

# Alessandra Lumini

## List of Publications by Year in descending order

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Version: 2024-02-01

161  
papers

6,195  
citations

94433

37  
h-index

82547

72  
g-index

169  
all docs

169  
docs citations

169  
times ranked

4586  
citing authors

#	ARTICLE	IF	CITATIONS
1	High performing ensemble of convolutional neural networks for insect pest image detection. <i>Ecological Informatics</i> , 2022, 67, 101515.	5.2	45
2	Comparisons among different stochastic selections of activation layers for convolutional neural networks for health care. , 2022, , 151-164.		0
3	An Empirical Study on Ensemble of Segmentation Approaches. <i>Signals</i> , 2022, 3, 341-358.	1.9	12
4	Fractal Neural Network: A new ensemble of fractal geometry and convolutional neural networks for the classification of histology images. <i>Expert Systems With Applications</i> , 2021, 166, 114103.	7.6	22
5	Experiments of Image Classification Using Dissimilarity Spaces Built with Siamese Networks. <i>Sensors</i> , 2021, 21, 1573.	3.8	8
6	Postprocessing for Skin Detection. <i>Journal of Imaging</i> , 2021, 7, 95.	3.0	2
7	Towards a self-sufficient face verification system. <i>Expert Systems With Applications</i> , 2021, 174, 114734.	7.6	6
8	Closing the Performance Gap between Siamese Networks for Dissimilarity Image Classification and Convolutional Neural Networks. <i>Sensors</i> , 2021, 21, 5809.	3.8	2
9	Image orientation detection by ensembles of Stochastic CNNs. <i>Machine Learning With Applications</i> , 2021, 6, 100090.	4.4	5
10	Comparison of Different Image Data Augmentation Approaches. <i>Journal of Imaging</i> , 2021, 7, 254.	3.0	30
11	Deep Ensembles Based on Stochastic Activations for Semantic Segmentation. <i>Signals</i> , 2021, 2, 820-833.	1.9	3
12	Neonatal pain detection in videos using the iCOPEvid dataset and an ensemble of descriptors extracted from Gaussian of Local Descriptors. <i>Applied Computing and Informatics</i> , 2020, , .	5.9	18
13	iProStruct2D: Identifying protein structural classes by deep learning via 2D representations. <i>Expert Systems With Applications</i> , 2020, 142, 113019.	7.6	15
14	Animal Sound Classification Using Dissimilarity Spaces. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 8578.	2.5	14
15	Stochastic Selection of Activation Layers for Convolutional Neural Networks. <i>Sensors</i> , 2020, 20, 1626.	3.8	24
16	Spectrogram Classification Using Dissimilarity Space. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 4176.	2.5	20
17	Fair comparison of skin detection approaches on publicly available datasets. <i>Expert Systems With Applications</i> , 2020, 160, 113677.	7.6	22
18	Ensemble of Deep Learning Approaches for ATC Classification. <i>Smart Innovation, Systems and Technologies</i> , 2020, , 117-125.	0.6	5

