Ajay Kumar

List of Publications by Year in Descending Order

117 papers	4,965 citations	40 h-index	68 g-index
120 ext. papers	6,003 ext. citations	5.7 avg, IF	6.6 L-index

#	Paper	IF	Citations
117	Accurate 3D Finger Knuckle Recognition Using Auto-Generated Similarity Functions. *IEEE Transactions on Biometrics, Behavior, and Identity Science*, **2021**, 3, 203-213	4.3	1
116	Deep Feature Collaboration for Challenging 3D Finger Knuckle Identification. *IEEE Transactions on Information Forensics and Security*, **2021**, 16, 1158-1173	8	3
115	Periocular-Assisted Multi-Feature Collaboration for Dynamic Iris Recognition. *IEEE Transactions on Information Forensics and Security*, **2021**, 16, 866-879	8	8
114	Minutiae Attention Network With Reciprocal Distance Loss for Contactless to Contact-Based Fingerprint Identification. *IEEE Transactions on Information Forensics and Security*, **2021**, 16, 3299-3311	8	1
113	Mycobacterium tuberculosis glyceraldehyde-3-phosphate dehydrogenase plays a dual role-As an adhesin and as a receptor for plasmin(ogen). *Cellular Microbiology*, **2021**, 23, e13311	3.9	1
112	Towards More Accurate Contactless Fingerprint Minutiae Extraction and Pose-Invariant Matching. *IEEE Transactions on Information Forensics and Security*, **2020**, 1-1	8	6
111	Contactless Palmprint Identification Using Deeply Learned Residual Features. *IEEE Transactions on Biometrics, Behavior, and Identity Science*, **2020**, 2, 172-181	4.3	17
110	Efficient and Accurate 3D Finger Knuckle Matching using Surface Key Points. *IEEE Transactions on Image Processing*, **2020**, PP,	8.7	1
109	Contactless Biometric Identification Using 3D Finger Knuckle Patterns. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2020**, 42, 1868-1883	13.3	11
108	Numerical Reflectance Compensation for Non-Lambertian Photometric Stereo. *IEEE Transactions on Image Processing*, **2019**, 28, 3177-3191	8.7	6
107	Toward More Accurate Iris Recognition Using Dilated Residual Features. *IEEE Transactions on Information Forensics and Security*, **2019**, 14, 3233-3245	8	32
106	A deep learning based unified framework to detect, segment and recognize irises using spatially corresponding features. *Pattern Recognition*, **2019**, 93, 546-557	7.7	34
105	Toward More Accurate Matching of Contactless Palmprint Images Under Less Constrained Environments. *IEEE Transactions on Information Forensics and Security*, **2019**, 14, 34-47	8	20
104	A CNN-Based Framework for Comparison of Contactless to Contact-Based Fingerprints. *IEEE Transactions on Information Forensics and Security*, **2019**, 14, 662-676	8	28
103	Toward Pose Invariant and Completely Contactless Finger Knuckle Recognition. *IEEE Transactions on Biometrics, Behavior, and Identity Science*, **2019**, 1, 201-209	4.3	6
102	Cross-spectral iris recognition using CNN and supervised discrete hashing. *Pattern Recognition*, **2019**, 86, 85-98	7.7	46
101	Finger vein identification using Convolutional Neural Network and supervised discrete hashing. *Pattern Recognition Letters*, **2019**, 119, 148-156	4.7	46

