



## List of Publications

Alfredo Antonio Núñez Vicencio

March 2025

### International journal papers

- [J79] R. Riahi Samani, A. Núñez, and B. De Schutter, "A bidirectional long short-term memory approach for infrastructure health monitoring using on-board vibration response." *Transportation Research Record: Journal of the Transportation Research Board*, (IF 2023: 1.6, Q2).
- [J78] W. Phusakulkajorn, Y. Zeng, Z. Li, and A. Núñez, "Unsupervised representation learning for monitoring rail infrastructures with high-frequency moving vibration sensors". *IEEE Transactions on Intelligent Transportation Systems*, DOI: 10.1109/TITS.2025.3557712 (IF 2023: 7.9, **Q1**).
- [J77] T. Kapoor, H. Wang, A. Stamou, K. El Sayed, A. Núñez, D. Tartakovsky, and R. Dollevoet, "Neural differential equation-based two-stage approach for generalization of beam dynamics". *IEEE Transactions on Industrial Informatics*, Volume 21, Issue 3, Pages: 2481-2490, March 2025, DOI: 10.1109/TII.2024.3507213 (IF 2023: 11.7, **Q1**).
- [J76] Y. Zeng, A. Núñez, A. Zoeteman, R. Dollevoet, and Z. Li, "A train-borne laser vibrometer solution based on multi-signal fusion for self-contained railway track monitoring." *IEEE Transactions on Industrial Informatics*, Volume 21, Issue 2, Pages: 1585-1594, February 2025, DOI: 10.1109/TII.2024.3485764 (IF 2023: 11.7, **Q1**).
- [J75] S. Unsiwilai, W. Phusakulkajorn, C. Shen, A. Zoeteman, R. Dollevoet, A. Núñez, Z. Li, "Enhanced vertical railway track quality index with dynamic responses from moving trains". *Heliyon*, Volume 10, Issue 19, October 2024, e38670. DOI: 10.1016/j.heliyon.2024.e38670 (IF 2023: 3.4, **Q1**).
- [J74] T. Vernaillen, L. Wang, A. Núñez, R. Dollevoet, and Z. Li, "Rail wear rate on the Belgian railway network – a big-data analysis." *International Journal of Rail Transportation*, Volume 12, Number 5, Pages: 765-780, 2024. DOI: 10.1080/23248378.2023.2259392 (IF 2023: 3.4, **Q2**).
- [J73] S. Unsiwilai, C. Shen, Y. Zeng, L. Wang, A. Núñez, and Z. Li, "Vertical dynamic measurements of a railway transition zone: a case study in Sweden." *Journal of Civil Structural Health Monitoring*, Volume 14, Pages: 979-996, 2024. DOI: 10.1007/s13349-024-00766-0 (IF 2023: 3.6, **Q1**).
- [J72] Y. Zeng, A. Núñez, Z. Li, "Railway sleeper vibration measurement by train-borne laser Doppler vibrometer and its speed-dependent characteristics." *Computer-Aided Civil and Infrastructure Engineering*, Volume 39, Issue 16, August 2024. DOI: 10.1111/mice.13150 (IF 2022: 9.6, **Q1**).
- [J71] T. Kapoor, H. Wang, A. Núñez and R. Dollevoet, "Transfer learning for improved generalizability in causal physics-informed neural networks for beam simulations." *Engineering Applications of Artificial Intelligence*, Volume 133, Part A, July 2024, 108085, DOI: 10.1016/j.engappai.2024.108085 (IF 2022: 8.0, **Q1**).
- [J70] Y. Zeng, A. Núñez, and Z. Li, "Measuring transfer functions of tracks structures in a test rig with laser Doppler vibrometer and accelerometers on a moving vehicle." *Mechanical Systems and Signal Processing*, Volume 214, May 2024, 111392. DOI: 10.1016/j.ymssp.2024.111392 (IF 2022: 8.4, **Q1**).
