# Joaquin Carrasco

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5984214/publications.pdf

Version: 2024-02-01

| 81 | 1,259 | 430874 18 | 414414 32 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 82 | 82 | 82 | 578 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Duality Bounds for Discrete-Time Zamesâ€“Falb Multipliers. IEEE Transactions on Automatic Control, 2022, 67, 3521-3528. | 5.7 | 7 |
| 2 | A Lyapunov-Lurye Functional Parametrization of Discrete-Time Zames-Falb Multipliers. , 2022, 6, 259-264. | | 1 |
| 3 | Multipliers for Nonlinearities With Monotone Bounds. IEEE Transactions on Automatic Control, 2022, 67, 910-917. | 5.7 | 5 |
| 4 | Fault-tolerant cooperative navigation of networked UAV swarms for forest fire monitoring. Aerospace Science and Technology, 2022, 123, 107494. | 4.8 | 57 |
| 5 | Construction of a Destabilizing Nonlinearity for Discrete-Time Uncertain Lurye Systems. , 2022, 6, 2605-2610. | | 0 |
| 6 | Phase limitations of generalised OZF multipliers: further results. , 2022, , . | | 0 |
| 7 | A Novel Triad Twisted String Actuator for Controlling a Two Degrees of Freedom Joint: Design and Experimental Validation. , 2022, , . | | 0 |
| 8 | Robust Stability of Barrier-Based Model Predictive Control. IEEE Transactions on Automatic Control, 2021, 66, 1879-1886. | 5.7 | 9 |
| 9 | Virtual Kinesthetic Teaching for Bimanual Telemanipulation. , 2021, , . | | 6 |
| 10 | Autonomous Elbow Controller for Differential Drive In-Pipe Robots. Robotics, 2021, 10, 28. | 3.5 | 8 |
| 11 | Construction of Periodic Counterexamples to the Discrete-Time Kalman Conjecture. , 2021, , . | | 0 |
| 12 | Omnipotent Virtual Giant for Remote Humanâ€“Swarm Interaction. , 2021, , . | | 3 |
| 13 | Adaptive Impedance-Conditioned Phase-Locked Loop for the VSC Converter Connected to Weak Grid. Energies, 2021, 14, 6040. | 3.1 | 4 |
| 14 | Construction of Periodic Counterexamples to the Discrete-Time Kalman Conjecture. , 2021, 5, 1291-1296. | | 10 |
| 15 | On numerical construction of worse-case convergence rates for Discrete-time Lurye systems with odd nonlinearities. , 2021, , . | | 0 |
| 16 | A Model-free Deep Reinforcement Learning Approach for Robotic Manipulators Path Planning. , 2021, , . | | 4 |
| 17 | Vibration analysis for large-scale wind turbine blade bearing fault detection with an empirical wavelet thresholding method. Renewable Energy, 2020, 146, 99-110. | 8.9 | 96 |
| 18 | Discrete-time counterparts of the RL and RC multipliers. International Journal of Control, 2020, 93, 1180-1193. | 1.9 | 2 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Convex Searches for Discrete-Time Zamesâ€“Falb Multipliers. IEEE Transactions on Automatic Control, 2020, 65, 4538-4553. | 5.7 | 26 |
| 20 | Zamesâ€“Falb multipliers for convergence rate: motivating example and convex searches. International Journal of Control, 2020, , 1-9. | 1.9 | 3 |
| 21 | Voronoi-Based Multi-Robot Autonomous Exploration in Unknown Environments via Deep Reinforcement Learning. IEEE Transactions on Vehicular Technology, 2020, 69, 14413-14423. | 6.3 | 190 |
| 22 | Tuning and sensitivity analysis of a hexapod state estimator. Robotics and Autonomous Systems, 2020, 129, 103509. | 5.1 | 2 |
| 23 | On Lyapunov-Lurâ€™e functional based stability criterion for discrete-time Lurâ€™e systems. IFAC-PapersOnLine, 2020, 53, 6364-6369. | 0.9 | 1 |
| 24 | Intuitive Bare-Hand Teleoperation of a Robotic Manipulator Using Virtual Reality and Leap Motion. Lecture Notes in Computer Science, 2019, , 283-294. | 1.3 | 21 |
