

## **Patents & Copyrights**

- [1] Zaldívar, J. M. & Strozzi, F. (1997) On-line early warning detection system of runaway initiation using chaos theory techniques. Patent in USA N° 97108772.1. Patent in Europe n° 0882499.
- [2] Zaldivar, J. M., Strozzi, F. & Bosch, J. (2002) EWDS-AWARD: Software for early warning detection of runaway initiation. Copyright SP 2689.
- [3] Zaldívar, J. M., Strozzi, F., 2003. On-line early warning detection system of runaway initiation using chaos theory techniques. EU Patent Number 0882499.
- [4] Zaldívar, J. M., Strozzi, F. and Bosch, 2004, EWDS v2. Software for early warning detection of runaway initiation. Copyright SP 2718.

## **A. Papers in peer-reviewed journals**

- [1] Strozzi, F., & Pozzi, R. (2023). Trend and seasonality features extraction with pre-trained CNN and recurrence plot. International Journal of Production Research, 1-12.
- [2] Afeltra, G., Alerasoul, S. A., & Strozzi, F. (2023). The evolution of sustainable innovation: from the past to the future. European Journal of Innovation Management, 26(2), 386-421.
- [3] Scorza, A., Porazzi, E., Strozzi, F., Garagiola, E., Gimigliano, A., & De Filippis, G. (2022). A new approach for emergency department performance positioning: The quality-efficiency matrix. The international journal of health planning and management, 37(3), 1636-1649.
- [4] Alerasoul, S. A., Afeltra, G., Hakala, H., Minelli, E., & Strozzi, F. (2022). Organisational learning, learning organisation, and learning orientation: An integrative review and framework. Human Resource Management Review, 32(3), 100854.
- [5] Etemadi, N., Borbon-Galvez, Y., Strozzi, F., & Etemadi, T. (2021). Supply chain disruption risk management with blockchain: A dynamic literature review. Information, 12(2), 70.
- [6] Milella, F., Minelli, E. A., Strozzi, F., & Croce, D. (2021). Change and innovation in healthcare: Findings from literature. ClinicoEconomics and outcomes research, 395-408.
- [7] Ciano, M. P., Pozzi, R., Rossi, T., & Strozzi, F. (2021). Digital twin-enabled smart industrial systems: a bibliometric review. International journal of computer integrated manufacturing, 34(7-8), 690-708.
- [8] Vianello, C., Strozzi, F., Mocellin, P., Cimetta, E., Fabiano, B., Manenti, F., ... & Maschio, G. (2021). A perspective on early detection systems models for COVID-19 spreading. Biochemical and biophysical research communications, 538, 244-252.

- [9] Etemadi, N., Van Gelder, P., & Strozzi, F. (2021). An ism modelling of barriers for blockchain/distributed ledger technology adoption in supply chains towards cybersecurity. *Sustainability*, 13(9), 4672.
- [10] Raji, I. O., Shevtshenko, E., Rossi, T., & Strozzi, F. (2021, October). Modelling the relationship of digital technologies with lean and agile strategies. In *Supply Chain Forum: An International Journal* (Vol. 22, No. 4, pp. 323-346). Taylor & Francis.
- [11] Raji, I. O., Shevtshenko, E., Rossi, T., & Strozzi, F. (2021). Industry 4.0 technologies as enablers of lean and agile supply chain strategies: an exploratory investigation. *The International Journal of Logistics Management*, 32(4), 1150-1189.
- [12] Raji, I. O., Rossi, T., & Strozzi, F. (2021). A dynamic literature review on 'lean and agile' supply chain integration using bibliometric tools. *International Journal of Services and Operations Management*, 40(2), 253-285.
- [13] Srbinoski, B., Strozzi, F., Poposki, K., & Born, P. H. (2020). Trends in life insurance demand and lapse literature. *Asia-Pacific Journal of Risk and Insurance*, 14(2), 20190036.
- [14] Puliga, G., Nasullaev, A., Bono, F., Gutiérrez, E. and Strozzi, F., 2020. Ambient assisted living and European funds: a bibliometric approach. *Information Technology & People*.
- [15] Khitous, F., Strozzi, F., Urbinati, A. and Alberti, F., 2020. A systematic literature network analysis of existing themes and emerging research trends in circular economy. *Sustainability*, 12(4), p.1633.
- [16] Strozzi, F., Garagiola, E., & Trucco, P. (2019). Analysing the attractiveness, availability and accessibility of healthcare providers via social network analysis (SNA). *Decision support systems*, 120, 25-37.
- [17] Comerio, N., & Strozzi, F. (2019). Tourism and its economic impact: A literature review using bibliometric tools. *Tourism Economics*, 25(1), 109-131.
- [18] Ciano, M. P., Pozzi, R., Rossi, T., & Strozzi, F. (2019). How IJPR has addressed 'lean': a literature review using bibliometric tools. *International Journal of Production Research*, 57(15-16), 5284-5317.
- [19] Strozzi, F., Garagiola, E. and Trucco, P., 2019. Analysing the attractiveness, availability and accessibility of healthcare providers via social network analysis (SNA). *Decision Support Systems*, 120, pp.25-37.
- [20] Torto, A.D., Pozzi, R., Porazzi, E., Garagiola, E. and Strozzi, F., 2019. Length of stay reduction in the emergency department and its quantification using complex network theory. *International Journal of Operational Research*, 36(3), pp.337-361.
- [21] Ciano, M.P., Pozzi, R., Rossi, T. and Strozzi, F., 2019. How IJPR has addressed 'lean': a literature review using bibliometric tools. *International Journal of Production Research*, 57(15-16), pp.5284-5317.
- [22] Colicchia, C., Creazza, A., Noè, C. and Strozzi, F., 2018. Information sharing in supply chains: a review of risks and opportunities using the systematic literature network analysis (SLNA). *Supply Chain Management: An International Journal*.

