

Refereed Journal articles (all in SCI-expanded journals, * denotes corresponding author):

1. E. Lughofer, A.C. Zavoianu, R. Pollak, M. Pratama, P. Meyer-Heye, H. Zörrer, C. Eitzinger and T. Radauer, **On-line Anomaly Detection with Advanced Independent Component Analysis of Multi-Variate Residual Signals from Causal Relation Networks**, [Information Sciences](#), to appear, 2020
2. P.V. De Campos Souza, H. Ponce and E. Lughofer, **Evolving Fuzzy Neural Hydrocarbon Networks: A Model Based on Organic Compounds**, [Knowledge-Based Systems](#), to appear, 2020
3. P.V. De Campos Souza, L.C. Bambilra Torres, G.R. Lacerda Silva, A.P. Braga, E. Lughofer, **An Advanced Pruning Method in the Architecture of Extreme Learning Machines using L1-regularization and Bootstrapping**, [Electronics](#), vol. 9(5), ID: 811, 2020, <https://doi.org/10.3390/electronics9050811>
4. S. Benmoussa, M. Djeziri, M. Sayed-Mouchaweh, E. Lughofer, **Fault diagnosis and prognosis based on physical knowledge and reliability data: application to MOS Field-Effect Transistor**, [Microelectronics Reliability](#), vol. 110, ID: 113682, 2020, <https://doi.org/10.1016/j.microrel.2020.113682>
5. E. Lughofer and R. Nikzad-Langerodi. **Robust Generalized Fuzzy Systems Training from High-Dimensional Series Data using Local Structure Preserving PLS**. [IEEE Transactions on Fuzzy Systems](#), on-line and in press, 2019.
6. W. Zellinger, T. Grubinger, H. Schöner, E. Lughofer, S. Saminger-Platz and M. Zwick. **Multi-Source Transfer Learning of Time Series in Cyclical Manufacturing**. [Journal of Intelligent Manufacturing](#), to appear, 2019.
7. M. Ferdausa, M. Pratama, S.G. Anavatti, M.A. Garratt, E. Lughofer. **PAC: A Novel Self-Adaptive Neuro-Fuzzy Controller for Micro Aerial Vehicles**. [Information Sciences](#), on-line and in press, 2019, <https://doi.org/10.1016/j.ins.2019.10.001>.
8. A. Ashfahani, M. Pratama, E. Lughofer, Y.-S. Ong. **DEV DAN: Deep Evolving Denoising Autoencoder**, [Neurocomputing](#), to appear, 2019.
9. E. Lughofer, A.-C. Zavoianu, R. Pollak, M. Pratama, P. Meyer-Heye, H. Zörrer, C. Eitzinger, T. Radauer, **Autonomous Supervision and Optimization of Product Quality in a Multi-Stage Manufacturing Process based on Self-Adaptive Prediction Models**, [Journal of Process Control](#), vol 76, pp. 27-45, 2019, <https://doi.org/10.1016/j.jprocont.2019.02.005>
10. Igor Skrjanc, Jose Iglesias, Araceli Sanchis, Daniel Leite, Edwin Lughofer and Fernando Gomide, **Evolving Fuzzy and Neuro-Fuzzy Approaches in Clustering, Regression, Identification, and Classification: A Survey**, [Information Sciences](#), vol. 490, pp. 344-368, 2019
11. I. Skrjanc, S. Blazic, E. Lughofer and D. Dovzan, **Inner Matrix Norms in evolving Cauchy Possibilistic Clustering for Classification and Regression from Data Streams**, [Information Sciences](#), vol. 478, pp. 540-563, 2019, <https://doi.org/10.1016/j.ins.2018.11.040>
12. W. Zellinger, B.A. Moser, T. Grubinger, E. Lughofer, T. Natschläger and S. Saminger-Platz. **Robust Unsupervised Domain Adaptation for Neural Networks via Moment Alignment**. [Information Sciences](#), vol. 483, pp. 174-191, 2019, <https://doi.org/10.1016/j.ins.2019.01.025>
13. T. Weiler and E. Lughofer. **Approximation of Incoherent Probabilities**. [International Journal of Approximate Reasoning](#), vol. 105, pp. 342--355, 2019, <https://doi.org/10.1016/j.ijar.2018.12.009>
