a link between the Fibonacci quasicrystal and the periodic crystal. *International Journal of Modern Physics B*. 1987, vol. 1, no.1, s. 121-132. ISSN 0217-9792.

[151] ROBINSON, Clark. *Dynamical Systems: Stability, Symbolic Dynamics, and Chaos*, Boca Raton: CRC Press, 1999. ISBN 0-8493-8495-8.

[152] RODRÍGUEZ-ITURBE, Ignacio a RINALDO, Andrea. Fractal River Basins: Chance and Self-Organization. Cambridge University Press, 2001. 564 s. ISBN 978-05-2100-405-3.

[153] ROSENSTEIN, Michael T., COLLINS, James J. a DeLUCA, Carlo J. A practical method for calculating largest Lyapunov exponents from small data sets. *Physica D.* 1993, vol. 65, no. 1-2, s. 117– 134. ISSN 0167-2789.

[154] RUDIN, Walter. *Real and complex analysis.* New York: Mc-Graw-Hill Education, 1987. ISBN 0-07-100276-6.

[155] RUELLE, David. *Chance and chaos.* Princeton: Princeton University Press, 1991. ISBN 978-0-691-02100-3.

[156] SAMBROOK, Roger C. a VOSS, Richard F. Fractal analysis of US settlement patterns. *Fractals.* 2001, vol. 9, no. 3, s. 241 – 250. ISSN 0218-348X.

[157] SICE, Petia, MOSEKILDE, Erik, MOSCARDINI, Alfredo, LAWLER, Kevin a FRENCH, Ian. Using system dynamics to analyse interactions in duopoly competition. *System Dynamics Review.* 2000, vol. 16, no. 2, s. 113–133. ISSN 1099-1727.

[158] SIVAKUMAR, Bellie. A phase-space reconstruction approach to prediction of suspended sediment concentration in rivers. *Journal of Hydrology.* 2002, vol. 258, no. 1-4, s. 149-162. ISSN 0022-1694.

[159] SIVAKUMAR, Bellie. Chaos theory in geophysics: past, present, and future. *Chaos, Solitons & Fractals*, 2004, vol. 19, no. 2, s. 441-462. ISSN 0960-0779.

[160] SIVAKUMAR, Bellie a WALLENDER, Wesley W. Predictability of river flow and suspended sediment transport in the Mississippi River basin: a non-linear deterministic approach. *Earth Surface Processes and Landforms.* 2005, vol. 30, no. 6, s. 665–677. ISSN 1096-9837.

[161] SCAFETTA, Nicola. *Fractal and Diffusion Entropy Analysis of Time Series: Theory, concepts, applications and computer codes for studying fractal noises and Lévy walk signals.* Verlag Dr. Müller. Berlín, 2010. 300 s. ISBN 978-36-3925-795-3.

[162] SCHERZINGER, Dagmar. 2002. Dostupné z: `http://m2matlabdb.ma.tum.de/files.jsp?MC_ID=5&SC_ID=13`

[163] SHARKOVSKII, Alexandr N. Coexistence of cycles of a continuous mapping of a line into itself. *Ukrainian Mathematical Journal*. 1964, vol. 16, no. 1, s. 61–71. ISSN: 0041-5995.

[164] SHEN, Guoqiang. Fractal dimension and fractal growth of urbanized areas. *International Journal of Geographical information science*. 2002, vol. 16, no. 5, s. 419 – 437. ISSN 1365-8816.

[165] SPARKS, Stephen R. J. Forecasting volcanic eruptions. *Earth and Planetary Science Letters*. 2003, vol. 210, no. 1-2, s. 1-15. ISSN 0012-821X

[166] SUN, Wanxiao. Three New Implementations of the Triangular Prism Method for Computing the Fractal Dimension of Remote Sensing Images. *Photogrammetric Engineering & Remote Sensing*. 2006, vol. 72, no. 4, s. 373 – 382. ISSN 0099-1112.

[167] TARBOTON, David G., BRAS, Rafael L. a RODRIGUEZ-ITURBE, Ignacio. The fractal nature of river networks. *Water Resources Research*. 1988, vol. 24, no. 8, s. 1317 – 1322. ISSN 0043-1397.

[168] TELESCA, Luciano, COLUZZI, Rosa a LASAPONARA, Rosa. Urban Pattern Morphology Time Variation in Southern Italy by Using Landsat Imagery. Murgante, Borruso, Lapucci (eds.) *Geocomputation & Urban Planning, SCI 176*. 2009. Springer.

