

Jan Flusser

List of Publications by Year in descending order

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147
papers

10,283
citations

168829

31
h-index

42259

96
g-index

168
all docs

168
docs citations

168
times ranked

7415
citing authors

#	ARTICLE	IF	CITATIONS
1	Fast Overlapping Block Processing Algorithm for Feature Extraction. Symmetry, 2022, 14, 715.	1.1	14
2	Non-separable rotation moment invariants. Pattern Recognition, 2022, 127, 108607.	5.1	2
3	Novel Octonion Moments for color stereo image analysis. , 2021, 108, 102878.		23
4	Affine Invariants of Vector Fields. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2021, 43, 1140-1155.	9.7	3
5	Combined Invariants to Gaussian Blur and Affine Transformation. , 2021, , .		0
6	DCT/IDCT Filter Design for Ultrasound Image Filtering. , 2021, , .		0
7	Complete and Incomplete Sets of Invariants. Journal of Mathematical Imaging and Vision, 2021, 63, 917-922.	0.8	1
8	Blur-Invariant Similarity Measurement of Images. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2021, 43, 2882-2884.	9.7	2
9	Ultrasound Image Filtering and Reconstruction Using DCT/IDCT Filter Structure. IEEE Access, 2020, 8, 141342-141357.	2.6	8
10	Handling Gaussian blur without deconvolution. Pattern Recognition, 2020, 103, 107264.	5.1	17
11	Fractional Charlier moments for image reconstruction and image watermarking. Signal Processing, 2020, 171, 107509.	2.1	70
12	Robust multivariate density estimation under Gaussian noise. Multidimensional Systems and Signal Processing, 2020, 31, 1113-1143.	1.7	1
13	Filter-generating system of Zernike polynomials. Automatica, 2019, 108, 108498.	3.0	3
14	Image Invariants to Anisotropic Gaussian Blur. Lecture Notes in Computer Science, 2019, , 140-151.	1.0	6
15	2-D Generating Function of the Zernike Polynomials and their Application for Image Classification. , 2019, , .		0
16	Orthogonal Affine Invariants from Gaussian-Hermite Moments. Lecture Notes in Computer Science, 2019, , 413-424.	1.0	0
17	On the Null-Space of the Shape-Color Moment Invariants. Lecture Notes in Computer Science, 2019, , 402-408.	1.0	2
18	Blur Invariant Template Matching Using Projection onto Convex Sets. Lecture Notes in Computer Science, 2019, , 351-362.	1.0	4

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19	Discrete Hermite moments and their application in chemometrics. Chemometrics and Intelligent Laboratory Systems, 2018, 177, 83-88.	1.8	1
20	Rotation invariants of vector fields from orthogonal moments. Pattern Recognition, 2018, 74, 110-121.	5.1	26
21	Rotation invariants from Gaussian-Hermite moments of color images. Signal Processing, 2018, 143, 282-291.	2.1	11
22	Rotation of 2D orthogonal polynomials. Pattern Recognition Letters, 2018, 102, 44-49.	2.6	8
23	Affine Moment Invariants of Vector Fields. , 2018, , .		1
24	New discrete orthogonal moments for signal analysis. Signal Processing, 2017, 141, 57-73.	2.1	15
25	Feature Selection on Affine Moment Invariants in Relation to Known Dependencies. Lecture Notes in Computer Science, 2017, , 285-295.	1.0	1
26	ATS drugs molecular structure representation using refined 3D geometric moment invariants. Journal of Mathematical Chemistry, 2017, 55, 1951-1963.	0.7	5
27	Scale invariants from Gaussian-Hermite moments. Signal Processing, 2017, 132, 77-84.	2.1	23
28	Recognition of patterns in vector fields by Gaussian-hermite invariants. , 2017, , .		5
29	Automatic blood detection in capsule endoscopy video. Journal of Biomedical Optics, 2016, 21, 126007.	1.4	17
30	Decomposition of 3D Binary Objects into Rectangular Blocks. , 2016, , .		0
31	Numerical problems with the Pascal triangle in moment computation. Journal of Computational and Applied Mathematics, 2016, 306, 53-68.	1.1	1
32	PIZZARO: Forensic analysis and restoration of image and video data. Forensic Science International, 2016, 264, 153-166.	1.3	7
33	Near infrared face recognition: A literature survey. Computer Science Review, 2016, 21, 1-17.	10.2	27
34	Robust histogram-based image retrieval. Pattern Recognition Letters, 2016, 69, 72-81.	2.6	23
35	Recognition of Images Degraded by Gaussian Blur. IEEE Transactions on Image Processing, 2016, 25, 790-806.	6.0	72
36	3D rotation invariants by complex moments. Pattern Recognition, 2015, 48, 3516-3526.	5.1	23