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19	Convolutional Neural Networks for 3D Protein Classification. Intelligent Systems Reference Library, 2020, , 237-250.	1.2	0
20	Digital Recognition of Breast Cancer Using TakhisisNet. Advances in Medical Technologies and Clinical Practice Book Series, 2020, , 151-169.	0.3	0
21	Deep learning and transfer learning features for plankton classification. Ecological Informatics, 2019, 51, 33-43.	5.2	117
22	Face Detection Ensemble with Methods Using Depth Information to Filter False Positives. Sensors, 2019, 19, 5242.	3.8	6
23	Texture descriptors for representing feature vectors. Expert Systems With Applications, 2019, 122, 163-172.	7.6	3
24	Bioimage Classification with Handcrafted and Learned Features. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2019, 16, 874-885.	3.0	29
25	Convolutional Neural Networks for ATC Classification. Current Pharmaceutical Design, 2019, 24, 4007-4012.	1.9	29
26	Learning morphological operators for skin detection. Journal of Artificial Intelligence and Systems, 2019, 1, 60-76.	1.1	27
27	Incremental Learning Techniques Within a Self-updating Approach for Face Verification in Video-Surveillance. Lecture Notes in Computer Science, 2019, , 25-37.	1.3	2
28	Ensemble based on static classifier selection for automated diagnosis of Mild Cognitive Impairment. Journal of Neuroscience Methods, 2018, 302, 42-46.	2.5	27
29	Ensemble of texture descriptors and classifiers for face recognition. Applied Computing and Informatics, 2017, 13, 79-91.	5.9	21
30	Overview of the combination of biometric matchers. Information Fusion, 2017, 33, 71-85.	19.1	106
31	Ensemble of texture descriptors for face recognition obtained by varying feature transforms and preprocessing approaches. Applied Soft Computing Journal, 2017, 61, 8-16.	7.2	17
32	Ensembles of dense and dense sampling descriptors for the HEp-2 cells classification problem. Pattern Recognition Letters, 2016, 82, 28-35.	4.2	3
33	Multilayer descriptors for medical image classification. Computers in Biology and Medicine, 2016, 72, 239-247.	7.0	11
34	Weighted Rewardâ€Punishment Editing. Pattern Recognition Letters, 2016, 75, 48-54.	4.2	3
35	Combining visual and acoustic features for music genre classification. Expert Systems With Applications, 2016, 45, 108-117.	7.6	87
36	Toward a General-Purpose Heterogeneous Ensemble for Pattern Classification. Computational Intelligence and Neuroscience, 2015, 2015, 1-10.	1.7	21

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37	Combining biometric matchers by means of machine learning and statistical approaches. <i>Neurocomputing</i> , 2015, 149, 526-535.	5.9	21
38	An Empirical Study of Different Approaches for Protein Classification. <i>Scientific World Journal</i> , The, 2014, 2014, 1-17.	2.1	53
39	Introduction to Local Binary Patterns: New Variants and Applications. <i>Studies in Computational Intelligence</i> , 2014, , 1-13.	0.9	14
40	Ensemble of Local Phase Quantization Variants with Ternary Encoding. <i>Studies in Computational Intelligence</i> , 2014, , 177-188.	0.9	10
41	Ensemble of different local descriptors, codebook generation methods and subwindow configurations for building a reliable computer vision system. <i>Journal of King Saud University - Science</i> , 2014, 26, 89-100.	3.5	5
42	Prediction of protein structure classes by incorporating different protein descriptors into general Chou's pseudo amino acid composition. <i>Journal of Theoretical Biology</i> , 2014, 360, 109-116.	1.7	111
43	A set of descriptors for identifying the protein-drug interaction in cellular networking. <i>Journal of Theoretical Biology</i> , 2014, 359, 120-128.	1.7	22
44	Effective and precise face detection based on color and depth data. <i>Applied Computing and Informatics</i> , 2014, 10, 1-13.	5.9	24
45	Ensemble of shape descriptors for shape retrieval and classification. <i>International Journal of Advanced Intelligence Paradigms</i> , 2014, 6, 136.	0.3	10
46	An empirical study on the matrix-based protein representations and their combination with sequence-based approaches. <i>Amino Acids</i> , 2013, 44, 887-901.	2.7	20
47	Subcellular localization using fluorescence imagery: Utilizing ensemble classification with diverse feature extraction strategies and data balancing. <i>Applied Soft Computing Journal</i> , 2013, 13, 4231-4243.	7.2	22
48	SmartVisionApp: A framework for computer vision applications on mobile devices. <i>Expert Systems With Applications</i> , 2013, 40, 5884-5894.	7.6	8
49	Artificial intelligence techniques for embryo and oocyte classification. <i>Reproductive BioMedicine Online</i> , 2013, 26, 42-49.	2.4	95
50	Heterogeneous bag-of-features for object/scene recognition. <i>Applied Soft Computing Journal</i> , 2013, 13, 2171-2178.	7.2	27
51	Double committee adaboost. <i>Journal of King Saud University - Science</i> , 2013, 25, 29-37.	3.5	14
52	A user dependent multi-resolution approach for biometric data. <i>International Journal of Information Technology and Management</i> , 2012, 11, 112.	0.1	2
53	Combining multiple approaches for gene microarray classification. <i>Bioinformatics</i> , 2012, 28, 1151-1157.	4.1	42
54	Identifying Bacterial Virulent Proteins by Fusing a Set of Classifiers Based on Variants of Chou's Pseudo Amino Acid Composition and on Evolutionary Information. <i>IEEE/ACM Transactions on Computational Biology and Bioinformatics</i> , 2012, 9, 467-475.	3.0	156

