Geovany A Borges

List of Publications by Year
in descending order

78 papers	1,107 citations	1039406 9 h-index	580395 25 g-index
79 all docs	79 docs citations	79 times ranked	958 citing authors

#	ARTICLE	IF	CITATIONS
1	Line Extraction in 2D Range Images for Mobile Robotics. Journal of Intelligent and Robotic Systems: Theory and Applications, 2004, 40, 267-297.	2.0	240
2	A Systematization of the Unscented Kalman Filter Theory. IEEE Transactions on Automatic Control, 2015, 60, 2583-2598.	3.6	188
3	Efficient computation of stochastic electromagnetic problems using unscented transforms. IET Science, Measurement and Technology, 2008, 2, 88-95.	0.9	75
4	Robot-assisted automatic insertion of steerable needles with closed-loop imaging feedback and intraoperative trajectory replanning. Mechatronics, 2013, 23, 630-645.	2.0	70
5	Estimation of the knee joint angle from surface electromyographic signals for active control of leg prostheses. Physiological Measurement, 2009, 30, 931-946.	1.2	42
6	Robust kinematic control of manipulator robots using dual quaternion representation. , 2013, , .		37
7	Robustified estimation algorithms for mobile robot localization based on geometrical environment maps. Robotics and Autonomous Systems, 2003, 45, 131-159.	3.0	30
8	Optimal mobile robot pose estimation using geometrical maps. IEEE Transactions on Automation Science and Engineering, 2002, 18, 87-94.	2.4	29
9	Multisensor Attitude Estimation. , 0, , .		21
10	A robust extended Kalman filter for discrete-time systems with uncertain dynamics, measurements and correlated noise. , 2009, , .		18
11	Semi-automatic needle steering system with robotic manipulator. , 2012, , .		18
12	3D Robust Online Motion Planning for Steerable Needles in Dynamic Workspaces Using Duty-Cycled Rotation. Journal of Control, Automation and Electrical Systems, 2014, 25, 216-227.	1.2	18
13	Switching strategy for flexible task execution using the cooperative dual task-space framework. , 2014, , .		16
14	An above-knee prosthesis with magnetorheological variable-damping. , 2014, , .		16
15	A new smallest sigma set for the Unscented Transform and its applications on SLAM. , 2011, , .		15
16	FPGA implementation of a sequential Extended Kalman Filter algorithm applied to mobile robotics localization problem. , 2013, , .		14
17	Disturbance rejection in a fixed wing UAV using nonlinear H<inf>&#x221E;</inf> state feedback. , 2011, , .		12
18	Manipulator Control Based on the Dual Quaternion Framework for Intuitive Teleoperation Using Kinect. , 2012, , .		12

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19	Modeling device manufacturing uncertainty in Electromagnetic Simulations. , 2008, , .		11
20	Split and merge algorithm for identification of Piecewise Affine systems. , 2011, , .		11
21	New minimum sigma set for unscented filtering. International Journal of Robust and Nonlinear Control, 2015, 25, 3286-3298.	2.1	11
22	Nonlinear Modeling, Identification and Control for a Simulated Miniature Helicopter. , 2008, , .		10
23	Robust stability of networked control systems. , 2009, , .		10
24	Attitude determination for unmanned aerial vehicles via an antenna array. , 2012, , .		10
25	Estimating delays in networked control systems using colored Petri nets and Markov chain models. , 2009, , .		9
26	Robust H âˆž Output Tracking Control for a Class of Nonlinear Systems with Time-Varying Delays. Circuits, Systems, and Signal Processing, 2014, 33, 1451-1471.	1.2	8
27	A new biomechanical hand prosthesis controlled by surface electromyographic signals. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 6142-5.	0.5	7
28	Estimation of foot orientation with respect to ground for an above knee robotic prosthesis. , 2009, , .		7
29	Fusion of electromyographic signals with proprioceptive sensor data in myoelectric pattern recognition for control of active transfemoral leg prostheses. , 2009, 2009, 4755-8.		7
30	New delay-and-delay-derivative-dependent stability criteria for systems with time-varying delay. , 2010, , .		7
31	Delay-Dependent Robust Stability Analysis for Time-Delay Tâ€"S Fuzzy Systems with Nonlinear Local Models. Journal of Control, Automation and Electrical Systems, 2013, 24, 11-21.	1.2	7
32	Improved Kalman-based attitude estimation framework for UAVs via an antenna array. , 2016, 59, 49-65.		7
33	A Robot Architecture for Outdoor Competitions. Journal of Intelligent and Robotic Systems: Theory and Applications, 2020, 99, 629-646.	2.0	7
34	Adaptive path planning for steerable needles using duty-cycling. , 2011, , .		7
35	Stability of networked control systems with dynamic controllers in the feedback loop. , 2010, , .		6
36	Efficient extraction of statistical moments in electromagnetic problems solved with the method of moments. , 2007, , .		5

