Francisco Valero

List of Publications by Year
in descending order

40 papers	1,197 citations	567144 15 h-index	377752 34 g-index
40 all docs	40 docs citations	40 times ranked	681 citing authors

#	Article	IF	Citations
1	A review of mobile robots: Concepts, methods, theoretical framework, and applications. International Journal of Advanced Robotic Systems, 2019, 16, 172988141983959.	1.3	320
2	Impact of digital transformation on the automotive industry. Technological Forecasting and Social Change, 2021, 162, 120343.	6.2	198
3	Identification of dynamic parameters of a 3-DOF RPS parallel manipulator. Mechanism and Machine Theory, 2008, 43, 1-17.	2.7	90
4	Serial-robot dynamics algorithms for moderately large numbers of joints. Mechanism and Machine Theory, 2002, 37, 739-755.	2.7	55
5	Trajectory planning in workspaces with obstacles taking into account the dynamic robot behaviour. Mechanism and Machine Theory, 2006, 41, 525-536.	2.7	55
6	Industrial robot efficient trajectory generation without collision through the evolution of the optimal trajectory. Robotics and Autonomous Systems, 2016, 86, 106-112.	3.0	49
7	A comparison between direct and indirect dynamic parameter identification methods in industrial robots. Robotica, 2006, 24, 579-590.	1.3	35
8	Sustainability and optimization in the automotive sector for adaptation to government vehicle pollutant emission regulations. Journal of Business Research, 2020, 112, 561-566.	5.8	31
9	Optimal time trajectories for industrial robots with torque, power, jerk and energy consumed constraints. Industrial Robot, 2012, 39, 92-100.	1.2	28
10	A direct approach to solving trajectory planning problems using genetic algorithms with dynamics considerations in complex environments. Robotica, 2015, 33, 669-683.	1.3	26
11	Fuzzy-set qualitative comparative analysis applied to the design of a network flow of automated guided vehicles for improving business productivity. Journal of Business Research, 2019, 101, 737-742.	5.8	25
12	Evolutionary indirect approach to solving trajectory planning problem for industrial robots operating in workspaces with obstacles. European Journal of Mechanics, A/Solids, 2013, 42, 210-218.	2.1	24
13	Optimization approaches for robot trajectory planning. Multidisciplinary Journal for Education, Social and Technological Sciences, 2018, 5, 1.	0.8	23
14	A formulation for path planning of manipulators in complex environments by using adjacent configurations. Advanced Robotics, 1996, 11, 33-56.	1.1	18
15	Assembly Line Productivity Assessment by Comparing Optimization-Simulation Algorithms of Trajectory Planning for Industrial Robots. Mathematical Problems in Engineering, 2015, 2015, 1-10.	0.6	17
16	Improving productivity using a multi-objective optimization of robotic trajectory planning. Journal of Business Research, 2015, 68, 1429-1431.	5.8	16
17	Assessment of the Effect of Energy Consumption on Trajectory Improvement for a Car-like Robot. Robotica, 2019, 37, 1998-2009.	1.3	16
18	Simultaneous algorithm to solve the trajectory planning problem. Mechanism and Machine Theory, 2009, 44, 1910-1922.	2.7	15

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19	The simultaneous algorithm and the best interpolation function for trajectory planning. Industrial Robot, 2010, 37, 441-451.	1.2	15
20	Multi-objective optimization of costs and energy efficiency associated with autonomous industrial processes for sustainable growth. Technological Forecasting and Social Change, 2021, 173, 121115.	6.2	14
21	Direct stepâ€byâ€step method for industrial robot path planning. Industrial Robot, 2009, 36, 594-607.	1.2	12
22	Influence of the Friction Coefficient on the Trajectory Performance for a Car-Like Robot. Mathematical Problems in Engineering, 2017, 2017, 1-9.	0.6	11
23	Navigation of Autonomous Light Vehicles Using an Optimal Trajectory Planning Algorithm. Sustainability, 2021, 13, 1233.	1.6	11
24	Solving the inverse dynamic control for low cost real-time industrial robot control applications. Robotica, 2003, 21, 261-269.	1.3	10
25	Evolutionary Path Planning Algorithm for Industrial Robots. Advanced Robotics, 2012, 26, 1369-1392.	1.1	10
26	Optimal synthesis of three-revolute manipulators. Meccanica, 1994, 29, 95-103.	1.2	9
27	Comparing the efficiency of five algorithms applied to path planning for industrial robots. Industrial Robot, 2012, 39, 580-591.	1.2	9
28	Modelling an Industrial Robot and Its Impact on Productivity. Mathematics, 2021, 9, 769.	1.1	9
29	Efficient trajectory of a car-like mobile robot. Industrial Robot, 2019, 46, 211-222.	1.2	7
30	Realâ€time solving of dynamic problem in industrial robots. Industrial Robot, 2011, 38, 119-129.	1.2	6
31	Reconfiguration of a parallel kinematic manipulator with 2T2R motions for avoiding singularities through minimizing actuator forces. Mechatronics, 2020, 69, 102382.	2.0	6
32	Designing Efficient Material Handling Systems Via Automated Guided Vehicles (AGVs). Multidisciplinary Journal for Education, Social and Technological Sciences, 2018, 5, 97.	0.8	6
33	A Comparison of Algorithms for Path Planning of Industrial Robots. , 2009, , 247-254.		5
34	Characterization and assessment of composite materials via inverse finite element modeling. Multidisciplinary Journal for Education, Social and Technological Sciences, 2019, 6, 1.	0.8	5
35	Identification of dynamic parameters in low-mobility mechanical systems: application to short long arm vehicle suspension. Vehicle System Dynamics, 2013, 51, 1242-1264.	2.2	3
36	Stochastic inverse finite element modeling for characterization of heterogeneous material properties. Materials Research Express, 2019, 6, 115806.	0.8	3

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37	Applied Mathematics to Mobile Robotics and Their Applications. Mathematical Problems in Engineering, 2017, 2017, 1-2.	0.6	2
38	Path Planning in Complex Environments for Industrial Robots with Additional Degrees of Freedom. CISM International Centre for Mechanical Sciences, Courses and Lectures, 2000, , 431-438.	0.3	2
39	Parallel-Populations Genetic Algorithm for the Optimization of Cubic Polynomial Joint Trajectories for Industrial Robots. Lecture Notes in Computer Science, 2011, , 83-92.	1.0	1
40	Modelado e IdentificaciÃ³n de ParÃ¡metros DinÃ¡micos de Robots. ResoluciÃ³n del Problema DinÃ¡mico Inverso en Tiempo Real. RIAI - Revista Iberoamericana De Automatica E Informatica Industrial, 2010, 7, 39-48.	0.6	0