100	Matching Contactless and Contact-based Conventional Fingerprint Images for Biometrics Identification. *IEEE Transactions on Image Processing*, **2018**, 27, 2008-2021	8.7	37
99	Contactless and partial 3D fingerprint recognition using multi-view deep representation. *Pattern Recognition*, **2018**, 83, 314-327	7.7	35
98	3D Fingerprint Image Preprocessing and Enhancement. *Advances in Computer Vision and Pattern Recognition*, **2018**, 63-69	1.1	
97	3D Fingerprint Acquisition Using Coloured Photometric Stereo. *Advances in Computer Vision and Pattern Recognition*, **2018**, 53-62	1.1	
96	Revisiting Outlier Rejection Approach for Non-Lambertian Photometric Stereo. *IEEE Transactions on Image Processing*, **2018**,	8.7	3
95	Tetrahedron Based Fast 3D Fingerprint Identification Using Colored LEDs Illumination. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2018**, 40, 3022-3033	13.3	15
94	Advancing Surface Feature Encoding and Matching for More Accurate 3D Biometric Recognition **2018**,		2
93	Representation, Recovery and Matching of 3D Minutiae Template. *Advances in Computer Vision and Pattern Recognition*, **2018**, 71-94	1.1	
92	Contactless 3D Fingerprint Identification. *Advances in Computer Vision and Pattern Recognition*, **2018**,	1.1	20
91	Other Methods for 3D Fingerprint Matching. *Advances in Computer Vision and Pattern Recognition*, **2018**, 95-108	1.1	
90	3D Fingerprint Image Acquisition Methods. *Advances in Computer Vision and Pattern Recognition*, **2018**, 17-27	1.1	
89	Improving Periocular Recognition by Explicit Attention to Critical Regions in Deep Neural Network. *IEEE Transactions on Information Forensics and Security*, **2018**, 13, 2937-2952	8	43
88	Accurate Periocular Recognition Under Less Constrained Environment Using Semantics-Assisted Convolutional Neural Network. *IEEE Transactions on Information Forensics and Security*, **2017**, 12, 1017-1030	8	62
87	Finger Vein Identification Using Convolutional Neural Network and Supervised Discrete Hashing. *Advances in Computer Vision and Pattern Recognition*, **2017**, 109-132	1.1	18
86	Toward More Accurate Iris Recognition Using Cross-Spectral Matching. *IEEE Transactions on Image Processing*, **2017**, 26, 208-221	8.7	70
85	Multi-Siamese networks to accurately match contactless to contact-based fingerprint images **2017**,		7
84	Towards More Accurate Iris Recognition Using Deeply Learned Spatially Corresponding Features **2017**,		53
83	Personal Identification Using Minor Knuckle Patterns From Palm Dorsal Surface. *IEEE Transactions on Information Forensics and Security*, **2016**, 11, 2338-2348	8	20

82	A 3D Feature Descriptor Recovered from a Single 2D Palmprint Image. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2016**, 38, 1272-9	13.3	46
81	Recognizing human faces under disguise and makeup **2016**,		22
80	Suspecting Less and Doing Better: New Insights on Palmprint Identification for Faster and More Accurate Matching. *IEEE Transactions on Information Forensics and Security*, **2016**, 11, 633-641	8	40
79	Adaptive management of multimodal biometrics fusion using ant colony optimization. *Information Fusion*, **2016**, 32, 49-63	16.7	30
78	Advancing Cross-Spectral Iris Recognition Research Using Bi-Spectral Imaging. *Advances in Intelligent Systems and Computing*, **2016**, 1-10	0.4	8
77	On matching cross-spectral periocular images for accurate biometrics identification **2016**,		13
76	Recovering and matching minutiae patterns from finger knuckle images. *Pattern Recognition Letters*, **2015**, 68, 361-367	4.7	21
75	An Accurate Iris Segmentation Framework Under Relaxed Imaging Constraints Using Total Variation Model **2015**,		64
74	Towards Contactless, Low-Cost and Accurate 3D Fingerprint Identification. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2015**, 37, 681-96	13.3	41
73	Integrating ocular and iris descriptors for fake iris image detection **2014**,		8
72	Accurate Iris Recognition at a Distance Using Stabilized Iris Encoding and Zernike Moments Phase Features. *IEEE Transactions on Image Processing*, **2014**, 23, 3962-3974	8.7	68
71	Efficient and Accurate At-a-Distance Iris Recognition Using Geometric Key-Based Iris Encoding. *IEEE Transactions on Information Forensics and Security*, **2014**, 9, 1518-1526	8	26
70	Importance of Being Unique From Finger Dorsal Patterns: Exploring Minor Finger Knuckle Patterns in Verifying Human Identities. *IEEE Transactions on Information Forensics and Security*, **2014**, 9, 1288-1298	8	33
69	Periocular Recognition Using Unsupervised Convolutional RBM Feature Learning **2014**,		16
68	Can We Use Second Minor Finger Knuckle Patterns to Identify Humans? **2014**,		10
67	Adaptive Security for Human Surveillance Using Multimodal Open Set Biometric Recognition **2014**,		1
66	Recognizing disguised faces: human and machine evaluation. *PLoS ONE*, **2014**, 9, e99212	3.7	67
65	Adaptive and localized iris weight map for accurate iris recognition under less constrained environments **2013**,		10