- [J69] T. Kapoor, H. Wang, A. Núñez, and R. Dollevoet, "Physics-informed neural networks for solving forward and inverse problems in complex beam systems." *IEEE Transactions on Neural Networks and Learning Systems*, Volume 35, Issue 5, Pages: 5981-5995, May 2024. DOI: 10.1109/TNNLS.2023.3310585 (IF 2022: 10.4, **Q1**).
- [J68] M. Kapetanović, A. Núñez, N. van Oort, and R.M.P. Goverde, "Energy use and greenhouse gas emissions of traction alternatives for regional railways." *Energy Conversion and Management*, Volume 303, March 2024, 118202. DOI: 10.1016/j.enconman.2024.118202 (IF 2022: 10.4, **Q1**).
- [J67] Z. Li, S. Li, P. Zhang, A. Núñez, and R. Dollevoet, "Mechanism of short pitch corrugation: Initial excitation and frequency selection for consistent initiation and growth". *International Journal of Rail Transportation*, Volume 12, Issue 1, Pages: 1-36, 2024. DOI: 10.1080/23248378.2022.2156402 (IF 2022: 4.0, **Q2**)
- [J66] R. Morales, L.G. Marin, T. Roje, V. Caquilpan, D. Sáez, and A. Núñez, "Microgrid planning based on computational intelligence methods for rural communities: a case study in Jose Painecura mapuche community, Chile." *Expert Systems with Applications*, Volume 235, January 2024, 121179. DOI: 10.1016/j.eswa.2023.121179 (IF 2022: 8.5, **Q1**).
- [J65] M. Kapetanović, A. Núñez, N. van Oort, and R.M.P. Goverde, "Energy model of a fuel cell hybrid-electric regional train in passenger transport service and vehicle-to-grid applications." *Journal of Rail Transport Planning & Management*, Volume 28, December 2023, 100415. DOI: 10.1016/j.jrtpm.2023.100415 (IF 2022: 3.7, **Q3**)
- [J64] (Best Paper Award) W. Phusakulkajorn, A. Núñez, H. Wang, A. Jamshidi, A. Zoeteman, B. Ripke, R. Dollevoet, B. De Schutter and Z. Li, "Artificial intelligence in railway infrastructure: current research, challenges, and future opportunities." *Intelligent Transportation Infrastructure*, Volume 2, 2023, liad016, DOI: 10.1093/iti/liad016
- [J63] Y. Zeng, C. Shen, A. Núñez, R. Dollevoet, W. Zhang, and Z. Li, "An interpretable method for operational modal analysis in time-frequency representation and its applications to railway sleepers." *Structural Control and Health Monitoring*, Volume 2023, 6420772, 2023. DOI: 10.1155/2023/6420772 (IF 2022: 5.4, **Q1**)
- [J62] S. Unsiwilai, L. Wang, A. Núñez and Z. Li, "Multiple-axle box acceleration measurements at railway transition zones." *Measurement*, Volume 213, May 2023, 112688. DOI: 10.1016/j.measurement.2023.112688 (IF 2022: 5.6, **Q1**)
- [J61] J. Fu, S. Peyghami, A. Núñez, F. Blaabjerg, and B. De Schutter, "A tractable failure probability prediction model for predictive maintenance scheduling of large-scale modular-multilevel-converters." *IEEE Transactions on Power Electronics*, Volume 38, Issue 5, May 2023, Pages: 6533 - 6544. DOI: 10.1109/TPEL.2023.3241317 (IF 2022: 6.7, **Q1**)



- [J60] J. Fu, A. Núñez, and B. De Schutter, "A bidding mechanism for the maintenance of generation units considering inter-ISO power exchange." *International Journal of Electrical Power & Energy Systems*, Volume 144, January 2023, 108595. DOI: 10.1016/j.ijepes.2022.108595 (IF 2022: 5.2, Q1)
- [J59] J. Fu, A. Núñez, and B. De Schutter, "Accelerated optimal maintenance scheduling for generation units on a truthful platform." *Energy Reports*, Volume 8, November 2022, Pages: 9777-9786. DOI: 10.1016/j.egyr.2022.08.002 (IF 2022: 5.2, Q2)