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37	Recognition of Images Degraded by Gaussian Blur. Lecture Notes in Computer Science, 2015, , 88-99.	1.0	7
38	Projection Operators and Moment Invariants to Image Blurring. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2015, 37, 786-802.	9.7	43
39	3D rotation invariants of Gaussian-Hermite moments. Pattern Recognition Letters, 2015, 54, 18-26.	2.6	37
40	Registration of Images With γ -Fold Dihedral Blur. IEEE Transactions on Image Processing, 2015, 24, 1036-1045.	6.0	15
41	Design of high-order rotation invariants from Gaussian-Hermite moments. Signal Processing, 2015, 113, 61-67.	2.1	25
42	Quaternion Wiener Deconvolution for Noise Robust Color Image Registration. IEEE Signal Processing Letters, 2015, 22, 1278-1282.	2.1	7
43	Near infrared face recognition using Zernike moments and Hermite kernels. Information Sciences, 2015, 316, 234-245.	4.0	55
44	Evaluating Feature Extractors and Dimension Reduction Methods for Near Infrared Face Recognition Systems. Jurnal Teknologi (Sciences and Engineering), 2014, 70, .	0.3	3
45	Noise-Resistant Image Retrieval. , 2014, , .		2
46	M3art: A Database of Models of Canvas Paintings. Lecture Notes in Computer Science, 2014, , 176-185.	1.0	0
47	Recognition of Symmetric 3D Bodies. Symmetry, 2014, 6, 722-757.	1.1	6
48	Near Infrared Face Recognition: A Comparison of Moment-Based Approaches. Lecture Notes in Electrical Engineering, 2014, , 129-135.	0.3	3
49	Fast computation of Krawtchouk moments. Information Sciences, 2014, 288, 73-86.	4.0	38
50	Comments on "Weed recognition using image blur information" by Peng, Z. & Jun, C., Biosystems Engineering 110(2), p. 198-205. Biosystems Engineering, 2014, 126, 104-108.	1.9	3
51	Near infrared face recognition by combining Zernike moments and undecimated discrete wavelet transform. , 2014, 31, 13-27.		48
52	2D and 3D Image Analysis by Gaussian-Hermite Moments. Gate To Computer Science and Research, 2014, , 143-173.	0.4	5
53	Automatic determination of the size of elliptical nanoparticles from AFM images. Journal of Nanoparticle Research, 2013, 15, 1.	0.8	3
54	Blur Invariant Translational Image Registration for N -fold Symmetric Blurs. IEEE Transactions on Image Processing, 2013, 22, 3676-3689.	6.0	21

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55	Patch-based blind deconvolution with parametric interpolation of convolution kernels. , 2013, , .		1
56	A comment on "A novel approach for the registration of weak affine images". Pattern Recognition Letters, 2013, 34, 1381-1385.	2.6	2
57	On the recognition of wood slices by means of blur invariants. Sensors and Actuators A: Physical, 2013, 198, 113-118.	2.0	5
58	Image fusion for difference visualization in art analysis. , 2013, , .		0
59	Rotation and noise invariant near-infrared face recognition by means of Zernike moments and spectral regression discriminant analysis. Journal of Electronic Imaging, 2013, 22, 013030.	0.5	22
60	Low-cost mobile system for multispectral cultural heritage data acquisition. , 2013, , .		4
61	STEERABILITY OF HERMITE KERNEL. International Journal of Pattern Recognition and Artificial Intelligence, 2013, 27, 1354006.	0.7	14
62	Comparison of Leaf Recognition by Moments and Fourier Descriptors. Lecture Notes in Computer Science, 2013, , 221-228.	1.0	8
63	Invariants to Symmetrical Convolution with Application to Dihedral Kernel Symmetry. Lecture Notes in Computer Science, 2013, , 369-378.	1.0	2
64	Blur Invariants and Projection Operators. , 2013, , .		1
65	Decomposition of binary images" A survey and comparison. Pattern Recognition, 2012, 45, 4279-4291.	5.1	21
66	Rectangular Decomposition of Binary Images. Lecture Notes in Computer Science, 2012, , 213-224.	1.0	3
67	Denoising, deblurring, and superresoluton in mobile phones. Proceedings of SPIE, 2011, , .	0.8	0
68	Affine moment invariants generated by graph method. Pattern Recognition, 2011, 44, 2047-2056.	5.1	57
69	Blur Invariants Constructed From Arbitrary Moments. IEEE Transactions on Image Processing, 2011, 20, 3606-3611.	6.0	17
70	Tensor Method for Constructing 3D Moment Invariants. Lecture Notes in Computer Science, 2011, , 212-219.	1.0	26
71	Implicit Moment Invariants. International Journal of Computer Vision, 2010, 86, 72-86.	10.9	23
72	Mathematics Improves Astronomical Image Understanding. , 2010, , .		0

