Vinod Chandran

List of Publications by Year in Descending Order

143 papers	2,842 citations	28 h-index	48 g-index
174 ext. papers	3,573 ext. citations	3.7 avg, IF	5.44 L-index

#	Paper	IF	Citations
143	HOS-FingerCode: Bispectral invariants based contactless multi-finger recognition system using ridge orientation and feature fusion. *Expert Systems With Applications*, **2022**, 117054	7.8	
142	Enhanced forensic speaker verification performance using the ICA-EBM algorithm under noisy and reverberant environments. *Evolutionary Intelligence*, **2021**, 14, 1475-1494	1.7	1
141	Segmentation of White Blood Cell, Nucleus and Cytoplasm in Digital Haematology Microscope Images: A Review-Challenges, Current and Future Potential Techniques. *IEEE Reviews in Biomedical Engineering*, **2021**, 14, 290-306	6.4	8
140	Hierarchical fusion network for periocular and iris by neural network approximation and sparse autoencoder. *Machine Vision and Applications*, **2021**, 32, 1	2.8	2
139	3D Face Tracking Using Stereo Cameras: A Review. *IEEE Access*, **2020**, 8, 94373-94393	3.5	1
138	Evaluation and benchmarking of level set-based three forces via geometric active contours for segmentation of white blood cell nuclei shape. *Computers in Biology and Medicine*, **2020**, 116, 103568	7	7
137	Automatic Emotion Recognition Using Temporal Multimodal Deep Learning. *IEEE Access*, **2020**, 8, 225463-225474	3.5	15
136	Benchmarking HEp-2 specimen cells classification using linear discriminant analysis on higher order spectra features of cell shape. *Pattern Recognition Letters*, **2019**, 125, 534-541	4.7	9
135	Automatic driver stress level classification using multimodal deep learning. *Expert Systems With Applications*, **2019**, 138, 112793	7.8	50
134	Prediction of Relative Physical Activity Intensity Using Multimodal Sensing of Physiological Data. *Sensors*, **2019**, 19,	3.8	10
133	Detection and Tracking of Faces in 3D Using a Stereo Camera Arrangements. *International Journal of Machine Learning and Computing*, **2019**, 9, 35-43	1.8	0
132	A Critical Review of Proactive Detection of Driver Stress Levels Based on Multimodal Measurements. *ACM Computing Surveys*, **2019**, 51, 1-35	13.4	43
131	Facial Expression Analysis under Partial Occlusion. *ACM Computing Surveys*, **2018**, 51, 1-49	13.4	294
130	Physical Activity Recognition Using Posterior-Adapted Class-Based Fusion of Multiaccelerometer Data. *IEEE Journal of Biomedical and Health Informatics*, **2018**, 22, 678-685	7.2	44
129	Evolutionary computation algorithms for feature selection of EEG-based emotion recognition using mobile sensors. *Expert Systems With Applications*, **2018**, 93, 143-155	7.8	106
128	Classification of White Blood Cells Using L-Moments Invariant Features of Nuclei Shape **2018**,		5
127	Classification of White Blood Cells using Bispectral Invariant Features of Nuclei Shape **2018**,		10

126	Combining multi-channel color space with local binary co-occurrence feature descriptors for accurate smoke detection from surveillance videos. *Fire Safety Journal*, **2018**, 102, 1-10	3.3	19
125	Towards Generic Modelling of Viewer Interest Using Facial Expression and Heart Rate Features. *IEEE Access*, **2018**, 6, 62490-62502	3.5	4
124	Contactless Finger Recognition Using Invariants from Higher Order Spectra of Ridge Orientation Profiles **2018**,		1
123	Long Short Term Memory Hyperparameter Optimization for a Neural Network Based Emotion Recognition Framework. *IEEE Access*, **2018**, 6, 49325-49338	3.5	50
122	. *IEEE Access*, **2017**, 5, 6978-6988	3.5	7
121	Ensemble Methods for Classification of Physical Activities from Wrist Accelerometry. *Medicine and Science in Sports and Exercise*, **2017**, 49, 1965-1973	1.2	47
120	Multispectral Periocular Classification With Multimodal Compact Multi-Linear Pooling. *IEEE Access*, **2017**, 5, 14572-14578	3.5	15
119	Enhanced Forensic Speaker Verification Using a Combination of DWT and MFCC Feature Warping in the Presence of Noise and Reverberation Conditions. *IEEE Access*, **2017**, 5, 15400-15413	3.5	38
118	Hybrid DWT and MFCC feature warping for noisy forensic speaker verification in room reverberation **2017**,		2
117	**2017**,		3
116	Automatic classification of physical exercises from wearable sensors using small dataset from non-laboratory settings **2017**,		2
115	Improving Retrieval Quality Using Pseudo Relevance Feedback in Content-Based Image Retrieval **2016**,		1
114	Part based bit error analysis of iris codes. *Pattern Recognition*, **2016**, 60, 306-317	7.7	3
113	Towards robust automatic affective classification of images using facial expressions for practical applications. *Multimedia Tools and Applications*, **2016**, 75, 4669-4695	2.5	14
112	Application of wavelet techniques for cancer diagnosis using ultrasound images: A Review. *Computers in Biology and Medicine*, **2016**, 69, 97-111	7	51
111	Automatic segmentation of HEp-2 cell Fluorescence microscope images using level set method via geometric active contours **2016**,		2
110	White Blood Cell Nuclei Segmentation Using Level Set Methods and Geometric Active Contours **2016**,		16
109	Investigating the impact of drug induced pupil dilation on automated iris recognition **2016**,		3