- [J58] M. Kapetanović, A. Núñez, N. van Oort, and R.M.P. Goverde, "Analysis of hydrogen-powered propulsion system alternatives for diesel-electric regional trains." *Journal of Rail Transport Planning & Management*, Volume 23, September 2022, 100338, DOI: 10.1016/j.jrtpm.2022.100338 (IF 2022: 3.7, Q3)
- [J57] Y. Zhen, A. Núñez, and Z. Li, "Speckle noise reduction for structural vibration measurement with laser doppler vibrometer on the moving platform." *Mechanical Systems and Signal Processing*, Volume 178, October 2022, 109196, DOI: 10.1016/j.ymssp.2022.109196 (IF 2021: 8.934, Q1)
- [J56] J. Fu, A. Núñez, and B. De Schutter, "Real-time UAV routing strategy for monitoring and inspection for post-disaster restoration of distribution networks." *IEEE Transactions on Industrial Informatics*, Volume 18, Issue 4, April 2022, Pages: 2582-2592. DOI: 10.1109/TII.2021.3098506 (IF 2021: 11.648, Q1)
- [J55] J. Zhong, Z. Liu, C. Yang, H. Wang, S. Gao, and A. Núñez, "Adversarial reconstruction based on tighter oriented localization for catenary insulator defect detection in high-speed railways." *IEEE Transactions on Intelligent Transportation Systems*, Volume 23, Issue 2, February 2022, Pages: 1109-1120. DOI: 10.1109/TITS.2020.3020287 (IF 2021: 9.551, Q1)
- [J54] P. Zhang, S. Li, A. Núñez, and Z. Li, "Vibration modes and wave propagation of the rail under fastening constraint." *Mechanical Systems and Signal Processing*, Volume 160, November 2021, 107933, DOI: 10.1016/j.ymssp.2021.107933 (IF 2020: 6.823, Q1)
- [J53] F. Yang, Z. Wei, X. Sun, C. Shen, and A. Núñez, "Wheel-rail rolling contact behavior induced by both rail surface irregularity and sleeper hanging defects on a high-speed railway line." *Engineering Failure Analysis*, Volume 128, October 2021, 105604, DOI: 10.1016/j.engfailanal.2021.105604 (IF 2020: 3.114, Q1)
- [J52] M. Kapetanović, A. Núñez, N. van Oort, and R.M.P. Goverde, "Reducing fuel consumption and related emissions through optimal sizing of energy storage system for diesel-electric trains." *Applied Energy*, Volume 294, July 2021, 117018. DOI: 10.1016/j.apenergy.2021.117018 (IF 2020: 9.746, Q1)
- [J51] J. Zhong, Z. Liu, H. Wang, W. Liu, C. Yang, Z. Han, and A. Núñez, "A looseness detection method for railway catenary fasteners based on reinforcement learning refined localization." *IEEE Transactions on Instrumentation and Measurements*, Volume 70, June 2021, Pages: 1-13. DOI: 10.1109/TIM.2021.3086913 (IF 2020: 4.016, Q1)
- [J50] J. Fu, A. Núñez, and B. De Schutter, "A short-term preventive maintenance scheduling method for distribution networks with distributed generators and batteries." *IEEE Transactions on Power Systems*, Volume 36, Issue 3, May 2021, Pages: 2516-2531. DOI: 10.1109/TPWRS.2020.3037558 (IF 2020: 6.663, Q1)
- [J49] W. Liu, Z. Liu, Q. Li, Z. Han, and A. Núñez, "High-precision detection method for structure parameters of catenary cantilever devices using 3D point cloud data." *IEEE Transactions on Instrumentation and Measurement*, Volume 70, 3507811, 2021, Pages: 1-11. DOI: 10.1109/TIM.2020.3045801 (IF 2020: 4.016, Q1)