14. M. Pratama, W. Pedrycz and E. Lughofer. **Online Tool Condition Monitoring Based on Parsimonious Ensemble+**. [IEEE Transactions on Cybernetics](#), to appear, September 2018, DOI:

[10.1109/TCYB.2018.2871120](https://doi.org/10.1109/TCYB.2018.2871120)

15. Edwin Lughofer*, Mahardhika Pratama and Igor Skrjanc, **Incremental Rule Splitting in Generalized Evolving Fuzzy Systems for Autonomous Drift Compensation**, [IEEE Transactions on Fuzzy Systems](#), vol. 26(4), pp. 1854--1865, 2018, DOI: [10.1109/TFUZZ.2017.2753727](https://doi.org/10.1109/TFUZZ.2017.2753727)
16. J. Liu, E. Lughofer, X. Zeng and Z. Li. **The Power of Visual Texture in Aesthetic Perception: an exploration of the predictability of perceived aesthetic emotions**. [Computational Intelligence and Neuroscience](#), Article ID 1812980, 2018, <https://doi.org/10.1155/2018/1812980>
17. Jose de Jesus Rubio, Edwin Lughofer, Jesus A. Meda Campana, Luis Alberto Paramo, Juan Francisco Novoa, Jaime Pacheco, **Neural network updating via argument Kalman filter for modeling of Takagi-Sugeno fuzzy models**, [Journal of Intelligent and Fuzzy Systems](#), vol. 35, no. 2, pp. 2585-2596, 2018, DOI: [10.3233/JIFS-18425](https://doi.org/10.3233/JIFS-18425)
18. Ramin Nikzad-Langerodi*, Werner Zellinger, Edwin Lughofer and Susanne Saminger-Platz, **Domain-Invariant Partial Least Squares Regression**, [Analytical Chemistry](#), vol. 90 (11), pp. 6693-6701, 2018, DOI: [10.1021/acs.analchem.8b00498](https://doi.org/10.1021/acs.analchem.8b00498)
19. Ramin Nikzad-Langerodi, Edwin Lughofer*, Carlos Cernuda, Thomas Reischer, Wolfgang Kantner, Marcin Pawliczek, Markus Brandstetter, **Calibration Model Maintenance in Melamine Resin Production: Integrating Drift Detection, Smart Sample Selection and Model Adaptation**, [Analytica Chimica Acta](#), vol. 1013, pp. 1—12, 2018, appeared as *FEATURED ARTICLE with image on Front Cover Issue*.
20. Mahardhika Pratama, Witold Pedrycz and Edwin Lughofer*, **Evolving Ensemble Fuzzy Classifier**, [IEEE Transactions on Fuzzy Systems](#), on-line and in press, 2018,
21. E. Lughofer*, R. Pollak, A.C. Zavoianu, M. Pratama, P. Mayer-Heye, H. Zörrer, C. Eitzinger, J. Haim and T. Radauer. **Self-Adaptive Evolving Forecast Models with Incremental PLS Space Update for On-line Predicting Quality of Micro-fluidic Chips**. [Engineering Applications of Artificial Intelligence](#), vol. 68, pp. 131--151, 2018.
22. E. Lughofer* and M. Pratama. **On-line Active Learning for Data Stream Regression based on Single-Pass Certainty Sampling Criteria**. [IEEE Transactions on Fuzzy Systems](#), vol. 26(1), pp. 292--309, 2018, DOI: [10.1109/TFUZZ.2017.2654504](https://doi.org/10.1109/TFUZZ.2017.2654504)
23. M. Pratama*, E. Lughofer, P. Angelov and M.J. Er. **Parsimonious Random Vector Functional Link Network for Data Streams**, [Information Sciences](#), vol. 430--431, pp. 519--537, 2018.
24. J. Liu*, E. Lughofer and X. Zeng. **Toward Model Building for Visual Aesthetic Perception --- SURVEY/POSITION Paper**. [Computational Intelligence and Neuroscience](#), Article ID 1292801, 2018, <https://doi.org/10.1155/2017/1292801>
25. J.J. Rubio*, E. Lughofer, P. Angelov, J.F. Novoa and J.A. Meda-Campina. **A Novel Algorithm for the Modeling of Complex Processes**. [Kybernetika](#), vol. 54 (1), pp. 79—95, 2018.
