

# Michel Verleysen

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/9272265/michel-verleysen-publications-by-citations.pdf>

**Version:** 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

123  
papers

4,185  
citations

32  
h-index

62  
g-index

132  
ext. papers

4,987  
ext. citations

3.7  
avg, IF

5.97  
L-index

#	Paper	IF	Citations
123	Unique in the Crowd: The privacy bounds of human mobility. <i>Scientific Reports</i> , <b>2013</b> , 3, 1376	4.9	731
122	Classification in the presence of label noise: a survey. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , <b>2014</b> , 25, 845-69	10.3	683
121	Quality assessment of dimensionality reduction: Rank-based criteria. <i>Neurocomputing</i> , <b>2009</b> , 72, 1431-1443	4.4	162
120	. <i>IEEE Transactions on Knowledge and Data Engineering</i> , <b>2007</b> , 19, 873-886	4.2	155
119	Weighted conditional random fields for supervised interpatient heartbeat classification. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2012</b> , 59, 241-7	5	126
118	K nearest neighbours with mutual information for simultaneous classification and missing data imputation. <i>Neurocomputing</i> , <b>2009</b> , 72, 1483-1493	5.4	126
117	Nonlinear projection with curvilinear distances: Isomap versus curvilinear distance analysis. <i>Neurocomputing</i> , <b>2004</b> , 57, 49-76	5.4	112
116	Resampling methods for parameter-free and robust feature selection with mutual information. <i>Neurocomputing</i> , <b>2007</b> , 70, 1276-1288	5.4	95
115	Mutual information-based feature selection for multilabel classification. <i>Neurocomputing</i> , <b>2013</b> , 122, 148-155	5.4	88
114	. <i>IEEE Transactions on Intelligent Transportation Systems</i> , <b>2017</b> , 18, 712-728	6.1	87
113	On the Kernel Widths in Radial-Basis Function Networks. <i>Neural Processing Letters</i> , <b>2003</b> , 18, 139-154	2.4	75
112	Representation of functional data in neural networks. <i>Neurocomputing</i> , <b>2005</b> , 64, 183-210	5.4	71
111	Robust Bayesian clustering. <i>Neural Networks</i> , <b>2007</b> , 20, 129-38	9.1	69
110	Parameter-insensitive kernel in extreme learning for non-linear support vector regression. <i>Neurocomputing</i> , <b>2011</b> , 74, 2526-2531	5.4	68
109	Multivariate statistics process control for dimensionality reduction in structural assessment. <i>Mechanical Systems and Signal Processing</i> , <b>2008</b> , 22, 155-171	7.8	60
108	Feature selection for nonlinear models with extreme learning machines. <i>Neurocomputing</i> , <b>2013</b> , 102, 111-124	5.4	58
107	Nonlinear dimensionality reduction of data manifolds with essential loops. <i>Neurocomputing</i> , <b>2005</b> , 67, 29-53	5.4	57

