# Rodolfo Haber

List of Publications by Year
in descending order



| | | 172386 | 254106 |
|---|---|---|---|
| 101 papers | 2,176 citations | 29 h-index | 43 g-index |

| | | | |
|---|---|---|---|
| 113 all docs | 113 docs citations | 113 times ranked | 1761 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | The fuzzy Kalman filter: Improving its implementation by reformulating uncertainty representation. Fuzzy Sets and Systems, 2021, 402, 78-104. | 1.6 | 15 |
| 2 | A decision-making framework for dynamic scheduling of cyber-physical production systems based on digital twins. Annual Reviews in Control, 2021, 51, 357-373. | 4.4 | 101 |
| 3 | Needs, Requirements and a Concept of a Tool Condition Monitoring System for the Aerospace Industry. Sensors, 2021, 21, 5086. | 2.1 | 7 |
| 4 | Ensemble of convolutional neural networks based on an evolutionary algorithm applied to an industrial welding process. Computers in Industry, 2021, 133, 103530. | 5.7 | 24 |
| 5 | Computational Intelligence for Simulating a LiDAR Sensor. , 2020, , 149-178. | | 1 |
| 6 | Computer Vision System for Welding Inspection of Liquefied Petroleum Gas Pressure Vessels Based on Combined Digital Image Processing and Deep Learning Techniques. Sensors, 2020, 20, 4505. | 2.1 | 28 |
| 7 | Towards Sustainability of Manufacturing Processes by Multiobjective Optimization: A Case Study on a Submerged Arc Welding Process. IEEE Access, 2020, 8, 212904-212916. | 2.6 | 13 |
| 8 | Cloud-Based Industrial Cyberâ€"Physical System for Data-Driven Reasoning: A Review and Use Case on an Industry 4.0 Pilot Line. IEEE Transactions on Industrial Informatics, 2020, 16, 5975-5984. | 7.2 | 60 |
| 9 | Digital twin-based Optimization on the basis of Grey Wolf Method. A Case Study on Motion Control Systems. , 2020, , . | | 3 |
| 10 | Local Decision Making based on Distributed Digital Twin Framework. IFAC-PapersOnLine, 2020, 53, 10568-10573. | 0.5 | 14 |
| 11 | Digital Twin-Based Optimization for Ultraprecision Motion Systems With Backlash and Friction. IEEE Access, 2019, 7, 93462-93472. | 2.6 | 64 |
| 12 | Visual Analytics Framework for Condition Monitoring in Cyber-Physical Systems. , 2019, , . | | 5 |
| 13 | Optimal Tuning of Cascade Controllers for Feed Drive Systems using Particle Swarm Optimization. , 2019, , . | | 4 |
| 14 | Sensor Reliability in Cyber-Physical Systems Using Internet-of-Things Data: A Review and Case Study. Remote Sensing, 2019, 11, 2252. | 1.8 | 46 |
| 15 | Automatic Selection of Optimal Parameters Based on Simple Soft-Computing Methods: A Case Study of Micromilling Processes. IEEE Transactions on Industrial Informatics, 2019, 15, 800-811. | 7.2 | 45 |
| 16 | Automated Driving. , 2018, , 275-342. | | 4 |
| 17 | Condition-based Monitoring Architecture for CNC Machine Tools based on Global Knowledge. IFAC-PapersOnLine, 2018, 51, 200-204. | 0.5 | 10 |
| 18 | Towards the Adoption of Cyber-Physical Systems of Systems Paradigm in Smart Manufacturing Environments. , 2018, , . | | 14 |

| # | ARTICLE | IF | CITATIONS |
|---|---|---|---|
| 19 | Self-Tuning Method for Increased Obstacle Detection Reliability Based on Internet of Things LiDAR Sensor Models. Sensors, 2018, 18, 1508. | 2.1 | 41 |
| 20 | Fault pattern identification in multi-stage assembly processes with non-ideal sheet-metal parts based on reinforcement learning architecture. Procedia CIRP, 2018, 67, 601-606. | 1.0 | 14 |
| 21 | Smart Sensing of Pavement Temperature Based on Low-Cost Sensors and V2I Communications. Sensors, 2018, 18, 2092. | 2.1 | 14 |
| 22 | Industrial cyber-physical system for condition-based monitoring in manufacturing processes. , 2018, , . | | 15 |
| 23 | Characterization of tool-workpiece contact during the micromachining of conductive materials. Mechanical Systems and Signal Processing, 2017, 83, 489-505. | 4.4 | 14 |
| 24 | A Simple Multi-Objective Optimization Based on the Cross-Entropy Method. IEEE Access, 2017, 5, 22272-22281. | 2.6 | 43 |