- [23] Comerio, N. and Strozzi, F., 2018. Tourism and its economic impact: A literature review using bibliometric tools. *Tourism Economics*, 1-23.
- [24] Rossella Pozzi, Fernanda Strozzi, Tommaso Rossi and Carlo Noè , (2018). Quantifying the benefits of the lean thinking adoption by the beer game supply chain , *Int. J. Operational Research*, Vol. 32, No. 3,
- [25] Strozzi, F., Colicchia, C., Creazza, A., 2017. Literature review on the “Smart Factory” concept using bibliometric tools. *International Journal of Production Research*.  
<http://dx.doi.org/10.1080/00207543.2017.1326643> .
- [26] Colicchia, C., Creazza, A., Strozzi, F. (2016). Citation Network Analysis for supporting continuous Improvement in Higher Education. in *Studies in Higher Education*.  
<http://dx.doi.org/10.1080/03075079.2016.1276550>
- [27] Strozzi, F. and Colicchia, C., 2015. Information processing and management using citation network and keyword analysis to perform a systematic literature review on Green Supply Chain Management. *Journal of scientometric research*, 4(3), pp.195-205.
- [28] Besozzi, N., Ruschetti, L., Rossignoli, C. and Strozzi, F., 2014. The traveling salesman game for cost allocation: the case study of the bus service in Castellanza. *Game theory*.
- [29] Colicchia, C. and Strozzi, F., 2012. Supply chain risk management: a new methodology for a systematic literature review. *Supply Chain Management: An International Journal*, 17(4), pp.403-418.
- [30] Strozzi, F., Noé, C. and Zaldívar, J.M., 2012. Divergence control of a one-level supply chain replenishment rule. *International journal of production research*, 50(7), pp.2046-2057.
- [31] Strozzi, F., Poljansek, K., Bono, F., Gutierrez, E. and Zaldivar, J.M., 2011. Recurrence networks: evolution and robustness. *International Journal of Bifurcation and Chaos*, 21(04), pp.1047-1063.
- [32] Coppini, M., Rossignoli, C., Rossi, T. and Strozzi, F., 2010. Bullwhip effect and inventory oscillations analysis using the beer game model. *International journal of production Research*, 48(13), pp.3943-3956.
- [33] Zaldívar, J.M. and Strozzi, F., 2010. Phase-space volume based control of semibatch reactors. *Chemical engineering research and design*, 88(3), pp.320-330.
- [34] Strozzi, F., Gutierrez, E., Noe, C., Rossi, T., Serati, M. and Zaldivar, J.M., 2008. Measuring volatility in the nordic spot electricity market using recurrence quantification analysis. *The European physical journal special topics*, 164(1), pp.105-115.
- [35] Zaldívar, J.M., Strozzi, F. Dueri, S., Marinov, D. and Zbilut, J. P., 2008. Recurrence quantification analysis as a method for the detection of environmental thresholds. *Ecol. Model.* 210, 58-70.
- [36] Strozzi, F., Noè, C. and Zaldívar, J.M., 2008. Stability control in a supply chain: Total costs and bullwhip effect reduction. *Open Operational Research Journal*, 2, pp.51-59.

