

Roumen K Kountchev

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8546399/publications.pdf>

Version: 2024-02-01

69
papers

220
citations

1478280

6
h-index

1281743

11
g-index

77
all docs

77
docs citations

77
times ranked

81
citing authors

#	ARTICLE	IF	CITATIONS
1	Generating classifier outputs of fixed accuracy and diversity. Pattern Recognition Letters, 2002, 23, 593-600.	2.6	32
2	Image Representation with Reduced Spectrum Pyramid. Studies in Computational Intelligence, 2008, , 275-284.	0.7	14
3	Inverse pyramidal decomposition with multiple DCT. Signal Processing: Image Communication, 2002, 17, 201-218.	1.8	11
4	Hierarchical Cubical Tensor Decomposition through Low Complexity Orthogonal Transforms. Symmetry, 2020, 12, 864.	1.1	7
5	Adaptive speech coding with DCT and neural net vector quantisation. Electronics Letters, 1993, 29, 704.	0.5	6
6	Contrast Enhancement with Histogram-Adaptive Image Segmentation. , 2006, , .		6
7	Combined visual attention model for video sequences. , 2008, , .		6
8	Resistant image watermarking in the phases of the Complex Hadamard Transform coefficients. , 2010, , .		6
9	Content Based Image Retrieval Using Adaptive Inverse Pyramid Representation. Lecture Notes in Computer Science, 2009, , 304-314.	1.0	6
10	ExtrIntDetectâ€”A New Universal Method for the Identification of Intelligent Cooperative Multiagent Systems with Extreme Intelligence. Symmetry, 2019, 11, 1123.	1.1	5
11	Adaptive error diffusion method for image quantisation. Electronics Letters, 1993, 29, 2021.	0.5	4
12	Image Multi-Layer Search Based on Spectrum Pyramid. , 2007, , .		4
13	Efficient sign language video representation. , 2008, , .		4
14	Adaptive Image Pyramidal Representation. , 2008, , .		4
15	New method for adaptive karhunen-loeve color transform. , 2009, , .		4
16	Automatic detection of welding defects. International Journal of Reasoning-based Intelligent Systems, 2011, 3, 34.	0.1	4
17	Complexity Estimation of Cubical Tensor Represented through 3D Frequency-Ordered Hierarchical KLT. Symmetry, 2020, 12, 1605.	1.1	4
18	Multimedia watermarking with complex Hadamard transform in the inverse pyramid decomposition. , 0, , .		3

#	ARTICLE	IF	CITATIONS
19	Documents Image Compression with IDP and Adaptive RLE. Industrial Electronics Society (IECON), Annual Conference of IEEE, 2006, , .	0.0	3
20	New Method for Lossless Compression of Medical Records. , 2008, , .		3
21	Adaptive Contour Image Interpolation for Sign Language Interpretations. , 2008, , .		3
22	Invariant object description with inverse pyramid based on the truncated modified discrete Mellin-Fourier transform. , 2011, , .		3
23	Compression of multispectral and multi-view images with inverse pyramid decomposition. International Journal of Reasoning-based Intelligent Systems, 2011, 3, 124.	0.1	3
24	PCA-based Adaptive Hierarchical Transform for correlated image groups. , 2013, , .		3
25	Hierarchical third-order tensor decomposition through inverse difference pyramid based on the three-dimensional Walsh-Hadamard transform with applications in data mining. Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery, 2020, 10, e1314.	4.6	3
26	Pre- And Post- Processing for Enhancement Of Image Compression Based On Spectrum Pyramid. , 2007, , 269-274.		3
27	Adaptive Compression of Compound Images. , 2007, , .		2
28	New Method for Adaptive Lossless Compression of Still Images Based on the Histogram Statistics. Smart Innovation, Systems and Technologies, 2011, , 61-70.	0.5	2
29	Complex Hadamard transform of digital signals: properties and applications. International Journal of Reasoning-based Intelligent Systems, 2012, 4, 3.	0.1	2
30	Hierarchical principal component analysis-based transformation of multispectral images. International Journal of Reasoning-based Intelligent Systems, 2013, 5, 260.	0.1	2
31	Hierarchical SVD-based image decomposition with tree structure. International Journal of Reasoning-based Intelligent Systems, 2015, 7, 114.	0.1	2
32	Content protection and hierarchical access control in image databases. , 2015, , .		2
33	Third-Order Tensor Representation Through Reduced Inverse Difference Pyramid. , 2019, , .		2
34	Image Sequence Decomposition Based on the Truncated Hierarchical SVD. International Journal of Multimedia and Image Processing, 2017, 7, 352-361.	0.1	2
35	Objects Color Segmentation and RSTC-Invariant Representation using Adaptive Color KLT and Modified Mellin-Fourier Transform. , 2011, , .		2
36	Decorrelation of Sequences of Medical CT Images Based on the Hierarchical Adaptive KLT. Studies in Computational Intelligence, 2013, , 41-55.	0.7	2

