

CITATION REPORT

List of articles citing

Learning the parts of objects by non-negative matrix factorization

DOI: 10.1038/44565

Nature, 1999, 401, 788-91.

Source: <https://exaly.com/paper-pdf/30426158/citation-report.pdf>

Version: 2024-04-26

This report has been generated based on the citations recorded by exaly.com for the above article. 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.

#	Paper	IF	Citations
2299	.		
2298	.		
2297	IEEE Guide for Test Procedures for Synchronous Machines Including Acceptance and Performance Testing and Parameter Determination for Dynamic Analysis.		1
2296	Identifying Nanoscale StructureFunction Relationships Using Multimodal Atomic Force Microscopy, Dimensionality Reduction and Regression Techniques.		
2295	Nonstatistical UV Fragmentation of Gas-Phase Peptides Reveals Conformers and Their Structural Features.		
2294	Quantification of Analyte Concentration in the Single Molecule Regime Using Convolutional Neural Networks.		
2293	Analyzing non-negative matrix factorization for image classification.		22
2292	Investigation on constrained matrix factorization for hyperspectral image analysis.		
2291	A 16-Kilobit CCD Memory. 1976,		
2290	The foundations of a provably secure operating system (PSOS). 1979,		22
2289	Electron Beam Observability and Controlability for the Debugging of Integrated Circuits. 1986,		
2288	A Unified Approach for a TV Graphics Animation Suite. 1991, 100, 691-694		1
2287	IEEE Power Electronics Society Information. 1996, 11, c3-c3		
2286	Design and Simulation of Four Stroke Engines. 1999,		84
2285	Changing LeadersEducational Hearts. 1999, 27, 431-440		2
2284	HIV. See a pocket, block it. <i>Nature</i> , 1999, 401, 759	50.4	5
2283	Computational neuroscience. Think positive to find parts. <i>Nature</i> , 1999, 401, 759-60	50.4	20

2282	Pattern recognition: Historical perspective and future directions. 2000 , 11, 101-116		16
2281	Digital selection and analogue amplification coexist in a cortex-inspired silicon circuit. <i>Nature</i> , 2000 , 405, 947-51	50.4	675
2280	Induction of neurogenesis in the neocortex of adult mice. <i>Nature</i> , 2000 , 405, 951-5	50.4	1030
2279	Correction: Digital selection and analogue amplification coexist in a cortex-inspired silicon circuit. <i>Nature</i> , 2000 , 408, 1012-1012	50.4	8
2278	Decomposition algorithms for analysing brain signals.		1
2277	Ensemble Learning for Blind Image Separation and Deconvolution. 2000 , 123-141		66
2276	Nonlinear dimensionality reduction by locally linear embedding. 2000 , 290, 2323-6		9190
2275	Developmental origins of adult phonology: the interplay between phonetic emergents and the evolutionary adaptations of sound patterns. 2000 , 57, 297-314		22
2274	A combined latent class and trait model for the analysis and visualization of discrete data. 2001 , 23, 859-872		34
2273	A two-layer sparse coding model learns simple and complex cell receptive fields and topography from natural images. 2001 , 41, 2413-23		169
2272	Dimensionality reduction using non-negative matrix factorization for information retrieval.		20
2271	Improvement of non-negative matrix factorization based language model using exponential models.		2
2270	Discriminant basis for object classification.		1
2269	Introduction. 2001 , 1-70		1
2268	Preface. 2001 , vii-x		
2267	ICA, graphical models and variational methods. 2001 , 95-112		5
2266	Nonlinear ICA. 2001 , 113-134		6
2265	Separation of non-stationary natural signals. 2001 , 135-157		12

2264	Separation of non-stationary sources: algorithms and performance. 2001 , 158-180	3
2263	Blind source separation by sparse decomposition in a signal dictionary. 2001 , 181-208	29
2262	Image processing methods using ICA mixture models. 2001 , 234-253	2
2261	Latent class and trait models for data classification and visualisation. 2001 , 254-279	1
2260	Particle filters for non-stationary ICA. 2001 , 280-298	3
2259	ICA: model order selection and dynamic source models. 2001 , 299-314	8
2258	References. 2001 , 315-335	
2257	Low-cost, polarisation independent, tapered photodiodes with bandwidth over 50 GHz. 2001 , 37, 516	13
2256	Adaptive minimum-BER linear multiuser detection for CDMA signals in multipath channels with 4-QAM constellation. 2001 , 37, 721	
2255	Fast ICA by a fixed-point algorithm that maximizes non-Gaussianity. 2001 , 71-94	8
2254	Ensemble Learning for blind source separation. 2001 , 209-233	30
2253	Biologically inspired computation and learning in Sensorimotor Systems. 2001 ,	1
2252	Positive tensor factorization. 2001 , 22, 1255-1261	97
2251	Face Detection Using Multimodal Density Models. 2001 , 84, 264-284	13
2250	General strategy for hierarchical decomposition of multivariate time series: implications for temporal lobe seizures. 2001 , 29, 1135-49	21
2249	An outline of brain function. 2001 , 12, 61-74	27
2248	Face Image Analysis by Unsupervised Learning. 2001 ,	54
2247	Use of non-negative matrix factorization for language model adaptation in a lecture transcription task.	8

2246	Sparse PCA. Extracting multi-scale structure from data.	7
2245	Minimum-Entropy Data Clustering Using Reversible Jump Markov Chain Monte Carlo. 2001 , 103-110	3
2244	A weighted non-negative matrix factorization for local representations.	15
2243	Similarity templates for detection and recognition.	17
2242	Learning spatially localized, parts-based representation.	276
2241	Learning representative local features for face detection.	2
2240	PRICAI 2002: Trends in Artificial Intelligence. 2002 ,	1
2239	The MERL SpokenQuery information retrieval system a system for retrieving pertinent documents from a spoken query.	2
2238	Elements of Computational Statistics. 2002 ,	1
2237	Gender Classification of Human Faces. 2002 , 491-500	33
2236	Noninvasive estimation of cerebral blood flow using image-derived carotid input function in $H_2^{15}O$ dynamic PET.	1
2235	Language model adaptation through topic decomposition and MDI estimation. 2002 ,	1
2234	Light field mapping. 2002 , 21, 447-456	89
2233	Rectified subspace analysis of dynamic positron emission tomography. 2002 ,	
2232	Topics in 0-1 data. 2002 ,	3
2231	Mean-field approaches to independent component analysis. 2002 , 14, 889-918	112
2230	EMPATH: a neural network that categorizes facial expressions. 2002 , 14, 1158-73	158
2229	Selectively grouping neurons in recurrent networks of lateral inhibition. 2002 , 14, 2627-46	53

2228	Light field mapping. 2002 ,	33
2227	Application of Bayesian decomposition for analysing microarray data. 2002 , 18, 566-75	68
2226	Bayesian Decomposition Analysis of Gene Expression in Yeast Deletion Mutants. 2002 , 105-122	6
2225	Local non-negative matrix factorization as a visual representation.	5
2224	Determining a suitable metric when using non-negative matrix factorization.	7
2223	Conditions for nonnegative independent component analysis. 2002 , 9, 177-180	68
2222	Face recognition by independent component analysis. 2002 , 13, 1450-64	1140
2221	Role of Featural and Configural Information in Familiar and Unfamiliar Face Recognition. 2002 , 643-650	52
2220	Non-negative sparse coding.	332
2219	4Approximate realization of hidden Markov chains.	6
2218	Non-negative matrix factorization of dynamic images in nuclear medicine.	
2217	Blind identification problems with constraints.	
2216	Summarizing video using non-negative similarity matrix factorization.	33
2215	Color categories revealed by non-negative matrix factorization of Munsell color spectra. 2002 , 42, 559-63	51
2214	A multi-layer sparse coding network learns contour coding from natural images. 2002 , 42, 1593-605	101
2213	Acquisition of visual shape primitives. 2002 , 42, 2105-22	5
2212	Low-Rank Approximations with Sparse Factors I: Basic Algorithms and Error Analysis. 2002 , 23, 706-727	40
2211	Dispersionless interleave filter based on transversal form optical filter. 2002 , 38, 1121	6

2210	Latent variable models for the topographic organisation of discrete and strictly positive data. 2002 , 48, 185-198	10
2209	Sparse coding of natural contours. 2002 , 44-46, 459-466	2
2208	Learning the parts of objects by auto-association. 2002 , 15, 285-95	8
2207	Visual features of intermediate complexity and their use in classification. 2002 , 5, 682-7	408
2206	Fast Extraction of Semantic Features from a Latent Semantic Indexed Text Corpus. 2002 , 15, 31-43	3
2205	Spatio-Temporal Data Mining for Typhoon Image Collection. 2002 , 19, 25-41	22
2204	Ockham's Razor at Work: Modeling of the "Homunculus". 2002 , 3, 187-220	2
2203	The mystery of structure and function of sensory processing areas of the neocortex: a resolution. 2002 , 13, 187-205	11
2202	The Problem of Sparse Image Coding. 2002 , 17, 89-108	17
2201	Shaping of receptive fields in the visual cortex during retinal maturation. 2003 , 15, 307-20	1
2200	On Advances in Statistical Modeling of Natural Images. 2003 , 18, 17-33	308
2199	Modeling receptive fields with non-negative sparse coding. 2003 , 52-54, 547-552	65
2198	Interactive Rendering with Bidirectional Texture Functions. 2003 , 22, 463-472	35
2197	Modeling the adaptive visual system: a survey of principled approaches. 2003 , 16, 1353-71	4
2196	Intrinsic generalization analysis of low dimensional representations. 2003 , 16, 537-45	3
2195	Evaluation of distance metrics for recognition based on non-negative matrix factorization. 2003 , 24, 1599-1605	26
2194	Introducing a weighted non-negative matrix factorization for image classification. 2003 , 24, 2447-2454	145
2193	N-division output coding method applied to face recognition. 2003 , 24, 3115-3123	1

2192	Recognizing faces with PCA and ICA. 2003 , 91, 115-137	292
2191	Combinations of muscle synergies in the construction of a natural motor behavior. 2003 , 6, 300-8	821
2190	Data decomposition using independent component analysis with prior constraints. 2003 , 36, 1813-1825	9
2189	The Neuroethology of Vocal Communication: Perception and Cognition. 2003 , 324-386	7
2188	Recognition from EMG Signals by an Evolutional Method and Non-negative Matrix Factorization. 2003 , 594-600	3
2187	Information processing, dimensionality reduction and reinforcement learning in the basal ganglia. 2003 , 71, 439-73	284
2186	Bubbles: a unifying framework for low-level statistical properties of natural image sequences. 2003 , 20, 1237-52	43
2185	Computational decomposition of molecular signatures based on blind source separation of non-negative dependent sources with NMF. 2003 ,	1
2184	Non-negative matrix factorization for polyphonic music transcription.	267
2183	A constrained non-negative matrix factorization in information retrieval.	0
2182	Document clustering based on non-negative matrix factorization. 2003 ,	728
2181	Subsystem identification through dimensionality reduction of large-scale gene expression data. 2003 , 13, 1706-18	152
2180	Acoustic Communication. 2003 ,	17
2179	Cortical integration of bottom-up, top-down and horizontal information in biological motion recognition.	2
2178	Discovering hierarchical speech features using convolutional non-negative matrix factorization.	15
2177	Eigenviews for object recognition in multispectral imaging systems.	12
2176	NMF vs ICA for face recognition.	5
2175	Time varying images sparse coding network model based on simple cell in visual cortex.	

2174	Matrix dimensionality reduction for mining Web logs.	
2173	Supervised and Unsupervised Feature Selection for Inferring Social Nature of Telephone Conversations from Their Content. 2008 , 1, 378-384	29
2172	Semantic rank reduction of music audio.	4
2171	Minimally-supervised classification using multiple observation sets. 2003 ,	3
2170	Non-uniform light field compression: a geometry-based method for image processing. 2003 ,	
2169	Computed simultaneous imaging of multiple biomarkers.	1
2168	Algorithms for nonnegative independent component analysis. 2003 , 14, 534-43	154
2167	Sensitive pattern discovery with 'fuzzy' alignments of distantly related proteins. 2003 , 19 Suppl 1, i130-7	37
2166	The Analysis of Gene Expression Data. 2003 ,	92
2165	Clustering appearances of objects under varying illumination conditions.	197
2164	Non-negative matrix factorization for visual coding.	3
2163	Recovery of constituent spectra using non-negative matrix factorization. 2003 ,	40
2162	Iterative signature algorithm for the analysis of large-scale gene expression data. 2003 , 67, 031902	233
2161	SUPPORT VECTOR LEARNING FOR GENDER CLASSIFICATION USING AUDIO AND VISUAL CUES. 2003 , 17, 417-439	19
2160	Learning optimized features for hierarchical models of invariant object recognition. 2003 , 15, 1559-88	117
2159	Sparse representation of images using alternating linear programming. 2003 ,	2
2158	.	
2157	Blind inversion in nonlinear space-variant imaging using Cauchy machine. 2003 ,	3

2156	Hybrid method of holistic and analytic approach for face recognition. 2003,	
2155	Font Classification Using NMF. 2003, 470-477	2
2154	Slice sampling. 2003, 31, 705	903
2153	Bayesian Decomposition. 2003, 388-408	5
2152	Face recognition with non-negative matrix factorization. 2003,	2
2151	Statistical Symmetric Shape from Shading for 3D Structure Recovery of Faces. 2004, 99-113	36
2150	Nonnegative Matrix Factorization for EEG Signal Classification. 2004, 470-475	1
2149	ICA Based Face Recognition Robust to Partial Occlusions and Local Distortions. 2004, 147-154	1
2148	Energy expenditure rate in level and uphill treadmill walking determined from empirical models and foot inertial sensing data. 2004, 40, 95	8
2147	Application of Bayesian Non-negative Source Separation to Mixture Analysis in Spectroscopy. 2004,	6
2146	Greedy learning of multiple objects in images using robust statistics and factorial learning. 2004, 16, 1039-62	33
2145	Beyond ICA: robust sparse signal representations.	1
2144	Analysis of sparse representation and blind source separation. 2004, 16, 1193-234	215
2143	Computed simultaneous imaging of multiple functional biomarkers.	
2142	3D Face Processing. 2004,	
2141	An object-extracting approach based on non-negative matrix factorization.	
2140	A Bayesian method for positive source separation.	6
2139	Blind source separation and sparse component analysis of overcomplete mixtures.	17

2138	Application of non-negative and local non negative matrix factorization to facial expression recognition. 2004,	55
2137	Color channel encoding with NMF for face recognition.	25
2136	A FastICA Algorithm for Non-negative Independent Component Analysis. 2004, 1-8	9
2135	Efficient DOA estimation method employing unitary improved polynomial rooting.	1
2134	Support vector machine with local summation kernel for robust face recognition. 2004,	18
2133	Profiling program and user behaviors for anomaly intrusion detection based on non-negative matrix factorization. 2004,	5
2132	Adaptive RLS Implementation of Non-negative PCA Algorithm for Blind Source Separation. 2004, 761-767	
2131	Face Recognition Based on Locally Salient ICA Information. 2004, 1-9	4
2130	Image fusion based on nonnegative matrix factorization.	1
2129	Metagenes and molecular pattern discovery using matrix factorization. 2004, 101, 4164-9	1178
2128	Nonnegative deconvolution for time of arrival estimation.	1
2127	Blind separation of positive sources by globally convergent gradient search. 2004, 16, 1811-25	53
2126	Latent Variable Models for Probabilistic Graph Clustering. 2004,	
2125	Document clustering via adaptive subspace iteration. 2004,	69
2124	Hebbian learning and development. 2004, 7, 141-8	81
2123	Relative gradient speeding up additive updates for nonnegative matrix factorization. 2004, 57, 493-499	5
2122	Competitive spiking and indirect entropy minimization of rate code: efficient search for hidden components. 2004, 98, 407-16	
2121	Mining for associations between text and brain activation in a functional neuroimaging database. 2004, 2, 369-80	37

2120	Obtaining profiles based on localized non-negative matrix factorization. 2004 , 9, 580-584	
2119	Spectral spaces and color spaces. 2004 , 29, 29-37	33
2118	Learning sparse features for classification by mixture models. 2004 , 25, 155-161	14
2117	Sequential EM learning for subspace analysis. 2004 , 25, 1559-1567	4
2116	Improving non-negative matrix factorizations through structured initialization. 2004 , 37, 2217-2232	118
2115	Non-negative matrix factorization based methods for object recognition. 2004 , 25, 893-897	71
2114	On reduced rank nonnegative matrix factorization for symmetric nonnegative matrices. 2004 , 393, 107-126	42
2113	Nonnegative matrix factorization for rapid recovery of constituent spectra in magnetic resonance chemical shift imaging of the brain. 2004 , 23, 1453-65	117
2112	Volatile metabolic monitoring of glycemic status in diabetes using electronic olfaction. 2004 , 6, 534-44	36
2111	Non-negative component parts of sound for classification.	
2110	.	5
2109	A new sparse image representation algorithm applied to facial expression recognition.	33
2108	Face Recognition Using Wavelet Transform and Non-negative Matrix Factorization. 2004 , 192-202	3
2107	Multiresolution hierarchical blind recovery of biochemical markers of brain cancer in MRSI.	
2106	A "nonnegative PCA" algorithm for independent component analysis. 2004 , 15, 66-76	78
2105	Modeling & Analysis. 2004 , 22, e1393-e1900	1
2104	Sparse coding and NMF.	98
2103	Document clustering by concept factorization. 2004 ,	122

2102	Pattern Recognition. 2004,	8
2101	.	153
2100	Independence or non-negativity: constraints for sensory coding. 2004, 1269, 38-41	
2099	Non-negative Matrix Factor Deconvolution; Extraction of Multiple Sound Sources from Monophonic Inputs. 2004, 494-499	121
2098	Blind primary colorant spectral separation combining ICA and POCS non-negative matrix factorization.	
2097	Detecting brain activations by constrained non-negative matrix factorization from task-related BOLD fMRI. 2004,	3
2096	Blind source separation: neural net principles and applications. 2004, 5439, 1	1
2095	Blind recovery of biochemical markers of brain cancer in MRSI. 2004,	1
2094	Fast Unsupervised Greedy Learning of Multiple Objects and Parts from Video.	4
2093	Automatic Text Extraction for Content-Based Image Indexing. 2004, 497-507	2
2092	Log-scaling watermark detection in digital audio watermarking.	8
2091	An Algorithm for Fast Pattern Recognition with Random Spikes. 2004, 399-406	
2090	NMF-Based Approach to Font Classification of Printed English Alphabets for Document Image Understanding. 2005, 354-364	2
2089	Detection of goal events in soccer videos. 2005,	2
2088	Feature Extraction Methods for Real-Time Face Detection and Classification. 2005, 2005, 1	4
2087	Determining Patterns in Neural Activity for Reaching Movements Using Nonnegative Matrix Factorization. 2005, 2005, 1	9
2086	PLANT DATA VISUALIZATION USING NON-NEGATIVE MATRIX FACTORIZATION. 2005, 38, 73-78	0
2085	Non-orthogonal binary subspace and its applications in computer vision. 2005,	2

2084	Clustered cNMF for fMRI data analysis. 2005,	1
2083	Image Feature Extraction Based on an Extended Non-negative Sparse Coding Neural Network Model. 2005, 807-812	
2082	Non-negative matrix factorization and its application in blind sparse source separation with less sensors than sources. 2005, 24, 695-706	1
2081	.	3
2080	Blind signal separation: mathematical foundations of ICA, sparse component analysis, and other techniques. 2005,	
2079	An algorithm for unsupervised unmixing of hyperspectral imagery using positive matrix factorization. 2005,	0
2078	Blind source separation: new tools for extraction of source signals and denoising. 2005,	6
2077	Extended Sparse Nonnegative Matrix Factorization. 2005, 249-256	6
2076	Nonnegative features of spectro-temporal sounds for classification. 2005, 26, 1327-1336	47
2075	Two subclasses of lung squamous cell carcinoma with different gene expression profiles and prognosis identified by hierarchical clustering and non-negative matrix factorization. 2005, 24, 7105-13	80
2074	Theme discovery from gene lists for identification and viewing of multiple functional groups. 2005, 6, 162	42
2073	Statistical model of natural stimuli predicts edge-like pooling of spatial frequency channels in V2. 2005, 6, 12	19
2072	Prediction of care class by local additive reference to prototypical examples. 2005, 9, 502-7	4
2071	Survey of sparse and non-sparse methods in source separation. 2005, 15, 18-33	100
2070	Feature extraction for nearest neighbor classification: Application to gender recognition. 2005, 20, 561-576	0
2069	Degenerate coding in neural systems. 2005, 191, 995-1010	41
2068	Fusion of visible and infrared imagery for night color vision. 2005, 26, 191-196	59
2067	An ensemble-based method for linear feature extraction for two-class problems. 2005, 8, 227-237	12

2066	Email Surveillance Using Non-negative Matrix Factorization. 2005 , 11, 249-264	66
2065	Non-negative Matrix Factorizations Based Spontaneous Electroencephalographic Signals Classification Using Back Propagation Feedback Neural Networks. 2005 , 731-736	2
2064	Learning quantifiable associations via principal sparse non-negative matrix factorization. 2005 , 9, 603-620	1
2063	. 2005 ,	86
2062	Face Recognition Using Fisher Non-negative Matrix Factorization with Sparseness Constraints. 2005 , 112-117	14
2061	Bilinear sparse coding for invariant vision. 2005 , 17, 47-73	48
2060	Shared and specific muscle synergies in natural motor behaviors. 2005 , 102, 3076-81	432
2059	Improving molecular cancer class discovery through sparse non-negative matrix factorization. 2005 , 21, 3970-5	218
2058	What do students know?. 2005 ,	12
2057	.	1
2056	An initial evaluation of automated organization for digital library browsing. 2005 ,	10
2055	Variable latent semantic indexing. 2005 ,	3
2054	Coevolutionary feature synthesized EM algorithm for image retrieval. 2005 ,	6
2053	Discriminant NMFfaces for Frontal Face Verification.	1
2052	Multi-Frame Sparse Feature Extraction for Lip-Reading.	
2051	Combining multiple clusterings by soft correspondence.	15
2050	On Low-level Cognitive Components of Speech.	1
2049	Separation of factor images for blood flow estimation in positron emission tomography using ensemble independent component analysis.	

2048	Oracle Data Mining. 2005 , 1315-1329	10
2047	Sorted locally confined non-negative matrix factorization in face verification.	0
2046	FONT CLASSIFICATION USING NMF WITH HIERARCHICAL CLUSTERING. 2005 , 19, 755-773	2
2045	Coordination of locomotion with voluntary movements in humans. 2005 , 25, 7238-53	302
2044	NON-NEGATIVE MATRIX FACTORIZATION FRAMEWORK FOR FACE RECOGNITION. 2005 , 19, 495-511	68
2043	A unifying approach to hard and probabilistic clustering. 2005 ,	63
2042	Relation between PLSA and NMF and implications. 2005 ,	111
2041	Non-negative matrix factorization algorithms modeling noise distributions within the exponential family. 2005 , 2005, 4990-3	17
2040	On the Equivalence of Nonnegative Matrix Factorization and Spectral Clustering. 2005 ,	405
2039	Central and sensory contributions to the activation and organization of muscle synergies during natural motor behaviors. 2005 , 25, 6419-34	303
2038	Natural image matting with non-negative matrix factorization. 2005 ,	
2037	Extraction of frame-difference features based on PCA and ICA for lip-reading.	2
2036	A limited set of muscle synergies for force control during a postural task. 2005 , 93, 609-13	474
2035	Image Segmentation by Unsupervised Sparse Clustering. 2005 ,	
2034	A variational Bayesian method for rectified factor analysis.	
2033	Blind decomposition of mixed pixels using constrained non-negative matrix factorization.	2
2032	Hybridizing Sparse Component Analysis with Genetic Algorithms for Blind Source Separation. 2005 , 137-148	3
2031	Mining the posterior cingulate: segregation between memory and pain components. 2005 , 27, 520-32	127

2030	Effective representation using ICA for face recognition robust to local distortion and partial occlusion. 2005 , 27, 1977-81	126
2029	Face recognition using face-ARG matching. 2005 , 27, 1982-8	53
2028	Locally linear discriminant analysis for multimodally distributed classes for face recognition with a single model image. 2005 , 27, 318-327	192
2027	Two-way clustering of gene expression profiles by sparse matrix factorization.	5
2026	Non-negative source separation using the maximum likelihood approach. 2005 ,	4
2025	Are External Face Features Useful for Automatic Face Classification?.	9
2024	.	0
2023	Comparison of linear and non-linear data projection techniques in recognizing universal facial expressions.	3
2022	Learning non-negative sparse image codes by convex programming. 2005 ,	9
2021	Non-Negative Matrix Factorization with Orthogonality Constraints for Chemical Agent Detection in Raman Spectra.	2
2020	Muscle Synergies Robustly Control Forces for Balance Control.	
2019	Enforcing sparsity, shift-invariance and positivity in a bayesian model of polyphonic piano music. 2005 ,	1
2018	Co-clustering by block value decomposition. 2005 ,	93
2017	Lighting normalization with generic intrinsic illumination subspace for face recognition. 2005 ,	7
2016	Non-negative source separation: range of admissible solutions and conditions for the uniqueness of the solution.	19
2015	Sparse component analysis and blind source separation of underdetermined mixtures. 2005 , 16, 992-6	211
2014	Robust $L_{1/2}$ norm factorization in the presence of outliers and missing data by alternative convex programming.	21
2013	Non-negative matrix factorizations of spontaneous electroencephalographic signals for classification. 2005 , 2005, 2790-3	1

2012	Modeling Decisions for Artificial Intelligence. 2005,	1
2011	Sparse image coding using a 3D non-negative tensor factorization. 2005,	93
2010	Energy Minimization Methods in Computer Vision and Pattern Recognition. 2005,	2
2009	Projective Nonnegative Matrix Factorization for Image Compression and Feature Extraction. 2005, 333-342	65
2008	Genomic analysis of metabolic pathway gene expression in mice. 2005, 6, R59	58
2007	Computer Vision [ECCV 2006]. 2006,	35
2006	On a Sparse Component Analysis Approach to Blind Source Separation. 2006, 765-772	2
2005	Tree Cluster of Text Data by NMF Based Neural Network. 2006,	
2004	Adaptive Spatially Variant Optimization of a Temporal Spline Basis for Dynamic PET Reconstruction. 2006,	1
2003	The Relationships Among Various Nonnegative Matrix Factorization Methods for Clustering. 2006,	113
2002	Ear Recognition using Improved Non-Negative Matrix Factorization. 2006,	16
2001	Unsupervised Unmixing of Hyperspectral Imagery. 2006,	2
2000	New Algorithms for Non-Negative Matrix Factorization in Applications to Blind Source Separation.	59
1999	Non-Negative Matrix Factorization for Note Onset Detection of Audio Signals. 2006,	4
1998	Blind Separation of Positive Dependent Sources by Non-Negative Least-Correlated Component Analysis. 2006,	7
1997	Convulsive Non-Negative Matrix Factorisation with a Sparseness Constraint. 2006,	35
1996	Muscle Synergies for Motor Control. 449-465	4
1995	Secure Copyright Protection of Digital Images Using Nonnegative Matrix Factorization. 2006,	2

1994	Motor patterns in human walking and running. 2006 , 95, 3426-37	501
1993	Nonsmooth nonnegative matrix factorization (nsNMF). 2006 , 28, 403-15	246
1992	Shapeme histogram projection and matching for partial object recognition. 2006 , 28, 568-77	28
1991	Bayesian regularization and nonnegative deconvolution for room impulse response estimation. 2006 , 54, 839-847	25
1990	Low-complexity equalization of time-varying channels with precoding. 2006 , 54, 3642-3648	5
1989	Reconstruction of reflectance spectra using robust nonnegative matrix factorization. 2006 , 54, 3637-3642	48
1988	Separation of Non-Negative Mixture of Non-Negative Sources Using a Bayesian Approach and MCMC Sampling. 2006 , 54, 4133-4145	114
1987	Occlusion Invariant Face Recognition Using Selective LNMF Basis Images. 2006 , 120-129	5
1986	Design of vast DOF artificial muscle actuators with a cellular array structure and its application to a five-fingered robotic hand.	1
1985	Machine learning for detection and diagnosis of disease. 2006 , 8, 537-65	197
1984	Discrete Component Analysis. 2006 , 1-33	36
1983	Nonnegative Matrix Factorization for Motor Imagery EEG Classification. 2006 , 250-259	12
1982	Orthogonal nonnegative matrix t-factorizations for clustering. 2006 ,	508
1981	Sequential activation of muscle synergies during locomotion in the intact cat as revealed by cluster analysis and direct decomposition. 2006 , 96, 1991-2010	118
1980	FACE MODELING BY INFORMATION MAXIMIZATION. 2006 , 219-253	
1979	Time-frequency decomposition based on information. 2006 , 6313, 210	
1978	A Biologically Inspired Shape Representation Model Based on Part Decomposition.	
1977	In-Place Learning for Positional and Scale Invariance.	