108	Automatic Identification of Sports Video Highlights using Viewer Interest Features **2016**,		8
107	Application of higher-order spectra for automated grading of diabetic maculopathy. *Medical and Biological Engineering and Computing*, **2015**, 53, 1319-31	3.1	17
106	A biomechanical approach to iris normalization **2015**,		12
105	Using Viewer's Facial Expression and Heart Rate for Sports Video Highlights Detection **2015**,		9
104	An effective Content Based Image Retrieval system based on global representation and multi-level searching **2015**,		2
103	Periocular recognition under expression variation using Higher Order Spectral features **2015**,		4
102	Content-Based Image (object) Retrieval with Rotational Invariant Bag-of-Visual Words representation **2015**,		2
101	Facial expression recognition experiments with data from television broadcasts and the World Wide Web. *Image and Vision Computing*, **2014**, 32, 107-119	3.7	23
100	Representation of facial expression categories in continuous arousal–valence space: Feature and correlation. *Image and Vision Computing*, **2014**, 32, 1067-1079	3.7	14
99	Effect of Pupil Dilation and Constriction on the Distribution of Bit Errors within the Iris **2014**,		3
98	Automated diagnosis of Age-related Macular Degeneration using greyscale features from digital fundus images. *Computers in Biology and Medicine*, **2014**, 53, 55-64	7	36
97	Decision support system for age-related macular degeneration using discrete wavelet transform. *Medical and Biological Engineering and Computing*, **2014**, 52, 781-96	3.1	35
96	Random Gabor based templates for facial expression recognition in images with facial occlusion. *Neurocomputing*, **2014**, 145, 451-464	5.4	61
95	A pilot study on affective classification of facial images for emerging news topics **2014**,		1
94	Separable and non-separable discrete wavelet transform based texture features and image classification of breast thermograms. *Infrared Physics and Technology*, **2013**, 61, 274-286	2.7	36
93	Breast cancer detection from thermal images using bispectral invariant features. *International Journal of Thermal Sciences*, **2013**, 69, 21-36	4.1	72
92	Decision fusion from parts and samples for robust iris recognition **2013**,		2
91	Improved Subject Identification in Surveillance Video Using Super-Resolution **2013**, 315-358		

90	Evaluation of image resolution and super-resolution on face recognition performance. *Journal of Visual Communication and Image Representation*, **2012**, 23, 75-93	2.7	40
89	Sequential fusion of decisions from adaptive and random samples for controlled verification errors **2012**,		1
88	Probabilistic Matching of Image Sets for Video-Based Face Recognition **2012**,		3
87	Time-varying bispectral analysis of visually evoked multi-channel EEG. *Eurasip Journal on Advances in Signal Processing*, **2012**, 2012,	1.9	6
86	Discovering the Best Feature Extraction and Selection Algorithms for Spontaneous Facial Expression Recognition **2012**,		10
85	Evaluation of Texture and Geometry for Dimensional Facial Expression Recognition **2011**,		8
84	Analysis of detection performance in spectrum sensing optimisation for long sensing periods **2011**,		1
83	Application of higher order spectra to identify epileptic EEG. *Journal of Medical Systems*, **2011**, 35, 1563-71	3.1	100
82	Asphalt Concrete Surfaces Macrotexture Determination From Still Images. *IEEE Transactions on Intelligent Transportation Systems*, **2011**, 12, 857-869	6.1	12
81	Toward a more robust facial expression recognition in occluded images using randomly sampled Gabor based templates **2011**,		4
80	Geometry vs. Appearance for Discriminating between Posed and Spontaneous Emotions. *Lecture Notes in Computer Science*, **2011**, 431-440	0.9	11
79	Sequential Fusion Using Correlated Decisions for Controlled Verification Errors. *Lecture Notes in Computer Science*, **2011**, 49-56	0.9	2
78	Robust Image Hashing Using Higher Order Spectral Features **2010**,		1
77	Biometric template security using Higher Order Spectra **2010**,		3
76	Sequential decision fusion for controlled detection errors **2010**,		4
75	Application of higher order statistics/spectra in biomedical signals--a review. *Medical Engineering and Physics*, **2010**, 32, 679-89	2.4	158
74	Multi-spectral fusion for surveillance systems. *Computers and Electrical Engineering*, **2010**, 36, 643-663	4.3	19
73	Automatic identification of epileptic electroencephalography signals using higher-order spectra. *Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine*, **2009**, 223, 485-95	1.7	48