- [J48] P. Zhang, S. Li, A. Núñez, and Z. Li, "Multimodal dispersive waves in free rail: numerical modeling and experimental validation." *Mechanical Systems and Signal Processing*, Volume 150, March 2021, 107305. DOI: 10.1016/j.ymssp.2020.107305 (IF 2020: 6.823, Q1)
- [J47] H. Wang, A. Núñez, Z. Liu, D. Zhang, and R. Dollevoet, "A Bayesian network approach for the condition monitoring of high-speed railway catenary." *IEEE Transactions on Intelligent Transportation Systems*, Volume 21, October 2020, Pages: 4037-4051. DOI: 10.1109/TITS.2019.2934346 (IF 2019: 6.319, Q1)
- [J46] Z. Li, M. Berg, D. Fletcher, P. Meehan, and A. Núñez, "Special issue of Wear on Contact Mechanics 2018." *Wear*, July 2020, Article 203362. DOI: 10.1016/j.wear.2020.203362 (IF 2019: 4.108, Q1)
- [J45] W. Liu, Z. Liu, A. Núñez, and Z. Han, "Unified deep learning architecture for the detection of all catenary support components." *IEEE Access*, Volume 8, 2020, Pages: 17049-17059. DOI: 10.1109/ACCESS.2020.2967831 (IF 2019: 3.745, Q1)
- [J44] Z. Wei, A. Núñez, X. Liu, R. Dollevoet, and Z. Li, "Multi-criteria evaluation of wheel/rail matching behavior at railway crossings." *Tribology International*, Volume 144, April 2020, 106107. DOI: 10.1016/j.triboint.2019.106107 (IF 2019: 4.271, Q1)
- [J43] L.G. Marín, M. Sumner, D. Muñoz-Carpintero, S. Pholboon, D. Kobrich, D. Saez, and A. Núñez, "Hierarchical energy management system for microgrid operation based on robust model predictive control." *Energies* 2019, 12(23), 4453, November 2019. DOI: 10.3390/en12234453 (IF 2019: 2.702, Q3)
- [J42] H. Wang, Z. Liu, A. Núñez, and R. Dollevoet, "Entropy-based local irregularity detection for high-speed railway catenaries with frequent inspections." *IEEE Transactions on Instrumentation and Measurement*, Volume 68, Issue 10, October 2019, Pages: 3536-3547. DOI: 10.1109/TIM.2018.2881529 (IF 2019: 3.658, Q1)
- [J41] Z. Su, A. Jamshidi, A. Núñez, S. Baldi, and B. De Schutter, "Integrated condition-based track maintenance planning and crew scheduling of railway networks." *Transportation Research Part C: Emerging Technologies*, Volume 105, August 2019, Pages: 359-384. DOI: 10.1016/j.trc.2019.05.045 (IF 2019: 6.077, Q1)
- [J40] P. Santis, D. Sáez, R. Cárdenas, and A. Núñez, "Pareto-based modulated-model-predictive control strategy for power converter applications." *Electric Power Systems Research*, Volume 171, June 2019, Pages: 158-174. DOI: 10.1016/j.epsr.2019.02.016 (IF 2019: 3.211, Q2)
- [J39] L. Marin, N. Cruz, D. Sáez, M. Sumner and A. Núñez, "Prediction interval methodology based on fuzzy numbers and its extension to fuzzy systems and neural networks." *Expert Systems with Applications*. Volume 119, April 2019, Pages: 128-141. DOI: 10.1016/j.eswa.2018.10.043 (IF 2019: 5.452, Q1)
- [J38] A. Núñez, A. Jamshidi, and H. Wang, "Pareto-based maintenance decisions for regional railways with uncertain weld conditions using the Hilbert spectrum of axle box acceleration." *IEEE Transactions on Industrial Informatics*, Volume 15, Issue 3, March 2019, Pages: 1496-1507. DOI: 10.1109/TII.2018.2847736 (IF 2019: 9.112, Q1)



- [J37] Z. Wei, A. Boogaard, A. Núñez, Z. Li, and R. Dollevoet, "An integrated approach for characterizing the dynamic behavior of wheel-rail interaction at crossings." *IEEE Transactions on Instrumentation and Measurement*, Volume 67, Issue 10, October 2018, Pages: 2332-2344. DOI: 10.1109/TIM.2018.2816800 (IF 2019: 3.658, Q1)