26. Edwin Lughofer*, Roland Richter, Ulrich Neissl, Wolfgang Heidl, Christian Eitzinger, Thomas Radauer, **Explaining Classifier Decisions Linguistically for Stimulating and Improving Operators Labeling Behavior**, [Information Sciences](#), vol. 420, pp. 16-36, 2017 <http://www.sciencedirect.com/science/article/pii/S0020025517308678>
27. Edwin Lughofer*, **On-line Active Learning: A New Paradigm to Improve Practical Useability of Data Stream Modeling Methods - SURVEY/POSITION Paper**, [Information Sciences](#), vol. 415-416, pp. 356-376, 2017, <https://doi.org/10.1016/j.ins.2017.06.038>

28. Mahardhika Pratama*, Eric Dimla, Chow Yin Lai, Edwin Lughofer, Meng Joo Er, **Metacognitive Learning Approach for Online Tool Condition Monitoring**, *Journal of Intelligent Manufacturing*, on-line and in press, 2017, <https://doi.org/10.1007/s10845-017-1348-9>
29. R. Nikzad-Langerodi, E. Lughofer*, S. Saminger-Platz, T. Zahel, P. Sagmeister, C. Herwig, **Automatic Feed Phase Identification in Multivariate Process Profiles by Sequential Binary Classification**, *Analytica Chimica Acta* vol. 982, pp. 48--61, 2017, <https://doi.org/10.1016/j.aca.2017.05.034>
30. F. Serdio, E. Lughofer, C. Zavoianu, K. Pichler, T. Buchegger, H. Efendic. **Improved Fault Detection employing Hybrid Memetic Fuzzy Modeling and Adaptive Filters**. *Applied Soft Computing*, vol. 51, pp. 60--82, 2017, DOI: [10.1016/j.asoc.2016.11.038](https://doi.org/10.1016/j.asoc.2016.11.038).
31. C. Zain*, M. Pratama, E. Lughofer, S. Anavatti, **Evolving Type-2 Web News Mining**, *Applied Soft Computing*, vol. 54, pp. 200-220, 2017, <http://dx.doi.org/10.1016/j.asoc.2016.11.034>
32. E. Lughofer, S. Kindermann, M. Pratama and J.d.J. Rubio. **Top-Down Sparse Fuzzy Regression Modeling from Data with Improved Coverage**. *International Journal of Fuzzy Systems*, vol. 19 (5), pp. 1645--1658, 2017, DOI: [10.1007/s40815-016-0271-0](https://doi.org/10.1007/s40815-016-0271-0).
33. M. Pratama, E. Lughofer, M.J. Err and C.P. Lim. **Data Driven Modelling Based on Recurrent Interval-Valued Metacognitive Scaffolding Fuzzy Neural Network**. *Neurocomputing*, vol. 262, pp. 4--27, <https://doi.org/10.1016/j.neucom.2016.10.093>, 2017.
34. José de Jesús Rubio, L. Zhang, E. Lughofer, P. Cruz, A. Alsaedi, T. Hayat. **Modeling and control with neural networks for a magnetic levitation system**. *Neurocomputing*, vol. 227, pp. 113--121, 2017, DOI: [10.1016/j.neucom.2016.09.101](https://doi.org/10.1016/j.neucom.2016.09.101).
35. Mahardhika Pratama*, Jie Lu, Edwin Lughofer, Guang Zhang and Meng Joo Er, **Incremental Learning of Concept Drift Using Evolving Type-2 Recurrent Fuzzy Neural Network**, *IEEE Transactions on Fuzzy Systems*, vol. 25 (5), pp. 1175--1192, 2017, [10.1109/TFUZZ.2016.2599855](https://doi.org/10.1109/TFUZZ.2016.2599855)
36. Mahardhika Pratama, Edwin Lughofer, Chee Peng Lim, Wenny Rahayu, Taram Dillon and Agus Budiyo, **pClass+: A novel Evolving Semi-supervised Classifier**, *International Journal of Fuzzy Systems*, vol. 19 (3), pp. 863--880, 2017, DOI: [10.1007/s40815-016-0236-3](https://doi.org/10.1007/s40815-016-0236-3)
37. Carlos Cernuda, Edwin Lughofer*, Helmut Klein, Clemens Forster, Marcin Pawliczek and Markus Brandstetter, **Improved Quantification of Important Beer Quality Parameters based on Non-linear Calibration Methods applied to FT-MIR Spectra**, *Analytical and Bioanalytical Chemistry* (special issue on "Process Analytics" organized by Rudolf Kessler), vol. 409 (3), pp. 841--857, 2017, [10.1007/s00216-016-9785-4](https://doi.org/10.1007/s00216-016-9785-4)