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73	Refined Morphological Methods of Moment Computation. , 2010, , .		7
74	Affine Moment Invariants of Color Images. Lecture Notes in Computer Science, 2009, , 334-341.	1.0	47
75	3D Rigid registration by cylindrical phase correlation method. Pattern Recognition Letters, 2009, 30, 914-921.	2.6	19
76	Recent Advances in Space-Variant Deblurring and Image Stabilization. NATO Science for Peace and Security Series B: Physics and Biophysics, 2009, , 259-272.	0.2	3
77	Extension of Moment Featuresâ€™ Invariance to Blur. Journal of Mathematical Imaging and Vision, 2008, 32, 227-238.	0.8	11
78	Recognition of partially occluded and deformed binary objects. Pattern Recognition Letters, 2008, 29, 360-369.	2.6	7
79	Superresolution imaging: a survey of current techniques. Proceedings of SPIE, 2008, , .	0.8	18
80	Simultaneous super-resolution and blind deconvolution. Journal of Physics: Conference Series, 2008, 124, 012048.	0.3	28
81	Space-Variant Restoration of Images Degraded by Camera Motion Blur. IEEE Transactions on Image Processing, 2008, 17, 105-116.	6.0	82
82	Affine Moment Invariants Generated by Automated Solution of the Equations. , 2008, , .		8
83	Superresolution and blind deconvolution of video. , 2008, , .		4
84	Super-Resolution and Blind Deconvolution For Rational Factors With an Application to Color Images. Computer Journal, 2008, 52, 142-152.	1.5	7
85	Photorealistic Modeling of the Growth of Filamentous Specimens. Eurasip Journal on Advances in Signal Processing, 2007, 2008, .	1.0	0
86	Restoration of Color Images Degraded by Space-Variant Motion Blur. Lecture Notes in Computer Science, 2007, , 450-457.	1.0	3
87	Implicit Invariants and Object Recognition. , 2007, , .		2
88	A Unified Approach to Superresolution and Multichannel Blind Deconvolution. IEEE Transactions on Image Processing, 2007, 16, 2322-2332.	6.0	94
89	Polygonal shape description for recognition of partially occluded objects. Pattern Recognition Letters, 2007, 28, 1002-1011.	2.6	12
90	Object Recognition by Implicit Invariants. Lecture Notes in Computer Science, 2007, , 856-863.	1.0	4

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91	Image Retrieval for Image Theft Detection. Advances in Intelligent and Soft Computing, 2007, , 44-51.	0.2	2
92	Cylindrical Phase Correlation Method. Lecture Notes in Computer Science, 2007, , 751-758.	1.0	0
93	Rotation Moment Invariants for Recognition of Symmetric Objects. IEEE Transactions on Image Processing, 2006, 15, 3784-3790.	6.0	142
94	Modelling of perception of non-planar scene in a defect vision. AIP Conference Proceedings, 2006, , .	0.3	0
95	The Independence of the Affine Moment Invariants. AIP Conference Proceedings, 2006, , .	0.3	1
96	Combined Superresolution and Blind Deconvolution. AIP Conference Proceedings, 2006, , .	0.3	1
97	Generalized affine moment invariants for object recogn. , 2006, , .		9
98	Resolution enhancement via probabilistic deconvolution of multiple degraded images. Pattern Recognition Letters, 2006, 27, 287-293.	2.6	26
99	Blind superresolution. , 2006, , 133-145.		0
100	Multichannel Blind Deconvolution As A Tool For Solar Image Restoration. Solar Physics, 2005, 228, 165-175.	1.0	2
101	Affine Normalization of Symmetric Objects. Lecture Notes in Computer Science, 2005, , 100-107.	1.0	24
102	Microscopic cross-sections of old artworks. , 2005, , .		2
103	Multichannel blind deconvolution of spatially misaligned images. IEEE Transactions on Image Processing, 2005, 14, 874-883.	6.0	119
104	Recognition of Partially Occluded and Deformed Binary Objects. Lecture Notes in Computer Science, 2005, , 415-422.	1.0	0
105	Moment Invariants for Recognizing Symmetric Objects. Lecture Notes in Computer Science, 2005, , 9-16.	1.0	1
106	Registration and Fusion of Blurred Images. Lecture Notes in Computer Science, 2004, , 122-129.	1.0	6
107	Invariants to convolution with circularly symmetric PSF. , 2004, , .		10
108	An application of image processing in the medieval mosaic conservation. Pattern Analysis and Applications, 2004, 7, 18-25.	3.1	8