| 25 | Time-To-Failure Modelling in On-Chip LiDAR Sensors for Automotive Applications. Proceedings (mdpi), 2017, 1, . | 0.2 | 1 |
| 26 | Consensus-Based Cooperative Control Based on Pollution Sensing and Traffic Information for Urban Traffic Networks. Sensors, 2017, 17, 953. | 2.1 | 11 |
| 27 | Obstacle Recognition Based on Machine Learning for On-Chip LiDAR Sensors in a Cyber-Physical System. Sensors, 2017, 17, 2109. | 2.1 | 41 |
| 28 | Coping with Complexity When Predicting Surface Roughness in Milling Processes: Hybrid Incremental Model with Optimal Parametrization. Complexity, 2017, 2017, 1-11. | 0.9 | 25 |
| 29 | Wireless Monitoring of Pavement Temperature Based on Low Cost Computing Platform. Proceedings (mdpi), 2017, 2, . | 0.2 | 1 |
| 30 | Monitoring tool usage on the basis of sensory information in micro-drilling operations. , 2016, , . | | 1 |
| 31 | Multi-objective optimization based on an improved cross-entropy method. A case study of a micro-scale manufacturing process. Information Sciences, 2016, 334-335, 161-173. | 4.0 | 51 |
| 32 | Surface roughness modeling and optimization of tungstenâ€“copper alloys in micro-milling processes. Measurement: Journal of the International Measurement Confederation, 2016, 86, 246-252. | 2.5 | 45 |
| 33 | Consensus-Based Cooperative Control Approach Applied to Urban Traffic Networks. Proceedings (mdpi), 2016, 1, . | 0.2 | 0 |
| 34 | PROTOTIPO DE UN COLECTOR SOLAR DE PLACAS PLANAS. Dyna (Spain), 2016, 91, 18-18. | 0.1 | 0 |
| 35 | 1st International Workshop on Software Engineering for Smart Cyber-Physical Systems (SEsCPS 2015). , 2015, , . | | 4 |
| 36 | Advanced Co-simulation Framework for Cooperative Maneuvers Among Vehicles. , 2015, , . | | 3 |

| # | Article | IF | Citations |
| --- | --- | --- | --- |
| 37 | Conductance sensing for monitoring micromechanical machining of conductive materials. Sensors and Actuators A: Physical, 2015, 232, 163-171. | 2.0 | 19 |
| 38 | Artificial cognitive control with self-x capabilities: A case study of a micro-manufacturing process. Computers in Industry, 2015, 74, 135-150. | 5.7 | 20 |
| 39 | A DRIVERLESS VEHICLE DEMONSTRATION ON MOTORWAYS AND IN URBAN ENVIRONMENTS. Transport, 2015, 30, 253-263. | 0.6 | 29 |
| 40 | From artificial cognitive systems and open architectures to cognitive manufacturing systems. , 2015, , . | | 43 |
| 41 | Conductance sensor for micromachining. A case study on monitoring tool-workpiece contact. , 2015, , . | | 0 |
| 42 | A self-learning strategy for artificial cognitive control systems. , 2015, , . | | 13 |
| 43 | HERRAMIENTA DE MONITORIZACIÃ“N PARA MEJORAR LAS PRESTACIONES DE LOS GRUPOS ELECTRÃ“GENOS FUELOIL EN CUBA. Dyna (Spain), 2015, 90, 34-39. | 0.1 | 0 |
| 44 | A fuzzy-genetic system to predict the cutting force in microdrilling processes. , 2014, , . | | 2 |
| 45 | Artificial intelligence-based modelling and optimization of microdrilling processes. , 2014, , . | | 0 |
| 46 | Application of hybrid incremental modeling for predicting surface roughness in micromachining processes. , 2014, , . | | 4 |
| 47 | Intelligent Models for Predicting the Thrust Force and Perpendicular Vibrations in Microdrilling Processes. , 2014, , . | | 1 |
| 48 | Connectivity control in WSN based on fuzzy logic control. ACM SIGBED Review, 2014, 11, 54-57. | 1.8 | 2 |
| 49 | Online detection of run out in microdrilling of tungsten and titanium alloys. International Journal of Advanced Manufacturing Technology, 2014, 74, 1567-1575. | 1.5 | 19 |
| 50 | Correlation of the holes quality with the force signals in a microdrilling process of a sintered tungsten-copper alloy. International Journal of Precision Engineering and Manufacturing, 2014, 15, 1801-1808. | 1.1 | 19 |
| 51 | Self-adaptive systems: A survey of current approaches, research challenges and applications. Expert Systems With Applications, 2013, 40, 7267-7279. | 4.4 | 155 |