- [37] Erzgräber, H., Strozzi, F., Zaldívar, J.M., Touchette, H., Gutiérrez, E. and Arrowsmith, D.K., 2008. Time series analysis and long range correlations of Nordic spot electricity market data. *Physica A: Statistical Mechanics and its Applications*, 387(26), pp.6567-6574.
- [38] Caloiero, G., Strozzi, F. and Comenges, J.M.Z., 2008. A supply chain as a series of filters or amplifiers of the bullwhip effect. *International Journal of Production Economics*, 114(2), pp.631-645.
- [39] Strozzi, F., Bosch, J. and Zaldivar, J.M., 2007. Beer game order policy optimization under changing customer demand. *Decision Support Systems*, 42(4), pp.2153-2163.
- [40] Comenges, J.M.Z. and Strozzi, F., 2007. Time-step volume-preserving control of chemical reactors. *The open chemical engineering journal*, 1, pp.8-16.
- [41] Strozzi, F., Zaldívar, J.M. and Zbilut, J.P., 2007. Recurrence quantification analysis and state space divergence reconstruction for financial time series analysis. *Physica A: statistical mechanics and its applications*, 376, pp.487-499.
- [42] Strozzi, F. and Comenges, J.M.Z., 2006. Towards a non-linear trading strategy for financial time series. *Chaos, Solitons & Fractals*, 28(3), pp.601-615.
- [43] Strozzi, F. and Zaldivar, J.M., 2005. Non-linear forecasting in high-frequency financial time series. *Physica A: Statistical Mechanics and its Applications*, 353, pp.463-479.
- [44] Zaldívar Comenges, J.M., Strozzi, F. and Pagans, J.B., 2005. Divergence as a goal function for control and on-line optimization. *AICHE journal*, 51(2), pp.678-681.
- [45] Zaldívar, J.M., Bosch, J., Strozzi, F. and Zbilut, J.P., 2005. Early warning detection of runaway initiation using non-linear approaches. *Communications in Nonlinear Science and Numerical Simulation*, 10(3), pp.299-311..
- [46] Bosch, J., Strozzi, F., Zbilut, J.P. and Zaldívar, J.M., 2004. On line application of the divergence criterion for runaway detection in isoperibolic batch reactors: simulated and experimental results. *Comput. Chem. Eng*, 28, pp.527-544.
- [47] Bosch, J., Strozzi, F., Lister, D.G., Maschio, G. and Zaldívar, J.M., 2004. Sensitivity analysis in polymerization reactions using the divergence criterion. *Process Safety and Environmental Protection*, 82(1), pp.18-25.
- [48] Bosch, J., Kerr, D.C., Snee, T.J., Strozzi, F. and Zaldívar, J.M., 2004. Runaway detection in a pilot-plant facility. *Industrial & engineering chemistry research*, 43(22), pp.7019-7024.
- [49] Bosch, J., Strozzi, F., Snee, T.J., Hare, J.A. and Zaldivar, J.M., 2004. A comparative analysis between temperature and pressure measurements for early detection of runaway initiation. *Journal of Loss Prevention in the process industries*, 17(6), pp.389-395.
- [50] Zaldívar, J.M., Cano, J., Alós, M.A., Sempere, J., Nomen, R., Lister, D., Maschio, G., Obertopp, T., Gilles, E.D., Bosch, J. and Strozzi, F., 2003. A general criterion to define runaway limits in chemical reactors. *Journal of Loss Prevention in the Process Industries*, 16(3), pp.187-200.

- [51] Strozzi, F., Zaldívar, J.M. and Zbilut, J.P., 2002. Application of nonlinear time series analysis techniques to high-frequency currency exchange data. *Physica A: Statistical Mechanics and its Applications*, 312(3), pp.520-538.
- [52] Zbilut, J.P., Zaldivar-Comenges, J.M. and Strozzi, F., 2002. Recurrence quantification based Liapunov exponents for monitoring divergence in experimental data. *Physics Letters A*, 297(3), pp.173-181.
- [53] Zaldivar, J.M., Gutiérrez, E., Galván, I.M., Strozzi, F. and Tomasin, A., 2000. Forecasting high waters at Venice Lagoon using chaotic time series analysis and nonlinear neural networks. *Journal of Hydroinformatics*, 2(1), pp.61-84.
- [54] Strozzi, F., Zaldívar, J.M., Kronberg, A.E. and Westerterp, K.R., 1999. On-Line runaway detection in batch reactors using chaos theory techniques. *AICHE Journal*, 45(11), pp.2429-2443.
- [55] Alós, M.A., Nomen, R., Sempere, J.M., Strozzi, F. and Zaldívar, J.M., 1998. Generalized criteria for boundary safe conditions in semi-batch processes: simulated analysis and experimental results. *Chemical Engineering and Processing: Process Intensification*, 37(5), pp.405-421.
- .
- [56] Alos, M.A., Strozzi, F. and Zaldivar, J.M., 1996. A new method for assessing the thermal stability of semibatch processes based on Lyapunov exponents. *Chemical engineering science*, 51(11), pp.3089-3094.
- [57] Alos, M.A., Zaldívar, J.M., Strozzi, F., Nomen, R. and Sempere, J., 1996. Application of parametric sensitivity to batch process safety: Theoretical and experimental studies. *Chemical engineering & technology*, 19(3), pp.222-232
- [58] Strozzi, F. and Zaldivar, J.M., 1994. A general method for assessing the thermal stability of batch chemical reactors by sensitivity calculation based on Lyapunov exponents. *Chemical Engineering Science*, 49(16), pp.2681-2688.
- [59] Strozzi, F., Alo, M.A. and Zaldivar, J.M., 1994. A method for assessing thermal stability of batch reactors by sensitivity calculation based on Lyapunov exponents: experimental verification. *Chemical engineering science*, 49(24), pp.5549-5561.