| 25 | MallARD: An Autonomous Aquatic Surface Vehicle for Inspection and Monitoring of Wet Nuclear Storage Facilities. Robotics, 2019, 8, 47. | 3.5 | 22 |
| 26 | Elbow Detection in Pipes for Autonomous Navigation of Inspection Robots. Journal of Intelligent and Robotic Systems: Theory and Applications, 2019, 95, 527-541. | 3.4 | 18 |
| 27 | Conditions for the equivalence between IQC and graph separation stability results. International Journal of Control, 2019, 92, 2899-2906. | 1.9 | 9 |
| 28 | IQC analysis of reset control systems with time-varying delay. International Journal of Control, 2019, 92, 2007-2014. | 1.9 | 3 |
| 29 | Analysis of steady-state power transfer capability and dynamic performance of VSC-HVDC with impedance-compensated synchronisation method connected to weak AC grid. , 2019, , . | | 0 |
| 30 | Improving thermal substation inspections utilising machine learning. , 2019, , . | | 0 |
| 31 | Phase Limitations of Zamesâ€“Falb Multipliers. IEEE Transactions on Automatic Control, 2018, 63, 947-959. | 5.7 | 20 |
| 32 | Towards a Proof of the Kalman Conjecture for the Second Order Systems with Time-Delay. , 2018, , . | | 0 |
| 33 | Phase Properties of the Generalised Zames- Falb Multipliers. , 2018, , . | | 1 |
| 34 | Kalman Conjecture for Resonant Second-Order Systems with Time Delay. , 2018, , . | | 3 |
| 35 | The Pond Cleaning System. , 2018, , . | | 0 |
| 36 | Evaluation of a State Observer for Frequency Estimation in a Grid Tied Photovoltaic Inverter. , 2018, , . | | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | A Hybrid Underwater Acoustic and RF Localisation System for Enclosed Environments Using Sensor Fusion. Lecture Notes in Computer Science, 2018, , 369-380. | 1.3 | 2 |
| 38 | Absolute Stability of Systems With Integrator and/or Time Delay via Off-Axis Circle Criterion. , 2018, 2, 411-416. | | 5 |
| 39 | Comment on â€œAbsolute stability analysis for negative-imaginary systemsâ€•[Automatica 67 (2016) 107â€“113]. Automatica, 2017, 85, 486-488. | 5.0 | 4 |
| 40 | Stability Analysis of Bilateral Teleoperation With Bounded and Monotone Environments via Zamesâ€“Falb Multipliers. IEEE Transactions on Control Systems Technology, 2017, 25, 1331-1344. | 5.2 | 16 |
| 41 | Discrete-time counterparts of the RL and RC multipliers. , 2017, , . | | 0 |
| 42 | Convex LMI approach for stability of critically stable systems with slope-restricted nonlinearities. , 2016, , . | | 1 |
| 43 | Bilateral Teleoperation with Nonlinear Environments: Multiplier Approach. IFAC-PapersOnLine, 2016, 49, 308-313. | 0.9 | 0 |
| 44 | Zamesâ€“Falb multipliers for absolute stability: From O×³Shea×³s contribution to convex searches. European Journal of Control, 2016, 28, 1-19. | 2.6 | 65 |
| 45 | Global asymptotic stability for a class of discrete-time systems. , 2015, , . | | 7 |
| 46 | Teleoperation with memoryless, monotone, and bounded environments: A Zames-Falb multiplier approach. , 2015, , . | | 2 |
| 47 | Integral quadratic constraint theorem: A topological separation approach. , 2015, , . | | 8 |
| 48 | A Less Conservative LMI Condition for Stability of Discrete-Time Systems With Slope-Restricted Nonlinearities. IEEE Transactions on Automatic Control, 2015, 60, 1692-1697. | 5.7 | 30 |
| 49 | Phase limitations of discrete-time Zames-Falb multipliers. , 2015, , . | | 2 |
| 50 | Stability analysis of asymmetric saturation via generalised Zames-Falb multipliers. , 2015, , . | | 8 |
| 51 | Second-order counterexample to the discrete-time Kalman conjecture. , 2015, , . | | 21 |
| 52 | Zames-Falb multipliers for absolute stability: From O'Shea's contribution to convex searches. , 2015, , . | | 5 |