[169] THOMAS, Isabelle, TANNIER, Cécile a FRANKHAUSER, Pierre. Is there a link between fractal dimensions and other indicators of the built-up environment at a regional level, *Cybergeo: European Journal of Geography*. 2008, no. 413, 24 s. ISSN 1278-3366.

[170] TSONIS, Anastasios A. a ELSNER, James. B. Chaos, Strange Attractors, and Weather. *Bulletin of the American Meteorological Society*. 1989, vol. 70, no. 1, s. 14-23. ISSN 1520-0477.

[171] TUČEK, Pavel a JANOŠKA, Zbyněk. Fractal dimension as a descriptor of urban growth dynamics. *Neural Network World*. 2013, vol. 23, no. 2, s. 93 – 102. ISSN 1210-0552.

[172] TURCOTTE, Donald L. *Fractals and Chaos in Geology and Geophysics*. Cambridge: Cambridge University Press, 1992. ISBN 978-0-521-56733-6.

[173] TURCOTTE Donald L. *Fractals and Chaos in Geology and Geophysics*. University Press. Cambridge, 1997. ISBN 0521561647

[174] VELLEKOOP, Michel a BERGLUND, Rauol. On intervals: transitivity = chaos. *The American Mathematical Monthly*. 1994, vol. 101, no. 4, s. 353-355. ISBN: 3-540-55309-6.

[175] VERBOVŠEK, Timotej. BCFD — a Visual Basic program for calculation of the fractal dimension of digitized geological image data using a box-counting technique. *Geological Quarterly*. 2009, vol. 53, no. 2, s. 241-248. ISSN 1641-7291.

[176] VESELÝ, Jaroslav. *Úvod do teorie chaosu v dopravě a dopravní telematice*. Praha: ČVUT, 2006. ISBN 80-01-03448-8.

[177] VISWANATHAN, Gandhimohan M., AFANASYEV, Vsevolod, BULDYREV, Sergey V., MURPHY, Eugene J., PRINCE, Peter A. a STANLEY, H. Eugene. Lévy flight search patterns of wandering albatrosses. *Nature*. 1996, vol. 381, no. 6581, s. 413-415. ISSN 0028-0836.

[178] WADDEL, P. UrbanSim: Modeling Urban Development for Land Use. *Transportation and Environmental Planning*. Journal of the American Planning Association. 2002, vol. 68, no. 3, s. 297-314. ISSN 0194-4363.

[179] WHITE, Roger W. Transitions to chaos with increasing system complexity: the case of regional industrial systems. *Environment and Planning A*. 1985, vol. 17, no. 3, s. 387 – 396. ISSN 0308-518X.

[180] WILLIAMS, Garnett. P. *Chaos Theory Tamed*. London: Taylor & Francis, 1997. ISBN 0-7484-0749-9.

[181] WILSON, Allan G. *Catastrophe Theory and Bifurcation (Routledge Revivals): Applications to Urban and Regional Systems*. Abingdon: Routledge, 2011. ISBN 978-0-415-68782-9.

[182] WOLF Alan, SWIFT Jack B., SWINNEY Harry L. a VASTANO John A. Determining Lyapunov exponents from a time series. *Physica D: Nonlinear Phenomena*. 1985, vol 16, no 3, s. 285-317. ISSN 0167-2789.

[183] WONG, David W.S., LASUS, Howard a FALK, R. Frank. Exploring the variability of segregation index D with scale and zonal systems: An analysis of thirty US cities. *Environment and Planning A*. 1999, vol. 31, no. 3, s. 507-522. ISSN 0308-518X.

[184] XIE, Yan-Shi, CHEN, Guang-Hao a TAN, Kai-Xuan. Chaotic analyses for space series of gold grade. *International Journal of Modern Physics B*. 2004, vol. 18, no. 17-19, s. 2730–2733. ISSN 0217-9792.

[185] ZELINKA, Ivan, VČELAŘ, František a Čandík, Marek. *Fraktální geometrie, principy a aplikace*. Praha: Ben, 2006. ISBN 80-7300-193-4.

[186] ZERAOULIA, Elhadj. *Models and Applications of Chaos Theory in Modern Sciences*. St. Helier: Science Publishers, 2011. ISBN 978-1-578-08722-8.

[187] ZHANG, Wei-Bin. *Synergetic Economics*. Berlin: Springer, 1991. ISBN 978-3-540-52904-0.

[188] ZHU, Zhengyuan a STEIN, Michael L. Parameter estimation for fractional Brownian surfaces. *Statist. Sinica*. 2002, vol. 12, no. 3, s. 863 – 883. ISSN 1017-0405.