1976	Fast Nonnegative Matrix Factorization and Its Application for Protein Fold Recognition. 2006 , 2006, 1	14
1975	Spectral unmixing with nonnegative matrix factorization. 2006 ,	1
1974	Adaptive smoothing for subpixel target detection in hyperspectral imaging. 2006 ,	
1973	Unsupervised unmixing of hyperspectral imagery using the constrained positive matrix factorization. 2006 ,	1
1972	ADVANCES AND NEW DIRECTIONS IN PLANT-WIDE CONTROLLER PERFORMANCE ASSESSMENT. 2006 , 39, 29-36	8
1971	Model Order Selection and Cue Combination for Image Segmentation.	24
1970	Learning from Incomplete Ratings Using Non-negative Matrix Factorization. 2006 ,	147
1969	A comparison of algorithms to compute the positive matrix factorization and their application to unsupervised unmixing. 2006 , 6233, 786	
1968	Matrix factorization algorithms for the identification of muscle synergies: evaluation on simulated and experimental data sets. 2006 , 95, 2199-212	479
1967	Sound Classification and Similarity. 2006 , 59-102	
1966	Local feature analysis: a statistical theory for reproducible essential dynamics of large macromolecules. 2006 , 64, 391-403	20
1965	Supervised locality pursuit embedding for pattern classification. 2006 , 24, 819-826	10
1964	Application of non-negative matrix factorization combined with Fisher's linear discriminant analysis for classification of olive oil excitation-emission fluorescence spectra. 2006 , 81, 94-106	36
1963	Bayesian analysis of spectral mixture data using Markov Chain Monte Carlo Methods. 2006 , 81, 137-148	45
1962	Single frame blind image deconvolution by non-negative sparse matrix factorization. 2006 , 266, 456-464	5
1961	NMF, LNMF, and DNMF modeling of neural receptive fields involved in human facial expression perception. 2006 , 17, 958-969	20
1960	Nonnegative matrix factorization for spectral data analysis. 2006 , 416, 29-47	405
1959	Nonnegative matrix factorization and I-divergence alternating minimization. 2006 , 416, 270-287	40

1958	On the use of sparse signal decomposition in the analysis of multi-channel surface electromyograms. 2006 , 86, 603-623	19
1957	Spectral feature projections that maximize Shannon mutual information with class labels. 2006 , 39, 1241-1252	48
1956	Exploiting discriminant information in nonnegative matrix factorization with application to frontal face verification. 2006 , 17, 683-95	224
1955	Unsupervised Learning of Image Manifolds by Semidefinite Programming. 2006 , 70, 77-90	369
1954	Learning Sparse Overcomplete Codes for Images. 2006 , 45, 97-110	23
1953	A New Two-Level Associative Memory for Efficient Pattern Restoration. 2006 , 25, 1-16	7
1952	Three-dimensional view-invariant face recognition using a hierarchical pose-normalization strategy. 2006 , 17, 309-325	2
1951	Image segmentation by unsupervised sparse clustering. 2006 , 27, 1650-1664	16
1950	Nonnegative matrix factorization and its applications in pattern recognition. 2006 , 51, 7-18	55
1949	Validation of an efficient non-negative matrix factorization method and its preliminary application in Central California. 2006 , 40, 1991-2001	2
1948	Off-line diagnostic analyses of a three-dimensional PM model using two matrix factorization methods. 2006 , 40, 5759-5767	2
1947	The oscillatory dynamic link matcher for spiking-neuron-based pattern recognition. 2006 , 69, 1837-1849	6
1946	LS-NMF: a modified non-negative matrix factorization algorithm utilizing uncertainty estimates. 2006 , 7, 175	62
1945	A literature-based similarity metric for biological processes. 2006 , 7, 363	8
1944	bioNMF: a versatile tool for non-negative matrix factorization in biology. 2006 , 7, 366	62
1943	Discovering semantic features in the literature: a foundation for building functional associations. 2006 , 7, 41	55
1942	Biclustering of gene expression data by Non-smooth Non-negative Matrix Factorization. 2006 , 7, 78	120
1941	Probabilistic topic decomposition of an eighteenth-century American newspaper. 2006 , 57, 753-767	70

1940	.	
1939	NMF-based Watermarking Scheme for Multimedia Protection. 2006,	2
1938	Evaluation of Distance Measures for NMF-based Face Recognition. 2006,	3
1937	Discriminant analysis using nonnegative matrix factorization for nonparametric multiclass classification.	
1936	Ensemble Learning (EL) Independent Component Analysis (ICA) Approach to Derive Blood Input Function from FDG-PET Images in Small Animal. 2006,	2
1935	.	1
1934	Collaborative prediction using ensembles of Maximum Margin Matrix Factorizations. 2006,	32
1933	The rate adapting poisson model for information retrieval and object recognition. 2006,	46
1932	Latent semantic analysis for multiple-type interrelated data objects. 2006,	35
1931	Spectral clustering for multi-type relational data. 2006,	126
1930	POXO: a web-enabled tool series to discover transcription factor binding sites. 2006, 34, W534-40	10
1929	Similarity of Semantic Relations. 2006, 32, 379-416	150
1928	Feature diversity in cluster ensembles for robust document clustering. 2006,	9
1927	All-frequency relighting of glossy objects. 2006, 25, 293-318	28
1926	Extracting unrecognized gene relationships from the biomedical literature via matrix factorizations using a priori knowledge of gene relationships. 2006,	3
1925	Processing of facial identity and expression: a psychophysical, physiological, and computational perspective. 2006, 156, 321-43	30
1924	Relevance feedback based on non-negative matrix factorisation for image retrieval. 2006, 153, 436	3
1923	Query Based Summarization Using Non-negative Matrix Factorization. 2006, 84-89	16

1922	Multilayer nonnegative matrix factorisation. 2006 , 42, 947	68
1921	How behavioral constraints may determine optimal sensory representations. 2006 , 4, e387	51
1920	HiRes--a tool for comprehensive assessment and interpretation of metabolomic data. 2006 , 22, 2562-4	36
1919	A Modified Non-negative Matrix Factorization Algorithm for Face Recognition. 2006 ,	13
1918	Pattern Recognition in Bioinformatics. 2006 ,	
1917	Sparse representations for the cocktail party problem. 2006 , 26, 7477-90	33
1916	Blind Source Separation with Pattern Expression NMF. 2006 , 1159-1164	1
1915	Integrating Value-Directed Compression and Belief Space Analysis for POMDP Decomposition. 2006 ,	
1914	Face Verification using External Features.	1
1913	Compstat 2006 - Proceedings in Computational Statistics. 2006 ,	1
1912	In-Place Learning for Positional and Scale Invariance. 2006 ,	
1911	On the initialization of the DNMF algorithm.	2
1910	Phonemes as Short Time Cognitive Components.	2
1909	Robust Image Hashing Via Non-Negative Matrix Factorizations.	3
1908	Semantic Learning for Audio Applications: A Computer Vision Approach.	3
1907	Utilizing Rich Bluetooth Environments for Identity Prediction and Exploring Social Networks as Techniques for Ubiquitous Computing. 2006 ,	2
1906	Sparse Coded Spatial Features from Spectral Images. 2006 ,	1
1905	Matrix Factorization and Stochastic State Representations. 2006 ,	5

1904	A Biologically Inspired Shape Representation Model Based on Part Decomposition. 2006,	
1903	A NMF-based Collaborative Filtering Recommendation Algorithm. 2006,	
1902	Non-negative Matrix Factorization Features from Spectral Signatures of AVIRIS Images. 2006,	6
1901	Nonnegative Matrix Factor 2-D Deconvolution for Blind Single Channel Source Separation. 2006, 700-707	49
1900	LEARNING SPARSE MIXTURE MODELS FOR DISCRIMINATIVE CLASSIFICATION. 2006, 20, 431-440	3
1899	Signal Processing Methods for Music Transcription. 2006,	143
1898	Motor control programs and walking. 2006, 12, 339-48	176
1897	Non-negative Matrix Factorization Based Text Mining: Feature Extraction and Classification. 2006, 703-712	4
1896	A Nonnegative Matrix Factorization Scheme for Digital Image Watermarking. 2006,	2
1895	Subspace, Latent Structure and Feature Selection. 2006,	6
1894	PROJECTIVE NON-NEGATIVE MATRIX FACTORIZATION WITH APPLICATIONS TO FACIAL IMAGE PROCESSING. 2007, 21, 1353-1362	36
1893	Multilayer nonnegative matrix factorization using projected gradient approaches. 2007, 17, 431-46	58
1892	Spectral-decorrelation strategies for the compression of hyperspectral imagery. 2007,	
1891	Classification of landsat TM image based on non negative matrix factorization. 2007,	1
1890	A Changeable Biometric System That Uses Parts-Based Localized Representation for Face Recognition. 2007,	1
1889	A MULTILAYER IN-PLACE LEARNING NETWORK FOR DEVELOPMENT OF GENERAL INVARIANCES. 2007, 04, 281-320	14
1888	Metagene projection for cross-platform, cross-species characterization of global transcriptional states. 2007, 104, 5959-64	100
1887	Nonnegative tensor factorization for continuous EEG classification. 2007, 17, 305-17	89

1886	. 2007,	17
1885	. 2007,	2
1884	Hybrid coevolutionary algorithms vs. SVM algorithms. 2007,	4
1883	Video Representation with Dynamic Features from Multi-Frame Frame- Difference Images. 2007,	2
1882	Blind Speech Separation. 2007,	155
1881	Inferential, robust non-negative matrix factorization analysis of microarray data. 2007, 23, 44-9	45
1880	Automated discovery of functional generality of human gene expression programs. 2007, 3, e148	23
1879	Predicting experimental properties of proteins from sequence by machine learning techniques. 2007, 8, 121-33	12
1878	A novel orthogonal NMF-based belief compression for POMDPs. 2007,	5
1877	Relational clustering by symmetric convex coding. 2007,	20
1876	One-touch access to music on mobile devices. 2007,	4
1875	Hierarchical ALS Algorithms for Nonnegative Matrix and 3D Tensor Factorization. 2007, 169-176	125
1874	A NMF algorithm for blind separation of uncorrelated signals. 2007,	7
1873	Laplacianfaces incorporated inside nonnegative matrix factorization for face recognition. 2007,	
1872	Non-Negative Tensor Factorization using Alpha and Beta Divergences. 2007,	36
1871	A Convex Analysis Based Criterion for Blind Separation of Non-Negative Sources. 2007,	0
1870	Systematic variation in mRNA 3'-processing signals during mouse spermatogenesis. 2007, 35, 234-46	95
1869	Subject metadata enrichment using statistical topic models. 2007,	18

1868	A probabilistic model for data cube compression and query approximation. 2007,	5
1867	Combining reconstruction and discrimination with class-specific sparse coding. 2007, 19, 1897-918	10
1866	Statistical modeling and analysis of laser-evoked potentials of electrocorticogram recordings from awake humans. 2007, 2007, 10479	8
1865	Dimensional reduction in sensorimotor systems: a framework for understanding muscle coordination of posture. 2007, 165, 299-321	128
1864	On Affine Non-Negative Matrix Factorization. 2007,	9
1863	The discovery of transcriptional modules by a two-stage matrix decomposition approach. 2007, 23, 473-9	20
1862	Deriving semantics for image clustering from accumulated user feedbacks. 2007,	5
1861	A Study on Optimal Face Ratio for Recognition Using Part-Based Feature Extractor. 2007,	4
1860	Disease outbreak detection and tracking for biosurveillance: a data fusion approach. 2007,	2
1859	A new approach for the identification of hidden Markov models. 2007,	3
1858	Incremental Nonnegative Matrix Factorization for Background Modeling in Surveillance Video. 2007,	11
1857	Identification of compounds in ice analogs with NMF algorithms. 2007,	
1856	Incorporating User Provided Constraints into Document Clustering. 2007,	19
1855	Automated analysis of 1H magnetic resonance metabolic imaging data as an aid to clinical decision-making in the evaluation of intracranial lesions. 2007, 2007, 4327-30	
1854	Novel Multi-layer Non-negative Tensor Factorization with Sparsity Constraints. 2007, 271-280	18
1853	Regularized Alternating Least Squares Algorithms for Non-negative Matrix/Tensor Factorization. 2007, 793-802	27
1852	Efficient computation based on stochastic spikes. 2007, 19, 1313-43	7
1851	Blind spectral unmixing of M-FISH images by non-negative matrix factorization. 2007, 2007, 6248-51	6

1850	Uncovering fuzzy community structure in complex networks. 2007 , 76, 046103	89
1849	. 2007 , 2, 588-595	72
1848	Contextual Distance for Data Perception. 2007 ,	13
1847	Modeling and Simulating Metabolic Networks. 755-805	11
1846	A family of modified projective Nonnegative Matrix Factorization algorithms. 2007 ,	
1845	. 2007 ,	73
1844	Model reduction of nonreversible Markov chains. 2007 ,	5
1843	Non-Negative Matrix Factorization for Diabetes II Metabolic Profiling Analysis. 2007 ,	1
1842	Learning and Memory of Spatial Relationship by a Neural Network with Sparse Features. 2007 ,	1
1841	Non-negative Matrix-Set Factorization. 2007 ,	3
1840	Eigenboosting: Combining Discriminative and Generative Information. 2007 ,	8
1839	A new scheme for decomposition of mixed pixels based on nonnegative matrix factorization. 2007 ,	4
1838	Process Control Performance Assessment. 2007 ,	32
1837	Sparse Component Analysis: a New Tool for Data Mining. 2007 , 91-116	14
1836	Localized versus Locality-Preserving Subspace Projections for Face Recognition. 2007 , 2007, 1-8	3
1835	Hebbian learning in a model with dynamic rate-coded neurons: an alternative to the generative model approach for learning receptive fields from natural scenes. 2007 , 18, 249-66	7
1834	. 2007 ,	29
1833	C. elegans sequences that control trans-splicing and operon pre-mRNA processing. 2007 , 13, 1409-26	29

1832	A Method of Initialization for Nonnegative Matrix Factorization. 2007,	7
1831	Palmprint recognition using fusion of local and global features. 2007,	1
1830	Squared Euclidean Distance Based Convolutional Non-Negative Matrix Factorization with Multiplicative Learning Rules For Audio Pattern Separation. 2007,	11
1829	Minimum distance constrained non-negative matrix factorization for the endmember extraction of hyperspectral images. 2007,	8
1828	The impact of initialization procedures on unsupervised unmixing of hyperspectral imagery using the constrained positive matrix factorization. 2007,	0
1827	Back Matter. 2007, 209-224	
1826	Gene Module Identification from Microarray Data Using Nonnegative Independent Component Analysis. 2007, 1, 117762500700100	4
1825	New sub-pixel unmixing method based on blind signal separation. 2007,	
1824	K-Corrections and Filter Transformations in the Ultraviolet, Optical, and Near-Infrared. 2007, 133, 734-754	1191
1823	Efficient stellar spectral type classification for SDSS based on nonnegative matrix factorization. 2007,	
1822	Non-negative factorization of non-negative matrices. 2007,	
1821	. 2007,	1
1820	Fast Newton-type Methods for the Least Squares Nonnegative Matrix Approximation Problem. 2007,	52
1819	Principles of Appearance Acquisition and Representation. 2007, 4, 75-191	68
1818	Selecting algorithms, sensors, and linear bases for optimum spectral recovery of skylight. 2007, 24, 942-56	40
1817	Approach to blind image deconvolution by multiscale subband decomposition and independent component analysis. 2007, 24, 973-83	12
1816	How to extract marker genes from microarray data sets. 2007, 2007, 4215-8	4
1815	Using non-negative matrix factorization for single-trial analysis of fMRI data. 2007, 37, 1148-60	26

1814	Discriminative learning and recognition of image set classes using canonical correlations. 2007 , 29, 1005-18	446
1813	Representing images using nonorthogonal Haar-like bases. 2007 , 29, 2120-34	19
1812	Multiplicative Updates for the Lasso. 2007 ,	3
1811	Automatic Discovery of Anomalies Reported in Aerospace Systems Health and Safety Documents. 2007 ,	2
1810	Diode Laser Absorption Tomography of Two Dimensional Supersonic Flow. 2007 ,	2
1809	Document Classification with Unsupervised Nonnegative Matrix Factorization and Supervised Perceptron Learning. 2007 ,	0
1808	. 2007 ,	11
1807	Gene function analysis. Preface. 2007 , 408, vii-ix	2
1806	Pitch Estimation using Models of Voiced Speech on Three Levels. 2007 ,	7
1805	. 2007 ,	4
1804	Pairwise Constraints-Guided Non-negative Matrix Factorization for Document Clustering. 2007 ,	4
1803	Sparse Nonnegative Matrix Factorization for Classification of Gene Expression Data. 2007 ,	2
1802	Spectral and Spatial Complexity-Based Hyperspectral Unmixing. 2007 , 45, 3867-3879	88
1801	Blind Sparse-Nonnegative (BSN) Channel Identification for Acoustic Time-Difference-of-Arrival Estimation. 2007 ,	6
1800	An Auditory Neural Feature Extraction Method for Robust Speech Recognition. 2007 ,	1
1799	Building an Interactive Next-Generation Artist Recommender Based on Automatically Derived High-Level Concepts. 2007 ,	4
1798	Local Gabor Binary Patterns Based on Kullback-Leibler Divergence for Partially Occluded Face Recognition. 2007 , 14, 875-878	49
1797	Non-negative Tensor Factorization Based on Alternating Large-scale Non-negativity-constrained Least Squares. 2007 ,	15

1796	Binary Matrix Factorization with Applications. 2007,	58
1795	Exploring Matrix Factorization Techniques for Classification of Gene Expression Profiles. 2007,	1
1794	. 2007, 2, 570-587	37
1793	A Blind Source Separation Perspective on Image Restoration. 2007,	1
1792	Multi-focus image fusing based on non-negative matrix factorization. 2007,	
1791	A study on partial face recognition of eye region. 2007,	1
1790	How to Apply ICA on Actual Data ? Example of Mars Hyperspectral Image Analysis. 2007,	2
1789	Wind Noise Reduction using Non-Negative Sparse Coding. 2007,	66
1788	Robust and Secure Image Hashing via Non-Negative Matrix Factorizations. 2007, 2, 376-390	204
1787	Effects of Time and Frequency Resolution on Nonnegative Matrix Factorization. 2007,	
1786	Non-Negative Matrix Factorization for Detection and Diagnosis of Plantwide Oscillations. 2007, 46, 801-817	34
1785	Nonnegative Matrix Factorization for Independent Component Analysis. 2007,	
1784	On Constrained Sparse Matrix Factorization. 2007,	5
1783	Face Recognition Using Topology Preserving Nonnegative Matrix Factorization. 2007,	
1782	Linear Regression on Sparse Features for Single-Channel Speech Separation. 2007,	11
1781	Fast Pixel/Part Selection with Sparse Eigenvectors. 2007,	17
1780	A Computational Approach to Style in American Poetry. 2007,	10
1779	Spectral separation resolves partial volume effect in MRSI: A validation study. 2007,	

1778	Basis iteration for reward based dimensionality reduction. 2007,	5
1777	Learning sparse non-negative features for object recognition. 2007,	1
1776	Uniqueness of Non-Negative Matrix Factorization. 2007,	10
1775	Shifted Non-Negative Matrix Factorization. 2007,	12
1774	Blind Separation of Frequency Overlapped Sources Based on Constrained Non-Negative Matrix Factorization. 2007,	1
1773	. 2007,	10
1772	Extracting Spatiotemporal Interest Points using Global Information. 2007,	108
1771	Pre-processing and source separation methods for Raman spectra analysis of biomedical samples. 2007, 2007, 6208-11	6
1770	Multiplicative updates for nonnegative quadratic programming. 2007, 19, 2004-31	108
1769	Introduction. 2007, 15, 667	4
1768	Multi-document Summarization Based on Cluster Using Non-negative Matrix Factorization. 2007, 761-770	10
1767	Sparse Nonnegative Matrix Factorization with Genetic Algorithms for Microarray Analysis. 2007,	11
1766	Survey of Distance Measures for NMF-Based Face Recognition. 2007, 1039-1049	3
1765	Temporal Analysis of Semantic Graphs Using ASALSAN. 2007,	44
1764	A generalized divergence measure for nonnegative matrix factorization. 2007, 19, 780-91	99
1763	Statistics of single-molecule surface enhanced Raman scattering signals: fluctuation analysis with multiple analyte techniques. 2007, 79, 8411-5	107
1762	Equivalence of state representations for hidden Markov models. 2007,	
1761	Multivariate Analysis of Spectral Images Composed of Count Data. 89-126	19

1760	Analysis of the emission of very small dust particles from Spitzer spectro-imagery data using blind signal separation methods. 2007 , 469, 575-586	144
1759	Bibliography. 387-439	
1758	. 2007 ,	22
1757	Algorithms and applications for approximate nonnegative matrix factorization. 2007 , 52, 155-173	876
1756	Bayesian independent component analysis: Variational methods and non-negative decompositions. 2007 , 17, 858-872	4
1755	Initialization enhancer for non-negative matrix factorization. 2007 , 20, 101-110	51
1754	The uncovering of hidden structures by Latent Semantic Analysis. 2007 , 177, 4122-4147	29
1753	A novel trilinear decomposition algorithm: Three-dimension non-negative matrix factorization. 2007 , 18, 495-498	2
1752	A new method for testing synthetic drugs adulterated in herbal medicines based on infrared spectroscopy. 2007 , 589, 200-7	32
1751	Variational learning for rectified factor analysis. 2007 , 87, 509-527	19
1750	Nonnegative matrix factorization with constrained second-order optimization. 2007 , 87, 1904-1916	60
1749	Unsupervised data reduction. 2007 , 87, 2260-2267	28
1748	Gabor feature-based face recognition using supervised locality preserving projection. 2007 , 87, 2473-2483	77
1747	Robust face detection under partial occlusion. 2007 , 38, 39-48	5
1746	Extracting unrecognized gene relationships from the biomedical literature via matrix factorizations. 2007 , 8 Suppl 9, S6	9
1745	Visual object concept discovery: Observations in congenitally blind children, and a computational approach. 2007 , 70, 2218-2233	14
1744	Kernel based symmetrical principal component analysis for face classification. 2007 , 70, 904-911	11
1743	2D-LPP: A two-dimensional extension of locality preserving projections. 2007 , 70, 912-921	122

1742	Multiplicative updates for non-negative projections. 2007 , 71, 363-373	32
1741	Isolation of Whole-plant Multiple Oscillations via Non-negative Spectral Decomposition. 2007 , 15, 353-360	11
1740	Convolutional Speech Bases and Their Application to Supervised Speech Separation. 2007 , 15, 1-12	202
1739	. 2007 , 45, 765-777	588
1738	Projected gradient methods for nonnegative matrix factorization. 2007 , 19, 2756-79	1027
1737	Hyperspectral Image Unmixing via Alternating Projected Subgradients. 2007 ,	20
1736	Spectral unmixing using nonnegative tensor factorization. 2007 ,	15
1735	On the Convergence of Multiplicative Update Algorithms for Nonnegative Matrix Factorization. 2007 , 18, 1589-1596	249
1734	Sparse non-negative matrix factorizations via alternating non-negativity-constrained least squares for microarray data analysis. 2007 , 23, 1495-502	514
1733	Face recognition using localized features based on non-negative sparse coding. 2007 , 18, 107-122	24
1732	Learning Sparse Overcomplete Codes for Images. 2007 , 46, 1-13	8
1731	Non-negative Matrix Factorization with Orthogonality Constraints and its Application to Raman Spectroscopy. 2007 , 48, 83-97	38
1730	A Clinical Application of Ensemble ICA to the Quantification of Myocardial Blood Flow in Dynamic (H^{15}_2O) PET. 2007 , 49, 233-241	0
1729	A Multimodal Approach to Communicative Interactivity Classification. 2007 , 49, 317-328	4
1728	A bilinear algorithm for sparse representations. 2007 , 38, 249-259	6
1727	Algorithmic and Complexity Issues of Three Clustering Methods in Microarray Data Analysis. 2007 , 48, 203-219	5
1726	Quadtree-based eigendecomposition for pose estimation in the presence of occlusion and background clutter. 2007 , 10, 15-31	3
1725	Deciphering modular and dynamic behaviors of transcriptional networks. 2007 , 1, 19-28	9

1724	Advances and new directions in plant-wide disturbance detection and diagnosis. 2007 , 15, 1196-1206	152
1723	ERPWAVELAB a toolbox for multi-channel analysis of time-frequency transformed event related potentials. 2007 , 161, 361-8	97
1722	Using non-negative matrix factorization in the Unmixing of diffuse reflectance spectra. 2007 , 241, 63-78	35
1721	1D-LDA vs. 2D-LDA: When is vector-based linear discriminant analysis better than matrix-based?. 2008 , 41, 2156-2172	65
1720	Prétraitements et méthodes de séparation de sources pour l'analyse des spectres Raman issus d'échantillons biologiques. 2008 , 29, 13-19	
1719	Non-negative matrix factorization for semi-supervised data clustering. 2008 , 17, 355-379	85
1718	Synergic co-activation in forearm pronation. 2008 , 36, 2002-18	13
1717	Holistic and partial facial features fusion by binary particle swarm optimization. 2008 , 17, 481-488	6
1716	Fast Projection-Based Methods for the Least Squares Nonnegative Matrix Approximation Problem. 2008 , 1, 38-51	33
1715	Automated tissue segmentation and blind recovery of (1)H MRS imaging spectral patterns of normal and diseased human brain. 2008 , 21, 33-41	13
1714	Spectrum separation resolves partial-volume effect of MRSI as demonstrated on brain tumor scans. 2008 , 21, 1030-42	16
1713	Non-negative matrix factorization with \mathcal{F} -divergence. 2008 , 29, 1433-1440	90
1712	Non-negative matrix factorization with fixed row and column sums. 2008 , 429, 1020-1025	18
1711	Structured nonnegative matrix factorization with applications to hidden Markov realization and clustering. 2008 , 429, 1409-1424	6
1710	Pharmaceutical applications of vibrational chemical imaging and chemometrics: a review. 2008 , 48, 533-53	280
1709	Clustering-based initialization for non-negative matrix factorization. 2008 , 205, 525-536	37
1708	Structured low-rank approximation and its applications. 2008 , 44, 891-909	143
1707	On the equivalence between Non-negative Matrix Factorization and Probabilistic Latent Semantic Indexing. 2008 , 52, 3913-3927	160

1706	Unsupervised texture classification: Automatically discover and classify texture patterns. 2008 , 26, 647-656	18
1705	An analysis of facial expression recognition under partial facial image occlusion. 2008 , 26, 1052-1067	132
1704	Robust face recognition under partial occlusion based on support vector machine with local Gaussian summation kernel. 2008 , 26, 1490-1498	59
1703	Occlusion invariant face recognition using selective local non-negative matrix factorization basis images. 2008 , 26, 1515-1523	90
1702	On the parameterization of the CreditRisk + model for estimating credit portfolio risk. 2008 , 42, 736-745	22
1701	SVD based initialization: A head start for nonnegative matrix factorization. 2008 , 41, 1350-1362	358
1700	Non-negative Matrix Factorization on Manifold. 2008 ,	207
1699	Order-preserving dimension reduction procedure for the dominance of two mean curves with application to tidal volume curves. 2008 , 64, 931-939	4
1698	Musical Genre Classification Using Nonnegative Matrix Factorization-Based Features. 2008 , 16, 424-434	61
1697	. 2008 , 16, 766-778	49
1696	An Adaptive Mean-Shift Analysis Approach for Object Extraction and Classification From Urban Hyperspectral Imagery. 2008 , 46, 4173-4185	179
1695	Nonnegative Matrix Factorization of Laboratory Astrophysical Ice Mixtures. 2008 , 2, 697-706	6
1694	Predictive coding as a model of biased competition in visual attention. 2008 , 48, 1391-408	177
1693	Application of nonnegative matrix factorization to improve profile-profile alignment features for fold recognition and remote homolog detection. 2008 , 9, 298	12
1692	On alpha-divergence based nonnegative matrix factorization for clustering cancer gene expression data. 2008 , 44, 1-5	11
1691	Reducing microarray data via nonnegative matrix factorization for visualization and clustering analysis. 2008 , 41, 602-6	37
1690	How to make local image features more efficient and distinctive. 2008 , 2, 178	9
1689	Mining bioprocess data: opportunities and challenges. 2008 , 26, 690-9	45

1688	Nonnegative matrix factorization with quadratic programming. 2008 , 71, 2309-2320	29
1687	On the decomposition of Mars hyperspectral data by ICA and Bayesian positive source separation. 2008 , 71, 2194-2208	96
1686	Sparse blind identification and separation by using adaptive K-orthodrome clustering. 2008 , 71, 2321-2329	5
1685	Hybridizing sparse component analysis with genetic algorithms for microarray analysis. 2008 , 71, 2356-2376	11
1684	Spatial relationship representation for visual object searching. 2008 , 71, 1813-1823	1
1683	Clustering complex networks and biological networks by nonnegative matrix factorization with various similarity measures. 2008 , 72, 134-141	44
1682	Total variation norm-based nonnegative matrix factorization for identifying discriminant representation of image patterns. 2008 , 71, 1824-1831	16
1681	Modeling word perception using the Elman network. 2008 , 71, 3150-3157	87
1680	A Remote Sensing Image Fusion Algorithm Based on Constrained Nonnegative Matrix Factorization. 2008 ,	3
1679	. 2008 , 56, 518-531	13
1678	A Survey on Statistical Pattern Feature Extraction. 2008 , 701-708	6
1677	Matrix Factorisation Techniques for Endpoint Detection in Plasma Etching. 2008 ,	1
1676	Regularity-based functional streamflow disaggregation: 2. Extended demonstration. 2008 , 44,	6
1675	On the blind source separation of human electroencephalogram by approximate joint diagonalization of second order statistics. 2008 , 119, 2677-86	87
1674	Organic Computing. 2008 ,	35
1673	Contribution of non-negative matrix factorization to the classification of remote sensing images. 2008 ,	2
1672	SPACE: an algorithm to predict and quantify alternatively spliced isoforms using microarrays. 2008 , 9, R46	23
1671	Face hallucination VIA sparse coding. 2008 ,	57