38. Gerd Bramerdorfer*, Alexandru-Ciprian Zavoianu, Siegfried Silber, Edwin Lughofer, Wolfgang Amrhein, **Possibilities for Speeding-Up the FE-Based Optimization of Electrical Machines - A Case Study**, *IEEE Transactions on Industrial Applications*, vol. 52 (6), pp. 4668--4677, 2016, [10.1109/TIA.2016.2587702](https://doi.org/10.1109/TIA.2016.2587702)
39. Edwin Lughofer*, Eva Weigl, Wolfgang Heidl, Christian Eitzinger and Thomas Radauer, **Recognizing Input Space and Target Concept Drifts in Data Streams with Scarcely Labelled and Unlabelled Instances**, *Information Sciences*, vol. 355-356, pp. 127-151, 2016, [doi:10.1016/j.ins.2016.03.034](https://doi.org/10.1016/j.ins.2016.03.034)
40. Mahardhika Pratama* and Jie Lu and E. Lughofer and G. Zhang and Sreenatha Anavatti, **Scaffolding Type-2 Classifier for Incremental Learning under Concept Drifts**, *NeuroComputing*, vol. 191, pp. 304-329, 2016, [doi:10.1016/j.neucom.2016.01.049](https://doi.org/10.1016/j.neucom.2016.01.049)
41. Eva Weigl*, Wolfgang Heidl, Edwin Lughofer, Christian Eitzinger and Thomas Radauer, **On Improving Performance of Surface Inspection Systems by On-line Active Learning and Flexible**

- Classifier Updates**, [Machine Vision and Applications](#), vol. 27 (1), pp. 103-127, 2016, doi: [10.1007/s00138-015-0731-9](#) (impact factor: 1.35)
42. Jianli Liu*, Edwin Lughofer and Xianyi Zeng, **Aesthetic Perception of Visual Textures: A Holistic Exploration using Texture Analysis, Psychological Experiment and Perception Modeling**, [Frontiers of Computational Neuroscience](#), vol. 9: 134, pp. 1–14, 2015, <http://dx.doi.org/10.3389/fncom.2015.00134> (impact factor: 2.2)
43. Carlos Cernuda, Edwin Lughofer*, Thomas Röder, Wolfgang Märzinger, Thomas Reischer, Marcin Pawliczek and Markus Brandstätter, **Self-Adaptive Non-Linear Methods for Improved Multivariate Calibration in Chemical Processes**, [Lenzinger Berichte](#), vol. 92, 12-32, 2016
44. Kurt Pichler*, Edwin Lughofer, Markus Pichler, Thomas Buchegger, Erich Peter Klement and Matthias Huschenbett, **Fault detection in reciprocating compressor valves under varying load conditions**, [Mechanical Systems and Signal Processing](#), vol. 70-71, pp. 104-119, 2016, doi: [10.1016/j.ymsp.2015.09.005](#) (impact factor: 2.26)
45. Edwin Lughofer*, Eva Weigl, Wolfgang Heidl, Christian Eitzinger, Thomas Radauer, **Integrating new Classes On the Fly in Evolving Fuzzy Classifier Designs and Its Application in Visual Inspection**, [Applied Soft Computing](#), vol. 35, pp. 558-582, 2015, doi: [10.1016/j.asoc.2015.06.038](#) (impact factor: 2.81)
46. Mahardhika Pratama*, Sreenatha Anavatti, Edwin Lughofer, C.P. Lim, **An Incremental Meta-cognitive-based Scaffolding Fuzzy Neural Network**, [NeuroComputing](#), vol. 171, pp. 89-105, 2016, doi: [10.1016/j.neucom.2015.06.022](#) (impact factor: 2.08) (cited 25 times, Google Scholar)
47. Alexandru-Ciprian Zavoianu*, Edwin Lughofer, Werner Koppelstaetter, Günther Weidenholzer, Wolfgang Amrhein, Erich Peter Klement, **Performance Comparison of Generational and Steady-State Asynchronous Multi-Objective Evolutionary Algorithms for Computationally-Intensive Problems**, [Knowledge-Based Systems](#), vol. 87, pp. 47-60, 2015, doi: [10.1016/j.knosys.2015.05.029](#) (impact factor: 2.95)
48. Jianli Liu*, Edwin Lughofer, Xianyi Zeng, **Could Linear Model Bridge the Gap between Low-level Statistical Features and Aesthetic Emotions of Visual Textures?**, [NeuroComputing](#), vol. 168 (30), pp. 947-960, 2015, doi: [10.1016/j.neucom.2015.05.030](#) (impact factor: 2.08)
49. Francisco Serdio, Edwin Lughofer*, Kurt Pichler, Markus Pichler, Thomas Buchegger and Hajrudin Efendic, **Fuzzy Fault Isolation using Gradient Information and Quality Criteria from System Identification Models**, [Information Sciences](#), vol. 316, pp. 18-39, 2015, doi: [10.1016/j.ins.2015.04.008](#) (impact factor: 4.04)
