Miguel Arevalillo-HerrÃ¡ez

List of Publications by Year
in descending order

72 papers	1,465 citations	471509 17 h-index	345221 36 g-index
74 all docs	74 docs citations	74 times ranked	1422 citing authors

#	Article	IF	Citations
1	Fast two-dimensional phase-unwrapping algorithm based on sorting by reliability following a noncontinuous path. Applied Optics, 2002, 41, 7437.	2.1	591
2	A Robust and Simple Measure for Quality-Guided 2D Phase Unwrapping Algorithms. IEEE Transactions on Image Processing, 2016, 25, 2601-2609.	9.8	67
3	Fusing highly dimensional energy and connectivity features to identify affective states from EEG signals. Neurocomputing, 2017, 244, 81-89.	5.9	60
4	Robust, simple, and fast algorithm for phase unwrapping. Applied Optics, 1996, 35, 5847.	2.1	45
5	Combining similarity measures in content-based image retrieval. Pattern Recognition Letters, 2008, 29, 2174-2181.	4.2	38
6	Robust, fast, and effective two-dimensional automatic phase unwrapping algorithm based on image decomposition. Applied Optics, 2002, 41, 7445.	2.1	35
7	Distance-based relevance feedback using a hybrid interactive genetic algorithm for image retrieval. Applied Soft Computing Journal, 2011, 11, 1782-1791.	7.2	34
8	Fundamentals of the design and the operation of an intelligent tutoring system for the learning of the arithmetical and algebraic way of solving word problems. Computers and Education, 2013, 63, 119-130.	8.3	33
9	Agglomerative clustering-based approach for two-dimensional phase unwrapping. Applied Optics, 2005, 44, 1129.	2.1	30
10	A naive relevance feedback model for content-based image retrieval using multiple similarity measures. Pattern Recognition, 2010, 43, 619-629.	8.1	30
11	Combining Inter-Subject Modeling with a Subject-Based Data Transformation to Improve Affect Recognition from EEG Signals. Sensors, 2019, 19, 2999.	3.8	29
12	Robust three-dimensional best-path phase-unwrapping algorithm that avoids singularity loops. Applied Optics, 2009, 48, 4582.	2.1	26
13	Domain-specific knowledge representation and inference engine for an intelligent tutoring system. Knowledge-Based Systems, 2013, 49, 97-105.	7.1	26
14	BED: A New Data Set for EEG-Based Biometrics. IEEE Internet of Things Journal, 2021, 8, 12219-12230.	8.7	23
15	Emulating Human Supervision in an Intelligent Tutoring System for Arithmetical Problem Solving. IEEE Transactions on Learning Technologies, 2014, 7, 155-164.	3.2	22
16	On the Influence of Affect in EEG-Based Subject Identification. IEEE Transactions on Affective Computing, 2021, 12, 391-401.	8.3	21
17	Some insights into the impact of affective information when delivering feedback to students. Behaviour and Information Technology, 2018, 37, 1252-1263.	4.0	20
18	Scalable Virtual Network Video-Optimizer for Adaptive Real-Time Video Transmission in 5G Networks. IEEE Transactions on Network and Service Management, 2020, 17, 1068-1081.	4.9	19

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19	Accelerating fast Fourier transform and filtering operations in Fourier fringe analysis for accurate measurement of three-dimensional surfaces. Optics and Lasers in Engineering, 1999, 31, 135-145.	3.8	17
20	A relevance feedback CBIR algorithm based on fuzzy sets. Signal Processing: Image Communication, 2008, 23, 490-504.	3.2	16
21	Hybrid robust and fast algorithm for three-dimensional phase unwrapping. Applied Optics, 2009, 48, 6313.	2.1	15
22	Intensive scaffolding in an intelligent tutoring system for the learning of algebraic word problem solving. British Journal of Educational Technology, 2015, 46, 1189-1200.	6.3	15
23	Filtering of Spontaneous and Low Intensity Emotions in Educational Contexts. Lecture Notes in Computer Science, 2015, , 429-438.	1.3	15
24	Fast fringe pattern phase demodulation using FIR Hilbert transformers. Optics Communications, 2016, 359, 200-206.	2.1	13
25	An improved distance-based relevance feedback strategy for image retrieval. Image and Vision Computing, 2013, 31, 704-713.	4.5	12
26	Steered Response Power Localization of Acoustic Passband Signals. IEEE Signal Processing Letters, 2017, 24, 717-721.	3.6	12
27	Adding sensor-free intention-based affective support to an Intelligent Tutoring System. Knowledge-Based Systems, 2017, 132, 85-93.	7.1	12
28	A hybrid multi-objective optimization algorithm for content based image retrieval. Applied Soft Computing Journal, 2013, 13, 4358-4369.	7.2	11
29	Combining feature extraction and expansion to improve classification based similarity learning. Pattern Recognition Letters, 2017, 93, 95-103.	4.2	11
30	Three-dimensional phase unwrapping using the Hungarian algorithm. Optics Letters, 2009, 34, 2994.	3.3	10
31	A Linear Cost Algorithm to Compute the Discrete Gabor Transform. IEEE Transactions on Signal Processing, 2010, 58, 2667-2674.	5.3	10
32	Aiding phase unwrapping by increasing the number of residues in two-dimensional wrapped-phase distributions. Applied Optics, 2015, 54, 10073.	2.1	10
33	A spatial algorithm to reduce phase wraps from two dimensional signals in fringe projection profilometry. Optics and Lasers in Engineering, 2016, 82, 70-78.	3.8	9
34	Conquer the Net: An educational computer game to learn the basic configuration of networking components. Computer Applications in Engineering Education, 2012, 20, 72-77.	3.4	7
35	Classification Similarity Learning Using Feature-Based and Distance-Based Representations: A Comparative Study. Applied Artificial Intelligence, 2015, 29, 445-458.	3.2	7
36	Improving distance based image retrieval using non-dominated sorting genetic algorithm. Pattern Recognition Letters, 2015, 53, 109-117.	4.2	7

