Hugo Guterman

List of Publications by Year
in descending order

53 papers	1,222 citations	623188 14 h-index	552369 26 g-index
53 all docs	53 docs citations	53 times ranked	1233 citing authors

#	Article	IF	Citations
1	Biologically Inspired Visual System Architecture for Object Recognition in Autonomous Systems. Algorithms, 2020, 13, 167.	1.2	6
2	Attitude Estimation of AUVs Based on a Network of Pressure Sensors. IEEE Sensors Journal, 2020, 20, 7988-7996.	2.4	6
3	Correction of DVL Error Caused by Seafloor Gradient. IEEE Sensors Journal, 2020, 20, 11652-11659.	2.4	8
4	Light Invariant Video Imaging for Improved Performance of Convolution Neural Networks. IEEE Transactions on Circuits and Systems for Video Technology, 2019, 29, 1584-1594.	5.6	7
5	Functional Safety Verification for Autonomous UGVsâ€"Methodology Presentation and Implementation on a Full-Scale System. IEEE Transactions on Intelligent Vehicles, 2019, 4, 472-485.	9.4	9
6	Automatic Identification and Switching of Multi-MRAC Systems. , 2019, , .		0
7	Geometrical Correction of Side-scan Sonar Images. , 2018, , .		2
8	Cooperation Between Autonomous Marine Platforms. , 2018, , .		2
9	Direct Adaptive Control Using a Neuro-evolutionary Algorithm for Vehicle Speed Control. , 2018, , .		1
10	A multi model filter based on fuzzy logic for the navigation of an autonomous underwater vehicle, preliminary results. , 2017, , .		0
11	Trajectory tracking and formation controls for a UAV model that incorporates dynamic effects. , 2016, , .		0
12	IVO Robot Driver. , 2016, , .		5
13	Tracking of Autonomous Underwater Vehicles using an Autonomous Surface Vehicle with ranger interrogator system. , 2016, , .		2
14	Navigation approaches for hovering autonomous underwater vehicles. , 2016, , .		6
15	Light invariant video camera â€" making faces appear the same under any light conditions. , 2016, , .		0
16	Visual reinforcement learning for object recognition in robotics. , 2016, , .		0
17	RobIL â€" Israeli program for research and development of autonomous UGV: Performance evaluation methodology. , 2016, , .		7
18	Performance boosting of a pedestrian detector using multiple cameras. , 2016, , .		1

#	Article	IF	Citations
19	Amplitude Modulated Video Camera - Light Separation in Dynamic Scenes. , 2016, , .		5
20	Obstacle Avoidance Approaches for Autonomous Underwater Vehicle: Simulation and Experimental Results. IEEE Journal of Oceanic Engineering, 2016, 41, 882-892.	2.1	60
21	Trajectory controller for Autonomous Surface Vehicle under sea waves. , 2015, , .		1
22	Non-linear controller for non-linear model of hovering autonomous underwater vehicles. , 2014, , .		4
23	Verification of safety for autonomous unmanned ground vehicles. , 2014, , .		4
24	Visual predictive architecture for biologically inspired object recognition. , 2014, , .		1
25	Light source separation from image sequences of oscillating lights. , 2014, , .		5
26	A Probabilistic Approach to Spectral Graph Matching. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2013, 35, 18-27.	9.7	166
27	AUV real-time acoustic vertical plane obstacle detection and avoidance. , 2012, , .		4
28	Initialization of Iterative-Based Speaker Diarization Systems for Telephone Conversations. IEEE Transactions on Audio Speech and Language Processing, 2012, 20, 414-425.	3.8	17
29	Educational hands-on testbed using Lego robot for learning guidance, navigation, and control*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 5170-5175.	0.4	2
30	FPGA-Based Adaptive Speckle Suppression Filter for Underwater Imaging Sonar. IEEE Journal of Oceanic Engineering, 2011, 36, 646-657.	2.1	31
31	H.264 encoder based 3D model acquisition and compression for aerial video. , 2010, , .		0
32	Speech recognition using combined forward and backward Viterbi search. , 2010, , .		2
33	Comparison between normalizations for SVM &#x2014; GMM supervectors speaker verification. , 2010, , .		0
34	Improving Shape Retrieval by Spectral Matching and Meta Similarity. IEEE Transactions on Image Processing, 2010, 19, 1319-1327.	6.0	57
35	Electric Field Stimulation Integrated into Perfusion Bioreactor for Cardiac Tissue Engineering. Tissue Engineering - Part C: Methods, 2010, 16, 1417-1426.	1.1	87
36	Frame level entropy based overlapped speech detection as a pre-processing stage for speaker diarization. , 2009, , .		7

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37	Pure segment selection as speaker diarization post-processing. , 2008, , .		1
38	Advanced Developments and Applications of the Fuzzy ARTMAP Neural Network in Pattern Classification. Studies in Computational Intelligence, 2008, , 77-107.	0.7	9
39	Studies on acute human infections using FTIR microspectroscopy and cluster analysis. Biopolymers, 2004, 73, 494-502.	1.2	17
40	Comparative studies on cervical and colonic malignancies using FTIR microspectroscopy. , 2003, , .		2
41	Diagnostic potential of Fourier-transform infrared microspectroscopy and advanced computational methods in colon cancer patients. Journal of Biomedical Optics, 2002, 7, 248.	1.4	145
42	FTIR Microscopic Studies on Normal, Polyp, and Malignant Human Colonic Tissues. Subsurface Sensing Technologies and Applications, 2001, 2, 99-117.	0.9	29
43	A flat inclined modular photobioreactor for outdoor mass cultivation of photoautotrophs. , 2000, 51, 51-60.		233
44	Classification of brain-stem trigeminal evoked potentials in multiple sclerosis, minor head injuries and post-concussion syndrome pathologies by similarity measurements. International Journal of Medical Informatics, 2000, 60, 303-318.	1.6	3
45	A comparative study of neural network based feature extraction paradigms. Pattern Recognition Letters, 1999, 20, 7-14.	2.6	70
46	On pattern classification with Sammon's nonlinear mapping an experimental study. Pattern Recognition, 1998, 31, 371-381.	5.1	49
47	Neural-network classifiers for automatic real-world aerial image recognition. Applied Optics, 1996, 35, 4598.	2.1	10
48	PHYSIOLOGICAL CHARACTERISTICS OF SPIRULINA PLATENSIS (CYANOBACTERIA) CULTURED AT ULTRAHIGH CELL DENSITIES1. Journal of Phycology, 1996, 32, 1066-1073.	1.0	84
49	A robust particle position controller for an electrodynamic chamber. Review of Scientific Instruments, 1993, 64, 3627-3633.	0.6	6
50	Exchange rates of O2 and CO2 between an algal culture and atmosphere. Water Research, 1987, 21, 25-34.	5.3	10
51	On line optimization of an arbitrary process by a personal microcomputer system: Application in algae ponds. Microprocessing and Microprogramming, 1985, 16, 319-323.	0.3	3
52	An automatic method for on-line estimation of the photosynthetic rate in open algal ponds. Biotechnology and Bioengineering, 1985, 27, 1136-1145.	1.7	21
53	Determination of total dissolved sulfide in the pH range 7.5 to 11.5 by ion selective electrodes. Analytical Chemistry, 1983, 55, 1731-1734.	3.2	15