106	Type 1 and 2 mixtures of Kullback-Leibler divergences as cost functions in dimensionality reduction based on similarity preservation. <i>Neurocomputing</i> , <b>2013</b> , 112, 92-108	5.4	54
105	A graph Laplacian based approach to semi-supervised feature selection for regression problems. <i>Neurocomputing</i> , <b>2013</b> , 121, 5-13	5.4	48
104	Scale-independent quality criteria for dimensionality reduction. <i>Pattern Recognition Letters</i> , <b>2010</b> , 31, 2248-2257	4.7	48
103	Feature selection with missing data using mutual information estimators. <i>Neurocomputing</i> , <b>2012</b> , 90, 3-11	5.4	46
102	Comparison of some chemometric tools for metabonomics biomarker identification. <i>Chemometrics and Intelligent Laboratory Systems</i> , <b>2008</b> , 91, 54-66	3.8	45
101	DD-HDS: A method for visualization and exploration of high-dimensional data. <i>IEEE Transactions on Neural Networks</i> , <b>2007</b> , 18, 1265-79		44
100	Mixtures of robust probabilistic principal component analyzers. <i>Neurocomputing</i> , <b>2008</b> , 71, 1274-1282	5.4	43
99	Feature Selection for Multi-label Classification Problems. <i>Lecture Notes in Computer Science</i> , <b>2011</b> , 9-16	0.9	42
98	Is mutual information adequate for feature selection in regression?. <i>Neural Networks</i> , <b>2013</b> , 48, 1-7	9.1	40
97	Information-theoretic feature selection for functional data classification. <i>Neurocomputing</i> , <b>2009</b> , 72, 3580-3589	5.4	40
96	Time series forecasting: Obtaining long term trends with self-organizing maps. <i>Pattern Recognition Letters</i> , <b>2005</b> , 26, 1795-1808	4.7	40
95	Multi-scale similarities in stochastic neighbour embedding: Reducing dimensionality while preserving both local and global structure. <i>Neurocomputing</i> , <b>2015</b> , 169, 246-261	5.4	38
94	Robust probabilistic projections <b>2006</b> ,		36
93	Fast selection of spectral variables with B-spline compression. <i>Chemometrics and Intelligent Laboratory Systems</i> , <b>2007</b> , 86, 208-218	3.8	35
92	Clustering Patterns of Urban Built-up Areas with Curves of Fractal Scaling Behaviour. <i>Environment and Planning B: Planning and Design</i> , <b>2010</b> , 37, 942-954		33
91	Time series prediction competition: The CATS benchmark. <i>Neurocomputing</i> , <b>2007</b> , 70, 2325-2329	5.4	31
90	Distance estimation in numerical data sets with missing values. <i>Information Sciences</i> , <b>2013</b> , 240, 115-128	7.7	29
89	On the use of self-organizing maps to accelerate vector quantization. <i>Neurocomputing</i> , <b>2004</b> , 56, 187-203	3.4	26

88	Statistical treatment of 2D NMR COSY spectra in metabolomics: data preparation, clustering-based evaluation of the Metabolomic Informative Content and comparison with 1H-NMR. <i>Metabolomics</i> , <b>2015</b> , 11, 1756-1768	4.7	24
87	Theoretical and empirical study on the potential inadequacy of mutual information for feature selection in classification. <i>Neurocomputing</i> , <b>2013</b> , 112, 64-78	5.4	24
86	Residual variance estimation in machine learning. <i>Neurocomputing</i> , <b>2009</b> , 72, 3692-3703	5.4	22
85	A minimum-range approach to blind extraction of bounded sources. <i>IEEE Transactions on Neural Networks</i> , <b>2007</b> , 18, 809-22		21
84	Benchmarking of Document Image Analysis Tasks for Palm Leaf Manuscripts from Southeast Asia. <i>Journal of Imaging</i> , <b>2018</b> , 4, 43	3.1	18
83	<b>2014</b> ,		17
82	Weighted SVMs and Feature Relevance Assessment in Supervised Heart Beat Classification. <i>Communications in Computer and Information Science</i> , <b>2011</b> , 212-223	0.3	17
81	On the entropy minimization of a linear mixture of variables for source separation. <i>Signal Processing</i> , <b>2005</b> , 85, 1029-1044	4.4	16
80	Advances in Feature Selection with Mutual Information. <i>Lecture Notes in Computer Science</i> , <b>2009</b> , 52-69	0.9	16
79	Estimating mutual information for feature selection in the presence of label noise. <i>Computational Statistics and Data Analysis</i> , <b>2014</b> , 71, 832-848	1.6	15
78	Unfolding preprocessing for meaningful time series clustering. <i>Neural Networks</i> , <b>2006</b> , 19, 877-88	9.1	15
77	Short Review of Dimensionality Reduction Methods Based on Stochastic Neighbour Embedding. <i>Advances in Intelligent Systems and Computing</i> , <b>2014</b> , 65-74	0.4	15
76	Fault Prediction in Aircraft Engines Using Self-Organizing Maps. <i>Lecture Notes in Computer Science</i> , <b>2009</b> , 37-44	0.9	15
75	A Mutual Information estimator for continuous and discrete variables applied to Feature Selection and Classification problems. <i>International Journal of Computational Intelligence Systems</i> , <b>2016</b> , 9, 726-733	3.4	14
74	Dimension reduction of technical indicators for the prediction of financial time series - Application to the BEL20 Market Index. <i>European Journal of Economic and Social Systems</i> , <b>2001</b> , 15, 31-48		13
73	Kernel-based dimensionality reduction using Renyi's Entropy measures of similarity. <i>Neurocomputing</i> , <b>2017</b> , 222, 36-46	5.4	12
72	Two key properties of dimensionality reduction methods <b>2014</b> ,		12
71	Unsupervised dimensionality reduction: Overview and recent advances <b>2010</b> ,		12

