

Scholarly Books:

- Edwin Lughofer, [Evolving Fuzzy Systems - Methodologies, Advanced Concepts and Applications](#), Springer Verlag, Berlin Heidelberg, 2011, ISBN: 978-3-642-18086-6, 460 pages, 148 figures, 263 images, 26 tables (cited 253, Google Scholar, "h").

Edited Research Books:

- Edwin Lughofer and Moamar Sayed-Mouchaweh, [Predictive Maintenance in Dynamic Systems --- Advanced Methods, Decision Support Tools and Real-World Applications](#), ca. 565 Pages, ca. 200 Illustrations, Springer New York, March 2019.
- Moamar Sayed-Mouchaweh, Edwin Lughofer, [Learning in Non-stationary Environments: Methods and Applications](#), Springer Verlag, New York, 2012. (cited 87 times, Google Scholar, "h")

Scholarly Book Chapters:

1. E. Lughofer and M. Sayed-Mouchaweh. **Prologue --- Predictive Maintenance in Dynamic Systems**. [Predictive Maintenance in Dynamic Systems](#), editors: E. Lughofer and M. Sayed-Mouchaweh, Springer, pp. 1-23, 2019.
2. E. Lughofer, A.C. Zavoianu, M. Pratama and T. Radauer. **Automated Process Optimization in Manufacturing Systems based on Static and Dynamic Prediction Models**. in: [Predictive Maintenance in Dynamic Systems](#), editors: E. Lughofer and M. Sayed-Mouchaweh, Springer, pp. 486-531, 2019.
3. M. Pratama, A. Ashfahani, E. Lughofer and S. Huang. **An Evolving RFID Localization Model in The Manufacturing Shopfloor**. in: [Predictive Maintenance in Dynamic Systems](#), editors: E. Lughofer and M. Sayed-Mouchaweh, Springer, pp. 287-309, 2019.
4. E. Lughofer. **Robust Data-Driven Fault Detection in Dynamic Process Environments Using Discrete Event Systems**. in: [Diagnosability, Security and Safety of Hybrid Dynamic and Cyber-Physical Systems](#), editor: M. Sayed-Mouchaweh, pp. 73--116, 2018.
5. Edwin Lughofer, **Evolving Fuzzy Systems --- Fundamentals, Reliability, Interpretability, Useability, Applications (a comprehensive work of reference)**, in: *Handbook on Computational Intelligence*, editor: Plamen Parvanov Angelov, World Scientific, pp. 67-135, 2016
6. Edwin Lughofer, **Flexible Evolving Fuzzy Inference Systems from Data Streams (FLEXFIS++)**, in: *Learning in Non-Stationary Environments: Methods and Applications*, editors: Moamar Sayed-Mouchaweh and Edwin Lughofer, Springer, New York, 2012, pp. 205-246
7. Edwin Lughofer, Christian Eitzinger and Carlos Guardiola, **On-line Quality Control with Flexible Evolving Fuzzy Systems**, in: *Learning in Non-Stationary Environments: Methods and Applications*, editors: Moamar Sayed-Mouchaweh and Edwin Lughofer, Springer, New York, 2012, pp. 375-406
8. Davy Sannen, Jean-Michel Papy, Steve Vandenplas, Edwin Lughofer and Hendrik van Brussel, **Incremental Classifier Fusion and its Application in Industrial Monitoring and Diagnostics**, in: *Learning in Non-Stationary Environments: Methods and Applications*, editors: Moamar Sayed-Mouchaweh and Edwin Lughofer, Springer, New York, 2012, pp. 153-184
9. Edwin Lughofer. **Towards Robust Evolving Fuzzy Systems**, book chapter in [Evolving Intelligent Systems - Methodologies and Applications](#), editors: Plamen Angelov, Dimitar Filev and Nik Kasabov, John Wiley and Sons, 2010, pp. 87-126
10. Erich Peter Klement, Edwin Lughofer, Johannes Himmelbauer and Bernhard Moser, **Data-Driven and Knowledge-Based Modelling**, chapter in [Hagenberg Research](#), editors: Michael Affenzeller, Bruno

Buchberger, Alois Ferscha, Michael Haller, Tudor Jebelean, Erich Peter Klement, Josef Kueng, Peter Paule, Birgit Proell, Wolfgang Schreiner, Gerhard Weiss, Roland Wagner, Wolfram Woess, Robert Stubenrauch and Wolfgang Windsteiger, [Springer Verlag](#), pp. 237-279, 2009

11. Christian Eitzinger, James E. Smith, Edwin Lughofer and Davy Sannen, **Lernfaehige Inspektionssysteme**, [Automatisierungsatlas](#), [SPS Magazin](#), 2009, pp. 370-372

Position / Survey Papers and Editorials (* denotes corresponding author):