1670	Fault Diagnosis of time-frequency images based on non-negative factorization and neural network ensemble. 2008,	
1669	. 2008,	58
1668	A Convex Analysis Framework for Blind Separation of Non-Negative Sources. 2008, 56, 5120-5134	86
1667	Graph-Based Multilevel Dimensionality Reduction with Applications to Eigenfaces and Latent Semantic Indexing. 2008,	8
1666	Document Summarization Using Non-Negative Matrix Factorization and Relevance Feedback. 2008,	4
1665	Automatic Personalized Summarization Using Non-negative Matrix Factorization and Relevance Measure. 2008,	3
1664	Personalized Summarization Agent Using Non-negative Matrix Factorization. 2008, 1034-1038	2
1663	Advanced Intelligent Computing Theories and Applications. With Aspects of Contemporary Intelligent Computing Techniques. 2008,	6
1662	Artificial Intelligence: Theories, Models and Applications. 2008,	1
1661	Genomic anatomy of the hippocampus. 2008, 60, 1010-21	278
1660	Blind Image Separation Using Nonnegative Matrix Factorization with Gibbs Smoothing. 2007, 519-528	11
1659	Developing an optimum computer-designed multispectral system comprising a monochrome CCD camera and a liquid-crystal tunable filter. 2008, 47, 4381-90	23
1658	Tensor methods for hyperspectral data analysis: a space object material identification study. 2008, 25, 3001-12	61
1657	Representation plurality and fusion for 3-D face recognition. 2008, 38, 155-73	54
1656	Hierarchical tensor approximation of multi-dimensional visual data. 2008, 14, 186-99	27
1655	Nonnegative Matrix Factorization (NMF) Based Supervised Feature Selection and Adaptation. 2008, 120-127	1
1654	Introduction. 2008, 16, 201	
1653	Low-Dimensional Polytope Approximation and Its Applications to Nonnegative Matrix Factorization. 2008, 30, 1131-1155	17

1652	Nonnegative Matrix Factorization Based on Alternating Nonnegativity Constrained Least Squares and Active Set Method. 2008 , 30, 713-730	370
1651	. 2008 , 55, 2356-2367	16
1650	Nonnegative Matrix and Tensor Factorization [Lecture Notes]. 2008 , 25, 142-145	91
1649	On Knowledge Structures Reduction. 2008 ,	4
1648	Incremental clustering via nonnegative matrix factorization. 2008 ,	2
1647	Improved non-negative factorization in the analysis of gene expression data. 2008 ,	
1646	Combination of multiple images for flash re-lightning. 2008 ,	2
1645	Blind Image Watermark Analysis using DWT and Non-Negative Matrix Factorization. 2008 ,	
1644	Query-Based Multi-Document Summarization Using Non-Negative Semantic Feature and NMF Clustering. 2008 ,	3
1643	Musical Sound Separation Using Pitch-Based Labeling and Binary Time-Frequency Masking. 2008 ,	7
1642	Restoration of Blind Image based on FPNMF. 2008 ,	
1641	Blind audio source separation by NTF and its perceptual quality evaluation. 2008 ,	
1640	An Approach to Doubletalk Detection Based on Non-Negative Matrix Factorization. 2008 ,	1
1639	Topology preserving non-negative matrix factorization for face recognition. 2008 , 17, 574-84	111
1638	Image space reconstruction based overcomplete ICA algorithm. 2008 ,	1
1637	A hybrid face recognition algorithm based on WT, NMFs and SVM. 2008 ,	
1636	. 2008 ,	
1635	The method of fault diagnosis based on NMF and SVM. 2008 ,	1

1634	Nonnegative singular value decomposition for microarray data analysis of spermatogenesis. 2008,	
1633	Quantification and localization of features in time-frequency plane. 2008,	1
1632	Nonnegative Tensor Decomposition and It's Applications in Image Processing. 2008,	
1631	Data Mining and Applied Linear Algebra. 2008,	1
1630	Characterization of guanidiniocarbonyl pyrroles in water by pH-dependent UV Raman spectroscopy and component analysis. 2008, 10, 6770-5	14
1629	Sparse shift-invariant NMF. 2008,	5
1628	Nonnegative matrix factorization with piecewise smoothness constraint for hyperspectral unmixing. 2008,	0
1627	Web Communities Defined by Web Page Content. 2008,	1
1626	Understanding Social Networks Using Formal Concept Analysis. 2008,	9
1625	Second fusion algorithm of satellite images by α -trous-Curvelet transform. 2008,	0
1624	Computing non-negative tensor factorizations. 2008, 23, 631-647	32
1623	Toward Faster Nonnegative Matrix Factorization: A New Algorithm and Comparisons. 2008,	106
1622	Fragile Watermarking Schemes for Tamperproof Web Pages. 2008, 552-559	0
1621	A framework for the automated analysis of subcellular patterns in human protein atlas images. 2008, 7, 2300-8	92
1620	Fast query by example of environmental sounds via robust and efficient cluster-based indexing. 2008,	8
1619	Machine Learning Techniques for Multimedia. 2008,	24
1618	Query Based Personalized Summarization Agent Using NMF and Relevance Feedback. 2008,	2
1617	Approximate L0 constrained non-negative matrix and tensor factorization. 2008,	11

1616 . 2008,

1615 Illuminant dependence of PCA, NMF and NTF in spectral color imaging. 2008, 1

1614 Tumor Classification Using Non-negative Matrix Factorization. 2008, 236-243 1

1613 bioNMF: a web-based tool for nonnegative matrix factorization in biology. 2008, 36, W523-8 25

1612 Comparison of Component Models in Analysing the Distribution of Dialectal Features. 2008, 2, 173-187 1

1611 Sea Ice SAR Feature Extraction by Non-Negative Matrix and Tensor Factorization. 2008, 3

1610 Comparing Sampling Methods in Faster Computation of Non-Negative Tensor Factorization of Spectral Images. 2008,

1609 Spectral unmixing using nonnegative basis learning: comparison of geometrical and statistical endmember extraction algorithms. 2008,

1608 A novel constraint non-negative matrix factorization criterion based incremental learning in face recognition. 2008, 0

1607 Modulation of phasic and tonic muscle synergies with reaching direction and speed. 2008, 100, 1433-54 171

1606 . 2008, 20, 1348-1362 123

1605 Nonnegative Tucker decomposition with alpha-divergence. 2008, 18

1604 An Image Fusion Method Based on WNMF and Region Segmentation. 2008, 4

1603 Automatic factorization of biological signals by using Boltzmann non-negative matrix factorization. 2008, 1

1602 Single-trial bistable perception classification based on sparse nonnegative tensor decomposition. 2008,

1601 Nonnegative matrix factorization via rank-one downdate. 2008, 14

1600 Class Discovery via Nonnegative Matrix Factorization. 2008, 28, 457-467 5

1599 Comparative analyses of anthropometry associated with overweight and obesity: PCA and ICA approaches. 2008, 9, 441-475 3

1598	CUR+NMF for learning spectral features from large data matrix. 2008,	
1597	A General Framework for Fast Co-clustering on Large Datasets Using Matrix Decomposition. 2008, 24, 1337-1339	4
1596	Algorithms for orthogonal nonnegative matrix factorization. 2008,	15
1595	AUTOMATED COMPARISON OF PROTEIN SUBCELLULAR LOCATION PATTERNS BETWEEN IMAGES OF NORMAL AND CANCEROUS TISSUES. 2008, 4540993, 304-307	12
1594	Convex analysis and separation of composite signals in DCE-MRI. 2008,	1
1593	TOWARD A VISUAL COGNITIVE SYSTEM USING ACTIVE TOP-DOWN SACCADIC CONTROL. 2008, 05, 225-246	4
1592	COMBINING GENERALIZED NMF AND DISCRIMINATIVE MIXTURE MODELS FOR CLASSIFICATION OF GENE EXPRESSION DATA. 2008, 22, 1587-1598	4
1591	Modulation of muscle synergy recruitment in primate grasping. 2008, 28, 880-92	167
1590	Feature synthesized EM algorithm for image retrieval. 2008, 4, 1-24	4
1589	A matrix-based approach for semi-supervised document co-clustering. 2008,	5
1588	Non-negative matrix factorisation for object class discovery and image auto-annotation. 2008,	13
1587	Systematic assessment of the human osteoblast transcriptome in resting and induced primary cells. 2008, 33, 301-11	27
1586	Using non-negative matrix factorization toward finding an informative basis in spin-image data. 2008,	
1585	Position-dependent motif characterization using non-negative matrix factorization. 2008, 24, 2684-90	81
1584	Algorithms for sparse nonnegative Tucker decompositions. 2008, 20, 2112-31	106
1583	Nonnegative matrix factorization: an analytical and interpretive tool in computational biology. 2008, 4, e1000029	239
1582	Dimension Reduction. 2008, 91-112	39
1581	Advances in Cognitive Neurodynamics ICCN 2007. 2008,	1

1580	Controllable Subspaces of Open Quantum Dynamical Systems. 2008 , 49, 61-64	3
1579	Weighted Consensus Clustering. 2008 ,	63
1578	A full algorithm to compute the constrained positive matrix factorization and its application in unsupervised unmixing of hyperspectral imagery. 2008 ,	5
1577	Author-topic evolution analysis using three-way non-negative Paratucker. 2008 ,	3
1576	Single-trial decoding of bistable perception based on sparse nonnegative tensor decomposition. 2008 , 642387	3
1575	Theorems on positive data: on the uniqueness of NMF. 2008 , 764206	88
1574	Extended nonnegative tensor factorisation models for musical sound source separation. 2008 , 872425	50
1573	Fast nonnegative matrix factorization algorithms using projected gradient approaches for large-scale problems. 2008 , 2008, 939567	29
1572	Probabilistic latent variable models as nonnegative factorizations. 2008 , 947438	70
1571	CRD. 2008 ,	16
1570	Ensemble non-negative matrix factorization methods for clustering protein-protein interactions. 2008 , 24, 1722-8	70
1569	The ACTCellerate initiative: large-scale combinatorial cloning of novel human embryonic stem cell derivatives. 2008 , 3, 287-308	27
1568	Unsupervised extraction of design components for a 3D parts-based representation. 2008 ,	1
1567	Non negative Matrix Factorization and Its Application in Medical Signal and Image Processing. 2008 ,	1
1566	Blind separation of non-negative sources by convex analysis: Effective method using linear programming. 2008 ,	
1565	Unsupervised learning of auditory filter banks using non-negative matrix factorisation. 2008 ,	2
1564	Non-negative matrix factorization for images with Laplacian noise. 2008 ,	4
1563	Automatic frame reduction of Wireless Capsule Endoscopy video. 2008 ,	12

1562	Robust Facial Attribute-Specific Subspace-Based Principal Component Analysis for Face Recognition. 2008,	
1561	Mosaicfaces: a discrete representation for face recognition. 2008,	
1560	Reduction of non-stationary noise using a non-negative latent variable decomposition. 2008,	12
1559	Pose primitive based human action recognition in videos or still images. 2008,	158
1558	Nonnegative matrix factorization for real time musical analysis and sight-reading evaluation. 2008,	
1557	Non-negative matrix factorization in bioinformatics: Towards understanding biological processes. 2008,	1
1556	Matrix Factorization Techniques for Analysis of Imaging Mass Spectrometry Data. 2008, 2008,	16
1555	Person tracking on a mobile robot with heterogeneous inter-characteristic feedback. 2008,	3
1554	Using a literature-based NMF model for discovering gene functional relationships. 2008,	1
1553	A novel approach to mixed phase room impulse response inversion for speech dereverberation. 2008,	
1552	FastNMF: A fast monotonic fixed-point non-negative Matrix Factorization algorithm with high ease of use. 2008,	3
1551	Non-negative graph embedding. 2008,	3
1550	Group learning using contrast NMF : Application to functional and structural MRI of schizophrenia. 2008,	9
1549	Structured non-negative matrix factorization with sparsity patterns. 2008,	5
1548	Using nonnegative matrix factorization and concept lattice reduction to visualizing data. 2008,	1
1547	Shared feature extraction for nearest neighbor face recognition. 2008, 19, 586-95	17
1546	A Removal of Power Line Interference in Signal Based on Improved Nonnegative Matrix Factorization. 2008,	
1545	Portfolio diversification using subspace factorizations. 2008,	4

1544 Non-negative sparse image coder via simulated annealing and pseudo-inversion. **2008,**

1543 Nonnegative matrix factorization in polynomial feature space. **2008, 19, 1090-100**

54

1542 Sparse Non-negative Pattern Learning for image representation. **2008,**

1541 Diagnosis of Process Nonlinearities and Valve Stiction. **2008,**

1

1540 Nonnegative Tensor Factorization with Smoothness Constraints. **2008, 300-307**

1539 Unsupervised Extraction and Supervised Selection of Features Based on Information Gain. **2008, 655-659**

1538 Discussion Tracking in Enron Email Using PARAFAC. **2008, 147-163**

43

1537 Convex analysis for separation of functional patterns in DCE-MRI: A longitudinal study to antiangiogenic therapy. **2008,**

1

1536 Coagulation of Organic Carbon Nanoparticles in Exhaust Conditions. **2008, 25, 1365-1378**

4

1535 Hyperspectral analysis in soft x-ray spectromicroscopy. **2008, 14, 772-773**

1534 Unsupervised summarisation of capsule endoscopy video. **2008,**

16

1533 Automatic Wood Defects Recognition Comparative Research. **2008,**

1

1532 Sparse p-norm Nonnegative Matrix Factorization for clustering gene expression data. **2008, 2, 236-49**

5

1531 Principles of appearance acquisition and representation. **2008,**

15

1530 Self-Modelling Curve Resolution of near Infrared Imaging Data. **2008, 16, 151-157**

25

1529 Non-negative matrix factorization of two-dimensional NMR spectra: application to complex mixture analysis. **2008, 128, 052313**

31

1528 IMPROVING GENE EXPRESSION CANCER MOLECULAR PATTERN DISCOVERY USING NONNEGATIVE PRINCIPAL COMPONENT ANALYSIS. **2008,**

1

1527 Note Onset Detection via Nonnegative Factorization of Magnitude Spectrum. **2008, 2008,**

6

1526	A modular non-negative matrix factorization for parts-based object recognition using subspace representation. 2008,	
1525	A General Model for Multiple View Unsupervised Learning. 2008,	132
1524	Non-negative matrix factorization for the analysis of complex gene expression data: identification of clinically relevant tumor subtypes. 2008, 6, 275-92	35
1523	Joint cluster and non-negative least squares analysis for aerosol mass spectrum data. 2008, 125, 012026	1
1522	Application of Several Non-negative Matrix Factorization-Based Methods in Remote Sensing Image Fusion. 2008,	0
1521	Finding SDSS BALQSOs Using Non-Negative Matrix Factorisation. 2008,	
1520	Incremental Nonnegative Matrix Factorization for Face Recognition. 2008, 2008, 1-17	21
1519	Modulating the granularity of category formation by global cortical States. 2008, 2, 1	20
1518	Reconciling predictive coding and biased competition models of cortical function. 2008, 2, 4	83
1517	Pattern expression nonnegative matrix factorization: algorithm and applications to blind source separation. 2008, 168769	13
1516	Gene tree labeling using nonnegative matrix factorization on biomedical literature. 2008, 276535	6
1515	Nonnegative matrix factorization with Gaussian process priors. 2008, 361705	46
1514	Robust object recognition under partial occlusions using NMF. 2008, 857453	13
1513	Intelligent Antennas for Future Wireless Communications. 2009,	
1512	Automatic identification of specular detections in multistatic sonar systems. 2009,	
1511	. 2009,	784
1510	Intersubband Absorption Loss in High-Performance Mid-Infrared Quantum Cascade Lasers. 2009,	1
1509	Non-Negative Matrix Factorization, Convexity and Isometry. 2009,	7

1508	The Dimensions of Reputation in Electronic Markets. 2009 ,	22
1507	Stepwise Correlation metric based Discriminant Analysis and multi-probe images fusion for face recognition. 2009 ,	
1506	Appearance-Based Subspace Projection Techniques for Face Recognition. 2009 ,	1
1505	A new representation method of head images for head pose estimation. 2009 ,	6
1504	Probabilistic matrix tri-factorization. 2009 ,	10
1503	Variational Nonnegative Matrix Factorisation. 2009 ,	12
1502	Nonlinear Nonnegative Component Analysis. 2009 ,	2
1501	Motor planning as an optimization of command representation. 2009 ,	1
1500	On the modeling and processing of polarization in Raman spectroscopy. 2009 ,	0
1499	Document Representation Using Nonnegative Matrix Factorization. 2009 ,	
1498	Binary Sparse Nonnegative Matrix Factorization. 2009 , 19, 772-777	44
1497	Temporal analysis of text data using latent variable models. 2009 ,	1
1496	Non-negative Laplacian Embedding. 2009 ,	17
1495	Computational Models for Neuromuscular Function. 2009 , 2, 110-135	79
1494	. 2009 ,	3
1493	Non-negative matrix factorization of partial track data for motion segmentation. 2009 ,	31
1492	Doubly weighted nonnegative matrix factorization for imbalanced face recognition. 2009 ,	1
1491	Non-Negative Matrix Factorization for Stock Market Pricing. 2009 ,	1

1490	A Penalty Function for Computing Orthogonal Non-negative Matrix Factorizations. 2009,	1
1489	Hierarchical Clustering of Gene Expression Data with Divergence Measure. 2009,	1
1488	Audio feature clustering for hearing aid systems. 2009,	3
1487	A review on music source separation. 2009,	0
1486	Two Dimensional Nonnegative Matrix Factorization. 2009,	
1485	Muscle synergies as a predictive framework for the EMG patterns of new hand postures. 2009, 6, 036004	86
1484	Archetypal Images in Large Photo Collections. 2009,	3
1483	Experimental study on neighbor selection policy for Phoenix Network Coordinate system. 2009,	1
1482	Hybrid Feature Selection: Combining Fisher Criterion and Mutual Information for Efficient Feature Selection. 2009, 613-620	3
1481	Non-negative matrix factorization Vs. FastICA on mismatch negativity of children. 2009,	5
1480	. 2009,	32
1479	Identification of autonomous complex dynamic systems from noisy data. 2009,	
1478	SAR and visible image fusion based on local non-negative matrix factorization. 2009,	3
1477	Gene expression data classification based on non-negative matrix factorization. 2009,	2
1476	Tensors versus matrices usefulness and unexpected properties. 2009,	10
1475	Facial Expression Recognition Based on NMF and SVM. 2009,	8
1474	Subspace-based techniques for retrieval of general 3D models. 2009,	
1473	Clustering of biomedical scientific papers. 2009,	1

1472	Adaptive Nonnegative Matrix Factorization Method. 2009,	
1471	Evaluation of SENS Algorithm for Image Clustering. 2009,	2
1470	Non Negative Matrix Factorization for Time Series of Medical Images Analysis. 2009,	1
1469	. 2009,	3
1468	On the use of the beta divergence for musical source separation. 2009,	19
1467	The Approach Based on Dividing and Conquering for Non-Negative Matrix Factorization. 2009,	
1466	An implicit spatiotemporal shape model for human activity localization and recognition. 2009,	12
1465	Goal-directed feature learning. 2009,	2
1464	Critical features for the perception of emotion from gait. 2009, 9, 15.1-32	197
1463	ACP Journal Club. Review: Brand-name drugs are not more effective than generic versions for treating cardiovascular disease. 2009, 150, JC4-6	
1462	Non-negative matrix factorization of gene expression profiles: a plug-in for BRB-ArrayTools. 2009, 25, 545-7	31
1461	Dictionary-free categorization of very similar objects via stacked evidence trees. 2009,	27
1460	Facial expression recognition based on graph-preserving sparse non-negative matrix factorization. 2009,	
1459	Composite autoregressive system for sparse source-filter representation of speech. 2009,	10
1458	FastNMF: highly efficient monotonic fixed-point nonnegative matrix factorization algorithm with good applicability. 2009, 18, 033004	18
1457	Data Transformations and Representations for Computation and Visualization. 2009, 8, 275-285	13
1456	Unsupervised and Supervised Learning of Graph Domains. 2009, 43-65	6
1455	Gene expression based mouse brain parcellation using Markov random field regularized non-negative matrix factorization. 2009,	

1454	. 2009,	1
1453	Dependent component analysis based approach to robust demarcation of skin tumors. 2009,	1
1452	Information-theoretic feature extraction and selection for robust classification. 2009,	
1451	A Neural Network Model for Chinese Character Perception. 2009,	1
1450	A Novel Hebbian Rules Based Method for Computation of Sparse Coding Basis Vectors. 2009,	
1449	Supervised Discriminant Nonnegative Matrix Factorization Method. 2009,	1
1448	Nonnegativity constraints in numerical analysis. 2009, 109-139	62
1447	Weighted Fisher Non-negative Matrix Factorization for Face Recognition. 2009,	1
1446	Unsupervised learning of overlapping image components using divisive input modulation. 2009, 381457	29
1445	Bayesian inference for nonnegative matrix factorisation models. 2009, 785152	163
1444	A model for learning topographically organized parts-based representations of objects in visual cortex: topographic nonnegative matrix factorization. 2009, 21, 2605-33	12
1443	Blind Source Separation For Ion Mobility Spectra. 2009,	
1442	Statistical feature representations for automatic wood defects recognition research and applications. 2009,	
1441	Locally non-negative linear structure learning for interactive image retrieval. 2009,	4
1440	Hidden-concept driven image decomposition towards semi-supervised multi-label image annotation. 2009,	4
1439	Estimation of sparse nonnegative sources from noisy overcomplete mixtures using MAP. 2009, 21, 3487-518	10
1438	A comparative study of spatial approaches for urban mapping using hyperspectral ROSIS images over Pavia City, northern Italy. 2009, 30, 3205-3221	77
1437	Projective Nonnegative Matrix Factorization with \mathbb{H} Divergence. 2009, 20-29	2

1436	Image co-clustering with multi-modality features and user feedbacks. 2009 ,	5
1435	A new visual search interface for web browsing. 2009 ,	10
1434	Graphical methods for quantifying macromolecules through bright field imaging. 2009 , 25, 1070-5	14
1433	Objective evaluation of color image fusion methods. 2009 , 48, 066201	9
1432	Mei Symmetries and Lie Symmetries for Nonholonomic Controllable Mechanical Systems with Relativistic Rotational Variable Mass. 2009 , 51, 1073-1077	3
1431	Stability of muscle synergies for voluntary actions after cortical stroke in humans. 2009 , 106, 19563-8	267
1430	Analyzing the U.S. Senate in 2003: Similarities, Clusters, and Blocs. 2009 , 17, 291-310	7
1429	DETECTION AND QUANTIFICATION OF CONTROL VALVE NONLINEARITIES USING HILBERT- \mathcal{H} UANG TRANSFORM. 2009 , 01, 425-446	13
1428	Reconstruct modular phenotype-specific gene networks by knowledge-driven matrix factorization. 2009 , 25, 2236-43	13
1427	Detection of treatment-induced changes in signaling pathways in gastrointestinal stromal tumors using transcriptomic data. 2009 , 69, 9125-32	50
1426	SENT: semantic features in text. 2009 , 37, W153-9	4
1425	Dependent component analysis for blind restoration of images degraded by turbulent atmosphere. 2009 , 72, 2682-2692	5
1424	Kernel nonnegative matrix factorization for spectral EEG feature extraction. 2009 , 72, 3182-3190	36
1423	Effect of excessive Internet use on the time-frequency characteristic of EEG. 2009 , 19, 1383-1387	12
1422	Construction and use of gene expression covariation matrix. 2009 , 10, 214	1
1421	Learning Posture Invariant Spatial Representations Through Temporal Correlations. 2009 , 1, 253-263	7
1420	Monaural Musical Sound Separation Based on Pitch and Common Amplitude Modulation. 2009 , 17, 1361-1371	22
1419	Extracting simultaneous and proportional neural control information for multiple-DOF prostheses from the surface electromyographic signal. 2009 , 56, 1070-80	307

1418	Automatic generic document summarization based on non-negative matrix factorization. 2009 , 45, 20-34	84
1417	Collaborative filtering using orthogonal nonnegative matrix tri-factorization. 2009 , 45, 368-379	80
1416	Synchrotron-Based Near-Edge X-Ray Spectroscopy of Natural Organic Matter in Soils and Sediments. 729-781	19
1415	Nonnegative approximations of nonnegative tensors. 2009 , 23, 432-441	128
1414	Blind decomposition of low-dimensional multi-spectral image by sparse component analysis. 2009 , 23, 590-597	9
1413	The aspect Bernoulli model: multiple causes of presences and absences. 2009 , 12, 55-78	14
1412	Non-negative matrix factorization: Ill-posedness and a geometric algorithm. 2009 , 42, 918-928	23
1411	Multi-modality video shot clustering with tensor representation. 2009 , 41, 93-109	9
1410	Comparison of ICA approaches for facial expression recognition. 2009 , 3, 345-361	17
1409	An NMF algorithm for blind separation of convolutive mixed source signals with least correlation constrains. 2009 , 26, 557-563	
1408	Comparison of eight methods for the estimation of the image-derived input function in dynamic [(18)F]-FDG PET human brain studies. 2009 , 29, 1825-35	61
1407	Two routes to face perception: evidence from psychophysics and computational modeling. 2009 , 33, 1413-40	21
1406	A comparative study of facial appearance modeling methods for active appearance models. 2009 , 30, 1335-1346	12
1405	Image watermarking scheme using nonnegative matrix factorization and wavelet transform. 2009 , 36, 2123-2129	53
1404	Spectral unmixing for mineral identification in pancam images of soils in Gusev crater, Mars. 2009 , 203, 421-436	20
1403	Fault diagnosis for diesel valve trains based on non-negative matrix factorization and neural network ensemble. 2009 , 23, 1683-1695	23
1402	Unsupervised decomposition of low-intensity low-dimensional multi-spectral fluorescent images for tumour demarcation. 2009 , 13, 507-18	8
1401	Incremental subspace learning via non-negative matrix factorization. 2009 , 42, 788-797	85

1400	Modular control of human walking: a simulation study. 2009 , 42, 1282-7	281
1399	Fast intrusion detection based on a non-negative matrix factorization model. 2009 , 32, 31-44	34
1398	Nonnegative matrix factorization of a correlation matrix. 2009 , 431, 334-349	4
1397	Bayesian separation of spectral sources under non-negativity and full additivity constraints. 2009 , 89, 2657-2669	53
1396	Robust watermarking based on DWT and nonnegative matrix factorization. 2009 , 35, 183-188	42
1395	Fitting sparse multidimensional data with low-dimensional terms. 2009 , 180, 2002-2012	43
1394	Approximating a similarity matrix by a latent class model: A reappraisal of additive fuzzy clustering. 2009 , 53, 3183-3193	17
1393	ICA, kernel methods and nonnegativity: New paradigms for dynamical component analysis of fMRI data. 2009 , 22, 497-504	7
1392	Evaluation of coronary endothelial dysfunction in healthy young smokers: Cold pressor test using [(15)O]H(2)O PET. 2009 , 67, 1199-203	4
1391	Nonnegative matrix factorization with the Itakura-Saito divergence: with application to music analysis. 2009 , 21, 793-830	662
1390	Unsupervised Object Discovery from Images by Mining Local Features Using Hashing. 2009 , 978-985	1
1389	Text Summarization: An Old Challenge and New Approaches. 2009 , 127-149	2
1388	Position specific interaction dependent scoring technique for virtual screening based on weighted protein--ligand interaction fingerprint profiles. 2009 , 49, 1185-92	33
1387	Transform Invariant Video Fingerprinting by NMF. 2009 , 452-459	3
1386	Discriminant nonnegative tensor factorization algorithms. 2009 , 20, 217-35	43
1385	. 2009 , 47, 161-173	250
1384	Weighted Nonnegative Matrix Co-Tri-Factorization for Collaborative Prediction. 2009 , 396-411	13
1383	Single vs. population cell coding: Gaze movement control in target search. 2009 ,	