70	. <i>IEEE Transactions on Information Theory</i> , <b>2007</b> , 53, 1030-1042	2.8	12
69	Double quantization of the regressor space for long-term time series prediction: method and proof of stability. <i>Neural Networks</i> , <b>2004</b> , 17, 1169-81	9.1	12
68	Aircraft Engine Health Monitoring Using Self-Organizing Maps. <i>Lecture Notes in Computer Science</i> , <b>2010</b> , 405-417	0.9	12
67	Shift-invariant similarities circumvent distance concentration in stochastic neighbor embedding and variants. <i>Procedia Computer Science</i> , <b>2011</b> , 4, 538-547	1.6	11
66	EEG feature selection using mutual information and support vector machine: A comparative analysis. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2010</b> , 2010, 4946-9	0.9	11
65	On the Risk of Using Rényi's Entropy for Blind Source Separation. <i>IEEE Transactions on Signal Processing</i> , <b>2008</b> , 56, 4611-4620	4.8	11
64	High-dimensional delay selection for regression models with mutual information and distance-to-diagonal criteria. <i>Neurocomputing</i> , <b>2007</b> , 70, 1265-1275	5.4	11
63	Forecasting the CATS benchmark with the Double Vector Quantization method. <i>Neurocomputing</i> , <b>2007</b> , 70, 2400-2409	5.4	10
62	A New Khmer Palm Leaf Manuscript Dataset for Document Analysis and Recognition <b>2017</b> ,		9
61	Modelling the quality of enantiomeric separations using Mutual Information as an alternative variable selection technique. <i>Analytica Chimica Acta</i> , <b>2007</b> , 602, 37-46	6.6	9
60	Nonlinear Dimensionality Reduction With Missing Data Using Parametric Multiple Imputations. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , <b>2019</b> , 30, 1166-1179	10.3	9
59	Reinforced Extreme Learning Machines for Fast Robust Regression in the Presence of Outliers. <i>IEEE Transactions on Cybernetics</i> , <b>2016</b> , 46, 3351-3363	10.2	8
58	Prediction of visual perceptions with artificial neural networks in a visual prosthesis for the blind. <i>Artificial Intelligence in Medicine</i> , <b>2004</b> , 32, 183-94	7.4	8
57	Feature Selection with Mutual Information for Uncertain Data. <i>Lecture Notes in Computer Science</i> , <b>2011</b> , 330-341	0.9	8
56	Character and Text Recognition of Khmer Historical Palm Leaf Manuscripts <b>2018</b> ,		8
55	Nonlinear Projection with the Isotop Method. <i>Lecture Notes in Computer Science</i> , <b>2002</b> , 933-938	0.9	8
54	Collaborative filtering with interlaced generalized linear models. <i>Neurocomputing</i> , <b>2008</b> , 71, 1300-1310	5.4	7
53	A Comparative Study of Various Probability Density Estimation Methods for Data Analysis. <i>International Journal of Computational Intelligence Systems</i> , <b>2008</b> , 1, 188-201	3.4	7