## B. Conferences/Posters

1. Strozzi, F., & Pozzi, R. (2022). Improving time series features identification by means of Convolutional Neural Networks and Recurrence Plot. IFAC-PapersOnLine, 55(10), 601-606.
2. Vianello Chiara, Strozzi Fernanda, Mocellin Paolo, Fabiano Bruno, Manenti Flavio, Maschio Giuseppe FROM REACTION SAFETY MODELLING TOWARDS COVID-19 PANDEMIC RISK EARLY DETECTION GRICU, Ischia, 2022.
3. Occa, R., Borbon-Galvez, Y. and Strozzi, F., In search of lost security. A systematic literature review on how blockchain can save the IoT revolution. XXV Summer School Francesco Turco, July 2020

4. Etemadi, N., Blockchain technology for cybersecurity applications in the food supply chain: A systematic literature review. XXV Summer School Francesco Turco, July 2020
5. Stefano Spinelli, Rossella Pozzi, Fernanda Strozzi. Recurrence Quantification Analysis to mitigate the effect of minor stops on Overall Equipment Effectiveness. 21-st International Working Seminar on Production Economics. February 24-28 2020, Innsbruck (Austria).  
<https://www.uibk.ac.at/wipl/productioneconomics2020/>
6. Ciano M. P., Strozzi F. R., Rossi T. The link between lean and human resource management or organizational behaviour: a bibliometric review. Summer School Francesco Turco, Brescia, September 2019.
7. Mr. Ibrahim Raji, Prof. Tommaso Rossi, Prof. Fernanda Strozzi, Lean and Agile supply chain strategies: A systematic literature review, EUROMA 2019, 17-19 June, Helsinki
8. Pozzi R., Strozzi, F., 2018. How assembly systems are adopting the technologies of I40: a preliminary landscape. XXII *Summer School Francesco Turco*, September, Palermo, Italy

Puliga, G., Strozzi, F., Manzini, R., Noè, C., (2018). Using TRIZ for teaching Innovation and Creativity. SEFI annual Conference. 17-21 September 2018. Copenhagen, Denmark.

- [60] Strozzi, F., Pozzi, R., 2017. Recurrence Quantification Analysis applied to the study of seasonality of demand data series. *Summer School Francesco Turco*, 13-15 September, Palermo, Italy.
- [61] Strozzi, F., Noè, C. 2017. Teaching sustainability to engineers: a systematic literature review. *SEFI annual conference* 18-21 September 2017, Azores, Portugal. Best Papers
- [62] Pozzi, R., Noe, C. and Strozzi, F., 2014. Engineering and network analysis. In *SEFI 2014: 42nd annual conference*. European society for engineering education. ISBN 9782873520045.
- [63] Strozzi,F., Colicchia, C., Sorrenti, A., Zaldivar, J.M., Citation Networks Dynamics: A new clustering algorithm using Recurrence plots. (Poster) European Conference in Complex Systems, 2-7 september 2012 Brussels. ISBN 978-2-9601250-0-9.
- [64] Colicchia, C., Sorrenti, A., Strozzi, F., A systematic literature network analysis on environmental indicators for supply chains using ISO framework. LRN Annual Conference, Cranfield (UK), 5 - 7 September 2012. ISBN 978-1-904564-43-0.
- [65] Zaldivar, J.M., Strozzi, F., Positive plus negative feedback loops as an energetic efficient control in molecular systems. Poster. 12-16 september 2011. ECCS'2011 Vienna.
- [66] Falabretti, D., Merlo, M., Delfanti, M., Strozzi, F., Zaldivar, J.M., Divergence operator for a novel power systems regulation. 21st International Conference on Electricity Distribution Frankfurt, 6-9 June 2011
- [67] Falabretti, D., Delfanti, M., Merlo, M., Zaldívar, J.M., Strozzi, F. Divergence operator for the stability assessment of a microgrid weakly connected to the power system. ICHQP 2010-14th International Conference on Harmonics and Quality Power.2010 Bergamo, Italy, 26-29 september 2010  
doi: 10.1109/ICHQP.2010.5625449.