1. M.-Y. Chen, H.-S. Chiang, E. Lughofer and E. Egrioglu, **Deep learning: emerging trends, applications and research challenges**, [Soft Computing](#), vol. 24, pp. 7835-7838, 2020
2. 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.
1. J.J. Rubio, Y. Pan, E. Lughofer, M.-Y. Chen and J. Qiu, Editorial: **Fast Learning of Neural Networks with Application to Big Data Processes**, [Neurocomputing](#), to appear, 2019.
2. Mahardhika Pratama*, Edwin Lughofer, Suresh Sundaram, Moamar Sayed-Mouchaweh, Igor Skrjanc and Fahed Mostafa, **Editorial: Special issue on Advanced Soft Computing for Prognostic Health Management**, [Applied Soft Computing](#), vol. 72, pp. 552-554, 2018, <https://doi.org/10.1016/j.asoc.2018.10.001>
3. Mu-Yen Chen*, Edwin Lughofer and Robi Polikar. **Big Data and Situation-Aware Technology for Smarter Healthcare**. [Journal of Medical and Biological Engineering](#), vol. 38(6), pp. 845-846, 2018, <https://doi.org/10.1007/s40846-018-0452-4>
4. Mu-Yen Chen* and Edwin Lughofer, **Editorial: Data Stream Mining and Soft Computing Applications**, [Applied Soft Computing](#), vol. 68, pp. 667--668, 2018. <https://doi.org/10.1016/j.asoc.2018.05.020>
5. J. Liu*, E. Lughofer and X. Zeng. **Toward Model Building for Visual Aesthetic Perception --- SURVEY/POSITION Paper**. [Computational Intelligence and Neuroscience](#), to appear, 2018.
6. 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>
7. M.-Y. Chen, E. Lughofer, N.Y. Yen and C.-C. Chen. **Guest editorial: Human behavior analysis for library and information science**. *Library Hi Tech*, Vol. 35 Issue: 4, pp.442-444, 2017, <https://doi.org/10.1108/LHT-10-2017-0213>.
8. Mahardhika Pratama, Edwin Lughofer, Dianhui Wang, **Online Real-Time Learning Strategies for Data Streams**, [Neurocomputing](#), vol. 262, pp. 1--3, 2017, <https://doi.org/10.1016/j.neucom.2017.05.078>
9. A. Fleury and E. Lughofer and M. Sayed-Mouchaweh, **Editorial of the special issue: adaptive and intelligent systems (AIS) for learning, control and optimization in dynamic environments**, [Evolving Systems](#), vol. 8 (4), pp 317--319, 2017, [DOI: 10.1007/s12530-017-9179-7](https://doi.org/10.1007/s12530-017-9179-7)
10. Premyszlav Kazienko, Edwin Lughofer and Bogdan Trawinski, Editorial on the Special Issue [Hybrid and Ensemble Techniques in Soft Computing: Recent Advances and Emerging Trends](#), [Soft Computing](#), vol.

19 (12), pp. 3353-3355, 2015 (impact factor: 1.32)

11. Edwin Lughofer and Moamar Sayed-Mouchaweh, **Adaptive and On-line Learning in Non-Stationary Environments**, [Evolving Systems](#), vol. 6 (2), pp. 75-77, 2015, DOI: [10.1007/s12530-015-9128-2](https://doi.org/10.1007/s12530-015-9128-2)
12. Fernando Gomide and Edwin Lughofer. [Recent Advances on Evolving Intelligent Systems and Applications](#), [Evolving Systems](#), vol. 5 (4), pp. 217-218, 2014
13. Edwin Lughofer, **On-line Assurance of Interpretability Criteria in Evolving Fuzzy Systems --- Achievements, New Concepts and Open Issues**, [Information Sciences](#), vol. 251, 22-46, 2013, <http://dx.doi.org/10.1016/j.ins.2013.07.002> (impact factor: 4.04) (cited 56 times, Google Scholar, "h")
14. Edwin Lughofer, **Human-Inspired Evolving Machines - The Next Generation of Evolving Intelligent Systems?**, [IEEE SMC newsletter](#), vol. 36, 2011.
15. M.-Y. Chen, E. Lughofer, K. Sakamura. **Information Fusion in Smart Living Technology Innovations**. [Information Fusion](#), vol. 21, pp. 1-2, 2015 (impact factor: 3.68)
16. Abdelhamid Bouchachia, Edwin Lughofer and Moamar Sayed-Mouchaweh, **Editorial: Evolving Soft Computing Techniques and Applications**, [Applied Soft Computing](#), vol. 14, part B, pp. 141-143, 2014 (impact factor: 2.81)
17. Abdelhamid Bouchachia, Edwin Lughofer and Daniel Sanchez, **Editorial of the special issue: Online Fuzzy Machine Learning and Data Mining**, [Information Sciences](#), vol. 220, pp. 1-4, 2013, <http://dx.doi.org/10.1016/j.ins.2012.10.005> (impact factor: 4.04)
18. Przemyslaw Kazienko, Edwin Lughofer and Bogdan Trawinski, **Editorial of the Special Issue on "Hybrid and Ensemble Methods in Machine Learning"**, [Journal of Universal Computer Science](#), vol. 19 (4), pp. 457-461, 2013 (impact factor: 0.80)
19. Mu-Yen Chen and Edwin Lughofer, **Editorial of the special issue: Smart Space Technology Innovations**, [Library Hi Tech](#), vol. 31 (2), pp. 1-3, 2014