52	Graph Laplacian for Semi-supervised Feature Selection in Regression Problems. <i>Lecture Notes in Computer Science</i> , <b>2011</b> , 248-255	0.9	7
51	Dynamics of the perception and EEG signals triggered by tonic warm and cool stimulation. <i>PLoS ONE</i> , <b>2020</b> , 15, e0231698	3.7	6
50	Improving projection-based data analysis by feature space transformations <b>2013</b> ,		6
49	Mode estimation in high-dimensional spaces with flat-top kernels: Application to image denoising. <i>Neurocomputing</i> , <b>2011</b> , 74, 1402-1410	5.4	6
48	A principled approach to image denoising with similarity kernels involving patches. <i>Neurocomputing</i> , <b>2010</b> , 73, 1199-1209	5.4	6
47	Label Noise-Tolerant Hidden Markov Models for Segmentation: Application to ECGs. <i>Lecture Notes in Computer Science</i> , <b>2011</b> , 455-470	0.9	6
46	Line Segmentation Approach for Ancient Palm Leaf Manuscripts Using Competitive Learning Algorithm <b>2016</b> ,		6
45	The delta test: The 1-NN estimator as a feature selection criterion <b>2014</b> ,		5
44	Nonlinear data projection on non-Euclidean manifolds with controlled trade-off between trustworthiness and continuity. <i>Neurocomputing</i> , <b>2009</b> , 72, 1444-1454	5.4	5
43	LASSO multi-objective learning algorithm for feature selection. <i>Soft Computing</i> , <b>2020</b> , 24, 13209-13217	3.5	5
42	Choosing the Metric: A Simple Model Approach. <i>Studies in Computational Intelligence</i> , <b>2011</b> , 97-115	0.8	5
41	Aircraft Engine Fleet Monitoring Using Self-Organizing Maps and Edit Distance. <i>Lecture Notes in Computer Science</i> , <b>2011</b> , 298-307	0.9	5
40	A Performance Evaluation of Mutual Information Estimators for Multivariate Feature Selection. <i>Advances in Intelligent Systems and Computing</i> , <b>2013</b> , 51-63	0.4	5
39	Nonlinear Dimensionality Reduction for Visualization. <i>Lecture Notes in Computer Science</i> , <b>2013</b> , 617-622	0.9	5
38	ICFHR 2018 Competition On Document Image Analysis Tasks for Southeast Asian Palm Leaf Manuscripts <b>2018</b> ,		5
37	Dimensionality reduction for EEG classification using Mutual Information and SVM <b>2011</b> ,		4
36	A Least Absolute Bound Approach to ICA - Application to the MLSP 2006 Competition. <i>IEEE International Workshop on Machine Learning for Signal Processing</i> , <b>2006</b> ,		4
35	Multi-Objective Semi-Supervised Feature Selection and Model Selection Based on Pearson's Correlation Coefficient. <i>Lecture Notes in Computer Science</i> , <b>2010</b> , 509-516	0.9	4