- [68] Strozzi, F., Zaldívar, J.M., Poljansek K., Bono F. and Gutiérrez, E. 2009. From complex networks to time series analysis and viceversa. Third International Symposium on Recurrence Plots, Montreal, Canada, 25-28th August.
- [69] F. Strozzi, E. Gutiérrez and D.K. Arrowsmith . Manmade project: diagnosing vulnerability , emergent phenomena and volatility in manmade networks. EURO XXIII, Bonn, July 5- 8 2009. Stream: Methodology of Societal Complexity
- [70] C. Colicchia, Kocarev L., Noè C., Strozzi F., "A stochastic model for evaluating the vulnerability of a supply network", EURO XXIII conference, Bonn, 5-8 July 2009
- [71] C. Colicchia, A Creazza, F. Strozzi. Markov Chains Models for supply chain risk: insights from a systematic literature review using Main Path Analysis. Logistics Research Network Annual Conference: 'Volatile and Fragile Supply Chains'9-11, Cardiff, September 2009.
- [72] Colicchia, C., Sivonen, H., Noè, C., Strozzi, F., Quantifying and ranking risks: the ANP method and the Interdependence Model. 22<sup>nd</sup> IPMA World Congress, "Project Management to Run". 9-11 November 2008, Roma, Italy.
- [73] F. Strozzi, J.M. Zaldivar, J. Zbilut Application of RQA to Financial Time Series, , Second International workshop on Recurrence Plot, Siena, 10-12 September 2007.
- [74] Zaldivar, J.M., Strozzi, F., Time-step volume-preserving control of dissipative systems. ICIAM, Zurigo 16-20 luglio 2007
- [75] Strozzi, F Zaldivar, J.M, Noè, C., The Order-Up-To policy using divergence to control the bullwhip problem, EURO2006, Reykjavik, Iceland, 2-5 July 2006.
- [76] Strozzi, F., Zaldivar, J.M., Recurrence Quantification Analysis and state space divergence reconstruction for financial time series analysis APFA5, Turin, Italy, 29<sup>th</sup> June-1<sup>st</sup> July 2006.
- [77] Cusco, L, Zaldívar Comenges J M, Wilday, A J, Strozzi, F. and Spagni D, Prevention, detection and mitigation of runaway reactions, Conference on Risk Assessment and Management (VGR 2006) , Pisa, Italy, 19<sup>th</sup> October 2006
- [78] Strozzi, F., Zaldivar, J.M., AWARD Project, ETPIS: European Technology Platform on Industrial Safety, Milan, 1<sup>st</sup> -2<sup>nd</sup> December 2005
- [79] Zaldivar, J.M., Strozzi, F., Early warning detection of runaway initiation in chemical reactors, Corso per Federazione Lombardia per l'Ambiente, Milano, 23 febbraio, 2005.
- [80] Strozzi, F. Algoritmo per il calcolo della divergenza. Seminario: " Early Warning Detection System:tecnologia avanzata per la rilevazione precoce dell'insorgere di reazioni fuggitive nell'industria chimica", Stazione Sperimentale dei Combustibili, S. Donato (Mi), 6 aprile 2005.
- [81] Strozzi, F., On line calculation of the runaway criterion, Technical Workshop: Advance Warning and Runaway Disposal, Instituto Superior Tecnico Congress Centre, Lisbon, Portugal, 21-22 Aprile, 2005