1382	Matrix factorization for recovery of biological processes from microarray data. 2009 , 467, 59-77	16
1381	Handbook of Remote Biometrics. 2009 ,	34
1380	Adaptive time-frequency matrix features for T wave alternans analysis. 2009 , 2009, 39-42	1
1379	Comparison of spectral-spatial classification for urban hyperspectral imagery with high resolution. 2009 ,	
1378	Prototype Classification: Insights from Machine Learning. 2009 , 21, 272-300	10
1377	Recovering independent components from shifted data using fast independent component analysis and swarm intelligence. 2009 , 63, 1142-51	3
1376	Blind source separation techniques for the decomposition of multiply labeled fluorescence images. 2009 , 96, 3791-800	88
1375	Encyclopedia of Neuroscience. 2009 , 3061-3062	
1374	Ant Clustering Using Ensembles of Partitions. 2009 , 283-292	1
1373	A Matrix Factorization Approach for Integrating Multiple Data Views. 2009 , 423-438	78
1372	Millennial-scale northwest African droughts related to Heinrich events and Dansgaard-Oeschger cycles: Evidence in marine sediments from offshore Senegal. 2009 , 24, n/a-n/a	70
1371	From Sparse Solutions of Systems of Equations to Sparse Modeling of Signals and Images. 2009 , 51, 34-81	1494
1370	Classification of Aeronautics System Health and Safety Documents. 2009 , 39, 670-680	27
1369	A Multiplicative Algorithm for Convolutional Non-Negative Matrix Factorization Based on Squared Euclidean Distance. 2009 , 57, 2858-2864	45
1368	. 2009 , 57, 4418-4432	293
1367	Factor Analysis of Incidence Data via Novel Decomposition of Matrices. 2009 , 83-97	16
1366	A strategy of classification via sparse dictionary learned by non-negative K-SVD. 2009 ,	
1365	Tensor Decompositions and Applications. 2009 , 51, 455-500	4889

1364	Feature Generation I: Data Transformation and Dimensionality Reduction. 2009 , 323-409	9
1363	Face Recognition Based on NMF and SVM. 2009 ,	5
1362	Detecting overlapping community structure of networks based on vertex-vertex correlations. 2009 , 2009, P11013	26
1361	Document Clustering with Cluster Refinement and Non-negative Matrix Factorization. 2009 , 281-288	7
1360	A survey of tensor methods. 2009 ,	18
1359	Guide to Biometric Reference Systems and Performance Evaluation. 2009 ,	23
1358	Nonnegative Matrix Factorization with Earth Mover's Distance metric. 2009 ,	14
1357	Advances in Machine Learning. 2009 ,	1
1356	Environmental sound classification based on feature collaboration. 2009 ,	20
1355	Encyclopedia of Neuroscience. 2009 , 3228-3233	
1354	Encyclopedia of Neuroscience. 2009 , 3097-3097	
1353	Innovations in Neural Information Paradigms and Applications. 2009 ,	1
1352	Multiple Classifier Systems. 2009 ,	8
1351	Rapid identification of structural phases in combinatorial thin-film libraries using x-ray diffraction and non-negative matrix factorization. 2009 , 80, 103902	64
1350	A penalized matrix decomposition, with applications to sparse principal components and canonical correlation analysis. 2009 , 10, 515-34	839
1349	Generic multi-document summarization using cluster refinement and NMF. 2009 ,	
1348	Unsupervised single-channel source separation using bayesian NMF. 2009 ,	14
1347	Unified Solution to Nonnegative Data Factorization Problems. 2009 ,	14

1346	Analyzing Social Networks Using FCA: Complexity Aspects. 2009,	15
1345	Nonnegative Matrix Factorization with Gibbs Random Field modeling. 2009,	3
1344	A hybrid iterative algorithm for Nonnegative Matrix Factorization. 2009,	1
1343	Automatic evaluation of the progress of bacterial pulmonary infections in temporal radiographic image sequences. 2009,	1
1342	A Classifying and Exploring System Based on Users' Tagging Behaviors. 2009,	
1341	Encyclopedia of Neuroscience. 2009, 3059-3347	
1340	Multiplicative nonnegative graph embedding. 2009,	2
1339	Fast bayesian nmf algorithms enforcing harmonicity and temporal continuity in polyphonic music transcription. 2009,	7
1338	Non-negative matrix factorization methods for face recognition under extreme lighting variations. 2009,	5
1337	A Non-negative Matrix Factorization approach to state estimation in stochastic systems. 2009,	
1336	Selection Method of Odor Components for Olfactory Display Using Mass Spectrum Database. 2009,	13
1335	Social Aspects of Web Page Contents. 2009,	2
1334	Source separation algorithms for the analysis of hyper-spectral observations of very small interstellar dust particles. 2009,	0
1333	Semantic Relation Extraction by Analysis of Terms Correlation in Documents. 2009,	
1332	Inducing Shades of Meaning by Matrix Methods : A First Step Towards Thematic Analysis of Opinion. 2009,	3
1331	Reducing Social Network Dimensions Using Matrix Factorization Methods. 2009,	4
1330	Research on Image Fusion Method Based on Wavelet Transform and NMF. 2009,	2
1329	Visualizing Paragraph Closeness for Academic Writing Support. 2009,	3

1328	Multi-layer features based personalized spam filtering. 2009 ,	
1327	Improved image watermarking scheme using nonnegative matrix factorization and wavelet transform. 2009 ,	2
1326	Direct imitation of human facial expressions by a user-interface robot. 2009 ,	7
1325	Chinese text classification method based on NMF. 2009 ,	
1324	Improved face recognition system using probability distribution functions extracted from wavelet subbands. 2009 ,	0
1323	A NMF-Based Privacy-Preserving Recommendation Algorithm. 2009 ,	10
1322	Efficient human action recognition by cascaded linear classification. 2009 ,	7
1321	Linear unmixing of hyperspectral images using a scaled gradient method. 2009 ,	8
1320	Convex Non-negative Matrix Factorization in the Wild. 2009 ,	33
1319	Discriminant sparse nonnegative matrix factorization. 2009 ,	1
1318	Bayesian Non-negative Matrix Factorization. 2009 , 540-547	80
1317	Blind Decomposition of Spectral Imaging Microscopy: A Study on Artificial and Real Test Data. 2009 , 548-556	3
1316	Document classification using nonnegative matrix factorization and underapproximation. 2009 ,	10
1315	Adjustments of motor pattern for load compensation via modulated activations of muscle synergies during natural behaviors. 2009 , 101, 1235-57	80
1314	Minimum Determinant Constraint for Non-negative Matrix Factorization. 2009 , 106-113	17
1313	Study of blind image restoration algorithm based on non-negative independent component analysis. 2009 ,	
1312	Generalized N-Dimensional Principal Component Analysis (GND-PCA) Based Statistical Appearance Modeling of Facial Images with Multiple Modes. 2009 , 1, 231-241	7
1311	Bi-cross-validation of the SVD and the nonnegative matrix factorization. 2009 , 3,	102

1310	Convex analysis for non-negative blind source separation with application in imaging. 229-265	1
1309	Topic model methods for automatically identifying out-of-scope resources. 2009 ,	2
1308	Comparison of basis-vector selection methods for structural modeling of hyperspectral imagery. 2009 ,	4
1307	Introduction [Problem Statements and Models. 1-80	1
1306	Multiplicative Iterative Algorithms for NMF with Sparsity Constraints. 131-202	2
1305	Alternating Least Squares and Related Algorithms for NMF and SCA Problems. 203-266	3
1304	Selected Applications. 433-472	
1303	Interpretation of organic components from Positive Matrix Factorization of aerosol mass spectrometric data. 2009 , 9, 2891-2918	1016
1302	Fast Local Algorithms for Large Scale Nonnegative Matrix and Tensor Factorizations. 2009 , E92-A, 708-721	251
1301	Spectral unmixing using nonnegative matrix factorization with smoothed L0 norm constraint. 2009 ,	2
1300	Data Fusion Boosted Face Recognition Based on Probability Distribution Functions in Different Colour Channels. 2009 , 2009,	19
1299	Medical image fusion based on non-negative matrix factorization. 2009 ,	0
1298	Gene ontology-based protein function prediction by using sequence composition information. 2010 , 17, 789-95	2
1297	Note-Based Sound Source Separation in Monoaural Polyphonic Music. 2010 , 96, 947-958	
1296	Blind source separation by nonnegative matrix factorization with minimum-volume constraint. 2010 ,	1
1295	Non-negative matrix factorization algorithm based on method of least square. 2010 ,	
1294	Data-driven modeling of nano-nose gas sensor arrays. 2010 ,	2
1293	Understanding the impact of spatial resolution in unmixing of hyperspectral images. 2010 ,	

1292	Outliers in some Faces and non-Faces data. 2010 , 2, 203	2
1291	Source separation on hyperspectral cube applied to dermatology. 2010 ,	2
1290	Dimensionality reduction, classification, and spectral mixture analysis using nonnegative underapproximation. 2010 ,	3
1289	Non Negative Matrix Factorisation clustering capabilities; application on multivariate image segmentation. 2010 , 5, 285	5
1288	Structural damage detection based on non-negative matrix factorization and relevance vector machine. 2010 ,	
1287	The restoration of low-quality audio recordings based on non-negative matrix factorization and perceptual assessment by means of the ebu mushra test method. 2010 ,	1
1286	On Detecting Target Acoustic Signals Based on Non-negative Matrix Factorization. 2010 , E93-D, 922-925	2
1285	Muscle Synergies Based on a Biomechanical Biaxial Isometric Shoulder Model Minimizing Fatigue. 2010 ,	
1284	Bibliography. 2010 , 589-596	
1283	Matrix factorisation methods applied in microarray data analysis. 2010 , 4, 72-90	24
1282	Evaluation of different structural models for target detection in hyperspectral imagery. 2010 ,	2
1281	Sparse Regulatory Networks. 2010 , 4, 663-686	7
1280	The MM Alternative to EM. 2010 , 25,	48
1279	Graphics Processing Units and High-Dimensional Optimization. 2010 , 25, 311-324	27
1278	Algebraic reduction in automatic text summarization [The state of the art. 2010 ,	1
1277	Semi-Supervised Nonnegative Matrix Factorization. 2010 , 17, 4-7	132
1276	Multichannel Nonnegative Matrix Factorization in Convolutional Mixtures for Audio Source Separation. 2010 , 18, 550-563	330
1275	Robust gender recognition for real-time surveillance system. 2010 ,	3

1274	Direct manipulation blendshapes. 2010 , 30, 42-50	61
1273	Automatic surface inspection for directional textures using nonnegative matrix factorization. 2010 , 48, 671-689	13
1272	Subspace methods for retrieval of general 3D models. 2010 , 114, 865-886	8
1271	Reduction of capsule endoscopy reading times by unsupervised image mining. 2010 , 34, 471-8	63
1270	SVM-based feature extraction for face recognition. 2010 , 43, 2871-2881	47
1269	Feature extraction by learning Lorentzian metric tensor and its extensions. 2010 , 43, 3298-3306	17
1268	Adaptive non-negative bases for reconstruction of spectral data from colorimetric information. 2010 , 17, 562-569	20
1267	Structural Identifiability in Low-Rank Matrix Factorization. 2010 , 56, 313-332	4
1266	Approximation of stationary processes by hidden Markov models. 2010 , 22, 1-22	5
1265	Hybrid and ensemble-based soft computing techniques in bankruptcy prediction: a survey. 2010 , 14, 995-1010	106
1264	Document clustering of MEDLINE abstracts based on non-negative matrix factorization using local confidence assessment. 2010 , 4, 336-349	3
1263	Frontal and Semi-Frontal Facial Caricature Synthesis Using Non-Negative Matrix Factorization. 2010 , 25, 1282-1292	2
1262	Technique for image fusion based on non-subsampled contourlet transform domain improved NMF. 2010 , 53, 2429-2440	11
1261	Orthogonal nonnegative learning for sparse feature extraction and approximate combinatorial optimization. 2010 , 5, 261-273	2
1260	Parallel Nonnegative Matrix Factorization Algorithm on the Distributed Memory Platform. 2010 , 38, 117-137	19
1259	Infinite factorization of multiple non-parametric views. 2010 , 79, 201-226	7
1258	Music emotion classification and context-based music recommendation. 2010 , 47, 433-460	81
1257	Convergence Analysis of Non-Negative Matrix Factorization for BSS Algorithm. 2010 , 31, 45-64	9

1256	Unsupervised Object Discovery: A Comparison. 2010 , 88, 284-302	129
1255	Computational Models of Learning the Raising-Control Distinction. 2010 , 8, 169-207	7
1254	Binary matrix factorization for analyzing gene expression data. 2010 , 20, 28-52	63
1253	TopDown Gaze Movement Control in Target Search Using Population Cell Coding of Visual Context. 2010 , 2, 196-215	9
1252	Generative Spectrogram Factorization Models for Polyphonic Piano Transcription. 2010 , 18, 519-527	7
1251	. 2010 , 18, 576-588	79
1250	Enforcing Harmonicity and Smoothness in Bayesian Non-Negative Matrix Factorization Applied to Polyphonic Music Transcription. 2010 , 18, 538-549	99
1249	Implementation Strategies for Hyperspectral Unmixing Using Bayesian Source Separation. 2010 ,	29
1248	A Doubly Weighted Approach for Appearance-Based Subspace Learning Methods. 2010 , 5, 71-81	31
1247	\$K\$ -Dimensional Coding Schemes in Hilbert Spaces. 2010 , 56, 5839-5846	32
1246	An associative sparse coding neural network and applications. 2010 , 73, 684-689	4
1245	Constrained Laplacian Eigenmap for dimensionality reduction. 2010 , 73, 951-958	31
1244	Normalized dimensionality reduction using nonnegative matrix factorization. 2010 , 73, 1783-1793	6
1243	A flexible R package for nonnegative matrix factorization. 2010 , 11, 367	638
1242	Structuring heterogeneous biological information using fuzzy clustering of k-partite graphs. 2010 , 11, 522	16
1241	Knowledge-based matrix factorization temporally resolves the cellular responses to IL-6 stimulation. 2010 , 11, 585	10
1240	Discovering gene functional relationships using FAUN (Feature Annotation Using Nonnegative matrix factorization). 2010 , 11 Suppl 6, S14	9
1239	Recent advances in clustering methods for protein interaction networks. 2010 , 11 Suppl 3, S10	74

1238	Improving document clustering in a learned concept space. 2010 , 46, 180-192	11
1237	Orthogonal nonnegative matrix tri-factorization for co-clustering: Multiplicative updates on Stiefel manifolds. 2010 , 46, 559-570	59
1236	Michromatic scope for enhancement of color difference. 2010 , 35, NA-NA	
1235	Colour category foci of Munsell colour spectra revealed by two computational methods. 2010 , 35, 294-303	1
1234	Non-negative Matrix Factorization for the identification of patterns of atmospheric pressure and geopotential for the Northern Hemisphere. 2010 , 30, 909-925	5
1233	Projected gradient method for kernel discriminant nonnegative matrix factorization and the applications. 2010 , 90, 2150-2163	16
1232	Blind separation of non-negative source signals using multiplicative updates and subspace projection. 2010 , 90, 2877-2890	17
1231	Discovery of optimal factors in binary data via a novel method of matrix decomposition. 2010 , 76, 3-20	143
1230	Nonnegative Matrix Factorization on Orthogonal Subspace. 2010 , 31, 905-911	53
1229	Blind separation of electron paramagnetic resonance signals using diversity minimization. 2010 , 204, 26-36	6
1228	Robust demarcation of basal cell carcinoma by dependent component analysis-based segmentation of multi-spectral fluorescence images. 2010 , 100, 10-8	8
1227	Personalized blog content recommender system for mobile phone users. 2010 , 68, 496-507	25
1226	Semi-supervised clustering algorithm for community structure detection in complex networks. 2010 , 389, 187-197	94
1225	Defect detection of uneven brightness in low-contrast images using basis image representation. 2010 , 43, 1129-1141	18
1224	Using underapproximations for sparse nonnegative matrix factorization. 2010 , 43, 1676-1687	71
1223	Nonnegative matrix factorization with bounded total variational regularization for face recognition. 2010 , 31, 2468-2473	15
1222	Visualizing search results and document collections using topic maps. 2010 , 8, 169-175	29
1221	Alternative gradient algorithms with applications to nonnegative matrix factorizations. 2010 , 216, 1763-1770	5

1220	A minimum norm approach for low-rank approximations of a matrix. 2010 , 234, 3091-3103	
1219	Approximate low-rank factorization with structured factors. 2010 , 54, 3411-3420	8
1218	Source separation in systems with correlated sources using NMF. 2010 , 20, 417-432	8
1217	An algorithm for classifying tumors based on genomic aberrations and selecting representative tumor models. 2010 , 3, 23	6
1216	Information visualization. 2010 , 2, 387-403	53
1215	New Trends in Biologically-Inspired Audio Coding. 2010 ,	3
1214	Analysis of population structure: a unifying framework and novel methods based on sparse factor analysis. 2010 , 6, e1001117	95
1213	Efficient Nonnegative Matrix Factorization with Random Projections. 2010 ,	15
1212	Robust Speech Hash Function. 2010 , 32, 345-347	8
1211	An HMM based approach for video action recognition using motion trajectories. 2010 ,	2
1210	Merging of healthy motor modules predicts reduced locomotor performance and muscle coordination complexity post-stroke. 2010 , 103, 844-57	497
1209	Fast nonnegative deconvolution for spike train inference from population calcium imaging. 2010 , 104, 3691-704	283
1208	Quantifying the distribution of probes between subcellular locations using unsupervised pattern unmixing. 2010 , 26, i7-12	35
1207	Research on NMF Based Hierarchical Clustering Methods. 2010 , 439-440, 1306-1311	
1206	Facial Expression Recognition Based on Orthogonal Nonnegative CP Factorization. 2010 , 143-144, 111-115	1
1205	Knowledge-based data analysis comes of age. 2010 , 11, 30-9	14
1204	METRIC-PRESERVING REDUCTION OF EARTH MOVER'S DISTANCE. 2010 , 27, 39-54	4
1203	Action Recognition in Videos Using Nonnegative Tensor Factorization. 2010 ,	10

1202	A novel approach for hyperspectral unmixing based on Nonnegative Matrix Factorization. 2010,	1
1201	Algebraic identification of under-determined mixtures. 2010, 325-365	6
1200	Brain Inspired Cognitive Systems 2008. 2010,	1
1199	ACNE: a summarization method to estimate allele-specific copy numbers for Affymetrix SNP arrays. 2010, 26, 1827-33	17
1198	Multiplicative update rules for nonnegative matrix factorization with co-occurrence constraints. 2010,	5
1197	Discriminative Basis Selection Using Non-negative Matrix Factorization. 2010,	
1196	Learning the Informative Components in Nonnegative Matrix Factorization. 2010,	
1195	Characteristics of Diffracted Waves Going over Building Rooftop. 2010,	0
1194	Two-way combinatorial clustering network. 2010,	
1193	Large data real-time classification with Non-negative Matrix Factorization and Self-Organizing Maps on GPU. 2010,	2
1192	Learning to recognize objects using waves of spikes and Spike Timing-Dependent Plasticity. 2010,	20
1191	. 2010,	0
1190	Identical fits of nonnegative matrix/tensor factorization may correspond to different extracted event-related potentials. 2010,	4
1189	A comparative study of two matrix factorization methods applied to the classification of gene expression data. 2010,	0
1188	Non-negative matrix factorization for parameter estimation in hidden Markov models. 2010,	12
1187	Parts based representation for pedestrian using NMF with robustness to partial occlusion. 2010,	0
1186	Recognition of muscle functional organisation in rowing by synergy identification. 2010, 13, 141-142	2
1185	Parallel unmixing of hyperspectral data using complexity pursuit. 2010,	

1184	Constrained independent component analysis for hyperspectral unmixing. 2010,	
1183	Nonnegative matrix factorization with matrix exponentiation. 2010,	
1182	Reviewer Profiling Using Sparse Matrix Regression. 2010,	4
1181	Fuzzy analysis for overlapping community structure of complex network. 2010,	4
1180	Sparse nonnegative matrix factorization using ℓ_1 -constraints. 2010,	6
1179	Blind rhythmic source separation: Nonnegativity and repeatability. 2010,	5
1178	Hierarchical alternating least squares algorithm with Sparsity Constraint for hyperspectral unmixing. 2010,	2
1177	Soft clustering with CP matrices. 2010,	1
1176	Finding distinctive facial areas for face recognition. 2010,	3
1175	Non-negative temporal decomposition of speech parameters. 2010,	1
1174	In vivo snapshot hyperspectral image analysis of age-related macular degeneration. 2010, 2010, 5363-6	12
1173	Discriminative LDA. 2010,	
1172	On relations between Genes and metagenes obtained via gradient-based matrix factorization. 2010	
1171	Search Results Clustering Based on Suffix Array and VSM. 2010,	1
1170	Advances in Knowledge Discovery and Data Mining. 2010,	3
1169	A constrained NMF algorithm for bold detection in fMRI. 2010,	7
1168	A mechanical fault characteristic extraction method based on orthogonal non-negative matrix factorization. 2010,	0
1167	Constrained Nonnegative Tensor Factorization for Clustering. 2010,	0

1166	On the Complexity of Nonnegative Matrix Factorization. 2010 , 20, 1364-1377	263
1165	Music Recommendation and Discovery. 2010 ,	183
1164	Flickr group recommendation based on tensor decomposition. 2010 ,	21
1163	. 2010 ,	2
1162	A vision-based navigation system of mobile tracking robot. 2010 ,	0
1161	An Improved Consensus Clustering for Nonnegative Matrix Factorization in Molecular Cancer Class Discovery. 2010 ,	1
1160	Anatomical Parts-Based Regression Using Non-Negative Matrix Factorization. 2010 , 2863-2870	5
1159	Robust unmixing of tumor states in array comparative genomic hybridization data. 2010 , 26, i106-14	27
1158	LOCALITY PRESERVING NONNEGATIVE MATRIX FACTORIZATION WITH APPLICATION TO FACE RECOGNITION. 2010 , 08, 835-846	6
1157	Utilizing Nonnegative Matrix Factorization for Email Classification Problems. 2010 , 57-80	9
1156	Link suggestions in terrorists networks using Semi Discrete Decomposition. 2010 ,	0
1155	Single-channel source separation using simplified-training complex matrix factorization. 2010 ,	12
1154	NMF with time-frequency activations to model non stationary audio events. 2010 ,	7
1153	Reverse Indexing for Reading Graffiti Tags. 2010 ,	
1152	Optimal habits can develop spontaneously through sensitivity to local cost. 2010 , 107, 20512-7	26
1151	Une version pondée de la factorisation matricielle non négative pour l'identification de sources de particules atmosphériques. Application au littoral de la mer du Nord. 2010 , 44, 547-566	3
1150	Mining roles with noisy data. 2010 ,	28
1149	View subspaces for indexing and retrieval of 3D models. 2010 ,	1

1148	Which photo groups should I choose? A comparative study of recommendation algorithms in Flickr. 2010 , 36, 733-750	38
1147	Polarimetric SAR image fusion using nonnegative matrix factorisation and improved-RGB model. 2010 , 46, 1399	10
1146	CoGAPS: an R/C++ package to identify patterns and biological process activity in transcriptomic data. 2010 , 26, 2792-3	51
1145	Protein interaction networks--more than mere modules. 2010 , 6, e1000659	46
1144	Distributed nonnegative matrix factorization for web-scale dyadic data analysis on mapreduce. 2010 ,	115
1143	Time course of information representation of macaque AIP neurons in hand manipulation task revealed by information analysis. 2010 , 104, 3625-43	12
1142	A scalable approach for discovering conserved active subnetworks across species. 2010 , 6, e1001028	15
1141	Coordinate dependence of variability analysis. 2010 , 6, e1000751	44
1140	A method of automatically estimating the regularization parameter for Non-negative Matrix Factorization. 2010 ,	
1139	Dynamics of Visual Motion Processing. 2010 ,	4
1138	An Image Fusion Method Based on Lifting Wavelet and Weighted Nonnegative Matrix Factorization. 2010 ,	0
1137	Document clustering algorithm based on NMF and SVDD. 2010 ,	
1136	Investigation into the Fault Diagnosis of Gear Box Based on NMF and Neural Networks. 2010 ,	
1135	Locality Between-Locality Embedding Nonnegative Matrix Factorization. 2010 ,	
1134	. 2010 ,	
1133	On the clustering aspect of nonnegative matrix factorization. 2010 ,	2
1132	Mechanism of estimation for integrated rating using web sources. 2010 ,	
1131	Extended Semi-supervised Matrix Factorization for Clustering. 2010 ,	

1130	Texton-based analysis of paintings. 2010,	4
1129	Nonnegative tensor factorization for clustering genes with time series microarrays from different conditions: A case study. 2010,	1
1128	Multimodal Image Annotation Using Non-negative Matrix Factorization. 2010,	11
1127	Palmprint feature extraction using weight coding based non-negative sparse coding. 2010,	1
1126	Group locality preserving orthogonal nonnegative matrix factorization. 2010,	
1125	Hypergraph-based multilevel matrix approximation for text information retrieval. 2010,	3
1124	Content-adaptive parallax barriers for automultiscopic 3D display. 2010,	2
1123	Content-adaptive parallax barriers for automultiscopic 3D display. 2010,	3
1122	Learning author-topic models from text corpora. 2010, 28, 1-38	175
1121	Content-adaptive parallax barriers. 2010, 29, 1-10	91
1120	Automatic query-based personalized summarization that uses pseudo relevance feedback with NMF. 2010,	1
1119	Role of homeostasis in learning sparse representations. 2010, 22, 1812-36	27
1118	A basis-background subtraction method using non-negative matrix factorization. 2010,	3
1117	NMF-based multimodal image indexing for querying by visual example. 2010,	8
1116	Iris recognition on GPU with the usage of Non-Negative Matrix Factorization. 2010,	5
1115	Preliminary Study of a New Approach to NMF Based Text Summarization Fused with Anaphora Resolution. 2010,	
1114	Recent Advances of Data Biclustering with Application in Computational Neuroscience. 2010, 85-112	8
1113	Image super-resolution via sparse representation. 2010, 19, 2861-73	2924

1112	Non-Negative Matrix Factorization for Semisupervised Heterogeneous Data Coclustering. 2010 , 22, 1459-1474	74
1111	Bounded Component Analysis of Linear Mixtures: A Criterion of Minimum Convex Perimeter. 2010 , 58, 2141-2154	44
1110	Computational Social Network Analysis. 2010 ,	31
1109	Enabling distributed summarization of wireless capsule endoscopy video. 2010 ,	5
1108	Towards Structural Sparsity: An Explicit l_2/l_0 Approach. 2010 ,	13
1107	Eye detection using eye filter and minimisation of NMF-based reconstruction error in facial image. 2010 , 46, 130	11
1106	Application of Factor Analysis with Nonnegative Constraints for Source Apportionment of Soil Polycyclic Aromatic Hydrocarbons (PAHs) in Liaoning, China. 2010 , 11, 161-167	12
1105	Robust Regression for Face Recognition. 2010 ,	9
1104	A Novel Discriminant Non-Negative Matrix Factorization and its Application to Facial Expression Recognition. 2010 , 143-144, 129-133	0
1103	Automatic face emotion recognition system. 2010 ,	12
1102	Dynamical simulations of classical stochastic systems using matrix product states. 2010 , 82, 036702	23
1101	Fusion method of radar data and IFF data based on NMF. 2010 ,	
1100	Computational consciousness: building a self-preserving organism. 2010 , 657, 303-13	
1099	Search strategies in a human water maze analogue analyzed with automatic classification methods. 2010 , 208, 169-77	14
1098	Muscular synergies during motor corrections: investigation of the latencies of muscle activities. 2010 , 214, 428-36	13
1097	Tri-dimensional and triphasic muscle organization of whole-body pointing movements. 2010 , 170, 1223-38	32
1096	MicroRNA profiling reveals two distinct p53-related human pluripotent stem cell states. 2010 , 7, 671-81	84
1095	Direct decomposition of three-way arrays using a non-negative approximation. 2010 , 83, 541-8	3

1094	One-Class Matrix Completion with Low-Density Factorizations. 2010,	45
1093	Convex and semi-nonnegative matrix factorizations. 2010, 32, 45-55	705
1092	A new approach to discovering the causal relationship between meteorological patterns and PM10 exceedances. 2010, 98, 500-511	32
1091	Modeling Long-Term Search Engine Usage. 2010, 28-39	14
1090	Overview of source separation applications. 2010, 639-681	3
1089	A framework for feature selection in clustering. 2010, 105, 713-726	346
1088	Nonnegative least-correlated component analysis for separation of dependent sources by volume maximization. 2010, 32, 875-88	56
1087	Detecting the number of clusters in n-way probabilistic clustering. 2010, 32, 2006-21	108
1086	Improving POMDP tractability via belief compression and clustering. 2010, 40, 125-36	5
1085	Robust gender recognition for uncontrolled environment of real-life images. 2010, 56, 1586-1592	12
1084	Stability analysis of multiplicative update algorithms and application to nonnegative matrix factorization. 2010, 21, 1869-81	37
1083	A non-negative matrix factorization algorithm for the detection of chemicals from an incomplete Raman library. 2010,	1
1082	Sparse representation using nonnegative curds and whey. 2010,	38
1081	SAR image target recognition based on NMF feature extraction and Bayesian decision fusion. 2010,	5
1080	Non-negative mixtures. 2010, 515-547	4
1079	Document Clustering Method Using Weighted Semantic Features and Cluster Similarity. 2010,	4
1078	On Finding the Natural Number of Topics with Latent Dirichlet Allocation: Some Observations. 2010, 391-402	195
1077	Classifier Based on Non-negative Matrix Factorization for Tumor Data Classification. 2010,	