| 52 | Sensoring systems and signal analysis to monitor tool wear in microdrilling operations on a sintered tungstenâ€“copper composite material. Sensors and Actuators A: Physical, 2013, 199, 165-175. | 2.0 | 39 |
| 53 | EXTRACCIÃ“N DE RASGOS DE LAS SEÃ‘ALES PARA LA MONITORIZACIÃ“N INDIRECTA DE LA HERRAMIENTA EN EL MICROTALADRADO. Dyna (Spain), 2013, 88, 405-413. | 0.1 | 2 |
| 54 | Hybrid Incremental Modeling Based on Least Squares and Fuzzy $K$-NN for Monitoring Tool Wear in Turning Processes. IEEE Transactions on Industrial Informatics, 2012, 8, 811-818. | 7.2 | 49 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Tool wear monitoring using neuro-fuzzy techniques: a comparative study in a turning process. Journal of Intelligent Manufacturing, 2012, 23, 869-882. | 4.4 | 76 |
| 56 | Modified Shared Circuits Model for Manufacturing Processes Control:. Lecture Notes in Computer Science, 2012, , 232-242. | 1.0 | 0 |
| 57 | Artificial cognitive control system based on the shared circuits model of sociocognitive capacities. A first approach. Engineering Applications of Artificial Intelligence, 2011, 24, 209-219. | 4.3 | 34 |
| 58 | Optimal fuzzy control system using the cross-entropy method. A case study of a drilling process. Information Sciences, 2010, 180, 2777-2792. | 4.0 | 64 |
| 59 | Detecting Nano-Scale Vibrations in Rotating Devices by Using Advanced Computational Methods. Sensors, 2010, 10, 4983-4995. | 2.1 | 1 |
| 60 | A Transductive Neuro-Fuzzy Controller: Application to a Drilling Process. IEEE Transactions on Neural Networks, 2010, 21, 1158-1167. | 4.8 | 37 |
| 61 | An optimal fuzzy control system in a network environment based on simulated annealing. An application to a drilling process. Applied Soft Computing Journal, 2009, 9, 889-895. | 4.1 | 44 |
| 62 | Internal Model Control Based on a Neurofuzzy System for Network Applications. A Case Study on the High-Performance Drilling Process. IEEE Transactions on Automation Science and Engineering, 2009, 6, 367-372. | 3.4 | 20 |
| 63 | Control Neuroborroso en Red. AplicaciÃ³n al Proceso de Taladrado de Alto Rendimiento. RIAI - Revista Iberoamericana De Automatica E Informatica Industrial, 2009, 6, 31-38. | 0.6 | 6 |
| 64 | Transductive-Weighted Neuro-Fuzzy Inference System for Tool Wear Prediction in a Turning Process. Lecture Notes in Computer Science, 2009, , 113-120. | 1.0 | 12 |
| 65 | A Transductive Neuro-Fuzzy Force Control: An Ethernet-Based Application to a Drilling Process. Lecture Notes in Computer Science, 2009, , 573-582. | 1.0 | 0 |
| 66 | Advanced Controls for New Machining Processes. , 2009, , 159-218. | | 0 |
| 67 | Arm-Helicopter Control with Positive Signals. , 2008, , . | | 0 |
| 68 | Neurofuzzy Force-Based Control in an Ethernet-Based Application. A Case Study on a Drilling Process. , 2008, , . | | 0 |
| 69 | Optimal Tuning of a Networked Linear Controller Using a Multi-Objective Genetic Algorithm. Application to a Complex Electromechanical Process. , 2008, , . | | 11 |
| 70 | Networked Fuzzy Control System for a High-Performance Drilling Process. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2008, 130, . | 1.3 | 6 |
| 71 | System Identification of the High Performance Drilling Process for Network-Based Control. , 2007, , 827. | | 19 |
| 72 | Optimal Fuzzy Control for a Time-Delay System Using Simulated Annealing: An Application to High-Performance Drilling. , 2007, , . | | 2 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | Fuzzy Logic-Based Torque Control System for Milling Process Optimization. IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews, 2007, 37, 941-950. | 3.3 | 38 |
| 74 | The State-of-the-Art in Nano-Turning. , 2007, , . | | 2 |
| 75 | A classic solution for the control of a high-performance drilling process. International Journal of Machine Tools and Manufacture, 2007, 47, 2290-2297. | 6.2 | 33 |