- [82] Zaldivar, J.M., Marinov, D., Strozzi, F., and Gutierrez, E., 2005. Oxygen dynamics in coastal lagoons. SIAM Conference on Applications of Dynamical Systems. May 22-26, Snowbird, UT, USA.
- [83] Strozzi, F., Zaldivar, J.M., Towards a non-linear trading strategy for financial time series. SIAM Conference on Dynamical Systems, 22-26 May 2005, Snowbird, Salt Lake city, SL.
- [84] Zaldivar, J. M., Bosch, J., Strozzi, F. and Snee, T. J., 2004. Early warning detection of runaway initiation using chaos-like features. Proceedings of the 11<sup>th</sup> International Symposium on Loss Prevention and Safety Promotion in the Process Industries 31<sup>st</sup>-May -3<sup>rd</sup> June, Praha , Czech Republic . pp 4178-4186. ISBN 80-02-01574-6
- [85] Strozzi, F, Bosh, J., Zaldivar, J.M., Analysis of the Beer Game Order Policy, New2004, 15-18 September 2004, Salerno (Italy)
- [86] Somboli, F., Strozzi, F., EWDS (Early Warning Detection System) for the Early Detection of Runaway Initiation. ESMG Symposium , 16-18 March 2004, Nurnberg Germany.
- [87] Strozzi, F., Somboli, F., Il progetto AWARD per Monitorare le Reazioni Fuggitive, II Conferenza Annuale dei Coordinatori di Responsible Care, Milano, 10-11 Dicembre 2003.
- [88] Strozzi, F.& Zaldivar, J. M. (2000). On-Line Runaway Detection in Batch Reactor Using Chaos Theory Techniques. In Atti del Convegno Caos e Complessità: Lo stato dell'arte. Milan, SICC.
- [89] Zaldívar, J. M., Kourtí, N., Villacastín, C., Strozzi, F. & Campolongo, F., (1999) Regimes shifts in upwelling systems. Pauly, D., Christensen, V. and Cuelho, L. (Eds.). Proceedings of the EXPO'98 Conference on Ocean Food Webs and Economic Productivity. ACP-EU Fish. Res. Rep. 6, 175-176.
- [90] Strozzi, F. & Zaldívar, J. M. (1999) The AWARE (Advanced Warning Against Runaway Events) Project. Fifth SIAM Conference on Applications of Dynamical Systems Snowbird, Utah, 23-27 May.
- [91] Zaldívar, J. M., Strozzi, F., Gutiérrez, E. & Tomasin, A. (1999). Forecasting high waters at Venice Lagoon using chaos theory techniques. Fifth SIAM Conference on Applications of Dynamical Systems Snowbird, Utah, 23-27 May.
- [92] Zaldívar, J.M., Kourtí, N., Villacastín, C., Strozzi, F. & Campolongo, F. (1998) Analyzing dynamics of complex ecologies from natural recordings: An application to fish population models. Invited lecture at the International Conference on Ocean Food Webs and Economic Productivity, 1-3 July, Lisbone.
- [93] Obertopp, T., Alós, M. A., Zaldívar, J. M., Strozzi, F. & Gilles, E. D. (1998) Model-based on-line monitoring of chemical processes using a new intrinsic runaway criterion related to the divergence of the system. Proceedings of the 9th International Symposium of Loss Prevention and Safety Promotion in the process industries,4-7 May, Barcelona,Spain, 641-651.
- [94] Strozzi, F., Zaldívar, J. M., Alós, M. A. & Westerterp, K. R. (1998) Towards on-line early detection of runaway initiation using chaos theory techniques. Proceedings of the 9th International Symposium of Loss Prevention and Safety Promotion in the process industries, 4-7 May, Barcelona, Spain, 708-717.

- [95] Obertopp, T., Alós, M. A., Zaldívar, J. M., Strozzi, F., and E. D. Gilles (1998) New intrinsic runaway criteria and their application to the model-based on-line monitoring of continuous and discontinuous reactors. Proceedings of the 3<sup>rd</sup> IFAC Workshop On-line Fault Detection and Supervision in the Chemical Process Industries, IFP, Solaize (Lyon) France, 4-5 June 1998. , P.S. Dhurjati and S. Cauvin (Eds.), Elsevier.
- [96] Zaldívar, J.M., Strozzi, F., Gutiérrez, E., Shepherd, I.M. & Tomasin, A. (1998). Early detection of high waters at Venice Lagoon using chaos theory techniques. Proceedings of the third international conference on Hydroinformatics, 24-26 August, Copenhagen, Denmark, V. Babovic and L. C. Larsen (eds.), A.A. Balkema, Rotterdam, vol. 2, 1483-1490.
- [97] Zaldívar, J.M., Kourtis, N., Villacastin, C., Strozzi, F. & Campolongo, F. (1998). Analyzing dynamics of complex ecologies from natural recordings: An application to fish population models. Tempos in Science and Nature: Structures, relations and complexity, 23-26 September, Siena.
- [98] Strozzi, F., Calenbuhr, V., Alós, M. A. & Zaldívar, J. M. (1995) Sensitivity analysis using Lyapunov exponents: Application to chemical reactors. Invited Paper. International Symposium SAMO95: Theory and Applications of Sensitivity Analysis of Model Output in Computer Simulation, 25-27th Sept 1995.
- [99] Strozzi, F., Alós, M. A. & Zaldívar, J. M. (1994). A method for assessing thermal stability of batch reactors by sensitivity calculation based on Lyapunov exponents: Theoretical and experimental verification. *Procc. of ISCRE 13*, PC-1, Baltimore, USA, 25-28 Sept, 1994.