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37	Adaptive Knee Joint Control for an Active Amputee Prosthesis. , 2008, , .		5
38	A real-time web-based networked control system education platform. International Journal of Electrical Engineering and Education, 2018, 55, 130-141.	0.4	5
39	3 Axis simulator of the Earth magnetic field. , 2018, , .		5
40	Extracting statistical moments of output quantities from a small number of time-domain simulations. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2009, 22, 143-157.	1.2	4
41	Delay-Dependent Robust Hâˇž Output Tracking Control for Uncertain Networked Control Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 3256-3261.	0.4	4
42	Adaptive path planning for steerable needles using duty-cycling. , 2011, , .		4
43	A Hardware Approach for Solving the Robot Localization Problem Using a Sequential EKF. , 2013, , .		4
44	Kalman-based attitude estimation for an UAV via an antenna array. , 2014, , .		4
45	Identification of state-space switched linear systems using clustering and hybrid filtering. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2017, 39, 565-573.	0.8	4
46	Improved Attitude Determination for Unmanned Aerial Vehicles with a Cross-Shaped Antenna Array. , 2012, , .		4
47	Knee Angle Estimation Algorithm for Myoelectric Control of Active Transfemoral Prostheses. Communications in Computer and Information Science, 2010, , 124-135.	0.4	4
48	Characterization of a trajectory recognition optical sensor for an automated guided vehicle. IEEE Transactions on Instrumentation and Measurement, 2000, 49, 813-819.	2.4	3
49	VoC: a reconfigurable matrix for stereo vision processing. , 2006, , .		3
50	Algorithms for uncertainty propagation in transmission-line matrix (TLM) method. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2008, 21, 43-60.	1.2	3
51	Gait generation for a quadruped robot using Kalman filter as optimizer. , 2009, , .		3
52	Multiple Hypotheses Mixing Filter for hybrid Markovian switching systems. , 2010, , .		3
53	Hybrid data fusion for 3D localization under heavy disturbances. , 2010, , .		3
54	Continuous Estimation Prediction of Knee Joint Angles Using Fusion of Electromyographic and Inertial Sensors for Active Transfemoral Leg Prostheses. Advances in Data Science and Adaptive Analysis, 2018, 10, 1840008.	0.2	3

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55	Cartographie de l'environnement et localisation robuste pour la navigation de robots mobiles. Journal Europeen Des Systemes Automatises, 2003, 37, 1299-1304.	0.3	3
56	Design and experimental evaluation of rotor speed regulators for model helicopters in a test bench. , 2007, , .		2
57	Automatic Wave Group Identification on Deep Seismic Refraction Data Using SMF Clustering. IEEE Geoscience and Remote Sensing Letters, 2008, 5, 687-690.	1.4	2
58	An improved stability criterion of networked control systems with dynamic controllers in the feedback loop. , 2014, , .		2
59	Antenna pointing system for satellite tracking based on Kalman filtering and model predictive control techniques. Advances in Space Research, 2016, 58, 2328-2340.	1.2	2
60	Extracting Statistical Moments of Output Quantities from a Small Number of Time-Domain Simulations. , 2007, , .		1
61	Development of a microcontrolled bioinstrumentation system for active control of leg prostheses. , 2008, 2008, 2393-6.		1
62	iARW: An incremental path planner algorithm based on adaptive random walks. , 2009, , .		1
63	A delay-fractioning approach to stability analysis of networked control systems with time-varying delay. , 2011, , .		1
64	Neural oscillator for gait command of a humanoid robot. , 2012, , .		1
65	Searching CPG parameters for humanoid gait using Particle Swarm Optimization and Genetic Algorithm. , 2013, , .		1
66	On the use of discrete steps in robot-aided flexible needle insertion. , 2013, 2013, 4867-70.		1
67	Novel stabilization technique for the H<inf>&#x221E;</inf> control of systems with time-varying input delay. , 2013, , .		1
68	Quaternion-based H<inf>âˆž</inf> kinematic attitude control subjected to input time-varying delays. , 2015, , .		1
69	Recent Advances in the Combination of the Unscented Transform (UT) with the Transmission Line Modeling Method (TLM). Springer Proceedings in Physics, 2008, , 135-145.	0.1	1
70	Continuous-Time H~~ Control Design of Large Scale Systems Using Chandrasekhar~fs Equations. , 2006, , .		0
71	Uncertainty propagation in one-dimensional Transmission Line Modeling (TLM) method. , 2007, , .		0
72	An Efficient Technique for Computing a Sub-optimal Disturbance Attenuation H_{infty} Control Problem Feedback Solution. , 2008, , .		0

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73	Estimation for nonlinear discrete-time systems with uncertain linearization and noises statistics. , 2009, , .		0
74	Myoelectric Algorithm for Knee Angle Estimation Using Proprioceptive Data and a Compatibility Test. , 2012, , .		0
75	Scaled Minimum Unscented Multiple Hypotheses Mixing Filter. , 2013, , .		0
76	An EKF-based approach for estimating leg stiffness during walking. , 2013, 2013, 7226-8.		0
77	A new filter for hybrid systems and its applications to robust attitude estimation. , 2014, , .		0
78	Robust stability of networked control systems with dynamic controllers in the feedback loop. , 2016, , .		0