1076	Bayesian extensions of non-negative matrix factorization. 2010,	5
1075	Knowledge-Based and Intelligent Information and Engineering Systems. 2010,	1
1074	. 2010,	7
1073	Nonlinear non-negative component analysis algorithms. 2010, 19, 1050-66	50
1072	Deterministic Column-Based Matrix Decomposition. 2010, 22, 145-149	58
1071	Linear and nonlinear projective nonnegative matrix factorization. 2010, 21, 734-49	151
1070	Numerical Analysis for Statisticians. 2010,	118
1069	Learning to rank tags. 2010,	12
1068	Non-negative matrix factorization and decomposition of a fuzzy relation. 2010,	
1067	. 2010,	4
1066	Automatic Multi-document Summarization Based on Clustering and Nonnegative Matrix Factorization. 2010, 27, 167	11
1065	Sparse nonnegative matrix factorization with the elastic net. 2010,	2
1064	Quantitative detection of sediment dust analog over green canopy using airborne hyperspectral imagery. 2010,	2
1063	A Nonnegative Blind Source Separation Model for Binary Test Data. 2010, 57, 1439-1448	11
1062	Head pose estimation based on extended non-negative matrix factorization. 2010,	
1061	Convolutional Sparse Non-negative Matrix Factorization for windy speech. 2010,	3
1060	Deductive and Inductive Stream Reasoning for Semantic Social Media Analytics. 2010, 25, 32-41	52
1059	Nonnegative Embeddings and Projections for Dimensionality Reduction and Information Visualization. 2010,	3

1058	Extracting Feature Subspace Using Modified Nonnegative Matrix Factorization. 2010,	
1057	Dealing with uncertain input in word learning. 2010,	
1056	Visualization and classification of microarray gene data by nonnegative matrix factorization. 2010,	
1055	M-eval: A Multivariate Evaluation Function for Opening Positions in Computer Go. 2010,	0
1054	Local Wavelet Features for Statistical Object Classification and Localization. 2010, 17, 118-118	9
1053	Development of Partial Face Recognition Framework. 2010,	8
1052	Research and application of non-negative matrix factorization with sparseness constraint in recognition of traditional Chinese medicine pulse condition. 2010,	
1051	Minimum volume simplicial enclosure for spectral unmixing of remotely sensed hyperspectral data. 2010,	2
1050	Nonnegative principal component analysis for cancer molecular pattern discovery. 2010, 7, 537-49	37
1049	Optimal Factorization of Three-Way Binary Data. 2010,	4
1048	Single Channel Speech Separation Using Source-Filter Representation. 2010,	2
1047	Interval-valued Matrix Factorization with Applications. 2010,	2
1046	Sifting through Network Data to Cull Activity Patterns with HEAPs. 2010,	1
1045	Exploring matrix factorization techniques for significant genes identification of microarray dataset. 2010,	1
1044	Sparse representations for facial expressions recognition via l1 optimization. 2010,	19
1043	L1/2 Sparsity Constrained Nonnegative Matrix Factorization for Hyperspectral Unmixing. 2010,	8
1042	Studying the effectiveness of using linear subspace techniques to improve SVM classifiers in facial image classification. 2010,	
1041	Efficient Probabilistic Latent Semantic Analysis with Sparsity Control. 2010,	2

1040	Comparison between popular image fusion approaches with the consideration of their influence on later segmentation outcomes. 2010,	
1039	Order-preserving factor discovery from misaligned data. 2010,	
1038	Learning the local molecular pattern of Alzheimer's disease by non-negative matrix factorization. 2010,	1
1037	Accurate fault prediction of BlueGene/P RAS logs via geometric reduction. 2010,	7
1036	Blind Source Separation by Fully Nonnegative Constrained Iterative Volume Maximization. 2010, 17, 799-802	2
1035	Convergence-guaranteed multiplicative algorithms for nonnegative matrix factorization with Edivergence. 2010,	14
1034	Non-negative matrix factorization based discriminative features for speaker verification. 2010,	1
1033	The Markov selection model for concurrent speech recognition. 2010,	3
1032	Manifold-respecting probabilistic matrix tri-factorization. 2010,	
1031	Archetypal analysis for machine learning. 2010,	5
1030	Compressed Nonnegative Sparse Coding. 2010,	4
1029	Toward Automated Anomaly Identification in Large-Scale Systems. 2010, 21, 174-187	65
1028	Learning from images and speech with Non-negative Matrix Factorization enhanced by input space scaling. 2010,	2
1027	Bilinear models for item recommendation based on tags. 2010,	
1026	Context awareness emergence for distributed binary pyroelectric sensors. 2010,	1
1025	Investigating word learning processes in an artificial agent. 2010,	
1024	Bayesian regularized nonnegative matrix factorization based face features learning. 2010,	
1023	Projective nonnegative graph embedding. 2010, 19, 1126-37	49

1022 Robust 3D Watermarking Technique for Authentication of 3D Polygonal Model. **2010,**

1021 FCA as a Tool for Inaccuracy Detection in Content-Based Image Analysis. **2010,**

4

1020 Using Genetic algorithm to enhance nonnegative matrix factorization initialization. **2010,**

1019 A non-negative approach to semi-supervised separation of speech from noise with the use of temporal dynamics. **2011,**

46

1018 A new spatially constrained NMF with application to fMRI. **2011,** 2011, 5052-5

6

1017 On the use of NMF for onset detection in polyphonic piano music. **2011,**

1016 A modified non-negative LMS algorithm and its stochastic behavior analysis. **2011,**

3

1015 . **2011,** 49, 4282-4297

334

1014 Age estimation based on extended non-negative matrix factorization. **2011,**

6

1013 A Content-Based Information Retrieval Model Using Non-Negative Matrix Factorization Method. **2011,**

1012 Semantic Models for Style-Based Text Clustering. **2011,**

2

1011 Document clustering using NMF and fuzzy relation. **2011,**

1010 Large scale topic modeling made practical. **2011,**

0

1009 Single-channel speech-music separation using NMF for automatic speech recognition. **2011,**

1008 Spatial sparsity-based blind source separation method including non-negative matrix factorization for multispectral image unmixing. **2011,**

1007 Independent Component Analysis for Blind Unmixing of Hyperspectral Imagery With Additional Constraints. **2011,** 49, 2165-2179

34

1006 Unified development of multiplicative algorithms for linear and quadratic nonnegative matrix factorization. **2011,** 22, 1878-91

39

1005 Non-negative Matrix Factorization with sparse features. **2011,**

1004	Research on clustering based on short message text. 2011,	
1003	Hyperspectral, multispectral, and panchromatic data fusion based on coupled non-negative matrix factorization. 2011,	17
1002	Audio similarity matrices enhancement in an image processing framework. 2011,	1
1001	. 2011,	21
1000	Scale-invariant probabilistic latent component analysis. 2011,	3
999	Formulations and algorithms for multichannel complex NMF. 2011,	5
998	. 2011,	
997	Probabilistic latent tensor factorization framework for audio modeling. 2011,	4
996	Document Clustering via Matrix Representation. 2011,	6
995	Occluded face recognition based on the improved SVM and block weighted LBP. 2011,	5
994	A new non-negative matrix factorization algorithm with sparseness constraints. 2011,	8
993	Systems Approach to Identifying Relevant Pathways from Phenotype Information in Dose-Dependent Time Series Microarray Data. 2011, 2011, 290-293	6
992	Supervised Matrix Factorization with sparseness constraints and fast inference. 2011,	2
991	Hyperspectral unmixing using non-negative matrix factorization with automatically estimating regularization parameters. 2011,	
990	New Methods of Data Clustering and Classification Based on NMF. 2011,	3
989	Infinite multiple membership relational modeling for complex networks. 2011,	15
988	A sensor interface based on sparse NMF for piano musical transcription. 2011,	0
987	Non-negative local coordinate factorization for image representation. 2011,	7

986	Biclustering and classification analysis in gene expression using Nonnegative Matrix Factorization on multi-GPU systems. 2011,	10
985	Automatic summarization of Turkish documents using non-negative matrix factorization. 2011,	6
984	A Two-Layer SVM Classification Mechanism for Chinese Blog Article. 2011,	
983	A framework for semantic analysis of histopathological images using nonnegative matrix factorization. 2011,	
982	Adaptive harmonic time-frequency decomposition of audio using shift-invariant PLCA. 2011,	11
981	Brain Tumor Pathological Area Delimitation through Non-negative Matrix Factorization. 2011,	
980	An input function estimation method for dynamic mouse 18F-FDG microPET studies. 2011,	1
979	Extended Probabilistic Latent Semantic Analysis Model For Topics In Time-Stamped Images. 2011, 17, 997-1007	1
978	Direct Robust Matrix Factorization for Anomaly Detection. 2011,	47
977	Non-negative patch alignment framework. 2011, 22, 1218-30	146
976	Modeling of isomeric structure of diphenyl urethane by FT-IR spectroscopy during synthesis from phenylisocyanate and phenol as an inverse kinetic problem. 2011, 115, 8832-44	5
975	Query log simulation for long-term learning in image retrieval. 2011,	
974	Constrained Nonnegative Matrix Factorization Used for Spectral Unmixing. 2011,	1
973	Efficient and principled method for detecting communities in networks. 2011, 84, 036103	213
972	Recommender systems with social regularization. 2011,	774
971	Improving Recommender Systems by Incorporating Social Contextual Information. 2011, 29, 1-23	116
970	Augmented complex matrix factorisation. 2011,	2
969	Fast Nonnegative Matrix Factorization: An Active-Set-Like Method and Comparisons. 2011, 33, 3261-3281	187

968	. 2011,	60
967	Mining Electronic Medical Records to Explore the Linkage between Healthcare Resource Utilization and Disease Severity in Diabetic Patients. 2011,	5
966	On the clustering of large-scale data: A matrix-based approach. 2011,	3
965	New formulations and efficient algorithms for multichannel NMF. 2011,	13
964	A novel computational framework for simultaneous integration of multiple types of genomic data to identify microRNA-gene regulatory modules. 2011, 27, i401-9	170
963	Hyperspectral unmixing based on the sparsity of spectrum's gabor transform coefficients. 2011,	
962	Fast and efficient fully 3D PET image reconstruction using sparse system matrix factorization with GPU acceleration. 2011, 56, 6739-57	60
961	Intrinsic subtypes of gastric cancer, based on gene expression pattern, predict survival and respond differently to chemotherapy. 2011, 141, 476-85, 485.e1-11	244
960	Co-clustering for Binary and Categorical Data with Maximum Modularity. 2011,	17
959	Exploring Latent Features for Memory-Based QoS Prediction in Cloud Computing. 2011,	77
958	Algorithms in nature: the convergence of systems biology and computational thinking. 2011, 7, 546	66
957	Multivariate models of inter-subject anatomical variability. 2011, 56, 422-39	34
956	Minimum-volume-constrained nonnegative matrix factorization: enhanced ability of learning parts. 2011, 22, 1626-37	88
955	Extracting insights from social media with large-scale matrix approximations. 2011, 55, 9:1-9:13	4
954	Using NMF-based text summarization to improve supervised and unsupervised classification. 2011,	5
953	High Performance Networking, Computing, and Communication Systems. 2011,	
952	Advances in Swarm Intelligence. 2011,	0
951	Synthesizing lead antimonate in ancient and modern opaque glass. 2011, 26, 1040	53

950	Intelligent Robotics and Applications. 2011,	1
949	Adaptive and Natural Computing Algorithms. 2011,	1
948	Symmetric nonnegative matrix factorization: algorithms and applications to probabilistic clustering. 2011, 22, 2117-31	135
947	Health care fraud detection using nonnegative matrix factorization. 2011,	5
946	Large-scale matrix factorization with distributed stochastic gradient descent. 2011,	291
945	Locomotor primitives in newborn babies and their development. 2011, 334, 997-9	398
944	Learning to recommend with explicit and implicit social relations. 2011, 2, 1-19	53
943	Intercomparison and Validation of Techniques for Spectral Unmixing of Hyperspectral Images: A Planetary Case Study. 2011, 49, 4341-4358	22
942	Locally Consistent Concept Factorization for Document Clustering. 2011, 23, 902-913	196
941	Mining Networked Media Collections. 2011, 1-11	1
940	WSPred: A Time-Aware Personalized QoS Prediction Framework for Web Services. 2011,	128
939	Web Data Mining. 2011,	191
938	Computer Analysis of Human Behavior. 2011,	4
937	Majorization-minimization algorithm for smooth Itakura-Saito nonnegative matrix factorization. 2011,	32
936	Convolutional Nonnegative Matrix Factorization with Markov Random Field Smoothing for Blind Unmixing of Multichannel Speech Recordings. 2011, 25-32	1
935	Personalized text summarization using NMF and cluster refinement. 2011,	
934	Web Usage Mining. 2011, 527-603	27
933	Using Population Based Algorithms for Initializing Nonnegative Matrix Factorization. 2011, 307-316	40

932	Nonnegative Least-Mean-Square Algorithm. 2011 , 59, 5225-5235	48
931	Recent trends in application of multivariate curve resolution approaches for improving gas chromatography-mass spectrometry analysis of essential oils. 2011 , 85, 835-49	59
930	Online blind source separation using incremental nonnegative matrix factorization with volume constraint. 2011 , 22, 550-60	98
929	Underdetermined Sparse Blind Source Separation of Nonnegative and Partially Overlapped Data. 2011 , 33, 2063-2094	8
928	Combinatorial and high-throughput screening of materials libraries: review of state of the art. 2011 , 13, 579-633	348
927	Regularized Active Set Least Squares Algorithm for Nonnegative Matrix Factorization in Application to Raman Spectra Separation. 2011 , 492-499	2
926	Computing the Stationary Distribution of a Finite Markov Chain Through Stochastic Factorization. 2011 , 32, 1513-1523	
925	Low-Rank Matrix Approximation with Weights or Missing Data Is NP-Hard. 2011 , 32, 1149-1165	100
924	Discrete Eckart-Young Theorem for Integer Matrices. 2011 , 32, 1367-1382	2
923	Tumor classification based on non-negative matrix factorization using gene expression data. 2011 , 10, 86-93	39
922	A Hybrid Probabilistic Model for Unified Collaborative and Content-Based Image Tagging. 2011 , 33, 1281-94	64
921	Graph Regularized Nonnegative Matrix Factorization for Data Representation. 2011 , 33, 1548-60	1248
920	Nonnegative Matrix Factorization with Earth Mover's Distance Metric for Image Analysis. 2011 , 33, 1590-602	116
919	Graph-preserving sparse nonnegative matrix factorization with application to facial expression recognition. 2011 , 41, 38-52	133
918	A General Model for Relational Clustering. 2011 ,	
917	Understanding Protein-Ligand Interactions Using Simulated Annealing in Dimensionally Reduced Fingerprint Representation. 2011 ,	
916	Swarm Intelligence for Non-Negative Matrix Factorization. 2011 , 2, 12-34	47
915	Towards a computer language for the i-society. 2011 ,	

914	Mapping Functional Connectivity between Neuronal Ensembles with Larval Zebrafish Transgenic for a Ratiometric Calcium Indicator. 2011 , 5, 2	15
913	Unmixing binocular signals. 2011 , 5, 78	7
912	Do parents recognize autistic deviant behavior long before diagnosis? Taking into account interaction using computational methods. 2011 , 6, e22393	82
911	Multiple statistical analysis techniques corroborate intratumor heterogeneity in imaging mass spectrometry datasets of myxofibrosarcoma. 2011 , 6, e24913	84
910	An efficient coding hypothesis links sparsity and selectivity of neural responses. 2011 , 6, e25506	14
909	BinTree seeking: a novel approach to mine both bi-sparse and cohesive modules in protein interaction networks. 2011 , 6, e27646	6
908	Non-negative matrix factorization for learning alignment-specific models of protein evolution. 2011 , 6, e28898	8
907	Sound Source Separation. 2011 , 551-588	
906	Sub-Category Optimization through Cluster Performance Analysis for Multi-View Multi-Pose Object Detection. 2011 , E94-D, 1467-1478	1
905	Enhancing Document Clustering Using Condensing Cluster Terms and Fuzzy Association. 2011 , E94-D, 1227-1234	1
904	Nonnegative matrix factorization with maximum self-information on basis components. 2011 ,	
903	Efficient Document Clustering via Online Nonnegative Matrix Factorizations. 2011 ,	39
902	Sparse unmixing analysis for hyperspectral imagery of space objects. 2011 ,	
901	A Parallel Quadratic Programming Algorithm for Model Predictive Control. 2011 , 44, 1031-1039	12
900	Recognition of Nonprototypical Emotions in Reverberated and Noisy Speech by Nonnegative Matrix Factorization. 2011 , 2011,	12
899	Genome-wide DNA profiling of marginal zone lymphomas identifies subtype-specific lesions with an impact on the clinical outcome. 2011 , 117, 1595-604	145
898	Recent Advances in Blind Speech Dereverberation. 2011 , 4, 301-310	1
897	Orthogonal simple component analysis: A new, exploratory approach. 2011 , 5,	10

896	Dimensionality Reduction for Histogram Features Based on Supervised Non-negative Matrix Factorization. 2011 , E94-D, 1870-1879	3
895	A strong redshift dependence of the broad absorption line quasar fraction. 2011 , 410, 860-884	156
894	Extraction of food consumption systems by nonnegative matrix factorization (NMF) for the assessment of food choices. 2011 , 67, 1647-58	13
893	A bioinformatic assay for pluripotency in human cells. 2011 , 8, 315-7	341
892	Recognising realistic emotions and affect in speech: State of the art and lessons learnt from the first challenge. 2011 , 53, 1062-1087	407
891	Synergy matrices to estimate fluid wrist movements by surface electromyography. 2011 , 33, 916-23	27
890	Efficient Euclidean projections via Piecewise Root Finding and its application in gradient projection. 2011 , 74, 2754-2766	12
889	Rank-two residue iteration method for nonnegative matrix factorization. 2011 , 74, 3305-3312	3
888	Discriminative concept factorization for data representation. 2011 , 74, 3800-3807	18
887	Improving subspace learning for facial expression recognition using person dependent and geometrically enriched training sets. 2011 , 24, 814-23	26
886	Large margin based nonnegative matrix factorization and partial least squares regression for face recognition. 2011 , 32, 1822-1835	12
885	Unsupervised Discovery of Temporal Structure in Music. 2011 , 5, 1240-1251	16
884	Nonnegative Matrix Partial Co-Factorization for Spectral and Temporal Drum Source Separation. 2011 , 5, 1192-1204	30
883	Musical Instrument Sound Multi-Excitation Model for Non-Negative Spectrogram Factorization. 2011 , 5, 1144-1158	30
882	Adaptive Sparsity Non-Negative Matrix Factorization for Single-Channel Source Separation. 2011 , 5, 989-1001	35
881	Transcribing Multi-Instrument Polyphonic Music With Hierarchical Eigeninstruments. 2011 , 5, 1159-1169	37
880	A Novel Strategy of Nonnegative-Matrix-Factorization-Based Polarimetric Ship Detection. 2011 , 8, 1085-1089	4
879	Sourcefilter-Based Single-Channel Speech Separation Using Pitch Information. 2011 , 19, 242-255	31

878	Underdetermined Convolutional Blind Source Separation via Frequency Bin-Wise Clustering and Permutation Alignment. 2011 , 19, 516-527	206
877	NMF With Time-Frequency Activations to Model Nonstationary Audio Events. 2011 , 19, 744-753	22
876	. 2011 , 19, 961-976	86
875	Single-Channel Source Separation Using Complex Matrix Factorization. 2011 , 19, 2591-2597	23
874	An approach based on constrained nonnegative matrix factorization to unmix hyperspectral data. 2011 , 49, 757-772	127
873	Image decomposition with multilabel context: algorithms and applications. 2011 , 20, 2301-14	10
872	Manifold regularized discriminative nonnegative matrix factorization with fast gradient descent. 2011 , 20, 2030-48	243
871	Data-Driven Intelligent Transportation Systems: A Survey. 2011 , 12, 1624-1639	857
870	Component analysis approach to estimation of tissue intensity distributions of 3D images. 2011 , 30, 838-48	6
869	Phoenix: A Weight-Based Network Coordinate System Using Matrix Factorization. 2011 , 8, 334-347	35
868	Computational pathology: challenges and promises for tissue analysis. 2011 , 35, 515-30	144
867	Face recognition: vision and emotions beyond the bubble. 2011 , 21, R888-90	4
866	Distinct resting-state brain activities in heroin-dependent individuals. 2011 , 1402, 46-53	55
865	Maximum contrast analysis for nonnegative blind source separation. 2011 , 62, 3997-4006	2
864	Clustering-based hyperspectral band selection using sparse nonnegative matrix factorization. 2011 , 12, 542-549	29
863	Blind spectral unmixing based on sparse nonnegative matrix factorization. 2011 , 20, 1112-25	123
862	Descent Methods for Nonnegative Matrix Factorization. 2011 , 251-293	13
861	Automatic text summarization using latent semantic analysis. 2011 , 37, 299-305	24

860	Gene expression modular analysis: an overview from the data mining perspective. 2011 , 1, 381-396	1
859	Community discovery using nonnegative matrix factorization. 2011 , 22, 493-521	257
858	Matrix-variate and higher-order probabilistic projections. 2011 , 22, 372-392	11
857	Nonnegative tensor factorization as an alternative Csiszar-Tusnady procedure: algorithms, convergence, probabilistic interpretations and novel probabilistic tensor latent variable analysis algorithms. 2011 , 22, 419-466	13
856	A unified scheme of shot boundary detection and anchor shot detection in news video story parsing. 2011 , 51, 1127-1145	34
855	Biometric bits extraction through phase quantization based on feature level fusion. 2011 , 47, 255-273	1
854	Temporal relation co-clustering on directional social network and author-topic evolution. 2011 , 26, 467-486	23
853	Convex non-negative matrix factorization for massive datasets. 2011 , 29, 457-478	25
852	Statistical semantics for enhancing document clustering. 2011 , 28, 365-393	27
851	On the equivalence between nonnegative tensor factorization and tensorial probabilistic latent semantic analysis. 2011 , 35, 285-295	10
850	Towards unique solutions of non-negative matrix factorization problems by a determinant criterion. 2011 , 21, 528-534	15
849	Enhanced clustering of biomedical documents using ensemble non-negative matrix factorization. 2011 , 181, 2293-2302	32
848	Biodiesel classification by base stock type (vegetable oil) using near infrared spectroscopy data. 2011 , 689, 190-7	89
847	An alternating projected gradient algorithm for nonnegative matrix factorization. 2011 , 217, 9997-10002	13
846	Computational auditory induction as a missing-data model-fitting problem with Bregman divergence. 2011 , 53, 658-676	15
845	Robust non-negative matrix factorization. 2011 , 6, 192-200	73
844	Codimensional matrix pairing perspective of BYY harmony learning: hierarchy of bilinear systems, joint decomposition of data-covariance, and applications of network biology. 2011 , 6, 86-119	21
843	Lipid profiles of female and male Drosophila. 2011 , 4, 198	36

842	TAFFEL: Independent Enrichment Analysis of gene sets. 2011 , 12, 171	1
841	Expression cartography of human tissues using self organizing maps. 2011 , 12, 306	65
840	Multi-resolution independent component analysis for high-performance tumor classification and biomarker discovery. 2011 , 12 Suppl 1, S7	21
839	Comprehensive evaluation of matrix factorization methods for the analysis of DNA microarray gene expression data. 2011 , 12 Suppl 13, S8	14
838	Exploring matrix factorization techniques for significant genes identification of Alzheimer's disease microarray gene expression data. 2011 , 12 Suppl 5, S7	16
837	Extracting Individual Contributions From Their Mixture: A Blind Source Separation Approach. 2011 , 51, 143-151	2
836	On extensions of k-means clustering for automated gating of flow cytometry data. 2011 , 79, 3-5	6
835	Investigation of spectrally coherent resting-state networks using non-negative matrix factorization for functional MRI data. 2011 , 21, 211-222	15
834	A guide to stem cell identification: progress and challenges in system-wide predictive testing with complex biomarkers. 2011 , 33, 880-90	15
833	Orthogonal projection to latent structures solution properties for chemometrics and systems biology data. 2011 , 25, 514-525	8
832	Component recognition with three-dimensional fluorescence spectra based on non-negative matrix factorization. 2011 , 25, 586-591	7
831	Sparse nonnegative matrix factorization for protein sequence motif discovery. 2011 , 38, 13198-13207	8
830	Joint processing of the parallel and crossed polarized Raman spectra and uniqueness in blind nonnegative source separation. 2011 , 105, 7-18	14
829	Fault detection, identification and reconstruction for gyroscope in satellite based on independent component analysis. 2011 , 68, 1015-1023	19
828	A new feature extraction and selection scheme for hybrid fault diagnosis of gearbox. 2011 , 38, 10000-10009	79
827	PARAFAC algorithms for large-scale problems. 2011 , 74, 1970-1984	70
826	Modelling vocabulary acquisition, adaptation and generalization in infants using adaptive Bayesian PLSA. 2011 , 74, 1874-1882	8
825	Image representation using Laplacian regularized nonnegative tensor factorization. 2011 , 44, 2516-2526	29

824	Feature extraction for rolling element bearing fault diagnosis utilizing generalized S transform and two-dimensional non-negative matrix factorization. 2011 , 330, 2388-2399	70
823	T wave alternans evaluation using adaptive time-frequency signal analysis and non-negative matrix factorization. 2011 , 33, 700-11	17
822	Extended HALS algorithm for nonnegative Tucker decomposition and its applications for multiway analysis and classification. 2011 , 74, 1956-1969	47
821	Nonlinear nonnegative matrix factorization based on Mercer kernel construction. 2011 , 44, 2800-2810	35
820	Manifold-respecting discriminant nonnegative matrix factorization. 2011 , 32, 832-837	28
819	Postprocessing and sparse blind source separation of positive and partially overlapped data. 2011 , 91, 1838-1851	23
818	Analysis of two-mode network data using nonnegative matrix factorization. 2011 , 33, 201-210	10
817	A very fast algorithm for matrix factorization. 2011 , 81, 773-782	9
816	Regularized latent semantic indexing. 2011 ,	41
815	Pattern change discovery between high dimensional data sets. 2011 ,	3
814	Probabilistic factor models for web site recommendation. 2011 ,	38
813	Algorithms for Nonnegative Matrix Factorization with the \mathbb{E} Divergence. 2011 , 23, 2421-2456	307
812	Cross-language web page classification via dual knowledge transfer using nonnegative matrix tri-factorization. 2011 ,	50
811	Conditional topical coding. 2011 ,	2
810	Fast coordinate descent methods with variable selection for non-negative matrix factorization. 2011 ,	101
809	Undergraduate research in computer forensics. 2011 ,	1
808	Study of Odor Approximation by Using Mass Spectrometer. 2011 ,	1
807	Transcriptome data analysis for cell culture processes. 2012 , 127, 27-70	1

806	Stability analysis of multiplicative update algorithms for non-negative matrix factorization. 2011,	0
805	Detecting Copy-Move Forgery Using Non-negative Matrix Factorization. 2011,	5
804	. 2011,	6
803	Online parts-based feature discovery using competitive activation neural networks. 2011,	4
802	Overlapping community detection using Bayesian non-negative matrix factorization. 2011, 83, 066114	227
801	The Three Steps of Clustering in the Post-Genomic Era: A Synopsis. 2011, 13-30	9
800	Recent advances in discriminant non-negative Matrix Factorization. 2011,	1
799	Image_3.PDF. 2020,	
798	Image_4.PDF. 2020,	
797	Image_5.PDF. 2020,	
796	Image_6.PDF. 2020,	
795	Image_7.PDF. 2020,	
794	Image_8.PDF. 2020,	
793	Table_1.XLSX. 2020,	
792	Table_10.XLSX. 2020,	
791	Table_11.XLSX. 2020,	
790	Table_12.XLSX. 2020,	
789	Table_13.XLSX. 2020,	

788 Table_2.XLSX. 2020,

787 Table_3.XLSX. 2020,

786 Table_4.XLSX. 2020,

785 Table_5.XLSX. 2020,

784 Table_6.XLSX. 2020,

783 Table_7.XLSX. 2020,

782 Table_8.XLSX. 2020,

781 Table_9.XLSX. 2020,

780 Table_1.DOCX. 2020,

779 Data_Sheet_1.pdf. 2020,

778 Video_1.mp4. 2020,

777 Presentation1.PDF. 2018,

776 Data_Sheet_1.pdf. 2018,

775 Image1.PDF. 2018,

774 Table1.PDF. 2018,

773 Table2.PDF. 2018,

772 Table3.PDF. 2018,

771 Multivariate analysis of disorder in metal-organic frameworks.. 2022, 13, 2173

1

- 770 Graph-Regularized Non-Negative Tensor-Ring Decomposition for Multiway Representation Learning.. **2022**, PP, 0
- 769 Is modular control related to functional outcomes in individuals with knee osteoarthritis and following total knee arthroplasty?. **2022**, 17, e0267340
- 768 Point process models for sequence detection in high-dimensional neural spike trains.. **2020**, 33, 14350-14361 1
- 767 The Interpretable Representation of Football Player Roles Based on Passing/Receiving Patterns. **2022**, 62-76 1
- 766 Real-Time Detection of COVID-19 Events From Twitter: A Spatial-Temporally Bursty-Aware Method. **2022**, 1-17 1
- 765 Neurodevelopmental Patterns of Early Postnatal White Matter Maturation Represent Distinct Underlying Microstructure and Histology.
- 764 A Novel Matrix Factorization Model for Interpreting Single-Cell Gene Expression from Biologically Heterogeneous Data. **2022**, 353-355
- 763 Tight risk bound for high dimensional time series completion. **2022**, 16,
- 762 Matrix Factorization and Topic Modeling. **2022**, 33-74
- 761 OUP accepted manuscript.
- 760 OUP accepted manuscript. 0
- 759 Recommender systems based on graph embedding techniques: A review. **2022**, 1-1 2
- 758 Semi-supervised multi-view binary learning for large-scale image clustering. 1 0
- 757 An Advanced Deep Attention Collaborative Mechanism for Secure Educational Email Services.. **2022**, 2022, 3150626 1
- 756 Nucleosome sliding by the Chd1 chromatin remodeler relies on the integrity of the DNA duplex.
- 755 Distinct ensembles in the noradrenergic locus coeruleus are associated with diverse cortical states.. **2022**, 119, e2116507119 2
- 754 Semi-Automatic Creation of Resilience Dictionary for Strengths-based Text Analysis of Online Mental Health Forums (Preprint).
- 753 Learning biologically-interpretable latent representations for gene expression data.