64	Towards online iris and periocular recognition under relaxed imaging constraints. *IEEE Transactions on Image Processing*, **2013**, 22, 3751-65	8.7	101
63	Robust ear identification using sparse representation of local texture descriptors. *Pattern Recognition*, **2013**, 46, 73-85	7.7	66
62	Towards Contactless, Low-Cost and Accurate 3D Fingerprint Identification **2013**,		30
61	Automated human identification using ear imaging. *Pattern Recognition*, **2012**, 45, 956-968	7.7	162
60	Human identification using finger images. *IEEE Transactions on Image Processing*, **2012**, 21, 2228-44	8.7	338
59	Unified framework for automated iris segmentation using distantly acquired face images. *IEEE Transactions on Image Processing*, **2012**, 21, 4068-79	8.7	88
58	Efficient iris segmentation using Grow-Cut algorithm for remotely acquired iris images **2012**,		9
57	Iris recognition using quaternionic sparse orientation code (QSOC) **2012**,		17
56	Can we use minor finger knuckle images to identify humans? **2012**,		21
55	Reliable ear identification using 2-D quadrature filters. *Pattern Recognition Letters*, **2012**, 33, 1870-1881	4.7	50
54	Human identification from at-a-distance face images using sparse representation of local iris features **2012**,		16
53	Biometric Recognition: An Overview. *The International Library of Ethics, Law and Technology*, **2012**, 49-79	0.5	65
52	Personal Identification Using Multibiometrics Rank-Level Fusion. *IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews*, **2011**, 41, 743-752		96
51	A Unified Framework for Contactless Hand Verification. *IEEE Transactions on Information Forensics and Security*, **2011**, 6, 1014-1027	8	78
50	Human Identification Using Palm-Vein Images. *IEEE Transactions on Information Forensics and Security*, **2011**, 6, 1259-1274	8	161
49	Contactless and pose invariant biometric identification using hand surface. *IEEE Transactions on Image Processing*, **2011**, 20, 1415-24	8.7	51
48	Contactless fingerprint identification using level zero features **2011**,		33
47	Automated segmentation of iris images using visible wavelength face images **2011**,		38