50. Moamar Sayed-Mouchaweh* and Edwin Lughofer, **Decentralized Fault Diagnosis Approach without a Global Model for Fault Diagnosis of Discrete Event Systems**, [International Journal of Control](#), vol. 88 (11), pp. 2228-2241, 2015, doi: [10.1080/00207179.2015.1039594](#) (impact factor: 1.38)
51. Edwin Lughofer*, Carlos Cernuda, Stefan Kindermann and Mahardhika Pratama, **Generalized Smart Evolving Fuzzy Systems**, [Evolving Systems](#), vol. 6 (4), pp. 269-292, 2015, doi: [10.1007/s12530-015-9132-6](#) (impact factor: 1.63, SNIP) (cited 37 times, Google Scholar, "h")
52. Edwin Lughofer* and Moamar Sayed-Mouchaweh, **Autonomous Data Stream Clustering Implementing Split-and-Merge Techniques - Towards a Plug-and-Play Approach**, [Information Sciences](#), vol. 204, pp. 54--79, 2015 (impact factor: 4.04) (cited 43 times, Google Scholar, "h")
53. Mahardhika Pratama*, Sreenatha.G.Anavatti, Meng Joo Er and Edwin Lughofer, **pClass: An Effective Classifier for Streaming Examples**, [IEEE Transactions on Fuzzy Systems](#), vol. 23 (2), pp. 369-386, 2015, doi: [10.1109/TFUZZ.2014.2312983](#) (impact factor: 8.75) (cited 45 times, Google

Scholar, "h")

54. Kurt Pichler*, Edwin Lughofer, Markus Pichler, Thomas Buchegger, Erich Peter Klement and Mathias Huschenbett, **Detecting cracks in reciprocating compressor valves using pattern recognition in the pV diagram**, [Pattern Analysis and Applications](#), vol. 18 (2), pp. 461-472, 2015, [doi: 10.1007/s10044-014-0431-5](https://doi.org/10.1007/s10044-014-0431-5) (impact factor: 0.78)
55. Carlos Cernuda, Edwin Lughofer*, Georg Mayr. Thomas Röder and Peter Hintenaus and Wolfgang Märzinger and Jürgen Kasberger. **Incremental and Decremental Active Learning for Optimized Self-Adaptive Calibration in Viscose Production**, [Chemometrics and Intelligent Laboratory Systems](#), vol. 138, pp. 14-29, 2014, [DOI: 10.1016/j.chemolab.2014.07.008](https://doi.org/10.1016/j.chemolab.2014.07.008) (impact factor: 2.32)
56. Ammar Shaker and Edwin Lughofer*. **Self-Adaptive and Local Strategies for a Smooth Treatment of Drifts in Data Streams**, [Evolving Systems](#), vol. 5 (4), pp. 239-257, 2014, [doi: 10.1007/s12530-014-9108-y](https://doi.org/10.1007/s12530-014-9108-y) (impact factor: 1.63, SNIP) (cited 28 times, Google Scholar)
57. Francisco Serdio, Edwin Lughofer*, Kurt Pichler, Thomas Buchegger, Markus Pichler and Hajrudin Efendic. **Fault Detection in Multi-Sensor Networks based on Multivariate Time-Series Models and Orthogonal Transformations**. [Information Fusion](#), vol. 20, pp. 272-291, 2014, <http://dx.doi.org/10.1016/j.inffus.2014.03.006> (impact factor: 3.68) (cited 44 times, Google Scholar, "h")
58. Alexandru-Ciprian Zavoianu*, Edwin Lughofer, Gerd Bramerdorfer, Wolfgang Amrhein, Erich Peter Klement, **DECMO2 - A Robust Hybrid and Adaptive Multi-Objective Evolutionary Algorithm**, [Soft Computing](#), on-line and in press, 2014, [doi: 10.1007/s00500-014-1308-7](https://doi.org/10.1007/s00500-014-1308-7) (impact factor: 1.27)
59. Carlos Cernuda*, Edwin Lughofer, Peter Hintenaus and Wolfgang Märzinger, **Enhanced Genetic Operators Design for Waveband Selection in Multivariate Calibration by NIR Spectroscopy**, [Journal of Chemometrics](#), vol. 28 (3), pp. 123-136, 2014, [DOI: 10.1002/cem.2583](https://doi.org/10.1002/cem.2583) (impact factor: 1.5)
60. Edwin Lughofer, **On-line Assurance of Interpretability Criteria in Evolving Fuzzy Systems --- Achievements, New Concepts and Open Issues**, [Information Sciences](#), vol. 251, pp. 22-46, 2013, <http://dx.doi.org/10.1016/j.ins.2013.07.002> (cited 56 times, Google Scholar, "h") (impact factor: 4.04)