- [J36] A. Jamshidi, S. Hajizadeh, Z. Su, M. Naeimi, A. Núñez, R. Dollevoet, B. De Schutter, and Zili Li, "A decision support approach for condition-based maintenance of rails based on big data analysis." *Transportation Research Part C: Emerging Technologies*, Volume 95, October 2018, Pages: 185-206. DOI: 10.1016/j.trc.2018.07.007 (IF 2019: 6.077, Q1)
- [J35] H. Wang, A. Núñez, Z. Liu, Y. Song, F. Duan, and R. Dollevoet, "Analysis of the evolvement of contact wire wear irregularity in railway catenary based on historical data." *Vehicle System Dynamics*, Volume 56, Issue 8, Pages: 1207-1232. DOI: 10.1080/00423114.2017.1408919 (IF 2019: 2.581, Q2)
- [J34] Z. Wei, A. Núñez, A. Boogaard, R. Dollevoet, and Z. Li, "Method for evaluating the performance of railway crossings after long-term service." *Tribology International*, Volume 123, July 2018, Pages: 337-348. DOI: 10.1016/j.triboint.2018.03.016 (IF 2019: 4.271, Q1)
- [J33] (Highly Cited Paper) J. Chen, Z. Liu, H. Wang, A. Núñez, and Z. Han, "Automatic defect detection of fasteners on the catenary support device using deep convolutional neural network." *IEEE Transactions on Instrumentation and Measurement*, Volume 67, Issue 2, February 2018, Pages: 257-269. DOI: 10.1109/TIM.2017.2775345 (IF 2019: 3.658, Q1). As of July/August 2020 and November/December 2024, this paper is in the highly cited list, the top 1% of the field Engineering, Data from Essential Science Indicators (ISI-Web of Science).
- [J32] Z. Su, A. Jamshidi, A. Núñez, S. Baldi, and B. De Schutter, "Multilevel condition-based maintenance planning for railway infrastructures – A scenario-based chance-constrained approach." *Transportation Research Part C: Emerging Technologies*, Volume 84, November 2017, Pages: 92-123. DOI: 10.1016/j.trc.2017.08.018 (IF 2019: 6.077, Q1)
- [J31] Z. Hidayat, R. Babuška A. Núñez, and B. De Schutter, "Identification of distributed-parameter systems from sparse measurements." *Applied Mathematical Modelling*, Volume 51, November 2017, Pages: 605-626. DOI: 10.1016/j.apm.2017.07.001 (IF 2019: 3.633, Q1)
- [J30] Z. Wei, A. Núñez, Z. Li, and R. Dollevoet, "Evaluating degradation at railway crossings using axle box acceleration measurements." *Sensors*, 2017 17(10), 2236, September 2017. DOI:10.3390/s17102236 (IF 2019: 3.275, Q1)
- [J29] A. Jamshidi, A. Núñez, R. Dollevoet, and Z. Li, "Robust and predictive fuzzy key performance indicators for condition-based treatment of squats in railway infrastructures." *Journal of Infrastructure Systems*, Volume 23, Issue 3, September 2017, 04017006. DOI: 10.1061/(ASCE)IS.1943-555X.0000357 (IF 2019: 1.825, Q2)
- [J28] A. Jamshidi, S. Faghih-Roohi, S. Hajizadeh, A. Núñez, R. Babuška, R. Dollevoet, Z. Li, and B. De Schutter, "A big data analysis approach for rail failure risk assessment." *Risk Analysis*. Volume 37, Issue 8, August 2017, Pages: 1495-1507. DOI: 10.1111/risa.12836 (IF 2019: 3.137, Q1)
- [J27] S. Li, Z. Li, A. Núñez, and R. Dollevoet, "New insights into the short pitch corrugation development enigma based on 3D-FE dynamic vehicle-track coupled modeling in frictional rolling contact." *Applied Sciences*, 2017 7(8), 807, August 2017. DOI: 10.3390/app7080807 (IF 2019: 2.474, Q2)