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109	Projective moment invariants. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2004, 26, 1364-1367.	9.7	40
110	Automatic screening and multifocus fusion methods for diatom identification. , 2004, , .		3
111	Refined Method for the Fast and Exact Computation of Moment Invariants. Lecture Notes in Computer Science, 2004, , 487-494.	1.0	0
112	Combined blur and affine moment invariants and their use in pattern recognition. Pattern Recognition, 2003, 36, 2895-2907.	5.1	103
113	Image registration methods: a survey. Image and Vision Computing, 2003, 21, 977-1000.	2.7	5,318
114	Multichannel blind iterative image restoration. IEEE Transactions on Image Processing, 2003, 12, 1094-1106.	6.0	143
115	Moment forms invariant to rotation and blur in arbitrary number of dimensions. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2003, 25, 234-246.	9.7	93
116	Affine invariants of convex polygons. IEEE Transactions on Image Processing, 2002, 11, 1117-1118.	6.0	16
117	Evaluation of naturally ventilated dairy barn management by a thermographic method. Livestock Science, 2002, 77, 349-353.	1.2	30
118	A new wavelet-based measure of image focus. Pattern Recognition Letters, 2002, 23, 1785-1794.	2.6	131
119	On the inverse problem of rotation moment invariants. Pattern Recognition, 2002, 35, 3015-3017.	5.1	50
120	Features Invariant Simultaneously to Convolution and Affine Transformation. Lecture Notes in Computer Science, 2001, , 183-190.	1.0	4
121	Point-based projective invariants. Pattern Recognition, 2000, 33, 251-261.	5.1	27
122	On the independence of rotation moment invariants. Pattern Recognition, 2000, 33, 1405-1410.	5.1	261
123	Invariants to Convolution in Arbitrary Dimensions. Journal of Mathematical Imaging and Vision, 2000, 13, 101-113.	0.8	11
124	Refined moment calculation using image block representation. IEEE Transactions on Image Processing, 2000, 9, 1977-1978.	6.0	41
125	Invariants to Convolution and Rotation. Series in Machine Perception and Artificial Intelligence, 2000, , 23-45.	0.1	6
126	COMBINED INVARIANTS TO LINEAR FILTERING AND ROTATION. International Journal of Pattern Recognition and Artificial Intelligence, 1999, 13, 1123-1135.	0.7	56

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127	Robust detection of significant points in multiframe images. Pattern Recognition Letters, 1999, 20, 199-206.	2.6	47
128	Landmark recognition using invariant features. Pattern Recognition Letters, 1999, 20, 541-547.	2.6	28
129	Convex Layers: A New Tool for Recognition of Projectively Deformed Point Sets. Lecture Notes in Computer Science, 1999, , 454-461.	1.0	7
130	Degraded image analysis: an invariant approach. IEEE Transactions on Pattern Analysis and Machine Intelligence, 1998, 20, 590-603.	9.7	199
131	Classification of degraded signals by the method of invariants. Signal Processing, 1997, 60, 243-249.	2.1	10
132	Recognition of blurred images by the method of moments. IEEE Transactions on Image Processing, 1996, 5, 533-538.	6.0	96
133	<title>Search of the correspondence between the control points for registration of projectively deformed images</title>. , 1996, , .		0
134	Vertex-based features for recognition of projectively deformed polygons. Pattern Recognition, 1996, 29, 361-367.	5.1	25
135	Invariants for recognition of degraded 1-D digital signals. , 1996, , .		5
136	Object matching by means of matching likelihood coefficients. Pattern Recognition Letters, 1995, 16, 893-900.	2.6	19
137	Image features invariant with respect to blur. Pattern Recognition, 1995, 28, 1723-1732.	5.1	42
138	The projective invariants for polygons. Lecture Notes in Computer Science, 1995, , 729-734.	1.0	2
139	Affine moment invariants: a new tool for character recognition. Pattern Recognition Letters, 1994, 15, 433-436.	2.6	102
140	A moment-based approach to registration of images with affine geometric distortion. IEEE Transactions on Geoscience and Remote Sensing, 1994, 32, 382-387.	2.7	218
141	Pattern recognition by affine moment invariants. Pattern Recognition, 1993, 26, 167-174.	5.1	681
142	Image representation via a finite Radon transform. IEEE Transactions on Pattern Analysis and Machine Intelligence, 1993, 15, 996-1006.	9.7	160
143	An adaptive method for image registration. Pattern Recognition, 1992, 25, 45-54.	5.1	79
144	Combined invariants to convolution and rotation. , 0, , .		0

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145	Shift-invariant multichannel blind restoration. , 0, , .		0
146	Blind restoration of images blurred by complex camera motion and simultaneous recovery of 3D scene structure. , 0, , .		1
147	Removing camera shake in smartphones without hardware stabilization. , 0, , 100-122.		0