61. Mahardhika Pratama*, Sreenatha.G.Anavatti, Plamen Angelov and Edwin Lughofer, **PANFIS: A Novel Incremental Learning Machine**, [IEEE Transactions on Neural Networks and Learning Systems](#), vol. 25 (1), pp. 55-68, 2014, [doi: 10.1109/TNNLS.2013.2271933](https://doi.org/10.1109/TNNLS.2013.2271933) (cited 94 times, Google Scholar, "h") (impact factor: 4.29)
62. Francisco Serdio, Edwin Lughofer*, Kurt Pichler, Thomas Buchegger and Hajrudin Efendic, **Residual-Based Fault Detection using Soft Computing Techniques for Condition Monitoring at Rolling Mills**, [Information Sciences](#), vol. 259, pp. 304-320, 2014, doi: [dx.doi.org/10.1016/j.ins.2013.06.045](https://doi.org/10.1016/j.ins.2013.06.045) (impact factor: 4.04) (cited 44 times, Google Scholar, "h")
63. Alexandru-Ciprian Zavoianu, Gerd Bramerdorfer, Edwin Lughofer*, Siegfried Silber, Wolfgang Amrhein, Erich Peter Klement, **Hybridization of Multi-Objective Evolutionary Algorithms and Artificial Neural Networks for Optimizing the Performance of Electrical Drives**, [Engineering Applications of Artificial Intelligence](#), vol. 26 (8), pp. 1781-1794, 2013, <http://dx.doi.org/10.1016/j.engappai.2013.06.002> (cited 46 times, Google Scholar, "h") (impact factor: 2.21)
64. Mahardhika Pratama*, Sreenatha.G.Anavatti and Edwin Lughofer, **GENEFIS: Towards an Effective Localist Network**, [IEEE Transactions on Fuzzy Systems](#), vol. 22 (3), pp. 547-562, 2014, doi: [10.1109/TFUZZ.2013.2264938](https://doi.org/10.1109/TFUZZ.2013.2264938) (cited 57 times, Google Scholar, "h") (impact factor: 8.75)

65. Carlos Cernuda, Edwin Lughofer*, Peter Hintenaus, Wolfgang Märzinger, Thomas Reischer, Marcin Pawlicek and Juergen Kasberger, **Hybrid Adaptive Calibration Methods and Ensemble Strategy for Prediction of Cloud Point in Melamine Resin Production**, [Chemometrics and Intelligent Laboratory Systems](#), vol. 126, pp. 60-75, 2013, <http://dx.doi.org/10.1016/j.chemolab.2013.05.001> (impact factor: 2.32)
66. Edwin Lughofer* and Oliver Buchtala, **Reliable All-Pairs Evolving Fuzzy Classifiers**, [IEEE Transactions on Fuzzy Systems](#), vol. 21 (4), pp. 625-641, 2013.
doi: <http://dx.doi.org/10.1109/TFUZZ.2012.2226892> (cited 52 times, Google Scholar, "h") (impact factor: 8.75)
67. Wolfgang Heidl*, Stefan Thumfart, Edwin Lughofer, Christian Eitzinger and Erich Peter Klement, **Machine Learning Based Analysis of Gender Differences in Visual Inspection Decision Making**, [Information Sciences](#), vol. 224, pp. 62-76, 2013, doi: <http://dx.doi.org/10.1016/j.ins.2012.09.054>. (impact factor: 4.04)
68. Mahardhika Pratama, M.J. Er, X. Li, Richard J. Oentaryo, Edwin Lughofer and Imam Arifin, **Data Driven Modeling Based on Dynamic Parsimonious Fuzzy Neural Network**, [NeuroComputing](#), vol. 110, pp. 18-28, 2013, <http://dx.doi.org/10.1016/j.neucom.2012.11.013> (impact factor: 2.08) (cited 33 times, Google Scholar, "h")
69. Edwin Lughofer, **Single-Pass Active Learning with Conflict and Ignorance**, [Evolving Systems](#), vol. 3 (4), pp. 251-271, 2012, doi: [10.1007/s12530-012-9060-7](http://dx.doi.org/10.1007/s12530-012-9060-7) (cited 60 times, Google Scholar, "h") (impact factor: 1.63, SNIP)
70. Carlos Cernuda, Edwin Lughofer*, Lisbeth Suppan, Thomas Röder, Roman Schmuck, Peter Hintenaus, Wolfgang Märzinger, Jürgen Kasberger, **Evolving Chemometric Models for Predicting Dynamic Process Parameters in Viscose Production**, [Analytica Chimica Acta](#), vol. 725, pp. 22-38, 2012, <http://dx.doi.org/10.1016/j.aca.2012.03.012> (impact factor: 4.51)
