Roberto Alejo

List of Publications by Citations

39 papers	366 citations	8 h-index	18 g-index
43 ext. papers	450 ext. citations	1.7 avg, IF	3.46 L-index

#	Paper	IF	Citations
39	Analysis of new techniques to obtain quality training sets. *Pattern Recognition Letters*, **2003**, 24, 1015-1022	4.7	123
38	A hybrid method to face class overlap and class imbalance on neural networks and multi-class scenarios. *Pattern Recognition Letters*, **2013**, 34, 380-388	4.7	48
37	Data Sampling Methods to Deal With the Big Data Multi-Class Imbalance Problem. *Applied Sciences (Switzerland)*, **2020**, 10, 1276	2.6	24
36	Combined Effects of Class Imbalance and Class Overlap on Instance-Based Classification. *Lecture Notes in Computer Science*, **2006**, 371-378	0.9	19
35	An Efficient Over-sampling Approach Based on Mean Square Error Back-propagation for Dealing with the Multi-class Imbalance Problem. *Neural Processing Letters*, **2015**, 42, 603-617	2.4	16
34	Improving the Performance of the RBF Neural Networks Trained with Imbalanced Samples **2007**, 162-169		16
33	DFT study of hydrogen storage on the metallic decoration of boron substitution on zeolite templated carbon vacancy. *International Journal of Hydrogen Energy*, **2020**, 45, 19505-19515	6.7	12
32	Neural networks to fit potential energy curves from asphaltene-asphaltene interaction data. *Fuel*, **2019**, 236, 1117-1127	7.1	9
31	When Overlapping Unexpectedly Alters the Class Imbalance Effects. *Lecture Notes in Computer Science*, **2007**, 499-506	0.9	8
30	A Selective Dynamic Sampling Back-Propagation Approach for Handling the Two-Class Imbalance Problem. *Applied Sciences (Switzerland)*, **2016**, 6, 200	2.6	8
29	Theoretical studies in the stability of vacancies in zeolite templated carbon for hydrogen storage. *International Journal of Hydrogen Energy*, **2019**, 44, 6437-6447	6.7	7
28	An Empirical Study for the Multi-class Imbalance Problem with Neural Networks. *Lecture Notes in Computer Science*, **2008**, 479-486	0.9	7
27	Making Accurate Credit Risk Predictions with Cost-Sensitive MLP Neural Networks. *Advances in Intelligent Systems and Computing*, **2013**, 1-8	0.4	6
26	An improved dynamic sampling back-propagation algorithm based on mean square error to face the multi-class imbalance problem. *Neural Computing and Applications*, **2017**, 28, 2843-2857	4.8	6
25	Performance evaluation of prototype selection algorithms for nearest neighbor classification		6
24	Edited Nearest Neighbor Rule for Improving Neural Networks Classifications. *Lecture Notes in Computer Science*, **2010**, 303-310	0.9	6
23	Performance Analysis of Deep Neural Networks for Classification of Gene-Expression Microarrays. *Lecture Notes in Computer Science*, **2018**, 105-115	0.9	5

22	Empirical Analysis of Assessments Metrics for Multi-class Imbalance Learning on the Back-Propagation Context. *Lecture Notes in Computer Science*, **2014**, 17-23	0.9	5
21	Back Propagation with Balanced MSE Cost Function and Nearest Neighbor Editing for Handling Class Overlap and Class Imbalance. *Lecture Notes in Computer Science*, **2011**, 199-206	0.9	4
20	Assessments Metrics for Multi-class Imbalance Learning: A Preliminary Study. *Lecture Notes in Computer Science*, **2013**, 335-343	0.9	4
19	Improving the Classification Accuracy of RBF and MLP Neural Networks Trained with Imbalanced Samples. *Lecture Notes in Computer Science*, **2006**, 464-471	0.9	4
18	**2013**,		3
17	Use of Ensemble Based on GA for Imbalance Problem. *Lecture Notes in Computer Science*, **2009**, 547-554	0.9	3
16	Deep Neural Network for Gender-Based Violence Detection on Twitter Messages. *Mathematics*, **2021**, 9, 807	2.3	3
15	Using Deep Learning to Classify Class Imbalanced Gene-Expression Microarrays Datasets. *Lecture Notes in Computer Science*, **2019**, 46-54	0.9	2
14	Addressing the Big Data Multi-class Imbalance Problem with Oversampling and Deep Learning Neural Networks. *Lecture Notes in Computer Science*, **2019**, 216-224	0.9	2
13	The Multi-Class Imbalance Problem: Cost Functions with Modular and Non-Modular Neural Networks. *Advances in Intelligent and Soft Computing*, **2009**, 421-431		2
12	A Modified Back-Propagation Algorithm to Deal with Severe Two-Class Imbalance Problems on Neural Networks. *Lecture Notes in Computer Science*, **2012**, 265-272	0.9	2
11	Bayesian Learning on Discrete Systems of Two Classes. *International Journal of Pattern Recognition and Artificial Intelligence*, **2018**, 32, 1860013	1.1	1
10	Cost-Sensitive Neural Networks and Editing Techniques for Imbalance Problems. *Lecture Notes in Computer Science*, **2010**, 180-188	0.9	1
9	Resampling Methods versus Cost Functions for Training an MLP in the Class Imbalance Context. *Lecture Notes in Computer Science*, **2011**, 19-26	0.9	1
8	Clustering Algorithms: An Application for Adsorption Kinetic Curves. *IEEE Latin America Transactions*, **2021**, 19, 507-514	0.7	1
7	Pedestrian Localization in a Video Sequence Using Motion Detection and Active Shape Models. *Applied Sciences (Switzerland)*, **2022**, 12, 5371	2.6	1
6	A Class-Incremental Learning Method Based on Preserving the Learned Feature Space for EEG-Based Emotion Recognition. *Mathematics*, **2022**, 10, 598	2.3	0
5	A Preliminary Study of SMOTE on Imbalanced Big Datasets When Dealing with Sparse and Dense High Dimensionality. *Lecture Notes in Computer Science*, **2022**, 46-55	0.9	0

4	On-line Learning With Reject Option. *IEEE Latin America Transactions*, **2018**, 16, 279-286	0.7
3	Comparative study of methods to obtain the number of hidden neurons of an auto-encoder in a high-dimensionality context. *IEEE Latin America Transactions*, **2020**, 18, 2196-2203	0.7
2	Deep Neural Network to Detect Gender Violence on Mexican Tweets. *Lecture Notes in Computer Science*, **2021**, 24-32	0.9
1	Analysing the Safe, Average and Border Samples on Two-Class Imbalance Problems in the Back-Propagation Domain. *Lecture Notes in Computer Science*, **2015**, 699-707	0.9