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55	Combining Face and Eye Detectors in a High- Performance Face-Detection System. IEEE MultiMedia, 2012, 19, 20-27.	1.7	24
56	Local phase quantization descriptor for improving shape retrieval/classification. Pattern Recognition Letters, 2012, 33, 2254-2260.	4.2	25
57	Wavelet images and Chou's pseudo amino acid composition for protein classification. Amino Acids, 2012, 43, 657-665.	2.7	117
58	A classifier ensemble approach for the missing feature problem. Artificial Intelligence in Medicine, 2012, 55, 37-50.	6.5	40
59	Random interest regions for object recognition based on texture descriptors and bag of features. Expert Systems With Applications, 2012, 39, 973-977.	7.6	13
60	A very high performing system to discriminate tissues in mammograms as benign and malignant. Expert Systems With Applications, 2012, 39, 1968-1971.	7.6	31
61	Matrix representation in pattern classification. Expert Systems With Applications, 2012, 39, 3031-3036.	7.6	14
62	Survey on LBP based texture descriptors for image classification. Expert Systems With Applications, 2012, 39, 3634-3641.	7.6	230
63	A simple method for improving local binary patterns by considering non-uniform patterns. Pattern Recognition, 2012, 45, 3844-3852.	8.1	56
64	Ensemble of Neural Networks for Automated Cell Phenotype Image Classification. , 2012, , 793-816.		0
65	Biohashing applied to orientation-based minutia descriptor for secure fingerprint authentication system. Electronics Letters, 2011, 47, 851.	1.0	18
66	Artificial intelligence systems based on texture descriptors for vaccine development. Amino Acids, 2011, 40, 443-451.	2.7	7
67	Local Ternary Patterns from Three Orthogonal Planes for human action classification. Expert Systems With Applications, 2011, 38, 5125-5128.	7.6	38
68	Likelihood ratio based features for a trained biometric score fusion. Expert Systems With Applications, 2011, 38, 58-63.	7.6	25
69	Wavelet selection for disease classification by DNA microarray data. Expert Systems With Applications, 2011, 38, 990-995.	7.6	25
70	A new encoding technique for peptide classification. Expert Systems With Applications, 2011, 38, 3185-3191.	7.6	21
71	Combining different local binary pattern variants to boost performance. Expert Systems With Applications, 2011, 38, 6209-6216.	7.6	26
72	Texture descriptors for generic pattern classification problems. Expert Systems With Applications, 2011, 38, 9340-9345.	7.6	4