71. Edwin Lughofer, **A Dynamic Split-and-Merge Approach for Evolving Cluster Models**, [Evolving Systems](#) (special issue on 'Dynamic Clustering'), vol. 3 (3), pp. 135-151, 2012, DOI: [10.1007/s12530-012-9046-5](http://dx.doi.org/10.1007/s12530-012-9046-5) (cited 42 times, Google Scholar, "h") (impact factor: 1.63, SNIP)
72. Edwin Lughofer, **Hybrid Active Learning (HAL) for Reducing the Annotation Effort of Operators in Classification Systems**, [Pattern Recognition](#), vol. 45 (2), pp. 884-896, 2012, DOI: [10.1016/j.patcog.2011.08.009](http://dx.doi.org/10.1016/j.patcog.2011.08.009) (cited 47 times, Google Scholar, "h") (impact factor: 3.10)
73. Carlos Cernuda, Edwin Lughofer*, Wolfgang Märzinger and Juergen Kasberger, **NIR-based Quantification of Process Parameters in Polyetheracrylat (PEA) Production using Flexible Non-linear Fuzzy Systems**, [Chemometrics and Intelligent Laboratory Systems](#), vol. 109 (1), pp. 22-33, 2011, DOI: [10.1016/j.chemolab.2011.07.004](http://dx.doi.org/10.1016/j.chemolab.2011.07.004) (impact factor: 2.32) (cited 26 times, Google Scholar)
74. Edwin Lughofer*, Bogdan Trawinski, Krzysztof Trawinski, Olgierd Kempa, Tadeusz Lasota, **On Employing Fuzzy Modeling Algorithms for the Valuation of Residential Premises**, [Information Sciences](#), vol. 181 (23), pp. 5123--5142, 2011, DOI: [10.1016/j.ins.2011.07.012](http://dx.doi.org/10.1016/j.ins.2011.07.012), (cited 35 times, Google Scholar, "h") (impact factor: 4.04)
75. Edwin Lughofer*, Jean-Luc Bouchot and Ammar Shaker. **On-line Elimination of Local Redundancies in Evolving Fuzzy Systems**. [Evolving Systems](#), vol. 2 (3), pp. 165--187, 2011, DOI: [10.1007/s12530-011-9032-3](http://dx.doi.org/10.1007/s12530-011-9032-3). (cited 60 times, Google Scholar, "h") (impact factor: 1.63, SNIP)
76. Edwin Lughofer*, Vicente Macian, Carlos Guardiola and Erich Peter Klement, **Identifying Static and Dynamic Prediction Models for NOx Emissions with Evolving Fuzzy Systems**, [Applied Soft Computing](#), vol. 11(2), pp. 2487-2500, 2011, doi:[10.1016/j.asoc.2010.10.004](http://dx.doi.org/10.1016/j.asoc.2010.10.004) (cited 41 times, Google Scholar, "h") (impact factor: 2.81)

77. Edwin Lughofer, **On-line Incremental Feature Weighting in Evolving Fuzzy Classifiers**, [Fuzzy Sets and Systems](#), vol 163 (1), pp. 1-23, 2011, [doi:10.1016/j.fss.2010.08.012](https://doi.org/10.1016/j.fss.2010.08.012) (cited 52 times, Google Scholar, "h") (impact factor: 2.1)
78. Edwin Lughofer* and Plamen Angelov, **Handling Drifts and Shifts in On-Line Data Streams with Evolving Fuzzy Systems**, [Applied Soft Computing](#), vol. 11(2), pp. 2057-2068, 2011, [doi:10.1016/j.asoc.2010.07.003](https://doi.org/10.1016/j.asoc.2010.07.003) (cited 101 times, Google Scholar, "h") (impact factor: 2.81)
79. Edwin Lughofer*, Stefan Kindermann, **SparseFIS: Data-Driven Learning of Fuzzy Systems with Sparsity Constraints**, [IEEE Transactions on Fuzzy Systems](#), vol. 18 (2), pp. 396-411, 2010, [doi:10.1109/TFUZZ.2010.2042960](https://doi.org/10.1109/TFUZZ.2010.2042960) (cited 46 times, Google Scholar, "h") (impact factor: 8.75)
80. Werner Groissboeck, Edwin Lughofer*, Stefan Thumfart, **Associating Visual Textures with Human Perceptions Using Genetic Algorithms**, [Information Sciences](#), vol. 180 (11), pp. 2065-2084, 2010, [doi:10.1016/j.ins.2010.01.035](https://doi.org/10.1016/j.ins.2010.01.035) (cited 31 times, Google Scholar, "h") (impact factor: 4.04)
81. Stefan Thumfart*, Richard Jacobs, Edwin Lughofer, Christian Eitzinger, Frans Cornelissen, Werner Groissboeck, Roland Richter, **Modelling Human Aesthetic Perception of Visual Textures**, [ACM Transactions on Applied Perception](#), vol. 8 (4), 2011, [DOI: 10.1145/2043603.2043609](https://doi.org/10.1145/2043603.2043609)