#	ARTICLE	IF	CITATIONS
37	Invariant recognition system for 2D objects based on three-stage BPNN structure. Electronics Letters, 1998, 34, 974.	0.5	1
38	Image Compression Based On the Inverse Difference Pyramid with BPNN. , 2006, , .		1
39	Extraction of objects contours for body language study. , 2008, , .		1
40	Efficient archiving of documents with protection of their authentic content. International Journal of Reasoning-based Intelligent Systems, 2009, 1, 43.	0.1	1
41	Extraction of human body contours and position analysis. , 2010, , .		1
42	Efficient compression of sequences of medical and multispectral images. , 2011, , .		1
43	Image compression based on the Karhunen-Loeve color transform with Inverse Pyramid decomposition. , 2011, , .		1
44	Comparison of the structure and the computational complexity of the inverse difference and Laplacian Pyramids for still image decomposition. , 2013, , .		1
45	Adaptive multi-level 2D Karhunen-Loeve-based transform for still images. International Journal of Reasoning-based Intelligent Systems, 2014, 6, 49.	0.1	1
46	New Approaches for Hierarchical Image Decomposition, Based on IDP, SVD, PCA and KPCA. Intelligent Systems Reference Library, 2016, , 1-58.	1.0	1
47	Truncated Hierarchical SVD for image sequences, represented as third order tensor. , 2017, , .		1
48	Sliding Recursive Hierarchical Adaptive PCA for 3D image processing. , 2017, , .		1
49	Comparative Analysis of the Hierarchical 3D-SVD and Reduced Inverse Tensor Pyramid in Regard to Famous 3D Orthogonal Transforms. Smart Innovation, Systems and Technologies, 2021, , 35-56.	0.5	1
50	Image Watermarking Based on Pyramid Decomposition with CH Transform. Profiles in Operations Research, 2009, , 353-387.	0.3	1
51	Linear and Non-linear Inverse Pyramidal Image Representation: Algorithms and Applications. Intelligent Systems Reference Library, 2012, , 35-89.	1.0	1
52	Comparison of Image Decompositions Through Inverse Difference and Laplacian Pyramids. International Journal of Multimedia Data Engineering and Management, 2015, 6, 19-38.	0.3	1
53	Third-Order Tensor Decorrelation Based on 3D FO-HKLT with Adaptive Directional Vectorization. Symmetry, 2022, 14, 854.	1.1	1
54	Enhancement of the Visual Quality of Scanned Documents. , 2007, , .		0

#	ARTICLE	IF	CITATIONS
55	Data Hiding with Image Decomposition Based on General Spectrum Pyramid. , 2007, , .		0
56	Intra-frame compression of video sequences with Inverse Difference Pyramid decomposition. , 2009, , .		0
57	Intelligent processing and analysis of groups of multispectral images. , 2012, , .		0
58	ADAPTIVE APPROACH TO QUALITY ENHANCEMENT AND STORAGE OF SIGNATURES AND FINGERPRINT IMAGES. , 2013, , 467-494.		0
59	Compression with Adaptive Speckle Suppression for Ultrasound Medical Images. Studies in Computational Intelligence, 2013, , 57-68.	0.7	0
60	Radix-(2 ⁿ -2) Hierarchical SVD for multi-dimensional images. , 2015, , .		0
61	Image Decomposition on the basis of an Inverse Pyramid with 3-layer Neural Networks. , 2010, , 445-450.		0
62	Advances in Reasoning-Based Image Processing and Pattern Recognition. Intelligent Systems Reference Library, 2012, , 3-8.	1.0	0
63	Multispectral Image Compression, Intelligent Analysis, and Hierarchical Search in Image Databases. International Journal of Multimedia Data Engineering and Management, 2012, 3, 1-30.	0.3	0
64	An Adaptive Approach for Noise Reduction in Sequences of CT Images. Studies in Computational Intelligence, 2014, , 43-52.	0.7	0
65	New Format for Coding of Single and Sequences of Medical Images. Studies in Computational Intelligence, 2014, , 19-30.	0.7	0
66	Tissue Segmentation Methods Using 2D Histogram Matching in a Sequence of MR Brain Images. Intelligent Systems Reference Library, 2016, , 183-222.	1.0	0
67	Face Recognition in Home Security System Using Tensor Decomposition Based on Radix-(2 ⁿ -2) Hierarchical SVD. Lecture Notes in Computer Science, 2017, , 48-59.	1.0	0
68	Low Computational Complexity Third-Order Tensor Representation Through Inverse Spectrum Pyramid. Smart Innovation, Systems and Technologies, 2020, , 61-76.	0.5	0
69	Hierarchical Decomposition of Third-Order Tensor Through Adaptive Branched Inverse Difference Pyramid Based on 3D-WHT. Smart Innovation, Systems and Technologies, 2022, , 49-61.	0.5	0