- 752 Nonnegative canonical tensor decomposition with linear constraints: nnCANDELINC. 0
- 751 Sparse non-negative matrix factorization for uncertain data clustering. **2022**, 26, 615-636
- 750 Evaluation of geometric similarity metrics for structural clusters generated using topology optimization. 1
- 749 Explainability of the COVID-19 epidemiological model with nonnegative tensor factorization.. **2022**, 1-14 1
- 748 Statistical Methods for Minimax Estimation in Linear Models with Unknown Design Over Finite Alphabets. **2022**, 4, 490-513 0
- 747 A novel update rule of HALS algorithm for nonnegative matrix factorization and Zangwill's global convergence.
- 746 A Topic Modeling Comparison Between LDA, NMF, Top2Vec, and BERTopic to Demystify Twitter Posts. **2022**, 7, 7
- 745 Globality constrained adaptive graph regularized non-negative matrix factorization for data representation. 0
- 744 Dissociable multi-scale patterns of development in personalized brain networks.. **2022**, 13, 2647 1
- 743 scSemiAE: a deep model with semi-supervised learning for single-cell transcriptomics.. **2022**, 23, 161 0
- 742 Investigation And Comparison of Optimization Methods for Variational Autoencoder-Based Underdetermined Multichannel Source Separation. **2022**,
- 741 Design and Research of Dynamic Evolution System in Football Tactics Under Computational Intelligence. **2022**, 2022, 1-12
- 740 KINOMO: A non-negative matrix factorization framework for recovering intra- and inter-tumoral heterogeneity from single-cell RNA-seq data.
- 739 Quantifying Discriminability between NMF Bases. **2022**,
- 738 Heterogeneous graph convolutional network pre-training as side information for improving recommendation. 0
- 737 An Information Maximization Based Blind Source Separation Approach for Dependent and Independent Sources. **2022**,
- 736 Bounded Simplex-Structured Matrix Factorization. **2022**, 0
- 735 Bacterial plasmid-associated and chromosomal proteins have fundamentally different properties in protein interaction networks. 0

734 A Generalized Hierarchical Nonnegative Tensor Decomposition. **2022,**

733 Population coding strategies in human tactile afferents.

732 Non-negative matrix factorization improves the efficiency of recording frequency-following responses in normal-hearing adults and neonates.. **2022,** 1-11

731 Unsupervised EEG channel selection based on nonnegative matrix factorization. **2022,** 76, 103700

o

730 Robust landmark graph-based clustering for high-dimensional data. **2022,** 496, 72-84

o

729 Improving NMF clustering by leveraging contextual relationships among words. **2022,** 495, 105-117

728 Inter- and intra-individual variation in brain structural-cognition relationships in aging.. **2022,** 119254

o

727 Handling information loss of graph convolutional networks in collaborative filtering. **2022,** 109, 102051

o

726 Sparse factorization of square matrices with application to neural attention modeling.. **2022,** 152, 160-168

o

725 Dynamic Imputation Methodology for Multi-source Streaming Mobility Data. **2022,** 184-198

o

724 Hangul Fonts Dataset: A Hierarchical and Compositional Dataset for Investigating Learned Representations. **2022,** 3-14

723 A Graph Representation Learning Algorithm for Approximate Local Symmetry Feature Extraction to Enhance Malicious Device Detection Preprocessing. **2022,** 1-1

722 Estimation of Time-Frequency Muscle Synergy in Wrist Movements. **2022,** 24, 707

1

721 A new fault isolation approach based on propagated nonnegative matrix factorizations. **2022,** 1-14

720 Submicrometer spectromicroscopy of UO₂ aged under high humidity conditions. **2022,** 40, 043202

719 easyMF: A Web Platform for Matrix Factorization-Based Gene Discovery from Large-scale Transcriptome Data.. **2022,**

o

718 A Review of the Trends and Challenges in Adopting Natural Language Processing Methods for Education Feedback Analysis. **2022,** 1-1

1

717 A Graph-Based Multi-view Clustering Approach for Continuous Pattern Mining. **2022,** 201-237

- 716 Performance Profiling of Operating Modes via Multi-view Analysis Using Non-negative Matrix Factorisation. **2022**, 289-316
- 715 Accurate and sensitive mutational signature analysis with MuSiCal.
- 714 Research on Overlapping Community Detection Based on Density Peak Clustering in Heterogeneous Networks. **2022**,
- 713 A survey of unsupervised learning methods for high-dimensional uncertainty quantification in black-box-type problems. **2022**, 111313 ○
- 712 SARNMF: A Community Detection Method for Attributed Networks. **2022**,
- 711 Multi-Trait Genetic Analysis Reveals Clinically Interpretable Hypertension Subtypes. 1
- 710 Segmentation of Infant Brain Using Nonnegative Matrix Factorization. **2022**, 12, 5377 1
- 709 Improving time-frequency sparsity for enhanced audio source separation in degenerate unmixing estimation technique algorithm. 1-14
- 708 Acoustic Denoising Using Artificial Intelligence for Wood-Boring Pests *Semanotus bifasciatus* Larvae Early Monitoring. **2022**, 22, 3861 ○
- 707 scMoMaT: Mosaic integration of single cell multi-omics matrices using matrix trifactorization. ○
- 706 Differential impact of brain network efficiency on post-stroke motor and attentional deficits.
- 705 Design of an Isometric End-Point Force Control Task for Electromyography Normalization and Muscle Synergy Extraction From the Upper Limb Without Maximum Voluntary Contraction. **2022**, 16, ○
- 704 Analysis of the impact of non-compulsory measures on human mobility in Japan during the COVID-19 pandemic. **2022**, 103751 ○
- 703 Selecting a clustering algorithm: A semi-automated hyperparameter tuning framework for effective persona development. **2022**, 14, 100186 1
- 702 A novel approach for discovering correlations between elemental and molecular composition using laser-based spectroscopic techniques. 1
- 701 A Momentum-accelerated Hessian-vector-based Latent Factor Analysis Model. **2022**, 1-1 4
- 700 Supervised Class-Pairwise Nmf for Data Representation and Classification.
- 699 Dual Graph-regularized Sparse Concept Factorization for Clustering. **2022**, ○

- 698 Multi-layer Manifold Learning for Deep Non-negative Matrix Factorization-Based Multi-View Clustering. **2022**, 108815 ○
- 697 DFIL: an Efficient Web Service Prediction Method based on Deep Feature Interactive Learning. **2022**, ○
- 696 Space-Time Mapping Identifies Concerted Multicellular Patterns and Gene Programs in Healing Wounds and their Conservation in Cancers.
- 695 Cutaneous and acral melanoma cross-OMICs reveals prognostic cancer drivers associated with pathobiology and ultraviolet exposure.
- 694 Identification of Heparan Sulfate in Dilated Cardiomyopathy by Integrated Bioinformatics Analysis. **2022**, 9,
- 693 Semi-supervised multi-view clustering with dual hypergraph regularized partially shared non-negative matrix factorization. ○
- 692 Quantum annealing algorithms for Boolean tensor networks. **2022**, 12, 1
- 691 Generalised non-negative matrix factorisation for air pollution source apportionment. **2022**, 156294 ○
- 690 DeepNNMF:deep nonlinear non-negative matrix factorization to address sparsity problem of collaborative recommender system. ○
- 689 Echinocandin heteroresistance causes prophylaxis failure and facilitates breakthrough Candida parapsilosis infection. ○
- 688 Crystallographic Rotation during Solid-Phase Epitaxy of SrTiO₃ from Nanoscale Seed Crystals. ○
- 687 INmfCA Algorithm for Training of Nonparallel Voice Conversion Systems Based on Non-Negative Matrix Factorization. **2022**, E105.D, 1196-1210
- 686 A Poisson reduced-rank regression model for association mapping in sequencing data.
- 685 3D (x-y-t) Raman imaging of tomato fruit cuticle: microchemistry during development.
- 684 Log-based sparse nonnegative matrix factorization for data representation. **2022**, 109127 3
- 683 Visualization of Needs Differences Between Commercial Areas Based on Topic Graph Centrality. **2022**, 142, 660-669
- 682 Investigating the association of environmental exposures and all-cause mortality in the UK Biobank using sparse principal component analysis. **2022**, 12,
- 681 Sex-specific tuning of modular muscle activation patterns for locomotion in young and older adults. **2022**, 17, e0269417 ○

- 680 Data-Driven Personas as Interfaces for Persona Analytics System. **2021**, 119-135
- 679 Enabling Programmatic Data Mining as Musicking: The Fluid Corpus Manipulation Toolkit. **2022**, 45, 9-23
- 678 Creating Data-Driven Personas. **2021**, 93-118
- 677 Multi-Objective Inverse Reinforcement Learning via Non-Negative Matrix Factorization. **2021**, 1
- 676 Nonnegative Matrix Factorization Approach for Image Reconstruction. **2021**,
- 675 Experience-based Pickup Area Recommendation on Taxi's GPS Trajectories. **2021**,
- 674 NMF for Quality Control of Multi-modal Retinal Images for Diagnosis of Diabetes Mellitus and Diabetic Retinopathy. **2022**, 343-356
- 673 Multivariate Lesion-Behavior Mapping. **2022**, 199-218
- 672 Nonlinear Orthogonal NMF on the Stiefel Manifold with Graph-based Total Variation Regularization. **2022**, 1-5 0
- 671 Design Space Exploration Tools. **2022**, 215-259
- 670 Weighted Residual NMF With Spatial Regularization for Hyperspectral Unmixing. **2022**, 19, 1-5
- 669 Methodology-Centered Review of Molecular Modeling, Simulation, and Prediction of SARS-CoV-2. 7
- 668 A Comparison of Topic Models Based on LDA, STM and NMF for Qualitative Studies of Russian Short Prose. **2022**, 20, 93-109
- 667 Extracting the Wisdom of a Smaller Crowd from Dependent Quantile Judgments. 1-31
- 666 Vulnerable Brain Networks Associated with Risk for Alzheimer's Disease.
- 665 Developing Reaction Chemistry Models from Reactive Molecular Dynamics: TATB. 1
- 664 Prediction of childhood maltreatment and subtypes with personalized functional connectome of large-scale brain networks. 0
- 663 Computational methods for single-cell DNA methylomes. **2022**, 0

662	Video Watermarking Algorithm Based on NSCT, Pseudo 3D-DCT and NMF. 2022 , 22, 4752	0
661	Combination of Live Cell Surface-Enhanced Raman Scattering Imaging with Chemometrics to Study Intracellular Nanoparticle Dynamics. 2022 , 7, 1747-1756	2
660	A Pilot Study to Quantify Volatile Organic Compounds and Their Sources Inside and Outside Homes in Urban India in Summer and Winter during Normal Daily Activities. 2022 , 9, 75	0
659	Soleus H-reflex modulation in cerebral palsy and its relationship with neural control complexity: a pilot study.	
658	Graph non-negative matrix factorization with alternative smoothed L_0 regularizations.	2
657	Heterogeneity of technological structures between EU countries: An application of complex systems methods to Input-Output Tables. 2022 , 117875	
656	Estimating intraclonal heterogeneity and subpopulation changes from bulk expression profiles in CMap. 2022 , 5, e202101299	0
655	Not Only Degree Matters: Diffusion-Driven Role Recognition. 2022 ,	
654	Incomplete multi-view clustering with incomplete graph-regularized orthogonal non-negative matrix factorization.	
653	Knowledge Discovery in a Recommender System: The Matrix Factorization Approach.	1
652	A longitudinal study of topic classification on Twitter. 8, e991	1
651	Large-scale phage-based screening reveals extensive pan-viral mimicry of host short linear motifs.	1
650	Interacting brains revisited: A cross-brain network neuroscience perspective.	1
649	Robust collaborative clustering approach with adaptive local structure learning. 2022 , 109222	0
648	TextCL: A Python package for NLP preprocessing tasks. 2022 , 19, 101122	0
647	Predicting application usage based on latent contextual information. 2022 , 192, 197-209	
646	Optimal thermal actuation for mirror temperature control. 2022 , 398, 115212	
645	Knowledge-enhanced attentive learning for answer selection in community question answering systems. 2022 , 250, 109117	1

- 644 Semi-supervised sparse neighbor constrained co-clustering with dissimilarity and similarity regularization. **2022**, 114, 104989 ○
- 643 Multivariate analysis of speech envelope tracking reveals coupling beyond auditory cortex. **2022**, 258, 119395 ○
- 642 Boolean matrix factorization based on collaborative neurodynamic optimization with Boltzmann machines. **2022**, 153, 142-151 ○
- 641 Deep alternating non-negative matrix factorisation. **2022**, 251, 109210
- 640 Differentiated graph regularized non-negative matrix factorization for semi-supervised community detection. **2022**, 604, 127692
- 639 Design of fuzzy rule-based models with fuzzy relational factorization. **2022**, 206, 117904
- 638 Identification of Key Nodes between Overlapping Communities by Using Nonnegative Matrix Factorization.
- 637 Analyzing Patient Feedback Data with Topic Modeling. **2022**, 248-258 ○
- 636 A Majorization-Minimization Algorithm for Nonnegative Binary Matrix Factorization. **2022**, 29, 1526-1530
- 635 Bias and Unfairness of Collaborative Filtering Based Recommender Systems in MovieLens Dataset. **2022**, 10, 68429-68439
- 634 Geometric structure guided model and algorithms for complete deconvolution of gene expression data. **2022**,
- 633 Natural Language Processing. **2022**, 217-244
- 632 Autoencoding Conditional GAN for Portfolio Allocation Diversification. 1
- 631 Multi-view Actionable Knowledge Graph Generation from Wikipedia Biographies. **2022**, 1-1
- 630 BIC: Blind Identification Countermeasure for Malicious Thermal Sensor Attacks in Mobile SoCs. **2022**,
- 629 A*-FastIsomap: An Improved Performance of Classical Isomap Based on A* Search Algorithm. **2022**,
- 628 Evaluation of blind source separation algorithms applied to music signals. **2022**,
- 627 Exercise recommendation method based on knowledge tracing and concept prerequisite relations.

- 626 Diverse thermosensory receptors and neurons mediate the neural coding of oral cooling in the mouse trigeminothalamic tract.
- 625 Modulation of Muscle Synergies in Lower-Limb Muscles Associated With Split-Belt Locomotor Adaptation. 16,
- 624 muscleyneRgies: factorization of electromyographic data in R with sensible defaults. **2022**, 7, 4439 ○
- 623 Unsupervised Machine Learning Analysis on Muscle Activities in Elderly's Gait and Proposal for a Rehabilitation Exercise Method in Geriatric Physical Education. **2022**, 23, 44-50
- 622 A*-FastIsomap: An Improved Performance of Classical Isomap Based on A* Search Algorithm.
- 621 Four distinct subtypes of Alzheimer's disease based on resting-state connectivity biomarkers. **2022**, 2
- 620 Machine learning assisted detection and localization of mechanical discontinuity.
- 619 Correlation between corneal dynamic responses and keratoconus topographic parameters. **2022**, 50, 030006052211081
- 618 Nanotube abundance from non-negative matrix factorization of Raman spectra as an example of chemical purity from open source machine learning. **2022**, 12, ○
- 617 Dietary protein consumption profiles show contrasting impacts on environmental and health indicators.
- 616 Spatial and temporal muscle synergies provide a dual characterization of low-dimensional and intermittent control of upper-limb movements. ○
- 615 Multiple mechanisms shape the relationship between pathway and duration of focal seizures. **2022**, 4, ○
- 614 A bias detection tree approach for detecting disparities in a recommendation model's errors.
- 613 A hierarchical interactive multi-channel graph neural network for technological knowledge flow forecasting. **2022**, 64, 1723-1757
- 612 Cutaneous and acral melanoma cross-OMICs reveals prognostic cancer drivers associated with pathobiology and ultraviolet exposure. **2022**, 13, ○
- 611 The spatio-temporal features of perceived-as-genuine and deliberate expressions. **2022**, 17, e0271047
- 610 Identifying intragenic functional modules of genomic variations associated with cancer phenotypes by learning representation of association networks. **2022**, 15,
- 609 The Effect of Small Additions of Fe and Heavy Deformation on the Precipitation in an Al_{0.1}Mg_{0.5}Cu_{0.3}Si At. Pct Alloy.

608 Spectral decomposition of black coated fabrics to optimal feasible primaries.

607 A Unified Bayesian Framework for Bi-overlapping-Clustering Multi-omics Data via Sparse Matrix Factorization.

606 Nonnegative matrix factorization with combined kernels for small data representation. **2022**, 118155

605 Event prediction in social network through Twitter messages analysis. **2022**, 12,

604 Robust graph regularization nonnegative matrix factorization for link prediction in attributed networks. 3

603 Dissecting the treatment-naive ecosystem of human melanoma brain metastasis. **2022**, 185, 2591-2608.e30 ○

602 Multiview Latent Representation Learning with Feature Diversity for Clustering. **2022**, 2022, 1-12

601 Semantic Academic Profiler (SAP): a framework for researcher assessment based on semantic topic modeling. ○

600 Estimating longitudinal change in latent variable means: a comparison of non-negative matrix factorization and other item non-response methods. 1-20

599 Computational Methods for Neuron Segmentation in Two-Photon Calcium Imaging Data: A Survey. **2022**, 12, 6876

598 Inferring cellular and molecular processes in single-cell data with non-negative matrix factorization using Python, R, and GenePattern Notebook implementations of CoGAPS. ○

597 Feature Nonlinear Transformation Non-negative Matrix Factorization with Kullback-Leibler Divergence. **2022**, 108906 1

596 Application of non-negative matrix factorization in oncology: one approach for establishing precision medicine. **2022**, 23, 2

595 Materials Informatics of Woven Fabric Composites: Effect of Different Dimensionality Reduction and Learning Methods. **2022**, 103971

594 Analysis of Occupational Profiles in the Brazilian Workforce Based on Non-Negative Matrix Factorization. **2022**, 100333

593 What changed in the cyber-security after COVID-19?. **2022**, 120, 102821 ○

592 Spatial Characterization of Strain Variation in the Profile of Tunnel Structure Using Monitoring Data and Numerical Modeling. **2022**, 28, ○

591 Capturing the latent space of an Autoencoder for multi-omics integration and cancer subtyping. **2022**, 148, 105832 ○

590 Spectral representation-based efficient simulation method for fully non-stationary spatially varying ground motions. **2022**, 161, 107436

589 Broadband acoustic resonance dissolution spectroscopy of natural edible salts: Visualization and interpretation for descriptive and diagnostic analysis. **2022**, 114, 104722

588 Human Brain Development: a cross-sectional and longitudinal study integrating multiple neuromorphological features.

587 Physics-Guided Machine Learning for the Analysis of Low SNR STEM-EDXS Data. **2022**, 28, 2978-2979

586 Inertial alternating direction method of multipliers for non-convex non-smooth optimization. 1

585 An approach to enhance topic modeling by using paratext and nonnegative matrix factorizations.

584 The trade-off between topology and content in community detection: An adaptive encoder-decoder-based NMF approach. **2022**, 118230 0

583 Spatial Transcriptomics as a Novel Approach to Redefine Electrical Stimulation Safety. 16, 0

582 An effective short-text topic modelling with neighbourhood assistance-driven NMF in Twitter. **2022**, 12,

581 Unsupervised detection of fragment length signatures of circulating tumor DNA using non-negative matrix factorization. 11, 0

580 Alterations in motor modules and their contribution to limitations in force control in the upper extremity after stroke. 16,

579 Unmixing Mineral Phases, Improving Quantification: Use Machine Learning to Understand Deep-Mantle with STEM-EDS Data. **2022**, 28, 542-544

578 Transition between individually different and common features in skilled drumming movements. 4, 1

577 Muscle synergies are flexibly recruited during gait pattern exploration using motor control-based biofeedback.

576 Correntropy based semi-supervised concept factorization with adaptive neighbors for clustering. **2022**, 154, 203-217

575 Design of a Practical System Based on Muscle Synergy Analysis and FES Rehabilitation for Stroke Patients. **2022**, 257-268

574 Resilience in Online Mental Health Communities: Building a Resilience Dictionary with Semi-Automatic Text Analysis (Preprint). 0

573 Enhancing Recommendation with Automated Tag Taxonomy Construction in Hyperbolic Space. **2022**, 0

- 572 Intent Mining: A Social and Semantic Enhanced Topic Model for Operation-Friendly Digital Marketing. **2022**, 1
- 571 Multi-View Deep Matrix Factorization with Consensual Solution from Multiple Paths. **2022**,
- 570 Double Security Guarantee: Protecting User Privacy and Model Security in QoS Prediction. **2022**, 1
- 569 Optimizing Concussion Care Seeking: Identification of Factors Predicting Previous Concussion Diagnosis Status. Publish Ahead of Print,
- 568 Application of Non-Negative Sparse Matrix Transformation in Hyperspectral Analysis. **2022**, 89, 593-601 1
- 567 Multiview clustering via nonnegative matrix factorization based on graph agreement. **2022**, 31,
- 566 Improvement in gait stability in older adults after ten sessions of standing balance training. **2022**, 17, e0242115 1
- 565 Multi-Scale Temporal-Frequency Attention for Music Source Separation. **2022**,
- 564 Knowledge-graph-based cell-cell communication inference for spatially resolved transcriptomic data with SpaTalk. **2022**, 13, 1
- 563 Degradation pathways for organic matter of terrestrial origin are widespread and expressed in Arctic Ocean microbiomes.
- 562 Evolution of brain network dynamics in early Parkinson's disease with mild cognitive impairment.
- 561 Uncoupled Nonnegative Matrix Factorization with Pairwise Comparison Data. **2022**,
- 560 A Fault Detection and Isolation Method Based on Supervised Nonnegative Matrix Factorizations. **2022**,
- 559 MSDA-NMF: A Multilayer Complex System Model Integrating Deep Autoencoder and NMF. **2022**, 10, 2750
- 558 Efficient tactile encoding of object slippage. **2022**, 12,
- 557 Some accelerated alternating proximal gradient algorithms for a class of nonconvex nonsmooth problems.
- 556 3D (x-y-t) Raman imaging of tomato fruit cuticle: Microchemistry during development. 0
- 555 Multi-omics assessment of dilated cardiomyopathy using non-negative matrix factorization. **2022**, 17, e0272093

- 554 Vascular Proteome Responses Precede Organ Dysfunction in a Murine Model of *Staphylococcus aureus* Bacteremia.
- 553 A ubiquitin-related gene signature for predicting prognosis and constructing molecular subtypes in osteosarcoma. 13, 1
- 552 Bayesian nonnegative matrix factorization in an incremental manner for data representation.
- 551 HabitEst3D: A User-Friendly Software for Estimating Mixed Crystal Habits from Two-Dimensional Sections in Igneous Rocks. **2022**, 12, 1001
- 550 The Social Process of Coping with Work-Related Stressors Online: A Machine Learning and Interpretive Data Science Approach.
- 549 How Does Varying the Number of Personas Affect User Perceptions and Behavior? Challenging the Small Personas Hypothesis!. **2022**, 102915 0
- 548 MaCroDNA: Accurate integration of single-cell DNA and RNA data for a deeper understanding of tumor heterogeneity.
- 547 Sex differences in the functional topography of association networks in youth. **2022**, 119, 0
- 546 Hidden patterns of gene expression provide prognostic insight for colorectal cancer. 0
- 545 BiInfGCN: Bilateral Information Augmentation of Graph Convolutional Networks for Recommendation. **2022**, 10, 3042 1
- 544 Robust muscle force prediction using NMFSEMD denoising and FOS identification. **2022**, 17, e0272118
- 543 Human Muscle Synergy Recruitment and Variability Assessment for Walking Speed Prediction Module Design. 1-19
- 542 Analysis of Muscle Activity in the Sit-to-Stand Motion When Knee Movability is Disturbed. **2022**, 34, 767-776
- 541 Big Data, Small Personas: How Algorithms Shape the Demographic Representation of Data-Driven User Segments. **2022**, 10, 313-336
- 540 Dual local learning regularized NMF with sparse and orthogonal constraints. 0
- 539 Agonist-antagonist muscle strain in the residual limb preserves motor control and perception after amputation. **2022**, 2,
- 538 Using Attributes Explicitly Reflecting User Preference in a Self-Attention Network for Next POI Recommendation. **2022**, 11, 440
- 537 Comparison of unsupervised machine learning model to core-observed facies within the basinal shale Late Devonian Duvernay Formation in the Western Canada Sedimentary Basin. **2022**,

- 536 StrainPanDA: Linked reconstruction of strain composition and gene content profiles via pangenome-based decomposition of metagenomic data. **2022**, 1, ○
- 535 Automatic user sentiments extraction from diabetes mobile apps [An evaluation of reviews with machine learning. 1-20 ○
- 534 News sharing on Twitter reveals emergent fragmentation of media agenda and persistent polarization. **2022**, 11, ○
- 533 Telescoping bimodal latent Dirichlet allocation to identify expression QTLs across tissues. **2022**, 5, e202101297○
- 532 Similarity of Hand Muscle Synergies Elicited by Transcranial Magnetic Stimulation and Those Found During Voluntary Movement. ○
- 531 Identification and prediction of Parkinson's disease subtypes and progression using machine learning in two cohorts. ○
- 530 Common multi-day rhythms in smartphone behavior. ○
- 529 A comprehensive overview of knowledge graph completion. **2022**, 109597 ○
- 528 The effect of co-location on human communication networks. **2022**, 2, 494-503 ○
- 527 NASMDR: a framework for miRNA-drug resistance prediction using efficient neural architecture search and graph isomorphism networks. ○
- 526 Co-consensus semi-supervised multi-view learning with orthogonal non-negative matrix factorization. **2022**, 59, 103054 ○
- 525 Robust local-coordinate non-negative matrix factorization with adaptive graph for robust clustering. **2022**, 610, 1058-1077 ○
- 524 One to multiple mapping dual learning: Learning multiple signals from one mixture. **2022**, 129, 103686 ○
- 523 Increasing the Sentinel-2 potential for marine plastic litter monitoring through image fusion techniques. **2022**, 182, 113974 1
- 522 Machine learning and shallow groundwater chemistry to identify geothermal prospects in the Great Basin, USA. **2022**, 197, 1034-1048 1
- 521 Winter wheat and soil total nitrogen integrated monitoring based on canopy hyperspectral feature selection and fusion. **2022**, 201, 107285 1
- 520 Machine learning techniques applied to construction: A hybrid bibliometric analysis of advances and future directions. **2022**, 142, 104532 ○
- 519 Credit evaluation solutions for social groups with poor services in financial inclusion: A technical forecasting method. **2022**, 183, 121902 ○

- 518 Improved AdaBoost algorithm using misclassified samples oriented feature selection and weighted non-negative matrix factorization. **2022**, 508, 153-169
- 517 Progressive Deep Non-Negative Matrix Factorization Architecture with Graph Convolution-based Basis Image Reorganization. **2022**, 132, 108984
- 516 Age-related differences in gait symmetry obtained from kinematic synergies and muscle synergies of lower limbs during childhood. **2022**, 21,
- 515 Community detection in weighted networks using probabilistic generative model.
- 514 Unknown fault diagnosis of planetary gearbox based on optimal rank nonnegative matrix factorization and improved stochastic resonance of bistable system.
- 513 Recent developments in wireless capsule endoscopy imaging: Compression and summarization techniques. **2022**, 149, 106087
- 512 Intentionally Biasing User Representation?: Investigating the Pros and Cons of Removing Toxic Quotes from Social Media Personas. **2022**,
- 511 HyperNTF: A hypergraph regularized nonnegative tensor factorization for dimensionality reduction. **2022**, 512, 190-202
- 510 Event detection in online social network: Methodologies, state-of-art, and evolution. **2022**, 46, 100500
- 509 Label prediction based constrained non-negative matrix factorization for semi-supervised multi-view classification. **2022**, 512, 443-455
- 508 Automated estimation of ankle muscle EMG envelopes and resulting plantar-dorsi flexion torque from 64 garment-embedded electrodes uniformly distributed around the human leg. **2022**, 67, 102701
- 507 An enhanced EMG-driven Musculoskeletal model based on non-negative matrix factorization. **2023**, 79, 104178
- 506 Heart-lung sound separation by nonnegative matrix factorization and deep learning. **2023**, 79, 104180
- 505 Multispectral and hyperspectral image fusion in remote sensing: A survey. **2023**, 89, 405-417
- 504 Robust Graph Regularized Nonnegative Matrix Factorization. **2022**, 10, 86962-86978
- 503 Deep Discriminant Non-negative Matrix Factorization Method for Image Clustering. **2022**, 267-276
- 502 Data-driven Linear Predictor based on Maximum Likelihood Nonnegative Matrix Decomposition for Batch Cultures of Hybridoma Cells. **2022**, 55, 903-908
- 501 Driving Risk Assessment Using Non-Negative Matrix Factorization With Driving Behavior Records. **2022**, 1-15