82. Edwin Lughofer, **On-line Evolving Image Classifiers and Their Application to Surface Inspection**, [Image and Vision Computing](#) (special issue of on-line pattern recognition and machine learning techniques for computer vision), Vol. 28 (7), pp. 1065-1079, 2010, [DOI: 10.1016/j.imavis.2009.07.002](https://doi.org/10.1016/j.imavis.2009.07.002) (cited 37 times, Google Scholar, "h") (impact factor: 1.59)
83. Edwin Lughofer*, James E. Smith, Muhammad A. Tahir, Praminda Caleb-Solly, Christian Eitzinger, Davy Sannen and Marnix Nuttin, **Human-Machine Interaction Issues in Quality Control Based on On-Line Image Classification**, [IEEE Transactions on Systems, Man and Cybernetics, part A: Systems and Humans](#), 2009, vol. 39 (5), pp. 960-971, [DOI: 10.1109/TSMCA.2009.2025025](https://doi.org/10.1109/TSMCA.2009.2025025) (impact factor: 2.5) (cited 42 times, Google Scholar, "h")
84. Davy Sannen, Edwin Lughofer* and Hendrik van Brussel, **Towards Incremental Classifier Fusion**, [Intelligent Data Analysis](#), Vol. 14 (1), pp. 3-30, 2010, [DOI 10.3233/IDA-2009-0406](https://doi.org/10.3233/IDA-2009-0406) (impact factor: 0.78)
85. Christian Eitzinger*, Wolfgang Heidl, Edwin Lughofer, Stefan Raiser, James E. Smith, Muhammad A. Tahir, Davy Sannen and Hendrik van Brussel, **Assessment of the Influence of Adaptive Components in Trainable Surface Inspection Systems**, [Machine Vision and Applications](#), Vol. 21 (5), pp. 613-626, 2010, [DOI 10.1007/s00138-009-0211-1](https://doi.org/10.1007/s00138-009-0211-1) (cited 26 times, Google Scholar, "h") (impact factor: 1.35) (cited 34 times, Google Scholar, "h")
86. Stefan Raiser, Edwin Lughofer*, Christian Eitzinger and James E. Smith, **Impact of Object Extraction Methods on Classification Performance in Surface Inspection Systems**, [Machine Vision and Applications](#), vol. 21(5), pp. 627-641, 2010, [DOI: 10.1007/s00138-009-0205-z](https://doi.org/10.1007/s00138-009-0205-z) (impact factor: 1.35)
87. Plamen Angelov, Edwin Lughofer*, Xiaowei Zhou. **Evolving Fuzzy Classifiers using Different Model Architectures**, [Fuzzy Sets and Systems](#), vol.159 (23), pp. 3160-3182, 2008, [doi:10.1016/j.fss.2008.06.019](https://doi.org/10.1016/j.fss.2008.06.019) (cited 149 times, Google Scholar, "h") (impact factor: 2.1)
88. Edwin Lughofer. **FLEXFIS: A Robust Incremental Learning Approach for Evolving TS Fuzzy Models**, [IEEE Transactions on Fuzzy Systems](#), vol. 16 (6), pp. 1393-1410, 2008, [doi 10.1109/TFUZZ.2008.925908](https://doi.org/10.1109/TFUZZ.2008.925908) (cited 223 times, Google Scholar, "h") (impact factor: 8.75)
89. Edwin Lughofer. **Extensions of Vector Quantization for Incremental Clustering**, [Pattern Recognition](#), vol. 41(3), pp. 995-1011, 2008, [doi:10.1016/j.patcog.2007.07.019](https://doi.org/10.1016/j.patcog.2007.07.019) (cited 135 times, Google Scholar, "h") (impact factor: 3.10)

90. Edwin Lughofer* and Carlos Guardiola. **On-Line Fault Detection with Data-Driven Evolving Fuzzy Models.** [Control and Intelligent Systems](#), Vol. 36 (4), pp. 307-317, 2008 (cited 25 times, Google Scholar)
91. Plamen Angelov* and Edwin Lughofer* , **Data-Driven Evolving Fuzzy Systems using eTS and FLEXFIS: Comparative Analysis.** [International Journal of General Systems](#), vol. 37(01), pp. 45 - 67, 2008 (impact factor: 2.08)
92. Plamen Angelov, Veniero Giglio, Carlos Guardiola, Edwin Lughofer*, and Jose Manuel Lujan. **An approach to model-based fault detection in industrial measurement systems with application to engine test benches.** [Measurement Science and Technology](#), Vol. 17, pp.1809-1818, 2006 (cited 44 times, Google Scholar, "h"). (impact factor: 1.43)