72	Analysis of epileptic EEG signals using higher order spectra. *Journal of Medical Engineering and Technology*, **2009**, 33, 42-50	1.8	89
71	Cardiac health diagnosis using higher order spectra and support vector machine. *Open Medical Informatics Journal*, **2009**, 3, 1-8	1	29
70	Higher Order Spectra based Support Vector Machine for Arrhythmia Classification. *IFMBE Proceedings*, **2009**, 231-234	0.2	4
69	Cardiac state diagnosis using higher order spectra of heart rate variability. *Journal of Medical Engineering and Technology*, **2008**, 32, 145-55	1.8	101
68	Object tracking using multiple motion modalities **2008**,		2
67	Automatic identification of epilepsy by HOS and power spectrum parameters using EEG signals: a comparative study. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2008**, 2008, 3824-7	0.9	19
66	Computer-based analysis of cardiac state using entropies, recurrence plots and Poincare geometry. *Journal of Medical Engineering and Technology*, **2008**, 32, 263-72	1.8	18
65	3D face verification using a free-parts approach. *Pattern Recognition Letters*, **2008**, 29, 1190-1196	4.7	10
64	Biometric Based Cryptographic Key Generation from Faces **2007**,		57
63	Multiscale Representation for 3-D Face Recognition. *IEEE Transactions on Information Forensics and Security*, **2007**, 2, 529-536	8	12
62	An adaptive optical flow technique for person tracking systems. *Pattern Recognition Letters*, **2007**, 28, 1232-1239	4.7	59
61	Higher Order Spectral (HOS) analysis of epileptic EEG signals. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, **2007**, 2007, 6496-9		13
60	Robust 3D Face Recognition from Expression Categorisation. *Lecture Notes in Computer Science*, **2007**, 271-280	0.9	2
59	Super-Resolved Faces for Improved Face Recognition from Surveillance Video. *Lecture Notes in Computer Science*, **2007**, 1-10	0.9	25
58	Gaze tracking for region of interest coding in JPEG 2000. *Signal Processing: Image Communication*, **2006**, 21, 359-377	2.8	6
57	The Role of Motion Models in Super-Resolving Surveillance Video for Face Recognition **2006**,		3
56	A Multi-Class Tracker Using a Scalable Condensation Filter **2006**,		2
55	Combined 2D/3D Face Recognition Using Log-Gabor Templates **2006**,		28

