Hugo Guterman

List of Publications by Year
in descending order

53	1,222	623188	552369
papers	citations	14	26
		h-index	g-index

53	53	53	1233
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A flat inclined modular photobioreactor for outdoor mass cultivation of photoautotrophs. , 2000, 51, 51-60.		233
2	A Probabilistic Approach to Spectral Graph Matching. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2013, 35, 18-27.	9.7	166
3	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
4	Electric Field Stimulation Integrated into Perfusion Bioreactor for Cardiac Tissue Engineering. Tissue Engineering - Part C: Methods, 2010, 16, 1417-1426.	1.1	87
5	PHYSIOLOGICAL CHARACTERISTICS OF SPIRULINA PLATENSIS (CYANOBACTERIA) CULTURED AT ULTRAHIGH CELL DENSITIES1. Journal of Phycology, 1996, 32, 1066-1073.	1.0	84
6	A comparative study of neural network based feature extraction paradigms. Pattern Recognition Letters, 1999, 20, 7-14.	2.6	70
7	Obstacle Avoidance Approaches for Autonomous Underwater Vehicle: Simulation and Experimental Results. IEEE Journal of Oceanic Engineering, 2016, 41, 882-892.	2.1	60
8	Improving Shape Retrieval by Spectral Matching and Meta Similarity. IEEE Transactions on Image Processing, 2010, 19, 1319-1327.	6.0	57
9	On pattern classification with Sammon's nonlinear mapping an experimental study. Pattern Recognition, 1998, 31, 371-381.	5.1	49
10	FPGA-Based Adaptive Speckle Suppression Filter for Underwater Imaging Sonar. IEEE Journal of Oceanic Engineering, 2011, 36, 646-657.	2.1	31
11	FTIR Microscopic Studies on Normal, Polyp, and Malignant Human Colonic Tissues. Subsurface Sensing Technologies and Applications, 2001, 2, 99-117.	0.9	29
12	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
13	Studies on acute human infections using FTIR microspectroscopy and cluster analysis. Biopolymers, 2004, 73, 494-502.	1.2	17
14	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
15	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
16	Exchange rates of O2 and CO2 between an algal culture and atmosphere. Water Research, 1987, 21, 25-34.	5.3	10
17	Neural-network classifiers for automatic real-world aerial image recognition. Applied Optics, 1996, 35, 4598.	2.1	10
18	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

#	Article	IF	Citations
19	Advanced Developments and Applications of the Fuzzy ARTMAP Neural Network in Pattern Classification. Studies in Computational Intelligence, 2008, , 77-107.	0.7	9
20	Correction of DVL Error Caused by Seafloor Gradient. IEEE Sensors Journal, 2020, 20, 11652-11659.	2.4	8
21	Frame level entropy based overlapped speech detection as a pre-processing stage for speaker diarization. , 2009, , .		7
22	RobIL â€" Israeli program for research and development of autonomous UGV: Performance evaluation methodology. , 2016, , .		7
23	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
24	A robust particle position controller for an electrodynamic chamber. Review of Scientific Instruments, 1993, 64, 3627-3633.	0.6	6
25	Navigation approaches for hovering autonomous underwater vehicles. , 2016, , .		6
26	Biologically Inspired Visual System Architecture for Object Recognition in Autonomous Systems. Algorithms, 2020, 13, 167.	1.2	6
27	Attitude Estimation of AUVs Based on a Network of Pressure Sensors. IEEE Sensors Journal, 2020, 20, 7988-7996.	2.4	6
28	Light source separation from image sequences of oscillating lights. , 2014, , .		5
29	IVO Robot Driver. , 2016, , .		5
30	Amplitude Modulated Video Camera - Light Separation in Dynamic Scenes. , 2016, , .		5
31	AUV real-time acoustic vertical plane obstacle detection and avoidance. , 2012, , .		4
32	Non-linear controller for non-linear model of hovering autonomous underwater vehicles. , 2014, , .		4
33	Verification of safety for autonomous unmanned ground vehicles. , 2014, , .		4
34	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
35	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
36	Comparative studies on cervical and colonic malignancies using FTIR microspectroscopy. , 2003, , .		2

#	Article	IF	Citations
37	Speech recognition using combined forward and backward Viterbi search. , 2010, , .		2
38	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
39	Tracking of Autonomous Underwater Vehicles using an Autonomous Surface Vehicle with ranger interrogator system. , 2016, , .		2
40	Geometrical Correction of Side-scan Sonar Images. , 2018, , .		2
41	Cooperation Between Autonomous Marine Platforms. , 2018, , .		2
42	Pure segment selection as speaker diarization post-processing. , 2008, , .		1
43	Visual predictive architecture for biologically inspired object recognition. , 2014, , .		1
44	Trajectory controller for Autonomous Surface Vehicle under sea waves. , 2015, , .		1
45	Performance boosting of a pedestrian detector using multiple cameras. , 2016, , .		1
46	Direct Adaptive Control Using a Neuro-evolutionary Algorithm for Vehicle Speed Control. , 2018, , .		1
47	H.264 encoder based 3D model acquisition and compression for aerial video. , 2010, , .		0
48	Comparison between normalizations for SVM &#x2014; GMM supervectors speaker verification. , 2010, , .		0
49	Trajectory tracking and formation controls for a UAV model that incorporates dynamic effects. , 2016, , .		0
50	Light invariant video camera â€" making faces appear the same under any light conditions. , 2016, , .		0
51	Visual reinforcement learning for object recognition in robotics. , 2016, , .		0
52	A multi model filter based on fuzzy logic for the navigation of an autonomous underwater vehicle, preliminary results. , 2017, , .		0
53	Automatic Identification and Switching of Multi-MRAC Systems. , 2019, , .		0