### C. Reports and non-peer reviewed papers

- [1] Bono, F., Puliga, G., Strozzi, F., Gutierrez, E. Bibliometric Analysis of Scientific Publications and Patents on Smart Cities (2023). DOI: 10.2760/074691.
- [2] Ghezzi, L., Strozzi, F., (2016). A nonlinear policy for trading in index found. LIUC Paper n° 296. Serie Metodi Quantivi 23. ISSN:1722-4667
- [3] Strozzi, F., Renaldi, G., Gutierrez, E., D2 (2015) Network segmentation and Spanning Sets. JRC Technical Notes n° 99540
- [4] Panzarella, E, Rossignoli, C. Strozzi, F., (2014).Il servizio di trasporto urbano di Castellanza analizzato con l'approccio dei giochi cooperativi. LIUC Paper n. 283, Serie Metodi Quantitativi. ISSN:1722-4667.
- [5] Strozzi, F., Bono, F., Gutierrez, E., Bibliometrics and Citation Network Analysis:Percolation and Graph Spectral Analysis in the framework of Wireless Sensor Network Technology . JRC Scientific and Technical report 31.12.2014. JRC 92443. ISBN 978-92-79-17118-5. ISSN 1018-5593
- [6] Pozzi, R.; Strozzi, F.. (2014). Esempi di reti complesse. LIUC Paper n.272. Serie Metodi Quantitativi, marzo 2014, ISSN: 1722-4667.

- [7] Strozzi, F., Colicchia, C., Sorrenti A.,(2013). Literature review on environmental indicators for supply chains using "Systematic Literature Network Analysis". LIUC Paper n. 267, Serie Metodi Quantitativi, luglio 2013, ISSN: 1722-4667.
- [8] Strozzi, F., Colicchia, C.; 2012. Literature review on complex network methods applied to measure robustness in supply chain design. Liuc Papers n. 249, Serie Metodi Quantitativi 20, luglio 2012. ISSN: 1722-4667
- [9] Strozzi F; Rossignoli C; Zaldívar J.M; 2011. Correlation Analysis between faults in the electricity grid and spot prices in the Nordic Region. LIUC paper n°237, serie Metodi Quantitativi. ISSN: 1722-4667
- [10] Zaldívar J M.; Strozzi F; 2010. Analysis and simulation of metabolic networks: Application to HEPG2 . EUR 24553 EN. ISBN 978-92-79-17118-5. ISSN 1018-5593  
doi:10.2788/30083. Luxembourg: Publications Office of the European Union
- [11] Strozzi F. Zaldivar J.M., Poliansek K., Bono F., Gutierrez E. From Complex Network to time series and viceversa: Application to metabolic networks. JRC Scientific and Technical Reports, EUR 23947 EN-2009.
- [12] Strozzi F., Gutierrez E., Noè C., Rossi T., Serati M., Zaldivar J.M.  
Application of nonlinear time series analysis tecniques to the nordic spot electricity market data.. LIUC paper 200, marzo 2007.
- [13] Bosch J., Strozzi F., Zaldívar J.M., Beer Game Order Policy Optimization Using Genetic Algorithms. Liuc paper, 179, Serie Metodi Quantitativi, 17, supplemento ottobre 2005.
- [14] Strozzi F., Zaldivar J.M., New trading Methodology for Financial Time Series, Liuc Paper 162, Serie Metodi Quantitativi, gennaio 2005
- [15] Zaldivar J.M., Strozzi, F., Bosh, J., January 2004, Report on Algorithm Improvements for the Early Warning Detection System v2. Special Publication No. I.04.46, EC.JRC.
- [16] Bosh J., Kerr D.C., Strozzi F., Zaldivar J.M., February 2004, Analysis of EWDS on Esterification Reaction Between Isopropanol and Propionic Anhydride in a Pilot Plant Reactor., TN No. I.04.40, EC, JRC.
- [17] Bosh J., Strozzi F., Zaldivar J.M., March 2004, Analysis of EWDS Modified Algorithm on Calorimetric Experiments. TN No.I.04.57. EC, JRC.
- [18] Bosh J., Strozzi F., Franz P., Vicoli F., Agazzi G., Bianchi F., Ampelli C., Cambria D., Di Bella D., Lister D.G., Maschio, G., Soraci A., Zaldivar J.M. (2004) Analysis of EWDS Results for the Free Radical Experiments in the Bench Scale Reactor at Messina University and Rohm & Haas Industrial Reactor. TN No I.03.177.
- [19] Grau I., Alós M. A., Bosch J., Strozzi F., Zaldívar J. M. (2003) On-line application of the divergence criterion for runaway detection in reactors under reflux conditions. TN n I.03.65. EC. JRC.