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- [J25] J. Llanos, R. Morales, A. Núñez, D. Sáez, M. Lacalle, L.G. Marín, R. Hernández, and F. Lanas, "Load estimation for microgrid planning based on a self-organizing map methodology." *Applied Soft Computing*, Volume 53, April 2017, Pages: 323-335. DOI: 10.1016/j.asoc.2016.12.054 (IF 2019: 5.472, Q1)
- [J24] M. Oregui, S. Li, A. Núñez, Z. Li, R. Carroll, and R. Dollevoet, "Monitoring bolt tightness of rail joints using axle box acceleration measurements." *Structural Control and Health Monitoring*, Volume 24:e1848, February 2017. DOI: 10.1002/stc.1848 (IF 2019: 3.499, Q1)
- [J23] Z. Liu, H. Wang, R. Dollevoet, Y. Song, A. Núñez, J. Zhang, "Ensemble EMD-based automatic extraction of the catenary structure wavelength from the pantograph-catenary contact force." *IEEE Transactions on Instrumentation and Measurement*, Volume 65, Issue 10, October 2016, Pages: 2272-2283. DOI: 10.1109/TIM.2016.2579360 (IF 2019: 3.658, Q1)
- [J22] C. Portilla, F. Valencia, J. Espinosa, A. Núñez, and B. De Schutter, "Model-based predictive control for bicycling in urban intersections." *Transportation Research Part C: Emerging Technologies*, Volume 70, September 2016, Pages: 27-41. DOI: 10.1016/j.trc.2015.11.016 (IF 2019: 6.077, Q1)
- [J21] M. Molodova, M. Oregui, A. Núñez, Z. Li, and R. Dollevoet, "Health condition monitoring of insulated joints based on axle box acceleration measurements." *Engineering Structures*, Volume 123, September 2016, Pages: 225-235. DOI: 10.1016/j.engstruct.2016.05.018 (IF 2019: 3.548, Q1)
- [J20] C. Ponce, D. Sáez, C. Bordons, and A. Núñez, "Dynamic simulator and model predictive control of an integrated solar combined cycle plant." *Energy*, Volume 109, Issue 2016, August 2016, Pages: 974-986. DOI: 10.1016/j.energy.2016.04.129 (IF 2019: 6.082, Q1)
- [J19] S. Liu, A.D. Sadowska, J.R.D. Frejo, A. Núñez, E.F. Camacho, H. Hellendoorn, and B. De Schutter, "Robust receding horizon parameterized control for multi-class freeway networks: A tractable scenario-based approach." *International Journal of Robust and Nonlinear Control*, Volume 26, Issue 6, April 2016, Pages: 1211-1245. DOI: 10.1002/rnc.3500 (IF 2019: 3.503, Q1)
- [J18] M. Molodova, Z. Li, A. Núñez, and R. Dollevoet, "Parameter study of the axle box acceleration at squats." *Proceedings of the Institution of Mechanical Engineers Part F: Journal of Rail and Rapid Transit*, Volume 229, Issue 8, November 2015, Pages: 841-851. DOI: 10.1177/0954409714523583 (IF 2019: 1.228, Q3)
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- [J15]** Z. Li, M. Molodova, A. Núñez, and R. Dollevoet, "Improvements in axle box acceleration measurements for the detection of light squats in railway infrastructure." *IEEE Transactions on Industrial Electronics*, Volume 62, Issue 7, July 2015, Pages: 4385-4397. DOI: 10.1109/TIE.2015.2389761 (IF 2019: 7.515, Q1)
- [J14]** D. Muñoz, D. Sáez, C.E. Cortés, and A. Núñez, "A methodology based on evolutionary algorithms to solve dynamic pick-up and delivery problem under hybrid predictive control approach." *Transportation Science*, Volume 49, Issue 2, May 2015, Pages: 239-253. DOI: 10.1287/trsc.2014.0569 (IF 2019: 3.384, Q2)