500	Transition to Adulthood for Young People with Intellectual or Developmental Disabilities: Emotion Detection and Topic Modeling. 2022 , 219-228	0
499	A Progressive Hierarchical Alternating Least Squares Method for Symmetric Nonnegative Matrix Factorization. 2022 , 1-15	0
498	Convex Factorization Embedding Thermography for Breast Cancer Diagnostic. 2022 , 1, 1-8	0
497	Matrix Completion Based on Low-Rank and Local Features Applied to Images Recovery and Recommendation Systems. 2022 , 10, 97010-97021	0
496	Label-free fibre optic Raman spectroscopy with bounded simplex-structured matrix factorization for the serial study of serum in amyotrophic lateral sclerosis.	0
495	Surface Electromyography-Based Assessment of Muscle Contribution in Squatting Movements. 2022 , 742-752	0
494	Evaluation of Muscle Activation Reaction on Fore-Aft Dynamic Interference During Load-Carrying Level Walking. 2022 , 626-636	0
493	Multi-view Matrix Factorization For Sparse Mobile Crowd Sensing. 2022 , 1-1	0
492	Adversarial Graph Regularized Deep Nonnegative Matrix Factorization for Data Representation. 2022 , 10, 86445-86457	0
491	Research on Traffic Safety Evaluation Method Based on Aggressive Driving Behaviors and Traffic Flow Characteristics.	0
490	Machine Learning for Microcontroller-Class Hardware - A Review. 2022 , 1-1	1
489	Advanced spectral analysis of complex molecular system. 2022 , 25-54	0
488	Extracting Stable Control Information from EMG Signals to Drive a Musculoskeletal Model - A Preliminary Study. 2022 , 735-746	0
487	Graph Regularized Nonnegative Matrix Factorization for Community Detection in Attributed Networks. 2022 , 1-14	8
486	Speaker Adaptation Using Spectro-Temporal Deep Features for Dysarthric and Elderly Speech Recognition. 2022 , 30, 2597-2611	0
485	Non-negative Matrix Factorization for Dimensionality Reduction. 2022 , 48, 03006	0
484	MapIntel: Enhancing Competitive Intelligence Acquisition Through Embeddings and Visual Analytics. 2022 , 599-610	0
483	Variational Bayesian Orthogonal Nonnegative Matrix Factorization Over the Stiefel Manifold. 2022 , 31, 5543-5558	0

482	Recommendation Systems: An Insight Into Current Development and Future Research Challenges. 2022 , 10, 86578-86623	0
481	Background. 2022 , 9-27	0
480	Harmony: A Generic Unsupervised Approach for Disentangling Semantic Content from Parameterized Transformations. 2022 ,	0
479	MPC: Multi-view Probabilistic Clustering. 2022 ,	0
478	An Unsupervised Hyperspectral Image Fusion Method Based on Spectral Unmixing and Deep Learning. 2022 ,	1
477	Learning phenotypic patterns in genetic disease by symptom interaction modeling.	0
476	Dietary protein consumption profiles show contrasting impacts on environmental and health indicators. 2023 , 856, 159052	0
475	Online Nonnegative Matrix Factorization with Temporal Affinity. 2022 ,	0
474	Improving penalized semi supervised nonnegative matrix factorization result confidence using deep residual learning approach in spectrum analysis. 2022 ,	0
473	Boolean and \mathbb{F}_p -Matrix Factorization: From Theory to Practice. 2022 ,	0
472	Local structure elucidation of tungsten-substituted vanadium dioxide ($V_{1-x}W_xO_{2.5}$). 2022 , 12,	0
471	S2NMF: Information Self-Enhancement Self-Supervised Nonnegative Matrix Factorization for Recommendation. 2022 , 2022, 1-10	0
470	Variability of trunk muscle synergies underlying the multidirectional movements and stability trunk motor tasks in healthy individuals.	0
469	Uncovering the Reasons behind COVID-19 Vaccine Hesitancy in Serbia: Sentiment-Based Topic Modeling (Preprint).	0
468	External walking environment differentially affects muscle synergies in children with cerebral palsy and typical development. 16,	0
467	The spatio-temporal architecture of everyday manual behavior.	0
466	The mutational signatures of formalin fixation on the human genome. 2022 , 13,	1
465	Identification of immune subtypes to guide immunotherapy and targeted therapy in clear cell renal cell carcinoma. 2022 , 14, 6917-6935	0

464	Semi-supervised nonnegative matrix factorization with pairwise constraints for image clustering. 2022 , 13, 3577-3587	0
463	A review and performance evaluation of clustering frameworks for single-cell Hi-C data.	0
462	Women with patellofemoral pain show lower motor complexity and a deficit in muscle coordination to execute gait. 2022 , 97, S105-S106	0
461	Semi-supervised dual-graph regularization non-negative matrix factorization with local coordinate and orthogonal constraints for image clustering. 2022 , 31,	0
460	Lossy compression of matrices by black box optimisation of mixed integer nonlinear programming. 2022 , 12,	1
459	Evaluation of Lower Extremity Motor Impairment in Post-Stroke Hemiplegic Patients Using Neuromuscular Response during Gait. 2022 , 39, 647-655	0
458	The Uniqueness of Human Vulnerability to Brain Aging in Great Ape Evolution.	0
457	Robust semi-supervised data representation and imputation by correntropy based constraint nonnegative matrix factorization.	0
456	IT skills in vocational training curricula and labour market outcomes. 2022 , 35, 614-640	0
455	Regularized online tensor factorization for sparse knowledge graph embeddings.	0
454	Subspace multi-regularized non-negative matrix factorization for hyperspectral unmixing.	0
453	Analysis of Interpretable Data Representations for 4D-STEM Using Unsupervised Learning. 1-11	1
452	Public and Private Information in International Crises: Diplomatic Correspondence and Conflict Anticipation. 2022 , 66,	0
451	Modular analysis of pooled muscle and kinematic data reveals the dynamics of the gait sub-phases. 2022 , 97, S402-S403	0
450	Identifying disease-critical cell types and cellular processes by integrating single-cell RNA-sequencing and human genetics. 2022 , 54, 1479-1492	1
449	Uncovering novel mutational signatures by de novo extraction with SigProfilerExtractor. 2022 , 100179	4
448	COVID Symptoms, Symptom Clusters, and Predictors for Becoming a Long-Hauler Looking for Clarity in the Haze of the Pandemic. 105477382211256	6
447	Non-negative constrained dictionary learning for compressed sensing of ECG signals. 2022 , 43, 095005	0

446	Mutagenic Characteristics of Six Heavy Metals in Escherichia coli: The Commonality and Specificity. 2022 , 56, 13867-13877	0
445	Toward a unifying framework for the modeling and identification of motor primitives. 16,	1
444	Leveraging the fine-grained user preferences with graph neural networks for recommendation.	0
443	Feature fusion based on joint sparse representations and wavelets for multiview classification.	0
442	A speech enhancement algorithm based on a non-negative hidden Markov model and Kullback-Leibler divergence. 2022 , 2022,	0
441	Theoretical limits on the speed of learning inverse models explain the rate of adaptation in arm reaching tasks.	0
440	Dual-Space Transfer Learning Based on an Indirect Mutual Promotion Strategy. 2022 , 15,	0
439	A data-driven investigation of human action representations.	0
438	Assessing HD-EEG functional connectivity states using a human brain computational model.	0
437	Mycelial differentiation linked avermectin production in Streptomyces avermitilis studied with Raman imaging.	0
436	Electron-Beam Induced Emergence of Mesoscopic Ordering in Layered MnPS ₃ .	0
435	Toward individualized medicine in stroke—the TiMeS project: Protocol of longitudinal, multi-modal, multi-domain study in stroke. 13,	0
434	Difference in muscle synergies of the butterfly technique with and without swimmer's shoulder. 2022 , 12,	0
433	On the limitations of low-rank approximations in contact mechanics problems.	0
432	Machine learning bridges omics sciences and plant breeding. 2022 ,	1
431	Cross-domain pattern classification with heterogeneous distribution adaptation.	0
430	Overcharge-Induced Phase Heterogeneity and Resultant Twin-Like Layer Deformation in Lithium Cobalt Oxide Cathode for Lithium-Ion Batteries. 2203639	2
429	A dynamic hypergraph regularized non-negative tucker decomposition framework for multiway data analysis.	1

428	Modular derivation of diverse, regionally discrete human posterior CNS neurons enables discovery of transcriptomic patterns. 2022 , 8,	0
427	Glioma stem cell signature predicts the prognosis and the response to tumor treating fields treatment.	2
426	Bi-Level Optimization Based Projective Non-Negative Matrix Factorization.	0
425	FilDReaMS. II. Application to the analysis of the relative orientations between filaments and the magnetic field in four Herschel fields.	0
424	Number of trials and data structure affect the number and components of muscle synergies in upper-limb reaching movements.	0
423	Muscle synergy during free throw shooting in basketball is different between scored and missed shots. 4,	1
422	A majorization-minimization based solution to penalized nonnegative matrix factorization with orthogonal regularization. 2022 , 114877	0
421	Three families of automated text analysis. 2022 , 102798	0
420	Emergence of Language Related to Self-experience and Agency in Autobiographical Narratives of Individuals With Schizophrenia.	0
419	A block column iteration for nonnegative matrix factorization. 2022 , 64, 101863	0
418	Hidden Markov model in nonnegative matrix factorization for fetal heart rate estimation using physiological priors. 2022 , 43, 105001	0
417	Object detection in hyperspectral images. 2022 , 131, 103752	0
416	Discovering hidden geothermal signatures using non-negative matrix factorization with customized k-means clustering. 2022 , 106, 102576	1
415	FGC: GCN Based Federated Learning Approach for Trust Industrial Service Recommendation. 2022 , 1-11	0
414	Machine learning in electron microscopy for advanced nanocharacterization: current developments, available tools and future outlook.	1
413	The Mechanical Basis Encoding Stick-Slip Transition. 2022 , 83-100	0
412	Self-supervised Adaptive Kernel Nonnegative Matrix Factorization. 2022 , 161-173	0
411	Weakly Supervised Object Localization Through Inter-class Feature Similarity and Intra-class Appearance Consistency. 2022 , 195-210	1

410	Excerno: Filtering Mutations Caused by the Clinical Archival Process in Sequencing Data. 2022 , 29-37	o
409	Nonnegative Matrix Factorization and Log-Determinant Divergences. 2022 , 171-195	o
408	Implementation of Machine Learning on Human Frequency-Following Responses: A Tutorial. 2022 , 43, 251-274	1
407	Adolescent alcohol use is linked to disruptions in age-appropriate cortical thinning: an unsupervised machine learning approach.	o
406	Towards an Automated Classification of Zooplankton by Using Combination of Laser Spectral Techniques and Advanced Chemometrics. 2022 , 22, 8234	o
405	Graph Regularized Probabilistic Matrix Factorization for Drug-Drug Interactions Prediction.	o
404	Weakly Correlated Local Cortical State Switches under Anesthesia Lead to Strongly Correlated Global States. JN-RM-0123-22	o
403	Comprehensive analysis of transient receptor potential channels-related signature for prognosis, tumor immune microenvironment, and treatment response of colorectal cancer. 13,	o
402	A Simple, interpretable method to identify surprising topic shifts in scientific fields. 7,	o
401	Altered brain dynamics across bipolar disorder and schizophrenia revealed by overlapping brain states.	o
400	Toward an Over-parameterized Direct-Fit Model of Visual Perception.	o
399	An efficient parallel kernel based on Cholesky decomposition to accelerate Multichannel Non-Negative Matrix Factorization.	o
398	Personalized Functional Brain Network Topography Predicts Individual Differences in Youth Cognition.	o
397	Research topic flows in co-authorship networks.	o
396	Spontaneous and Information-induced Bursting Activities in Honeybee Hives.	o
395	Reaction Monitoring of Rose Bengal Photodegradation in Alcohols using Multivariate Frequency-Domain Dynamic Fluorescence. 2022 , 114348	o
394	Fast Explainable Recommendation Model by Combining Fine-Grained Sentiment in Review Data. 2022 , 2022, 1-15	o
393	Manipulation-specific cortical activity as mice handle food. 2022 ,	o

- 392 Robust Discriminative Non-Negative Matrix Factorization with Maximum Correntropy Criterion. **2022,** ○
- 391 Single-cell gene set enrichment analysis and transfer learning for functional annotation of scRNA-seq data. ○
- 390 Whole-brain dynamics of human sensorimotor adaptation. ○
- 389 A Hybrid Approach on Conditional GAN for Portfolio Analysis. **2023,** 849-868 ○
- 388 Accelerated Bayesian SED Modeling Using Amortized Neural Posterior Estimation. **2022,** 938, 11 1
- 387 One-Stage Multi-view Clustering with Hierarchical Attributes Extraction. ○
- 386 Multi-omics analysis: Paving the path toward achieving precision medicine in cancer treatment and immuno-oncology. 9, 1
- 385 Machine learning on syngeneic mouse tumor profiles to model clinical immunotherapy response. **2022,** 8, 1
- 384 Multi-omic modeling of antidepressant response implicates dynamic immune and inflammatory changes in individuals who respond to treatment. ○
- 383 Density matrix reconstruction using non-negative matrix product states. **2022,** 106, 1
- 382 UAV Remote Sensing Prediction Method of Winter Wheat Yield Based on the Fused Features of Crop and Soil. **2022,** 14, 5054 ○
- 381 A time-varying process monitoring approach based on iterative-updated semi-supervised nonnegative matrix factorizations. ○
- 380 Detecting task-relevant spatiotemporal modules and their relation to motor adaptation. **2022,** 17, e0275820 ○
- 379 Neurodevelopmental patterns of early postnatal white matter maturation represent distinct underlying microstructure and histology. **2022,** ○
- 378 CRIT: identifying RNA binding protein regulator in circRNA life cycle via non-negative matrix factorization. **2022,** ○
- 377 Application of an Adaptive Adjacency Matrix-Based Graph Convolutional Neural Network in Taxi Demand Forecasting. **2022,** 10, 3694 ○
- 376 Multi-view clustering via dual-norm and HSIC. ○
- 375 The brain integrates proprioceptive information to ensure robust locomotion. 1

- 374 Latent energy preserving embedding for unsupervised feature selection. **2022**, 103794 ○
- 373 Excerno: Using Mutational Signatures in Sequencing Data to Filter False Variants Caused by Clinical Archival. ○
- 372 High-Performance Statistical Computing in the Computing Environments of the 2020s. **2022**, 37, ○
- 371 Identifying vulnerable brain networks associated with Alzheimer's disease risk. ○
- 370 Image feature selection embedded distribution differences between classes for convolutional neural network. **2022**, 131, 109715 ○
- 369 Label consistency-based deep semisupervised NMF for tumor recognition. **2023**, 117, 105511 ○
- 368 Mapping structural heterogeneity at the nanoscale with scanning nano-structure electron microscopy (SNEM). **2023**, 242, 118426 ○
- 367 RSC-based differential model with correlation removal for improving multi-omics clustering. **2023**, 556, 111328 ○
- 366 Spectral unmixing of multi-temporal data in gamma-ray spectrometry. **2023**, 1045, 167547 ○
- 365 A consistent and flexible framework for deep matrix factorizations. **2023**, 134, 109102 ○
- 364 Semi-supervised adaptive kernel concept factorization. **2023**, 134, 109114 ○
- 363 Deep Autoencoder-like NMF with Contrastive Regularization and Feature Relationship Preservation. **2023**, 214, 119051 ○
- 362 Enhanced selective photocatalytic oxidation of a bio-derived platform chemical with vacancy-induced core-shell anatase TiO₂ nanoparticles. **2023**, 322, 122140 ○
- 361 Music Source Separation with Generative Flow. **2022**, 1-5 ○
- 360 Meta Path-Aware Recommendation Method Based on Non-Negative Matrix Factorization in LBSN. **2022**, 1-1 ○
- 359 A remark on non-negative matrix factorization. **2022**, ○
- 358 Research and Accomplishments in Applications of Non-negative Matrix Factorization. **2022**, 1061-1072 ○
- 357 Multi-View Clustering Based on Multiple Manifold Regularized Non-Negative Sparse Matrix Factorization. **2022**, 10, 113249-113259 1

356	Robust multi-view subspace enhanced representation based on collaborative constraints and HSIC induction. 2023 , 117, 105585	0
355	Topic modeling algorithms and applications: A survey. 2023 , 112, 102131	4
354	Moving Window Non-negative Matrix Projection for Adaptive Process Monitoring. 2022 ,	0
353	Prediction Network Downtime Values Using Non-Negative Matrix Factorization. 2022 ,	0
352	Tuning landscapes of the ventral stream. 2022 , 41, 111595	0
351	Overexpression of Ubiquitin-Conjugating Enzyme E2C Is Associated with Worsened Prognosis in Prostate Cancer. 2022 , 23, 13873	0
350	Scalable one-stage multi-view subspace clustering with dictionary learning. 2022 , 110092	1
349	Technology fitness landscape for design innovation: a deep neural embedding approach based on patent data. 1-12	1
348	SPCMLMI: A structural perturbation-based matrix completion method to predict lncRNA-miRNA interactions. 13,	0
347	The Number and Structure of Muscle Synergies Depend on the Number of Recorded Muscles: A Pilot Simulation Study with OpenSim. 2022 , 22, 8584	1
346	Comparison of Semantic Similarity Models on Constrained Scenarios.	0
345	AICCA: AI-Driven Cloud Classification Atlas. 2022 , 14, 5690	0
344	INSIDER: Interpretable Sparse Matrix Decomposition for Bulk RNA Expression Data Analysis.	0
343	Robust large-scale clustering based on correntropy. 2022 , 17, e0277012	0
342	Initialization for non-negative matrix factorization: a comprehensive review.	0
341	Transcriptional Profiling Reveals Mesenchymal Subtypes of Small Cell Lung Cancer with Activation of the Epithelial-to-Mesenchymal Transition and Worse Clinical Outcomes. 2022 , 14, 5600	0
340	Matrix-wise ℓ_0 -constrained sparse nonnegative least squares.	0
339	Detecting common features from point patterns for similarity measurement using matrix decomposition. 1-24	1

338	Modular cell type organization of cortical areas revealed by in situ sequencing.	0
337	Whole-genome sequencing of chronic lymphocytic leukemia identifies subgroups with distinct biological and clinical features. 2022 , 54, 1675-1689	2
336	Bacterial plasmid-associated and chromosomal proteins have fundamentally different properties in protein interaction networks. 2022 , 12,	0
335	Machine-learning-based prediction of first-principles XANES spectra for amorphous materials. 2022 , 6,	0
334	Network community detection and clustering with random walks. 2022 , 4,	0
333	MUSCLE SYNERGIES ANALYSIS SHOWS ALTERED NEURAL COMMANDS IN WOMEN WITH PATELLOFEMORAL PAIN DURING WALKING.	0
332	Exponential Graph Regularized Non-Negative Low-Rank Factorization for Robust Latent Representation. 2022 , 10, 4314	1
331	Neuromuscular mechanisms of motor adaptation to repeated gait-slip perturbations in older adults. 2022 , 12,	0
330	Factor analysis method for fluorescence excitation emission matrix. 2023 , 811, 140237	0
329	Pre-processing, Dimension Reduction, and Clustering for Single-Cell RNA-seq Data. 2022 , 37-51	0
328	Qualitative Classification of Biological Materials. 2022 , 165-203	0
327	Stain normalization using score-based diffusion model through stain separation and overlapped moving window patch strategies. 2023 , 152, 106335	0
326	Inside-Ellipsoid Outside-Sphere (IEOS) model for general bilinear feasibility problems: Feasibility analysis and solution algorithm. 2023 , 147, 110738	0
325	A hierarchical fused fuzzy deep neural network with heterogeneous network embedding for recommendation. 2023 , 620, 105-124	1
324	Auto-weighted collective matrix factorization with graph dual regularization for multi-view clustering. 2023 , 260, 110145	1
323	Attribute community detection based on latent representation learning and graph regularized non-negative matrix factorization. 2023 , 133, 109932	0
322	Multi-label Emotion Classification of COVID-19 Tweets with Deep Learning and Topic Modelling. 2023 , 45, 3005-3021	0
321	An improved nonnegative matrix factorization with the imputation method model for pollution source apportionment during rainstorm events. 2023 , 328, 116888	0

- 320 Community detection in networks through a deep robust auto-encoder nonnegative matrix factorization. **2023**, 118, 105657 ○
- 319 Factorizer: A scalable interpretable approach to context modeling for medical image segmentation. **2023**, 84, 102706 ○
- 318 Brain inspired face recognition: A computational framework. **2023**, 78, 1-13 ○
- 317 Multi-grained mode partition and robust fault diagnosis for multimode industrial processes. **2023**, 231, 109011 ○
- 316 Elastic adversarial deep nonnegative matrix factorization for matrix completion. **2023**, 621, 562-579 ○
- 315 An NMF-based method for jointly handling mixture nonlinearity and intraclass variability in hyperspectral blind source separation. **2023**, 133, 103838 ○
- 314 Learning specific and conserved features of multi-layer networks. **2023**, 622, 930-945 ○
- 313 SAIRUS: Spatially-aware identification of risky users in social networks. **2023**, 92, 435-449 ○
- 312 Statistical Challenges in Mutational Signature Analyses of Cancer Sequencing Data. **2022**, 241-258 ○
- 311 Integrative Analyses of Single-Cell Multi-Omics Data: A Review from a Statistical Perspective. **2022**, 53-69 ○
- 310 GeoThermalCloud: Machine Learning for Geothermal Resource Exploration. **2022**, 1 ○
- 309 Hierarchical Topic Model Inference by Community Discovery on Word Co-occurrence Networks. **2022**, 148-162 ○
- 308 Efficient Weighted-Adaptive Sparse Constrained Nonnegative Tensor Factorization for Hyperspectral Unmixing. **2022**, 15, 10113-10130 1
- 307 Financial Topic Modeling Based on the BERT-LDA Embedding. **2022**, 1 ○
- 306 Simulation of an Algorithm for Space Target Materials Identification Based on vis-NIR Hyperspectral Data. **2022**, 28-35,42 ○
- 305 Adaptive Projected Clustering with Graph Regularization. **2022**, 1 ○
- 304 Towards Robust Community Detection via Extreme Adversarial Attacks. **2022**, 1 ○
- 303 Decontamination of galaxy spectra using four dispersion directions. **2022**, 1 ○

- 302 A novel computational framework for integrating multidimensional data to enhance accuracy in predicting the prognosis of colorectal cancer. **2022**, 1,
- 301 Identyfikacja ukrytych komponentów w szeregach czasowych metodami nieujemnej faktoryzacji macierzy. **2022**, 23, 59-66
- 300 Research on recommendation system for railway intelligent monitoring. **2022**,
- 299 Synchrosqueezing Transform and Non-Negative Matrix Factorization based Feature Extraction from EEG Signals for Motor Imagery Classification. **2022**,
- 298 Low-Doppler CW Target Echo Enhancement Based on Target Echo Characteristics. **2022**,
- 297 Integrative Analysis of Necroptosis-Related Signature for Predicting the Prognosis of Osteosarcoma.
- 296 Automatic Extractive and Generic Document Summarization Based on NMF. **2023**, 13, 37-49
- 295 DNN-Based Frequency-Domain Permutation Solver for Multichannel Audio Source Separation. **2022**,
- 294 Muscle synergy analysis of lower limb based on Mechanomyography. **2022**,
- 293 scAB detects multiresolution cell states with clinical significance by integrating single-cell genomics and bulk sequencing data. **2022**, 50, 12112-12130
- 292 Adaptive and Implicit Regularization for Matrix Completion. **2022**, 15, 2000-2022
- 291 Responsive and intelligent service recommendation method based on deep learning in cloud service. 13,
- 290 A Columnwise Update Algorithm for Sparse Stochastic Matrix Factorization. **2022**, 43, 1712-1735
- 289 Detecting hierarchical organization of pervasive communities by modular decomposition of Markov chain. **2022**, 12,
- 288 Multichannel Variational Autoencoder-Based Speech Separation in Designated Speaker Order. **2022**, 14, 2514
- 287 Principal Component Pursuit for Pattern Identification in Environmental Mixtures. **2022**, 130,
- 286 Aligning latent representations of neural activity.
- 285 Evolution and regulation of microbial secondary metabolism. 11,

- 284 Face Recognition with Robust Matrix Factorization. **2022**, ○
- 283 Expression patterns of platinum resistance-related genes in lung adenocarcinoma and related clinical value models. 13, ○
- 282 A single-cell analysis reveals tumor heterogeneity and immune environment of acral melanoma. **2022**, 13, ○
- 281 Virtual label guided multi-view non-negative matrix factorization for data clustering. **2022**, 103888 ○
- 280 Proteogenomic insights into the biology and treatment of pancreatic ductal adenocarcinoma. **2022**, 15, ○
- 279 Identification of multiplicatively acting modulatory mutational signatures in cancer. **2022**, 23, ○
- 278 Non-negative low-rank representation based on dictionary learning for single-cell RNA-sequencing data analysis. **2022**, 23, ○
- 277 An individualized causal framework for learning intercellular communication networks that define microenvironments of individual tumors. **2022**, 18, e1010761 ○
- 276 Fault Detection and Isolation of Industrial Fermentation Process Based on Semi-supervised Convex Nonnegative Matrix Factorizations. **2022**, 55, 358-364 ○
- 275 Machine learning prediction of side effects for drugs in clinical trials. **2022**, 2, 100358 ○
- 274 Robust Graph Regularized NMF with Dissimilarity and Similarity Constraints for ScRNA-seq Data Clustering. **2022**, 62, 6271-6286 ○
- 273 A weighted non-negative matrix factorization approach to predict potential associations between drug and disease. **2022**, 20, ○
- 272 Impact of Climate Change on Water Transfer Scale of Inter-basin Water Diversion Project. ○
- 271 Spatial field reconstruction with INLA. Application to simulated galaxies. ○
- 270 Spatial Monitoring of Coastal Protection Dikes Case Study of the Touristic Beach Balm Beach, West Algiers, Algeria **2023**, 149-169 ○
- 269 Global centralised and structured discriminative non-negative matrix factorisation for hyperspectral unmixing. ○
- 268 An algorithm of nonnegative matrix factorization under structure constraints for image clustering. ○
- 267 Privacy and Explainability: The Effects of Data Protection on Shapley Values. **2022**, 10, 125 1

266	Mycelial differentiation linked avermectin production in <i>Streptomyces avermitilis</i> studied with Raman imaging. 2023 , 107, 369-378	0
265	Mechanistic dissection of alga recognition and uptake in coral-algal endosymbiosis.	0
264	Identification and prediction of Parkinson's disease subtypes and progression using machine learning in two cohorts. 2022 , 8,	0
263	Latent Multi-View Semi-Nonnegative Matrix Factorization with Block Diagonal Constraint. 2022 , 11, 722	0
262	Population coding strategies in human tactile afferents. 2022 , 18, e1010763	1
261	A generalized approach for Boolean matrix factorization. 2022 , 108887	0
260	Multiview nonnegative matrix factorization with dual HSIC constraints for clustering.	0
259	Non-negative matrix factorisation of Raman spectra finds common patterns relating to neuromuscular disease across differing equipment configurations, preclinical models and human tissue.	0
258	Nonmonotone Quasi-Newton-based conjugate gradient methods with application to signal processing.	0
257	Super diffraction limit spectral imaging detection and material type identification of distant space objects. 2022 , 30, 46911	1
256	Supervised discovery of interpretable gene programs from single-cell data.	0
255	Multiple Graph Adaptive Regularized Semi-Supervised Nonnegative Matrix Factorization with Sparse Constraint for Data Representation. 2022 , 10, 2623	0
254	Simultaneous Elucidation of Solid and Solution Manganese Environments via Multiphase Operando Extended X-ray Absorption Fine Structure Spectroscopy in Aqueous Zn/MnO ₂ Batteries.	1
253	A Poisson reduced-rank regression model for association mapping in sequencing data. 2022 , 23,	0
252	Revealing genetic links of Type 2 diabetes that lead to the development of Alzheimer's disease. 2022 , e12202	0
251	Simultaneous Execution of Dereverberation, Denoising, and Speaker Separation Using a Neural Beamformer for Adapting Robots to Real Environments. 2022 , 34, 1399-1410	0
250	Comparison of Methods for Estimating Temporal Topic Models From Primary Care Clinical Text Data: Retrospective Closed Cohort Study. 2022 , 10, e40102	0
249	Distribution Preserving-based Deep Semi-NMF for Data Representation. 2022 ,	0