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73	Prototype reduction techniques: A comparison among different approaches. Expert Systems With Applications, 2011, 38, 11820-11828.	7.6	35
74	Combining local, regional and global matchers for a template protected on-line signature verification system. Expert Systems With Applications, 2010, 37, 3676-3684.	7.6	67
75	Advanced machine learning techniques for microarray spot quality classification. Neural Computing and Applications, 2010, 19, 471-475.	5.6	6
76	Coding of amino acids by texture descriptors. Artificial Intelligence in Medicine, 2010, 48, 43-50.	6.5	6
77	Local binary patterns variants as texture descriptors for medical image analysis. Artificial Intelligence in Medicine, 2010, 49, 117-125.	6.5	419
78	An evaluation of direct attacks using fake fingers generated from ISO templates. Pattern Recognition Letters, 2010, 31, 725-732.	4.2	106
79	Protein classification using texture descriptors extracted from the protein backbone image. Journal of Theoretical Biology, 2010, 264, 1024-1032.	1.7	24
80	High performance set of PseAAC and sequence based descriptors for protein classification. Journal of Theoretical Biology, 2010, 266, 1-10.	1.7	57
81	Orthogonal linear discriminant analysis and feature selection for micro-array data classification. Expert Systems With Applications, 2010, 37, 7132-7137.	7.6	9
82	A local approach based on a Local Binary Patterns variant texture descriptor for classifying pain states. Expert Systems With Applications, 2010, 37, 7888-7894.	7.6	102
83	Fusion of systems for automated cell phenotype image classification. Expert Systems With Applications, 2010, 37, 1556-1562.	7.6	17
84	Novel Features for Automated Cell Phenotype Image Classification. Advances in Experimental Medicine and Biology, 2010, 680, 207-213.	1.6	14
85	Data Mining Based on Intelligent Systems for Decision Support Systems in Healthcare. Studies in Computational Intelligence, 2010, , 45-65.	0.9	3
86	A Data Mining Approach for Predicting the Pregnancy Rate in Human Assisted Reproduction. Studies in Computational Intelligence, 2010, , 97-111.	0.9	5
87	Protein classification combining surface analysis and primary structure. Protein Engineering, Design and Selection, 2009, 22, 267-272.	2.1	11
88	Particle swarm optimization for prototype reduction. Neurocomputing, 2009, 72, 1092-1097.	5.9	63
89	An ensemble of reduced alphabets with protein encoding based on grouped weight for predicting DNA-binding proteins. Amino Acids, 2009, 36, 167-175.	2.7	24
90	Using ensemble of classifiers for predicting HIV protease cleavage sites in proteins. Amino Acids, 2009, 36, 409-416.	2.7	36

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91	A multi-matcher system based on knuckle-based features. <i>Neural Computing and Applications</i> , 2009, 18, 87-91.	5.6	34
92	Particle swarm optimization for ensembling generation for evidential k-nearest-neighbour classifier. <i>Neural Computing and Applications</i> , 2009, 18, 105-108.	5.6	14
93	Machine learning multi-classifiers for peptide classification. <i>Neural Computing and Applications</i> , 2009, 18, 185-192.	5.6	3
94	Fusion of color spaces for ear authentication. <i>Pattern Recognition</i> , 2009, 42, 1906-1913.	8.1	76
95	Genetic nearest feature plane. <i>Expert Systems With Applications</i> , 2009, 36, 838-843.	7.6	3
96	Ensemble of on-line signature matchers based on OverComplete feature generation. <i>Expert Systems With Applications</i> , 2009, 36, 5291-5296.	7.6	31
97	A supervised method to discriminate between impostors and genuine in biometry. <i>Expert Systems With Applications</i> , 2009, 36, 10401-10407.	7.6	21
98	Input Decimated Ensemble based on Neighborhood Preserving Embedding for spectrogram classification. <i>Expert Systems With Applications</i> , 2009, 36, 11257-11261.	7.6	3
99	Descriptors for image-based fingerprint matchers. <i>Expert Systems With Applications</i> , 2009, 36, 12414-12422.	7.6	60
100	An experimental comparison of ensemble of classifiers for bankruptcy prediction and credit scoring. <i>Expert Systems With Applications</i> , 2009, 36, 3028-3033.	7.6	228
101	A genetic encoding approach for learning methods for combining classifiers. <i>Expert Systems With Applications</i> , 2009, 36, 7510-7514.	7.6	16
102	An ensemble of support vector machines for predicting virulent proteins. <i>Expert Systems With Applications</i> , 2009, 36, 7458-7462.	7.6	23
103	Ensemble generation and feature selection for the identification of students with learning disabilities. <i>Expert Systems With Applications</i> , 2009, 36, 3896-3900.	7.6	26
104	Ensemble of multiple Palmprint representation. <i>Expert Systems With Applications</i> , 2009, 36, 4485-4490.	7.6	25
105	On selecting Gabor features for biometric authentication. <i>International Journal of Computer Applications in Technology</i> , 2009, 35, 23.	0.5	11
106	A Further Step Toward an Optimal Ensemble of Classifiers for Peptide Classification, a Case Study: HIV Protease. <i>Protein and Peptide Letters</i> , 2009, 16, 163-167.	0.9	31
107	Mixture of KL subspaces for relevance feedback. <i>Multimedia Tools and Applications</i> , 2008, 37, 189-209.	3.9	5
108	Cluster-Based Nearest-Neighbour Classifier and Its Application on the Lightning Classification. <i>Journal of Computer Science and Technology</i> , 2008, 23, 573-581.	1.5	1