34	On the Role and Impact of the Metaparameters in t-distributed Stochastic Neighbor Embedding <b>2010</b> , 337-346		4
33	Minimum Support ICA Using Order Statistics. Part I: Quasi-range Based Support Estimation. <i>Lecture Notes in Computer Science</i> , <b>2006</b> , 262-269	0.9	4
32	Combining strong sparsity and competitive predictive power with the L-sOPLS approach for biomarker discovery in metabolomics. <i>Metabolomics</i> , <b>2017</b> , 13, 1	4.7	3
31	Improving individual predictions using social networks assortativity <b>2017</b> ,		3
30	Incremental classification of objects in scenes: Application to the delineation of images. <i>Neurocomputing</i> , <b>2015</b> , 152, 45-57	5.4	3
29	Dimensionality reduction by rank preservation <b>2010</b> ,		3
28	Fast Multiscale Neighbor Embedding. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , <b>2020</b> , PP,	10.3	3
27	Is the General Form of Renyi's Entropy a Contrast for Source Separation? <b>2007</b> , 129-136		3
26	Improving the Robustness to Outliers of Mixtures of Probabilistic PCAs <b>2008</b> , 527-535		3
25	A CMOS/SOI Single-input PWM Discriminator for Low-voltage Body-implanted Applications. <i>VLSI Design</i> , <b>2002</b> , 15, 469-476		3
24	Semi-supervised relevance index for feature selection. <i>Neural Computing and Applications</i> , <b>2019</b> , 31, 989-997	4.9	3
23	Inference of node attributes from social network assortativity. <i>Neural Computing and Applications</i> , <b>2020</b> , 32, 18023-18043	4.8	3
22	About Filter Criteria for Feature Selection in Regression. <i>Lecture Notes in Computer Science</i> , <b>2019</b> , 579-590	5.0	2
21	Multi-step-ahead forecasting using kernel adaptive filtering <b>2016</b> ,		2
20	Spatial Filtering of EEG Signals to Identify Periodic Brain Activity Patterns. <i>Lecture Notes in Computer Science</i> , <b>2018</b> , 524-533	0.9	2
19	Line segmentation for grayscale text images of khmer palm leaf manuscripts <b>2017</b> ,		2
18	Feature ranking in changing environments where new features are introduced <b>2015</b> ,		2
17	Placing spline knots in neural networks using splines as activation functions. <i>Neurocomputing</i> , <b>1997</b> , 17, 159-166	5.4	2

16	Blind source separation based on endpoint estimation with application to the MLSP 2006 data competition. <i>Neurocomputing</i> , <b>2008</b> , 72, 47-56	5.4	2
15	Filtering-Free Blind Separation of Correlated Images. <i>Lecture Notes in Computer Science</i> , <b>2005</b> , 1091-1099.	0.9	2
14	Minimum Support ICA Using Order Statistics. Part II: Performance Analysis. <i>Lecture Notes in Computer Science</i> , <b>2006</b> , 270-277	0.9	2
13	Simbed: Similarity-Based Embedding. <i>Lecture Notes in Computer Science</i> , <b>2009</b> , 95-104	0.9	2
12	Trajectory Clustering for Vibration Detection in Aircraft Engines. <i>Lecture Notes in Computer Science</i> , <b>2010</b> , 362-375	0.9	2
11	A Functional Approach to Variable Selection in Spectrometric Problems. <i>Lecture Notes in Computer Science</i> , <b>2006</b> , 11-20	0.9	2
10	Pointwise probability reinforcements for robust statistical inference. <i>Neural Networks</i> , <b>2014</b> , 50, 124-41	9.1	1
9	An Unsupervised Gaussian Mixture Classification Mechanism Based on Statistical Learning Analysis <b>2008</b> ,		1
8	Zero-Entropy Minimization for Blind Extraction of Bounded Sources (BEBS). <i>Lecture Notes in Computer Science</i> , <b>2006</b> , 747-754	0.9	1
7	Information-Theoretic Feature Selection for the Classification of Hysteresis Curves <b>2007</b> , 522-529		1
6	Reading grid for feature selection relevance criteria in regression. <i>Pattern Recognition Letters</i> , <b>2021</b> , 148, 92-99	4.7	0
5	Smoothness Bias in Relevance Estimators for Feature Selection in Regression. <i>IFIP Advances in Information and Communication Technology</i> , <b>2018</b> , 285-294	0.5	
4	An Alternative to Center-Based Clustering Algorithm Via Statistical Learning Analysis. <i>Lecture Notes in Computer Science</i> , <b>2008</b> , 693-700	0.9	
3	Linear Periodic Discriminant Analysis of Multidimensional Signals. <i>Lecture Notes in Computer Science</i> , <b>2018</b> , 476-487	0.9	
2	Comparison Between Filter Criteria for Feature Selection in Regression. <i>Lecture Notes in Computer Science</i> , <b>2019</b> , 59-71	0.9	
1	Segmentation with Incremental Classifiers. <i>Lecture Notes in Computer Science</i> , <b>2013</b> , 81-90	0.9	