54	Feature Modelling of PCA Difference Vectors for 2D and 3D Face Recognition **2006**,		2
53	3D Face Recognition using Log-Gabor Templates **2006**,		40
52	. *IEEE Transactions on Multimedia*, **2005**, 7, 495-506	6.6	21
51	Identification of gastroenteric viruses by electron microscopy using higher order spectral features. *Journal of Clinical Virology*, **2005**, 34, 195-206	14.5	17
50	Near-surface Interface Detection for Coal Mining Applications using Bispectral Features and GPR. *Subsurface Sensing Technologies and Applications*, **2005**, 6, 125-149		16
49	An Application of Fractal Image-Set Coding in Facial Recognition. *Lecture Notes in Computer Science*, **2004**, 178-186	0.9	0
48	Speaker Identification Using Higher Order Spectral Phase Features and their Effectiveness vis□□is Mel-Cepstral Features. *Lecture Notes in Computer Science*, **2004**, 614-622	0.9	6
47	Importance prioritisation in JPEG 2000 for improved interpretability. *Signal Processing: Image Communication*, **2004**, 19, 1005-1028	2.8	1
46	Face authentication test on the BANCA database **2004**,		46
45	Improved Facial-Feature Detection for AVSP via Unsupervised Clustering and Discriminant Analysis. *Eurasip Journal on Advances in Signal Processing*, **2003**, 2003, 1	1.9	6
44	Interpretability performance assessment of JPEG2000 and part 1 compliant region of interest coding. *IEEE Transactions on Consumer Electronics*, **2003**, 49, 808-817	4.8	10
43	Adaptive mouth segmentation using chromatic features. *Pattern Recognition Letters*, **2002**, 23, 1293-1302	4.7	17
42	Chromatic colour spaces for skin detection using GMMS **2002**,		2
41	Detection of mines in acoustic images using higher order spectral features. *IEEE Journal of Oceanic Engineering*, **2002**, 27, 610-618	3.3	24
40	Learning object dynamics for smooth tracking of moving lip contours. *Electronics Letters*, **2000**, 36, 520	1.1	1
39	Robust speaker verification via fusion of speech and lip modalities **1999**,		9
38	Detection of sea mines in sonar imagery using higher-order spectral features **1999**,		4
37	Speech compaction using temporal decomposition. *Electronics Letters*, **1998**, 34, 2317	1.1	0

36	Higher-Order Spectra of Nonlinear Polynomial Models for Chua's Circuit. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **1998**, 08, 2425-2431	2	2
35	Pattern recognition using invariants defined from higher order spectra: 2-D image inputs. *IEEE Transactions on Image Processing*, **1997**, 6, 703-12	8.7	71
34	The development of a new signal processing program at the Queensland University of Technology. *IEEE Transactions on Education*, **1996**, 39, 186-191	2.1	1
33	Higher-order spectral analysis of nonlinear ocean surface gravity waves. *Journal of Geophysical Research*, **1995**, 100, 4977		20
32	. *IEEE Transactions on Signal Processing*, **1994**, 42, 229-233	4.8	40
31	. *IEEE Transactions on Signal Processing*, **1994**, 42, 3430-3440	4.8	16
30	. *IEEE Transactions on Circuits and Systems Part 1: Regular Papers*, **1993**, 40, 689-692		6
29	Pattern Recognition Using Invariants Defined From Higher Order Spectra- One Dimensional Inputs. *IEEE Transactions on Signal Processing*, **1993**, 41, 205	4.8	98
28	HIGHER-ORDER SPECTRAL ANALYSIS TO DETECT NONLINEAR INTERACTIONS IN MEASURED TIME SERIES AND AN APPLICATION TO CHUA'S CIRCUIT. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **1993**, 03, 19-34	2	19
27	BISPECTRAL AND TRISPECTRAL CHARACTERIZATION OF TRANSITION TO CHAOS IN THE DUFFING OSCILLATOR. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **1993**, 03, 551-557	2	16
26	**1992**,		12
25	**1991**,		6
24	. *IEEE Transactions on Signal Processing*, **1991**, 39, 2640-2651	4.8	18
23	. *IEEE Transactions on Acoustics, Speech, and Signal Processing*, **1990**, 38, 2181-2186		14
22	Optical techniques for real-time binary multiplication. *Applied Optics*, **1986**, 25, 2272	1.7	14
21	Speech recognition in adverse environments using lip information		1
20	Digit recognition using trispectral features		1
19			7

18	Face recognition from super-resolved images	7
17	Gabor Filter Bank Representation for 3D Face Recognition	7
16	Application of ground penetrating radar technology for near-surface interface determination in coal mining	2
15	Techniques for improving stereo depth maps of faces	4
14	Visual attention based roi maps from gaze tracking data	3
13	Face recognition from 3D data using Iterative Closest Point algorithm and Gaussian mixture models	22
12	Improved speech recognition using adaptive audio-visual fusion via a stochastic secondary classifier	3
11	Robustness to expression variations in fractal-based face recognition	3
10	A suitability metric for mouth tracking through chromatic segmentation	3
9	Initialised eigenlip estimator for fast lip tracking using linear regression	5
8	The use of temporal speech and lip information for multi-modal speaker identification via multi-stream HMMs	11
7	Vector quantization based Gaussian modeling for speaker verification	7
6	Machine recognition of hand-drawn circuit diagrams	9
5	Face recognition using fractal codes	6
4	Importance coding of still imagery based on importance maps of visually interpretable regions	1
3	An approach to statistical lip modelling for speaker identification via chromatic feature extraction	22
2	The use of speech and lip modalities for robust speaker verification under adverse conditions	8
1		4