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109	Combing ontologies and dipeptide composition for predicting DNA-binding proteins. <i>Amino Acids</i> , 2008, 34, 635-641.	2.7	31
110	Genetic programming for creating Chou's pseudo amino acid based features for submitochondria localization. <i>Amino Acids</i> , 2008, 34, 653-660.	2.7	178
111	An ensemble of support vector machines for predicting the membrane protein type directly from the amino acid sequence. <i>Amino Acids</i> , 2008, 35, 573-580.	2.7	33
112	Local binary patterns for a hybrid fingerprint matcher. <i>Pattern Recognition</i> , 2008, 41, 3461-3466.	8.1	176
113	Random subspace for an improved BioHashing for face authentication. <i>Pattern Recognition Letters</i> , 2008, 29, 295-300.	4.2	68
114	Generalized Needleman-Wunsch algorithm for the recognition of T-cell epitopes. <i>Expert Systems With Applications</i> , 2008, 35, 1463-1467.	7.6	7
115	Over-complete feature generation and feature selection for biometry. <i>Expert Systems With Applications</i> , 2008, 35, 2049-2055.	7.6	11
116	Advanced methods for two-class pattern recognition problem formulation for minutiae-based fingerprint verification. <i>Pattern Recognition Letters</i> , 2008, 29, 142-148.	4.2	14
117	A novel local on-line signature verification system. <i>Pattern Recognition Letters</i> , 2008, 29, 559-568.	4.2	60
118	Wavelet decomposition tree selection for palm and face authentication. <i>Pattern Recognition Letters</i> , 2008, 29, 343-353.	4.2	27
119	A multi-modal method based on the competitors of FVC2004 and on palm data combined with tokenised random numbers. <i>Pattern Recognition Letters</i> , 2008, 29, 1344-1350.	4.2	6
120	A genetic approach for building different alphabets for peptide and protein classification. <i>BMC Bioinformatics</i> , 2008, 9, 45.	2.6	34
121	A reliable method for cell phenotype image classification. <i>Artificial Intelligence in Medicine</i> , 2008, 43, 87-97.	6.5	60
122	Evolved Feature Weighting for Random Subspace Classifier. <i>IEEE Transactions on Neural Networks</i> , 2008, 19, 363-366.	4.2	24
123	Ensemble of Multiple Pedestrian Representations. <i>IEEE Transactions on Intelligent Transportation Systems</i> , 2008, 9, 365-369.	8.0	33
124	Fake fingertip generation from a minutiae template. , 2008, , .		15
125	Fingerprint Image Reconstruction from Standard Templates. <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , 2007, 29, 1489-1503.	13.9	238
126	A hybrid wavelet-based fingerprint matcher. <i>Pattern Recognition</i> , 2007, 40, 3146-3151.	8.1	38