- [J13]** A. Núñez, C.E. Cortés, D. Sáez, B. De Schutter and M. Gendreau, "Multiobjective model predictive control for dynamic pickup and delivery problems." *Control Engineering Practice*, Volume 32, November 2014, Pages: 73-86. DOI: 10.1016/j.conengprac.2014.07.004 (IF 2019: 3.193, Q2)
- [J12]** M. Molodova, Z. Li, A. Núñez, and R. Dollevoet, "Automatic detection of squats in the railway infrastructures." *IEEE Transactions on Intelligent Transportation Systems*, Volume 15, Issue 5, October 2014, Pages: 1980-1990. DOI: 10.1109/TITS.2014.2307955 (IF 2019: 6.319, Q1)
- [J11]** J.R. Frejo, A. Núñez, B. De Schutter, and E.F. Camacho, "Hybrid model predictive control for freeway traffic using discrete speed limit signals." *Transportation Research Part C: Emerging Technologies*, Volume 46, September 2014, Pages: 309-325. DOI: 10.1016/j.trc.2014.06.005 (IF 2019: 6.077, Q1)
- [J10]** M. Molodova, Z. Li, A. Núñez, and R. Dollevoet, "Validation of a finite element model for axle box acceleration at squats in the high-frequency range." *Computers and Structures*, Volume 141, Issue 1, August 2014, Pages: 84-93. DOI: 10.1016/j.compstruc.2014.05.005 (IF 2019: 3.664, Q1)
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- [J08]** A. Núñez, B. De Schutter, D. Sáez, and I. Škrjanc, "Hybrid-fuzzy modeling and identification," *Applied Soft Computing*, Volume 17, April 2014, Pages: 67-78. DOI: 10.1016/j.asoc.2013.12.011 (IF 2019: 5.472, Q1)
- [J07]** D. Sáez, C.E. Cortés, F. Milla, A. Núñez, A. Tirachini, and M. Riquelme, "Hybrid predictive control strategy for a public transport system with uncertain demand," *Transportmetrica*, Volume 8, Issue 1, January 2012, Pages: 61-86. DOI: 10.1080/18128601003615535 (IF 2014: 3.773, Q1, this journal became two new journals Part A and B)
- [J06]** C.E. Cortés, D. Sáez, F. Milla, A. Núñez, and M. Riquelme, "Hybrid predictive control for real-time optimization of public transport system' operations based on evolutionary multiobjective optimization," *Transportation Research Part C: Emerging Technologies*, Volume 18, Issue 5, October 2010, Pages: 757-769. DOI: 10.1016/j.trc.2009.05.016 (IF 2019: 6.077, Q1)
- [J05]** C.E. Cortés, D. Sáez, A. Núñez, and D. Muñoz-Carpintero, "Hybrid adaptive predictive control for a dynamic pick-up and delivery problem," *Transportation Science*, Volume 43, Issue 1, February 2009, Pages: 27-42. DOI: 10.1287/trsc.1080.0251 (IF 2019: 3.384, Q2)
- [J04]** A. Núñez, D. Sáez, S. Oblak, and I. Škrjanc, "Fuzzy-model-based hybrid predictive control," *ISA Transactions*, Volume 48, Issue 1, January 2009, Pages: 24-31. DOI: 10.1016/j.isatra.2008.10.007 (IF 2019: 4.305, Q1)
- [J03]** J. Causa, G. Karer, A. Núñez, D. Sáez, I. Škrjanc, and B. Zupančič, "Hybrid fuzzy predictive control based on genetic algorithm for the temperature control of a batch reactor," *Computers & Chemical Engineering*, Volume 32, Issue 12, December 2008, Pages: 3254-3263. DOI: 10.1016/j.compchemeng.2008.05.014 (IF 2019: 4.000, Q1)
- [J02]** D. Sáez, C.E. Cortés, and A. Núñez, "Hybrid adaptive predictive control for the multi-vehicle dynamic pick-up and delivery problem based on genetic algorithms and fuzzy clustering," *Computers & Operations Research*, Volume 35, Issue 11, November 2008, Pages: 3412-3438. DOI: 10.1016/j.cor.2007.01.025 (IF 2019: 3.424, Q2)
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## Books

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