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46	Incorporating color information for reliable palmprint authentication **2011**,		3
45	Palmprint recognition using rank level fusion **2010**,		13
44	Personal Identification from Iris Images Using Localized Radon Transform **2010**,		12
43	Contactless palm vein identification using multiple representations **2010**,		20
42	Human hand identification with 3D hand pose variations **2010**,		6
41	Improved palmprint authentication using contactless imaging **2010**,		21
40	. *IEEE Transactions on Information Forensics and Security*, **2010**, 5, 92-102	8	46
39	Improving Biometric Authentication Performance From the User Quality. *IEEE Transactions on Instrumentation and Measurement*, **2010**, 59, 730-735	5.2	40
38	Robust palmprint verification using 2D and 3D features. *Pattern Recognition*, **2010**, 43, 358-368	7.7	75
37	Comparison and combination of iris matchers for reliable personal authentication. *Pattern Recognition*, **2010**, 43, 1016-1026	7.7	207
36	USER AUTHENTICATION USING FUSION OF FACE AND PALMPRINT. *International Journal of Image and Graphics*, **2009**, 09, 251-270	0.5	6
35	Development of a New Cryptographic Construct Using Palmprint-Based Fuzzy Vault. *Eurasip Journal on Advances in Signal Processing*, **2009**, 2009,	1.9	30
34	Personal identification using finger knuckle orientation features. *Electronics Letters*, **2009**, 45, 1023	1.1	40
33	Personal Authentication Using Finger Knuckle Surface. *IEEE Transactions on Information Forensics and Security*, **2009**, 4, 98-110	8	148
32	On estimating performance indices for biometric identification. *Pattern Recognition*, **2009**, 42, 1803-1815	7.7	12
31	Human identification using KnuckleCodes **2009**,		42
30	Combining 2D and 3D hand geometry features for biometric verification **2009**,		23
29	Personal authentication using hand vein triangulation and knuckle shape. *IEEE Transactions on Image Processing*, **2009**, 18, 2127-36	8.7	199

#	Title	IF	Cites
28	Comments on "An Adaptive Multimodal Biometric Management Algorithm. *IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews*, **2008**, 38, 841-843		3
27	Micro power battery state-of-charge monitor. *IEEE Transactions on Consumer Electronics*, **2008**, 54, 623-630	4.8	7
26	Incorporating Cohort Information for Reliable Palmprint Authentication **2008**,		78
25	Incorporating user quality for performance improvement in hand identification **2008**,		3
24	Comparison and combination of iris matchers for reliable personal identification **2008**,		16
23	Online personal identification in night using multiple face representations **2008**,		4
22	A new antispoofing approach for biometric devices. *IEEE Transactions on Biomedical Circuits and Systems*, **2008**, 2, 328-37	5.1	77
21	A palmprint-based cryptosystem using double encryption **2008**,		18
20	Personal authentication using hand vein triangulation **2008**,		8
19	A New Method for Fingerprint Antispoofing using Pulse Oxiometry **2007**,		11
18	Biometric Authentication using Finger-Back Surface **2007**,		32
17	. *IEEE Transactions on Information Forensics and Security*, **2007**, 2, 181-187	8	38
16	**2007**,		3
15	Improving Iris Identification using User Quality and Cohort Information **2007**,		2
14	A Novel Approach to Improve Biometric Recognition Using Rank Level Fusion **2007**,		18
13	Ear authentication using Log-Gabor wavelets **2007**,		21
12	. *IEEE Transactions on Consumer Electronics*, **2007**, 53, 1044-1052	4.8	13
11	INTEGRATING SHAPE AND TEXTURE FOR HAND VERIFICATION. *International Journal of Image and Graphics*, **2006**, 06, 101-113	0.5	6

10	Personal recognition using hand shape and texture. *IEEE Transactions on Image Processing*, **2006**, 15, 2454-61	8.7	181
9	Personal authentication using hand images. *Pattern Recognition Letters*, **2006**, 27, 1478-1486	4.7	77
8	Personal authentication using multiple palmprint representation. *Pattern Recognition*, **2005**, 38, 1695-1704	7.7	112
7	Palmprint authentication using multiple classifiers **2004**,		9
6	Neural network based detection of local textile defects. *Pattern Recognition*, **2003**, 36, 1645-1659	7.7	143
5	Personal Verification Using Palmprint and Hand Geometry Biometric. *Lecture Notes in Computer Science*, **2003**, 668-678	0.9	206
4	Automated inspection of textured web materials using real Gabor functions **2002**, 4875, 298		
3	Defect detection in textured materials using Gabor filters. *IEEE Transactions on Industry Applications*, **2002**, 38, 425-440	4.3	275
2	Fabric defect segmentation using multichannel blob detectors. *Optical Engineering*, **2000**, 39, 3176	1.1	53
1	Combining 2D and 3D hand geometry features for biometric verification		6