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127	Ensemblator: An ensemble of classifiers for reliable classification of biological data. Pattern Recognition Letters, 2007, 28, 622-630.	4.2	42
128	RegionBoost learning for 2D+3D based face recognition. Pattern Recognition Letters, 2007, 28, 2063-2070.	4.2	29
129	An improved BioHashing for human authentication. Pattern Recognition, 2007, 40, 1057-1065.	8.1	275
130	A multi-expert approach for wavelet-based face detection. Pattern Recognition Letters, 2007, 28, 1541-1547.	4.2	5
131	MKL-tree: an index structure for high-dimensional vector spaces. Multimedia Systems, 2007, 12, 533-550.	4.7	4
132	A multi-matcher for ear authentication. Pattern Recognition Letters, 2007, 28, 2219-2226.	4.2	73
133	Two-class fingerprint matcher. Pattern Recognition, 2006, 39, 714-716.	8.1	32
134	Clustering techniques for protein surfaces. Pattern Recognition, 2006, 39, 2370-2382.	8.1	7
135	Detector of image orientation based on Borda Count. Pattern Recognition Letters, 2006, 27, 180-186.	4.2	39
136	Identifying splice-junction sequences by hierarchical multiclassifier. Pattern Recognition Letters, 2006, 27, 1390-1396.	4.2	8
137	FuzzyBagging: A novel ensemble of classifiers. Pattern Recognition, 2006, 39, 488-490.	8.1	29
138	A clustering method for automatic biometric template selection. Pattern Recognition, 2006, 39, 495-497.	8.1	53
139	An enhanced subspace method for face recognition. Pattern Recognition Letters, 2006, 27, 76-84.	4.2	15
140	Machine learning for HIV-1 protease cleavage site prediction. Pattern Recognition Letters, 2006, 27, 1537-1544.	4.2	18
141	Human authentication featuring signatures and tokenised random numbers. Neurocomputing, 2006, 69, 858-861.	5.9	11
142	Advanced methods for two-class problem formulation for on-line signature verification. Neurocomputing, 2006, 69, 854-857.	5.9	48
143	A reliable method for HIV-1 protease cleavage site prediction. Neurocomputing, 2006, 69, 838-841.	5.9	9
144	A novel method for fingerprint verification that approaches the problem as a two-class pattern recognition problem. Neurocomputing, 2006, 69, 846-849.	5.9	3

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145	An advanced multi-modal method for human authentication featuring biometrics data and tokenised random numbers. Neurocomputing, 2006, 69, 1706-1710.	5.9	16
146	Random Bands: A novel ensemble for fingerprint matching. Neurocomputing, 2006, 69, 1702-1705.	5.9	5
147	An experimental comparison of ensemble of classifiers for biometric data. Neurocomputing, 2006, 69, 1670-1673.	5.9	11
148	An approach for improving face recognition in presence of inaccurate detection. Neurocomputing, 2006, 69, 1678-1682.	5.9	0
149	MppS: An ensemble of support vector machine based on multiple physicochemical properties of amino acids. Neurocomputing, 2006, 69, 1688-1690.	5.9	41
150	Empirical tests on BioHashing. Neurocomputing, 2006, 69, 2390-2395.	5.9	40
151	A deformation-invariant image-based fingerprint verification system. Neurocomputing, 2006, 69, 2336-2339.	5.9	7
152	An ensemble of K-local hyperplanes for predicting protein-protein interactions. Bioinformatics, 2006, 22, 1207-1210.	4.1	157
153	Ensemble of Parzen window classifiers for on-line signature verification. Neurocomputing, 2005, 68, 217-224.	5.9	57
154	Support Vector Machines for HIV-1 Protease Cleavage Site Prediction. Lecture Notes in Computer Science, 2005, , 413-420.	1.3	0
155	Bulk Loading the MKL-Tree. Lecture Notes in Computer Science, 2003, , 119-128.	1.3	0
156	MKL-Tree: A Hierarchical Data Structure for Indexing Multidimensional Data. Lecture Notes in Computer Science, 2002, , 914-924.	1.3	3
157	<title>Blind watermarking system for digital images in the wavelet domain</title> . , 2000, 3971, 524.		6
158	Fingerprint classification by directional image partitioning. IEEE Transactions on Pattern Analysis and Machine Intelligence, 1999, 21, 402-421.	13.9	244
159	Continuous versus exclusive classification for fingerprint retrieval. Pattern Recognition Letters, 1997, 18, 1027-1034.	4.2	86
160	Learning in Fingerprints. , 0, , 339-364.		0
161	Ensemble of Neural Networks for Automated Cell Phenotype Image Classification. Advances in Bioinformatics and Biomedical Engineering Book Series, 0, , 234-259.	0.4	1