- 248 Meta-topologies define distinct anatomical classes of brain tumors linked to histology and survival. ○
- 247 RMFRASL: Robust Matrix Factorization with Robust Adaptive Structure Learning for Feature Selection. **2023**, 16, 14 ○
- 246 An Unsupervised Machine-Learning Approach to Understanding Seismicity at an Alpine Glacier. **2022**, 127, ○
- 245 pyGNMF: A Python library for implementation of generalised non-negative matrix factorisation method. **2022**, 20, 101257 ○
- 244 A non-convex optimization framework for large-scale low-rank matrix factorization. **2022**, 10, 100440 ○
- 243 Degradation pathways for organic matter of terrestrial origin are widespread and expressed in Arctic Ocean microbiomes. **2022**, 10, ○
- 242 Tumor fractions deciphered from circulating cell-free DNA methylation for cancer early diagnosis. **2022**, 13, ○
- 241 HM-LDM: A Hybrid-Membership Latent Distance Model. **2023**, 350-363 ○
- 240 The Lawson-Hanson algorithm with deviation maximization: Finite convergence and sparse recovery. ○
- 239 Impact of mobility restrictions on NO₂ concentrations in key Latin American cities during the first wave of the COVID-19 pandemic. **2023**, 101412 ○
- 238 Soft Clustering Based on Non-negative Matrix Factorization for Longitudinal Data. **2022**, 51, 1-18 ○
- 237 Using angular two-point correlations to self-calibrate the photometric redshift distributions of DECaLS DR9. ○
- 236 Cross-cultural patterns in mobile playtime: an analysis of 118 billion hours of human data. **2023**, 13, 1
- 235 Inferring neuron-neuron communications from single-cell transcriptomics through NeuronChat. ○
- 234 Dynamical information enables inference of gene regulation at single-cell scale. ○
- 233 Semi-blind source separation using convolutive transfer function for nonlinear acoustic echo cancellation. **2023**, 153, 88-95 ○
- 232 A cross-sectional and longitudinal study of human brain development: the integration of cortical thickness, surface area, gyrification index, and cortical curvature into a unified analytical framework. **2023**, 119885 ○
- 231 SIGMA: Spectral Interpretation using Gaussian Mixtures and Autoencoder. ○

- 230 VIP: A Python package for high-contrast imaging. **2023**, 8, 4774 ○
- 229 Automated Library Generation and Serendipity Quantification Enables Diverse Discovery in Coordination Chemistry. ○
- 228 A review on recent machine learning applications for imaging mass spectrometry studies. **2023**, 133, 020702 ○
- 227 An overview on density peaks clustering. ○
- 226 Molecular subtypes of ALS are associated with differences in patient prognosis. **2023**, 14, ○
- 225 Gene Expression Changes in Cultured Reactive Rat Astrocyte Models and Comparison to Device-Associated Effects in the Brain. ○
- 224 Parts-based decomposition of spatial genomics data finds distinct tissue regions. ○
- 223 A Survey on High-Dimensional Subspace Clustering. **2023**, 11, 436 ○
- 222 Using ICD-9 diagnostic codes for external validation of topic models derived from primary care electronic medical record clinical text data. **2023**, 29, 146045822211156 ○
- 221 Robust non-negative supervised low-rank discriminant embedding (NSLRDE) for feature extraction. ○
- 220 BGCL: Bi-subgraph network based on graph contrastive learning for cold-start QoS prediction. **2023**, 263, 110296 ○
- 219 Noise-aware clustering based on maximum correntropy criterion and adaptive graph regularization. **2023**, 626, 42-59 ○
- 218 Robust discriminant feature extraction for automatic depression recognition. **2023**, 82, 104505 ○
- 217 Hypergraph based semi-supervised symmetric nonnegative matrix factorization for image clustering. **2023**, 137, 109274 ○
- 216 Monitoring the impact of ionizing radiation on CdSe/ZnS semiconductor quantum dot photoluminescence. **2023**, 206, 110731 ○
- 215 Time series clustering based on relationship network and community detection. **2023**, 216, 119481 ○
- 214 The diversity of canonical and ubiquitous progress in computer vision: A dynamic topic modeling approach. **2023**, 60, 103238 ○
- 213 Self-supervised semi-supervised nonnegative matrix factorization for data clustering. **2023**, 137, 109282 ○

- 212 Accelerating Non-Negative Matrix Factorization on Embedded FPGA with Hybrid Logarithmic Dot-Product Approximation. **2022**, ○
- 211 Inferring turbulent environments via machine learning. **2022**, 45, ○
- 210 n2MFn2: Non-negative Matrix Factorization in A Single Deconstruction Single Reconstruction Neural Network Framework for Dimensionality Reduction. **2022**, ○
- 209 Raman microspectroscopy and machine learning for use in identifying radiation-induced lung toxicity. **2022**, 17, e0279739 ○
- 208 Multi-view subspace enhanced representation of manifold regularization and low-rank tensor constraint. ○
- 207 A Bayesian model for identifying cancer subtypes from paired methylation profiles. **2023**, 24, ○
- 206 Graph Regularized Nonnegative Latent Factor Analysis Model for Temporal Link Prediction in Cryptocurrency Transaction Networks. **2022**, ○
- 205 Nonnegative Matrix Factorization Based on Node Centrality for Community Detection. ○
- 204 Dense Connection Graph Contrastive Learning for Recommendation. ○
- 203 Nonnegative spatial factorization applied to spatial genomics. ○
- 202 Phenotyping of Cervical Cancer Risk Groups via Generalized Low-Rank Models Using Medical Questionnaires. **2022**, 94-110 ○
- 201 Anovos: A Scalable Feature Engineering Library. **2022**, ○
- 200 Structured Joint Sparse Orthogonal Nonnegative Matrix Factorization for Fault Detection. **2023**, 1-1 ○
- 199 EMG space similarity feedback promotes learning of expert-like muscle activation patterns in a complex motor skill. 16, ○
- 198 Muscle coordination and recruitment during squat assistance using a robotic ankle-foot exoskeleton. **2023**, 13, ○
- 197 Network self-exciting point processes to measure health impacts of COVID-19. ○
- 196 Emergent Criticality in Coupled Boolean Networks. **2023**, 25, 235 ○
- 195 Robust and Efficient Alignment of Calcium Imaging Data through Simultaneous Low Rank and Sparse Decomposition. **2023**, ○

- 194 Spatial and Temporal Muscle Synergies Provide a Dual Characterization of Low-dimensional and Intermittent Control of Upper-limb Movements. **2023**, ○
- 193 Platelet response to influenza vaccination reflects effects of aging. ○
- 192 Innate immune cell instruction using micron-scale 3D objects of varied architecture and polymer chemistry: The ChemoArchiChip. **2023**, ○
- 191 Multivariate Curve Resolution for Analysis of Heterogeneous System in Toxicogenomics. **2023**, 375-403 ○
- 190 Proteogenomics of diffuse gliomas reveal molecular subtypes associated with specific therapeutic targets and immune-evasion mechanisms. **2023**, 14, ○
- 189 Adaptive Noise Reduction Algorithm Based on SPP and NMF for Environmental Sound Event Recognition under Low-SNR Conditions. **2023**, 2023, 1-11 ○
- 188 Comprehensive analysis of mutational signatures reveals distinct patterns and molecular processes across 27 pediatric cancers. ○
- 187 A partially shared joint clustering framework for detecting protein complexes from multiple state-specific signed interaction networks. ○
- 186 Evolution of muscle coordination and mechanical output following four weeks of arm cranking submaximal training. ○
- 185 Point Process based time sensitive personalised recommendation. **2023**, 218, 1791-1804 ○
- 184 Data-driven nonstationary signal decomposition approaches: a comparative analysis. **2023**, 13, ○
- 183 Assoziationsregeln. **2023**, 79-89 ○
- 182 Bio-Raman non-negative matrix factorization: its practical methodology. ○
- 181 Spatial-spectral graph regularized sparse nonnegative matrix factorization hyperspectral unmixing. **2023**, ○
- 180 Variability of trunk muscle synergies underlying the multidirectional movements and stability trunk motor tasks in healthy individuals. **2023**, 13, 1
- 179 Efficient representations of binarized health deficit data: the frailty index and beyond. ○
- 178 Hypergraph Regular Nonnegative Matrix Factorization Based on $\ell_{2,1}$ Norms. **2023**, 12, 451-458 ○
- 177 Mapping of RNA Modifications by Direct Nanopore Sequencing and JACUSA2. **2023**, 241-260 ○

- 176 Heat-induced changes in soil water-extractable organic matter characterized using fluorescence and FTIR spectroscopies coupled with dimensionality reduction methods. **2023**, 430, 116347 ○
- 175 iPoLNGAn unsupervised model for the integrative analysis of single-cell multiomics data. 14, ○
- 174 Robust weighted co-clustering with global and local discrimination. **2023**, 138, 109405 ○
- 173 Adaptive Coefficients Multi-view Projection and Its Application for Fault Detection. **2022**, ○
- 172 A machine learning-based depression detection on social media platforms for adolescents: A work in progress narrative review. **2022**, ○
- 171 The Influence-Maximizing Node Selection Algorithm Based on Local Isolated Centrality in Large-scale networks Implemented by Distributed Graph Computing. **2022**, ○
- 170 A Neural Network Model for Matrix Factorization: Dimensionality Reduction. **2022**, ○
- 169 One-Shot Federated Group Collaborative Filtering. **2022**, ○
- 168 ??????????????????????. **2023**, 43, 0415002 ○
- 167 Proximal alternating-direction-method-of-multipliers-incorporated nonnegative latent factor analysis. **2023**, 1-19 ○
- 166 darfix Data analysis for dark-field X-ray microscopy. **2023**, 30, ○
- 165 Deep Learning-Assisted Multivariate Analysis for Nanoscale Characterization of Heterogeneous Beam-Sensitive Materials. ○
- 164 Differential Impact of Brain Network Efficiency on Poststroke Motor and Attentional Deficits. **2023**, 54, 955-963 ○
- 163 Robust dual-graph discriminative NMF for data classification. **2023**, 268, 110465 ○
- 162 The effects of the financial crisis and Basel III on banks risk disclosure: A textual analysis. **2023**, 53, 103680 ○
- 161 Source apportionment of polychlorinated biphenyls (PCBs) using different receptor models: A case study on sediment from the Portland Harbor Superfund Site (PHSS), Oregon, USA. **2023**, 872, 162231 ○
- 160 Semi-supervised non-negative matrix tri-factorization with adaptive neighbors and block-diagonal learning. **2023**, 121, 106043 ○
- 159 A review on semi-supervised clustering. **2023**, 632, 164-200 ○

- 158 Anomaly detection of train wheels utilizing short-time Fourier transform and unsupervised learning algorithms. **2023**, 122, 106037 ○
- 157 A visually secure image encryption scheme based on adaptive block compressed sensing and non-negative matrix factorization. **2023**, 163, 109345 ○
- 156 Robust multi-view non-negative matrix factorization with adaptive graph and diversity constraints. **2023**, 634, 587-607 ○
- 155 Dual-graph regularized concept factorization for multi-view clustering. **2023**, 223, 119949 ○
- 154 Joint majorization-Minimization for nonnegative matrix factorization with the \mathbb{H} -divergence. **2023**, 209, 109048 ○
- 153 Integrative proteogenomic characterization of early esophageal cancer. **2023**, 14, ○
- 152 Two-Stage Single-Channel Speech Enhancement with Multi-Frame Filtering. **2023**, 13, 4926 ○
- 151 Symmetric nonnegative matrix trifactorization. **2023**, 665, 36-60 ○
- 150 Noise-tolerant clustering via joint doubly stochastic matrix regularization and dual sparse coding. **2023**, 222, 119814 ○
- 149 Community Detection in Multilayer Networks via Semi-supervised Joint Symmetric Nonnegative Matrix Factorization. **2022**, 1-14 ○
- 148 Persistent homology analysis with nonnegative matrix factorization for 3D voxel data of iron ore sinters. **2022**, 14, 151-154 1
- 147 Discovering Respects for Visual Similarity. **2022**, 132-141 ○
- 146 SUFI: an automated approach to spectral unmixing of fluorescent multiplex images captured in mouse and post-mortem human brain tissues. **2023**, 24, ○
- 145 Partial Discharge Detection for Underground Transmission Lines Using Nonnegative Matrix Factorization. **2022**, ○
- 144 Hyperspectral microscopy-based label-free semi-automatic segmentation of eye tissues. **2023**, ○
- 143 Trade with Correlation. **2023**, 113, 317-353 ○
- 142 The investigation of an analysis method for co-activation of knee osteoarthritis utilizing normalization of peak dynamic method. **2023**, 101, 48-54 ○
- 141 An $L_{\{0\}}$ -Norm Constrained Unsupervised Non-Negative Matrix Factorization Algorithm for Privacy Preserving Energy Usage Decomposition. **2022**, ○

- 140 Rethinking Symmetric Matrix Factorization: A More General and Better Clustering Perspective. **2022**, ○
- 139 Bioinformatics analysis identifies heparan sulfate proteoglycans acting as different progress subtypes of biliary atresia. 11, ○
- 138 Combining non-negative matrix factorization with graph Laplacian regularization for predicting drug-miRNA associations based on multi-source information fusion. 14, ○
- 137 Weibull and Nakagami speech priors based regularized NMF with adaptive wiener filter for speech enhancement. **2023**, 26, 197-209 ○
- 136 Learning matrix factorization with scalable distance metric and regularizer. **2023**, 161, 254-266 ○
- 135 Comparing COVID-19 vaccine passports attitudes across countries by analysing Reddit comments. 016555152211483 ○
- 134 Quantitative aflatoxin B1 detection and mining key wavelengths based on deep learning and hyperspectral imaging in subpixel level. **2023**, 206, 107561 ○
- 133 sciCSR infers B cell state transition and predicts class-switch recombination dynamics using single-cell transcriptomic data. ○
- 132 Paired single-cell multi-omics data integration with Mowgli. ○
- 131 Inference and Learning for Generative Capsule Models. **2023**, 35, 727-761 ○
- 130 SingleCellGGM enables gene expression program identification from single-cell transcriptomes and facilitates universal cell label transfer. ○
- 129 Estimating Soil Salinity with Different Levels of Vegetation Cover by Using Hyperspectral and Non-Negative Matrix Factorization Algorithm. **2023**, 20, 2853 ○
- 128 A convergence algorithm for graph co-regularized transfer learning. **2023**, 66, ○
- 127 Cartography of Genomic Interactions Enables Deep Analysis of Single-Cell Expression Data. **2023**, 14, ○
- 126 Multi-aspect Matrix Factorization based Visualization of Convolutional Neural Networks. **2022**, ○
- 125 Effects of orthoses on muscle activity and synergy during gait. **2023**, 18, e0281541 ○
- 124 The Sustainable Development Goals and Aerospace Engineering: A critical note through Artificial Intelligence. **2023**, 17, 100940 ○
- 123 Use of Surface Electromyography to Estimate End-Point Force in Redundant Systems: Comparison between Linear Approaches. **2023**, 10, 234 ○

- 122 DP-AGM: A Differential Privacy Preserving Method for Binary Relationship in Mobile Networks. ○
- 121 Bulk and single-cell spatial transcriptomic analysis reveals cuproptosis-related molecular subtypes characterized by distinct tumour microenvironment infiltrates in colorectal cancer. **2023**, 3, ○
- 120 An omics-to-omics joint knowledge association subtensor model for radiogenomics cross-modal modules from genomics and ultrasonic images of breast cancers. **2023**, 155, 106672 ○
- 119 Cohort-Based Analysis of Foreign Residents' Growth in Japan. **2023**, 13, 2298 ○
- 118 A New Laser Induced Breakdown Spectroscopy (LIBS) Spectral Data Analysis Method Using No Database Reference or Peak Wavelength Search. **2023**, 35, 561-566 ○
- 117 Multi-target ensemble learning based speech enhancement with temporal-spectral structured target. **2023**, 205, 109268 ○
- 116 Kinematics, dynamics, and muscle-synergy analysis of single-leg Yoga postures. ○
- 115 Molecular features and predictive models identify the most lethal subtype and a therapeutic target for osteosarcoma. 13, ○
- 114 Recommendation System Based on Deep Sentiment Analysis and Matrix Factorization. **2023**, 11, 16994-17001 ○
- 113 Graph Regularized Probabilistic Matrix Factorization for Drug-Drug Interactions Prediction. **2023**, 1-10 ○
- 112 Fine synergies describe motor adaptation in people with drop foot in a way that supplements traditional coarse synergies, ○
- 111 A Generalized Deep Learning Clustering Algorithm Based on Non-Negative Matrix Factorization. ○
- 110 Multiple forms of neural processing when repeating voluntary thumb flexions. ○
- 109 Implementing Topic Modelling For Document Clustering. **2023**, ○
- 108 A method for approximating weave diagrams under heald frame constraint. 004051752211496 ○
- 107 TIMEAS, a promising method for the stratification of testicular germ cell tumor patients with distinct immune microenvironment, clinical outcome and sensitivity to frontline therapies. ○
- 106 A fast two-stage algorithm for non-negative matrix factorization in smoothly varying data. **2023**, 79, 203-216 ○
- 105 Striatal ensemble activity in an innate naturalistic behavior. ○

- 104 An Experimental Approach for Information Extraction in Multi-party Dialogue Discourse. **2023**, 180-192 ○
- 103 Multilabel Text Classification of Unbalanced Datasets: Two-Pass NMF. **2023**, 275-286 ○
- 102 Impact of R&D and innovation in Chinese road transportation sustainability performance: A novel trigonometric envelopment analysis for ideal solutions (TEA-IS). **2023**, 101544 1
- 101 The Generalization of Non-Negative Matrix Factorization Based on Algorithmic Stability. **2023**, 12, 1147 1
- 100 Performance Comparison of Topic Modeling Algorithms on Indonesian Short Texts. **2022**, ○
- 99 An algorithm of non-negative matrix factorization with the nearest neighbor after per-treatments. ○
- 98 Speech source separation avoiding initial value dependency by cepstral-basis-decomposed nonnegative matrix factorization. **2023**, 44, 137-140 ○
- 97 Edivergence NMF with biorthogonal regularization for data representation. **2023**, 121, 106014 ○
- 96 The DESI PRObabilistic Value-added Bright Galaxy Survey (PROVABGS) Mock Challenge. **2023**, 945, 16 1
- 95 Advecting Superspecies: Efficiently Modeling Transport of Organic Aerosol With a Mass-Conserving Dimensionality Reduction Method. **2023**, 15, ○
- 94 Inferring neuron-neuron communications from single-cell transcriptomics through NeuronChat. **2023**, 14, ○
- 93 Continuous estimation of multi-DOF movement from sEMG based on non-negative matrix factorization and L2 regulation. ○
- 92 Unsupervised Music Source Separation Using Differentiable Parametric Source Models. **2023**, 31, 1276-1289 ○
- 91 Multi-view clustering guided by unconstrained non-negative matrix factorization. **2023**, 266, 110425 ○
- 90 Mobility pattern clustering with big human mobility data. **2023**, 27-48 ○
- 89 Signals: A Multidisciplinary Journal of Signal Processing Research. **2023**, 4, 206-207 ○
- 88 Single-cell gene set enrichment analysis and transfer learning for functional annotation of scRNA-seq data. **2023**, 5, ○
- 87 In Situ Visualization of Membrane Fouling Evolution during Ultrafiltration Using Label-Free Hyperspectral Light Sheet Fluorescence Imaging. **2023**, 57, 4533-4542 ○

- 86 Identifying promoter sequence architectures via a chunking-based algorithm using non-negative matrix factorisation. ○
- 85 Unsupervised EHR -based phenotyping via matrix and tensor decompositions. ○
- 84 Neural Stellar Population Synthesis Emulator for the DESI PROVABGS. **2023**, 265, 23 ○
- 83 Interpreting structure in sequence count data with differential expression analysis allowing for grades of membership. ○
- 82 Sensory Evaluation of Interference Suppression in Odor Reproduction Using Mass Spectrometry. **2023**, 11, 24103-24111 ○
- 81 Multi-view clustering via matrix factorization assisted k-means. **2023**, 534, 45-54 ○
- 80 Data analysis in spectroscopic STXM. **2023**, 264, 147310 ○
- 79 Topic Evolution Analysis Based on Optimized Combined Topic Model: Illustrated as CRISPR Technology. **2023**, 47-64 ○
- 78 Incomplete multi-view clustering based on low-rank representation with adaptive graph regularization. ○
- 77 A Study of Optimization Algorithm based on Non-negative Matrix Factorization for Face Age Prediction. **2023**, ○
- 76 Stochastic Composition Optimization of Functions Without Lipschitz Continuous Gradient. ○
- 75 Population-Based Hierarchical Non-Negative Matrix Factorization for Survey Data. **2022**, ○
- 74 Robust design of semi-automated clustering models for 4D-STEM datasets. **2023**, 1, 016106 ○
- 73 Mitophagy-related gene signature predicts prognosis, immune infiltration and chemotherapy sensitivity in colorectal cancer. 15, 546-561 ○
- 72 Joint L2,p-norm and random walk graph constrained PCA for single-cell RNA-seq data. 1-14 ○
- 71 Spatially aware self-representation learning for tissue structure characterization and spatial functional genes identification. ○
- 70 Simultaneous Imaging and Characterization of Polyunsaturated Fatty Acids, Carotenoids, and Microcrystalline Guanine in Single Aurantiochytrium limacinum Cells with Linear and Nonlinear Raman Microspectroscopy. **2023**, 127, 2708-2718 ○
- 69 Unsupervised pattern discovery in spatial gene expression atlas reveals mouse brain regions beyond established ontology. ○

- 68 The Forces Generated by Agonist Muscles during Isometric Contractions Arise from Motor Unit Synergies. **2023**, 43, 2860-2873 ○
- 67 Statistical Methods for Integrative Clustering of Multi-omics Data. **2023**, 73-93 ○
- 66 Quasi Non-Negative Quaternion Matrix Factorization with Application to Color Face Recognition. **2023**, 95, ○
- 65 Topics in Contextualised Attention Embeddings. **2023**, 221-238 ○
- 64 A Unified Multi-View Clustering Method Based on Non-Negative Matrix Factorization for Cancer Subtyping. **2023**, 19, 1-19 ○
- 63 Characteristics of muscle synergy and anticipatory synergy adjustments strategy when cutting in different angles. **2023**, ○
- 62 Public engagement with biomedical science: An analysis of Black, Hispanic, and General Population adults in the United States. ○
- 61 Coherence based Document Clustering. **2023**, ○
- 60 MGRec: Multi-Graph Fusion for Recommendation. **2022**, ○
- 59 On the Analysis of Information Resilience and the Spread of News. **2022**, ○
- 58 Hyperspectral Anomaly Detection Based on Regularized Background Abundance Tensor Decomposition. **2023**, 15, 1679 ○
- 57 Community Detection Algorithms in Healthcare Applications: A Systematic Review. **2023**, 11, 30247-30272 ○
- 56 Common multi-day rhythms in smartphone behavior. **2023**, 6, ○
- 55 Multi-Omics Integration For Disease Prediction Via Multi-Level Graph Attention Network And Adaptive Fusion. ○
- 54 Radioisotope Identification Using CLYC Detectors. **2022**, ○
- 53 Computational Methods Summarizing Mutational Patterns in Cancer: Promise and Limitations for Clinical Applications. **2023**, 15, 1958 ○
- 52 Students feedback analysis model using deep learning-based method and linguistic knowledge for intelligent educational systems. ○
- 51 Error Graph Regularized Nonnegative Matrix Factorization for Data Representation. ○

- 50 Allosterically coupled conformational dynamics in solution prepare the sterol transfer protein StarD4 to release its cargo upon interaction with target membranes.
- 49 The Bayesian lens and Bayesian blinkers. **2023**, 381,
- 48 A Review Paper of Model Based Collaborative Filtering Techniques. **2022**,
- 47 Source and pattern identification of ground deformation based on non-negative matrix factorization: a case study. **2023**, 82,
- 46 A Study on the Usability of Text Analysis on Web Artifacts for Digital Forensic Investigation. **2022**,
- 45 Revealing interpretable object representations from human visual cortex and artificial neural networks. **2023**,
- 44 Adaptive Kernel Graph Nonnegative Matrix Factorization. **2023**, 14, 208
- 43 An improved nonlinear correlation method for feature selection of complex data.
- 42 Comprehensive proteogenomic characterization of early duodenal cancer reveals the carcinogenesis tracks of different subtypes. **2023**, 14,
- 41 Machine Learning for Geothermal Resource Exploration in the Tularosa Basin, New Mexico. **2023**, 16, 3098
- 40 Identification of TIAM1 as a Potential Synthetic-Lethal-like Gene in a Defined Subset of Hepatocellular Carcinoma. **2023**, 24, 6387
- 39 $L_{(r,c)}$; Nonnegative Matrix Factorization for Image Clustering. **2023**, 12, 1306-1316
- 38 A data-driven investigation of human action representations. **2023**, 13,
- 37 Continuous Semi-Supervised Nonnegative Matrix Factorization. **2023**, 16, 187
- 36 ??????????. **2023**, 16, 257-271
- 35 Bayesian stroke modeling details sex biases in the white matter substrates of aphasia. **2023**, 6,
- 34 Identification of PsA phenotypes with machine learning analytics using data from two phase III clinical trials of guselkumab in a bio-naïve population of patients with PsA. **2023**, 9, e002934
- 33 Epidural stimulation restores muscle synergies by modulating neural drives in participants with motor/sensory complete spinal cord injuries.

- 32 Luminescence as a Method for Studying the Mechanisms of Photochemical Reactions. **2023**, 17, 36-48 ○
- 31 Motor control complexity can be dynamically simplified during gait pattern exploration using motor control-based biofeedback. **2023**, 129, 984-998 ○
- 30 Diversity Multi-View Clustering With Subspace and NMF-Based Manifold Learning. **2023**, 11, 37041-37051 ○
- 29 A generalized inertial proximal alternating linearized minimization method for nonconvex nonsmooth problems. **2023**, 189, 66-87 ○
- 28 Extraction of Low-dimensional Structures Inherent in Human Body Motion and Those Task-dependent Modulations. **2023**, 30, 28-36 ○
- 27 The super-enhancer landscape reflects molecular subgroups of adrenocortical carcinoma. ○
- 26 Prediction model of social trust relationship in network environment based on organizational behavior theory. **2022**, ○
- 25 Interference Mitigation via NMF for Radio Astronomy Applications: A Feasibility Study. **2023**, 352-364 ○
- 24 Neural clustering based on implicit maximum likelihood. ○
- 23 SARS-CoV-2 evolutionary capacity is mostly driven by host antiviral molecules. ○
- 22 An Interpretable Joint Nonnegative Matrix Factorization-Based Point Cloud Distance Measure. **2023**, ○
- 21 Comparison of Muscle Coordination During Front Crawl and Backstroke With and Without Swimmer's Shoulder Pain. 194173812311669 ○
- 20 Binary Orthogonal Non-negative Matrix Factorization. **2023**, 28-38 ○
- 19 Cancer heterogeneity is defined by normal cellular trade-offs. ○
- 18 Matrix factorization-based multi-objective ranking: What makes a good university?. **2023**, 18, e0284078 ○
- 17 MALDI IMS-Derived Molecular Contour Maps: Augmenting Histology Whole-Slide Images. ○
- 16 Majorization-minimization for Sparse Nonnegative Matrix Factorization with the β -divergence. **2023**, 1-13 ○
- 15 Strategic decision making in smart home ecosystems: A review on the use of artificial intelligence and Internet of things. **2023**, 100772 ○

- 14 A partially shared joint clustering framework for detecting protein complexes from multiple state-specific signed interaction networks. **2023**, 106936
- 13 Large-scale Non-negative Subspace Clustering Based on Nyström Approximation. **2023**, 118981
- 12 Association Rules. **2023**, 35-52
- 11 Machine Learning Predicts the Oxidative Stress Subtypes Provide an Innovative Insight into Colorectal Cancer. **2023**, 2023, 1-12
- 10 Finetuning Analytics Information Systems for a Better Understanding of Users: Evidence of Personalization Bias on Multiple Digital Channels.
- 9 Large-scale phage-based screening reveals extensive pan-viral mimicry of host short linear motifs. **2023**, 14,
- 8 Non-invasive PSF recovery based on direct illumination from wavelength-dependent speckles. **2023**, 122,
- 7 An NSST-Based Fusion Method for Airborne Dual-Frequency, High-Spatial-Resolution SAR Images. **2023**, 16, 4362-4370
- 6 Hybrid binaural singing voice separation. **2023**,
- 5 Identification of transcription factor co-binding patterns with non-negative matrix factorization.
- 4 scEpiTools: a database to comprehensively interrogate analytic tools for single-cell epigenomic data.
- 3 Model selection and robust inference of mutational signatures using Negative Binomial non-negative matrix factorization. **2023**, 24,
- 2 MC 2 :Unsupervised Multiple Social Network Alignment.
- 1 Local and long-distance organization of prefrontal cortex circuits in the marmoset brain. **2023**,