| 53 | Second-order counterexamples to the discrete-time Kalman conjecture. Automatica, 2015, 60, 140-144. | 5.0 | 63 |
| 54 | A complete and convex search for discrete-time noncausal FIR Zames-Falb multipliers. , 2014, , . | | 18 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | On multipliers for bounded and monotone nonlinearities. Systems and Control Letters, 2014, 66, 65-71. | 2.3 | 13 |
| 56 | LMI searches for anticausal and noncausal rational Zamesâ€“Falb multipliers. Systems and Control Letters, 2014, 70, 17-22. | 2.3 | 31 |
| 57 | Equivalence between classes of multipliers for slope-restricted nonlinearities. Automatica, 2013, 49, 1732-1740. | 5.0 | 40 |
| 58 | Towards -stability of discrete-time reset control systems via dissipativity theory. Systems and Control Letters, 2013, 62, 525-530. | 2.3 | 20 |
| 59 | IQC analysis for time-delay reset control systems with first order reset elements. , 2013, , . | | 2 |
| 60 | Themed Project Case Study: Quadruple Tanks Control with PLCs. International Journal of Electrical Engineering and Education, 2013, 50, 279-292. | 0.8 | 4 |
| 61 | LMI searches for discrete-time Zames-Falb multipliers. , 2013, , . | | 13 |
| 62 | Team organization and participation in the Eurobot 2012 contest. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 180-185. | 0.4 | 0 |
| 63 | On multipliers for bounded and monotone nonlinearities. , 2013, , . | | 1 |
| 64 | A Robust Kalman Conjecture For First-Order Plants. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 27-32. | 0.4 | 10 |
| 65 | Reset Control of an Industrial In-Line pH Process. IEEE Transactions on Control Systems Technology, 2012, 20, 1100-1106. | 5.2 | 23 |
| 66 | Revisited Jury-Lee criterion for multivariable discrete-time Lur'e systems: Convex LMI search. , 2012, , . | | 4 |
| 67 | LMI search for rational anticausal Zames-Falb multipliers. , 2012, , . | | 10 |
| 68 | Equivalence between classes of multipliers for slope-restricted nonlinearities. , 2012, , . | | 1 |
| 69 | Comments on â€œOn the Existence of Stable, Causal Multipliers for Systems With Slope-Restricted Nonlinearitiesâ€• IEEE Transactions on Automatic Control, 2012, 57, 2422-2428. | 5.7 | 34 |
| 70 | Factorization of multipliers in passivity and IQC analysis. Automatica, 2012, 48, 909-916. | 5.0 | 16 |
| 71 | Reset Times-Dependent Stability of Reset Control Systems. IEEE Transactions on Automatic Control, 2011, 56, 217-223. | 5.7 | 71 |
| 72 | On the design of reset systems with unstable base: A fixed reset-time approach. , 2011, , . | | 3 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | Reset Control for Passive Bilateral Teleoperation. IEEE Transactions on Industrial Electronics, 2011, 58, 3037-3045. | 7.9 | 69 |
| 74 | Factorization of multipliers in passivity and IQC analysis. , 2011, , . | | 4 |
| 75 | A passivity-based approach to reset control systems stability. Systems and Control Letters, 2010, 59, 18-24. | 2.3 | 67 |
| 76 | Reset control of an industrial in-line pH process. , 2009, , . | | 4 |
| 77 | Reset control for passive teleoperation. , 2008, , . | | 9 |
| 78 | Stability of reset control systems with inputs. , 2008, , . | | 2 |
| 79 | Reset times-dependent stability of reset control with unstable base systems. , 2007, , . | | 13 |
| 80 | Reset times-dependent stability of reset control systems. , 2007, , . | | 5 |
| 81 | Super-attracting periodic orbits for a classical third order method. Journal of Computational and Applied Mathematics, 2007, 206, 599-602. | 2.0 | 1 |