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37	On Incorporating Affective Support to an Intelligent Tutoring System: an Empirical Study. Revista Iberoamericana De Tecnologias Del Aprendizaje, 2018, 13, 63-69.	0.9	7
38	Clustering-based robust three-dimensional phase unwrapping algorithm. Applied Optics, 2010, 49, 1780.	2.1	6
39	Towards Psychologically based Personalised Modelling of Emotions Using Associative Classifiers. International Journal of Cognitive Informatics and Natural Intelligence, 2016, 10, 52-64.	0.4	6
40	Cognitive reasoning and inferences through psychologically based personalised modelling of emotions using associative classifiers. , 2014, , .		5
41	Impact evaluation of reactive assessment strategies to address social loafing by promoting student cooperation and encouraging mutual support. Innovations in Education and Teaching International, 2014, 51, 523-532.	2.5	5
42	Shifting of wrapped phase maps in the frequency domain using a rational number. Measurement Science and Technology, 2016, 27, 105003.	2.6	5
43	Single-channel EEG-based subject identification using visual stimuli. , 2021, , .		5
44	Domain Specific Knowledge Representation for an Intelligent Tutoring System to Teach Algebraic Reasoning. Lecture Notes in Computer Science, 2012, , 630-631.	1.3	5
45	Using intraâ€task flexibility on an intelligent tutoring system to promote arithmetic problemâ€solving proficiency. British Journal of Educational Technology, 2022, 53, 1976-1992.	6.3	5
46	A generalized finite difference method using CoatmÃ¨lec lattices. Computer Physics Communications, 2009, 180, 1125-1133.	7.5	4
47	Comparative Evaluation of Batch and Online Distance Metric Learning Approaches Based on Margin Maximization. , 2013, , .		4
48	Efficient Analysis and Synthesis Using a New Factorization of the Gabor Frame Matrix. IEEE Transactions on Signal Processing, 2018, 66, 4564-4573.	5.3	4
49	Image-Evoked Affect and its Impact on Eeg-Based Biometrics. , 2019, , .		4
50	Interactive Image Retrieval Using Smoothed Nearest Neighbor Estimates. Lecture Notes in Computer Science, 2010, , 708-717.	1.3	4
51	A Robust Wrap Reduction Algorithm for Fringe Projection Profilometry and Applications in Magnetic Resonance Imaging. IEEE Transactions on Image Processing, 2017, 26, 1452-1465.	9.8	4
52	An interactive evolutionary approach for content based image retrieval. , 2009, , .		3
53	Educational knowledge generation from administrative data. Educational Technology Research and Development, 2011, 59, 511-527.	2.8	3
54	Gui-driven intelligent tutoring system with affective support to help learning the algebraic method. , 2017, , .		3

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55	Eigenexpressions: Emotion Recognition Using Multiple Eigenspaces. Lecture Notes in Computer Science, 2013, , 758-765.	1.3	3
56	A NSGA Based Approach for Content Based Image Retrieval. Lecture Notes in Computer Science, 2013, , 359-366.	1.3	3
57	CombinaciÃ³n de cuestionarios simples y gamificados utilizando gestores de participaciÃ³n en el aula: experiencia y percepciÃ³n del alumnado. , 0, , .		3
58	A group-theory method to find stationary states in nonlinear discrete symmetry systems. Computer Physics Communications, 2010, 181, 35-42.	7.5	2
59	Designing supercontinuum spectra using Grid technology. , 2010, , .		2
60	Learning Similarity Scores by Using a Family of Distance Functions in Multiple Feature Spaces. International Journal of Pattern Recognition and Artificial Intelligence, 2017, 31, 1750027.	1.2	2
61	Combining Supervised and Unsupervised Learning to Discover Emotional Classes. , 2017, , .		2
62	Using System Dynamics to Model Student Performance in an Intelligent Tutoring System. , 2017, , .		2
63	Learning combined similarity measures from user data for image retrieval. , 2008, , .		1
64	A reconfigurable platform for evaluating the performance of QoS networks. Journal of Systems Architecture, 2010, 56, 191-207.	4.3	1
65	BIG-AFF. , 2017, , .		1
66	Class discovery from semi-structured EEG data for affective computing and personalisation. , 2017, , .		1
67	An Intra-Subject Approach Based on the Application of HMM to Predict Concentration in Educational Contexts from Nonintrusive Physiological Signals in Real-World Situations. Sensors, 2021, 21, 1777.	3.8	1
68	Game-based learning supported by audience response tools: game proposals and preliminary assessment. , 0, , .		1
69	<title>Treatment of nonfull-field images with the Fourier fringe analysis technique</title>. , 1997, , .		0
70	Data Analysis as a Tool for Optimizing Learning Management Systems. , 2009, , .		0
71	Passiveâ€"aggressive online distance metric learning and extensions. Progress in Artificial Intelligence, 2013, 2, 85-96.	2.4	0
72	Predicting human performance in interactive tasks by using dynamic models. , 2017, , .		0