- [20] Bosch J., Strozzi F., Franz P., Nicoli F., Pirovano F., Agazzi G., Bianchi F., and Zaldívar J. M.(2003) Preliminary analysis of the EWDS prototype performances in Rohm & Haas industrial reactor. TN n I.03.64. EC. JRC.
- [21] Strozzi F., Bosch J., Zaldívar J. M., Ampelli C., Di Bella D., Lister D. G., Maschio G., 2003, A preliminary analysis of the EWDS prototype performances in temperature oscillation calorimetry. TN n I.03.20. EC. JRC.
- [22] Zaldívar J. M., Bosch J., Strozzi F., Snee T. J., Hare J. A. (2003) A comparative analysis between temperature and pressure measurements for early detection of runaway initiation. TN n I.03.21. EC.JRC.
- [23] Bosch J., Strozzi F., Serra E., Gonzalez A., Aviles K., Cano J.,Nomen R., Sempere J., Agazzi G., Bianchi F., Zaldivar, J. M.,(2003). Analysis of IQS bench scale reactor experiments connected to the EWDS prototype. TN n° I.03.135, EC, JRC.
- [24] Bosh, j., Strozzi, F., Jorba, X., Nicoli, F., Pirovano, F., Agazzi, G., Bianchi, F., Cano, J., Sempere, J., Nomen, R. and Zaldivar, J.M., 2003. Analysis of the EWDS performances on the Esteve Quimica industrial process: Bench and industrial scale experiments. TN n I.03.159, EC, JRC.
- [25] Zaldívar J. M., Bosch J., Strozzi F. (2002) Report on algorithm specifications for the early warning detection system, S.P.I.02.114, EC, JRC.
- [26] Zaldívar J. M., Bosch J. and., Strozzi F. (2002) On-line application of the divergence criterion for runaway detection in isothermal batch reactors: Simulated and experimental results. EUR Report N° 20414, EC, JRC.
- [27] Bosch J., Strozzi F., Zbilut J. P., Zaldivar J. M. (2002) Application of the divergence criterion to isoperibolic batch reactors: Simulated and experimental results, EUR Report N° 20388, EC, JRC.
- [28] Bosch J., Strozzi F. & Zaldivar J. M.(2002) Implementation and test of noise reduction techniques for the early warning detection system. TN n° I.02.49, EC, JRC.
- [29] Zaldívar J. M., Cano J., Alos M. A., Sempere J., Nomen R., Lister D., Maschio G., Bosch J., Strozzi F. (2002) A general criterion to define runaway limits in chemical reactors. EUR Report N° 20250, EC, JRC.
- [30] Strozzi F. (2002) Application of non-linear time series analysis techniques to high frequency currency exchange data. LIUC Paper n° 99.
- [31] Zaldívar J. M., Strozzi F. (2001) Early warning detection of runaway initiation using chaos-like features. Published in <http://www.safetynet.de>
- [32] Strozzi F., Zaldívar J. M. (2001) Sensitivity analysis in Consecutive-Parallel reactions using the divergence criterion. TN n° I.01.60 , EC, JRC.
- [33] Strozzi F., Zaldívar J. M. (2001) Sensitivity analysis in Consecutive-Parallel reactions using the divergence criterion. TN n° I.01.66 , EC, JRC.

- [34] Zaldívar J.M., Kourt N., Villacastin C., Strozzi F. & Campolongo F. (1998) Analyzing dynamics of complex ecologies from natural recordings: An application to fish population models. JRC-EC. TN n° I.98.199.
- [35] Strozzi F., Ligthart J., Zaldívar J.M. (1998). AWARE (Advanced Warning Against Runaway Events) Project: Assembling and calibration of the temperature sensor and software specifications. JRC-EC, TN n° I.98.89.
- [36] Zaldivar,J.M. Strozzi, F., Predizione delle maree nella laguna di Venezia usando la teoria dei sistemi non-lineari. LIUC paper n. 55, luglio-agosto 1998 - Metodi quantitativi,
- [37] Zaldívar J. M., Strozzi F., Gutiérrez E., Tomasin A. (1997). Non-linear time series analysis: Forecasting high waters at Venice Lagoon, JRC-European Commission, EUR 17317 EN.
- [38] Strozzi F., Zaldívar J. M., Westerterp K. R. (1997) Runaway prevention in chemical reactors using chaos theory techniques, JRC-European Commission, EUR 17696 EN.
- [39] Zaldívar J. M., Strozzi F., Gutiérrez E. (1997), Control of chaos: development of the algorithms and application to numerical simulation. JRC-EC, TN n° I.97.150.