| 76 | Using Simulated Annealing for Optimal Tuning of a PID Controller for Time-Delay Systems. An Application to a High-Performance Drilling Process. Lecture Notes in Computer Science, 2007, , 1155-1162. | 1.0 | 11 |
| 77 | Networked Control Based on Fuzzy Logic. An Application to a High-Performance Milling Process. Lecture Notes in Computer Science, 2007, , 391-398. | 1.0 | 3 |
| 78 | Fuzzy Logic Based Drilling Force Control in a Network-Based Application. , 2007, , . | | 0 |
| 79 | Networked Fuzzy Control System for a High-Performance Drilling Process. , 2007, , . | | 1 |
| 80 | Fuzzy Control of Spindle Torque in High-Speed Milling Processes. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2006, 128, 1014-1018. | 1.3 | 16 |
| 81 | Fuzzy Control of Spindle Torque in High-Speed Milling Processes. , 2005, , . | | 0 |
| 82 | Modeling of Communication Delays Aiming at the Design of Networked Supervisory and Control Systems. A First Approach. Lecture Notes in Computer Science, 2005, , 1056-1059. | 1.0 | 3 |
| 83 | Networked sensing for high-speed machining processes based on CORBA. Sensors and Actuators A: Physical, 2005, 119, 418-426. | 2.0 | 9 |
| 84 | Controlling a complex electromechanical process on the basis of a neurofuzzy approach. Future Generation Computer Systems, 2005, 21, 1083-1095. | 4.9 | 5 |
| 85 | Power-Steering Control Architecture for Automatic Driving. IEEE Transactions on Intelligent Transportation Systems, 2005, 6, 406-415. | 4.7 | 84 |
| 86 | Nonlinear internal model control using neural networks: an application for machining processes. Neural Computing and Applications, 2004, 13, 47-55. | 3.2 | 37 |
| 87 | An investigation of tool-wear monitoring in a high-speed machining process. Sensors and Actuators A: Physical, 2004, 116, 539-545. | 2.0 | 106 |
| 88 | Fuzzy control of a multiple hearth furnace. Computers in Industry, 2004, 54, 105-113. | 5.7 | 36 |
| 89 | CORBA-Based Open Platform for Processes Monitoring. An Application to a Complex Electromechanical Process. Lecture Notes in Computer Science, 2004, , 523-526. | 1.0 | 5 |
| 90 | Using circle criteria for verifying asymptotic stability in PI-like fuzzy control systems: application to the milling process. IET Control Theory and Applications, 2003, 150, 619-627. | 1.7 | 31 |

| # | Article | IF | Citations |
|---|---|---|---|
| 91 | Embedded fuzzy-control system for machining processes. Computers in Industry, 2003, 50, 353-366. | 5.7 | 35 |
| 92 | Intelligent process supervision for predicting tool wear in machining processes. Mechatronics, 2003, 13, 825-849. | 2.0 | 42 |
| 93 | Nonlinear Internal Model Control Using Neural Networks and Fuzzy Logic: Application to an Electromechanical Process. Lecture Notes in Computer Science, 2003, , 351-360. | 1.0 | 1 |
| 94 | Embedded Fuzzy Control System in an Open Computerized Numerical Control: A Technology Transfer Case-Study. Lecture Notes in Computer Science, 2003, , 442-449. | 1.0 | 0 |
| 95 | Tool Wear Prediction in Milling Using Neural Networks. Lecture Notes in Computer Science, 2002, , 807-812. | 1.0 | 2 |
| 96 | Dynamic Model of the Machining Process on the Basis of Neural Networks: from Simulation to Real Time Application. Lecture Notes in Computer Science, 2002, , 574-583. | 1.0 | 5 |
| 97 | Lyapunov Stable Control of Robot Manipulators: A Fuzzy Self-Tuning Procedure. Intelligent Automation and Soft Computing, 1999, 5, 313-326. | 1.6 | 34 |
| 98 | Fuzzy model and hierarchical fuzzy control integration: an approach for milling process optimization. Computers in Industry, 1999, 39, 199-207. | 5.7 | 40 |
| 99 | Toward intelligent machining: hierarchical fuzzy control for the end milling process. IEEE Transactions on Control Systems Technology, 1998, 6, 188-199. | 3.2 | 40 |
| 100 | Fuzzy supervisory control of end milling process. Information Sciences, 1996, 89, 95-106. | 4.0 | 13 |
| 101 | A MIMO fuzzy-control system for high-speed machining processes. Results of a case study. , 0, , . | | 1 |