Ioannis Kalatzis

List of Publications by Year
in descending order

58 papers	922 citations	430874 18 h-index	501196 28 g-index
59 all docs	59 docs citations	59 times ranked	1159 citing authors

#	Article	IF	Citations
1	Improving brain tumor characterization on MRI by probabilistic neural networks and non-linear transformation of textural features. Computer Methods and Programs in Biomedicine, 2008, 89, 24-32.	4.7	113
2	Design and implementation of an SVM-based computer classification system for discriminating depressive patients from healthy controls using the P600 component of ERP signals. Computer Methods and Programs in Biomedicine, 2004, 75, 11-22.	4.7	73
3	Enhancing the discrimination accuracy between metastases, gliomas and meningiomas on brain MRI by volumetric textural features and ensemble pattern recognition methods. Magnetic Resonance Imaging, 2009, 27, 120-130.	1.8	70
4	Design of a multi-classifier system for discriminating benign from malignant thyroid nodules using routinely H&E-stained cytological images. Computers in Biology and Medicine, 2008, 38, 196-203.	7.0	45
5	Independent Component Analysis for Source Localization of EEG Sleep Spindle Components. Computational Intelligence and Neuroscience, 2010, 2010, 1-12.	1.7	34
6	Development of a support vector machine-based image analysis system for assessing the thyroid nodule malignancy risk on ultrasound. Ultrasound in Medicine and Biology, 2005, 31, 1451-1459.	1.5	33
7	Pattern recognition system for the discrimination of multiple sclerosis from cerebral microangiopathy lesions based on texture analysis of magnetic resonance images. Magnetic Resonance Imaging, 2009, 27, 417-422.	1.8	33
8	Osteoarthritis severity of the hip by computer-aided grading of radiographic images. Medical and Biological Engineering and Computing, 2006, 44, 793-803.	2.8	32
9	Evaluation of ZnS:Cu phosphor as X-ray to light converter under mammographic conditions. Radiation Measurements, 2005, 39, 263-275.	1.4	31
10	Improving accuracy in astrocytomas grading by integrating a robust least squares mapping driven support vector machine classifier into a two level grade classification scheme. Computer Methods and Programs in Biomedicine, 2008, 90, 251-261.	4.7	31
11	Development of the cubic least squares mapping linear-kernel support vector machine classifier for improving the characterization of breast lesions on ultrasound. Computerized Medical Imaging and Graphics, 2004, 28, 247-255.	5.8	30
12	Assessing hip osteoarthritis severity utilizing a probabilistic neural network based classification scheme. Medical Engineering and Physics, 2007, 29, 227-237.	1.7	27
13	Complementary DNA Microarray Image Processing Based on the Fuzzy Gaussian Mixture Model. IEEE Transactions on Information Technology in Biomedicine, 2009, 13, 419-425.	3.2	25
14	Adaptable pattern recognition system for discriminating Melanocytic Nevi from Malignant Melanomas using plain photography images from different image databases. International Journal of Medical Informatics, 2017, 105, 1-10.	3.3	23
15	Quantitative combination of volumetric MR imaging and MR spectroscopy data for the discrimination of meningiomas from metastatic brain tumors by means of pattern recognition. Magnetic Resonance Imaging, 2011, 29, 525-535.	1.8	22
16	Real time decision support system for diagnosis of rare cancers, trained in parallel, on a graphics processing unit. Computers in Biology and Medicine, 2012, 42, 376-386.	7.0	20
17	A novel easy-to-use phantom for the determination of MTF in SPECT scanners. Medical Physics, 2012, 39, 1561-1570.	3.0	20
18	Light emission efficiency and imaging performance of Y3Al5O12: Ce (YAG: Ce) powder screens under diagnostic radiology conditions. Applied Physics B: Lasers and Optics, 2005, 80, 923-933.	2.2	19

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19	A wavelet-based Markov random field segmentation model in segmenting microarray experiments. Computer Methods and Programs in Biomedicine, 2011, 104, 307-315.	4.7	18
20	Non-linear Least Squares Features Transformation for Improving the Performance of Probabilistic Neural Networks in Classifying Human Brain Tumors on MRI. , 2007, , 239-247.		18
21	Computer-aided grading and quantification of hip osteoarthritis severity employing shape descriptors of radiographic hip joint space. Computers in Biology and Medicine, 2007, 37, 1786-1795.	7.0	15
22	A multi-classifier system for the characterization of normal, infectious, and cancerous prostate tissues employing transrectal ultrasound images. Computer Methods and Programs in Biomedicine, 2010, 97, 53-61.	4.7	15
23	Improving gene quantification by adjustable spot-image restoration. Bioinformatics, 2007, 23, 2265-2272.	4.1	14
24	Computer-based automated estimation of breast vascularity and correlation with breast cancer in DCE-MRI images. Magnetic Resonance Imaging, 2017, 35, 39-45.	1.8	13
25	A hybrid pixel-based classification method for blood vessel segmentation and aneurysm detection on CTA. Computers and Graphics, 2007, 31, 493-500.	2.5	12
26	Segmentation of Complementary DNA Microarray Images by Wavelet-Based Markov Random Field Model. IEEE Transactions on Information Technology in Biomedicine, 2009, 13, 1068-1074.	3.2	10
27	Microscopy image analysis of p63 immunohistochemically stained laryngeal cancer lesions for predicting patient 5-year survival. European Archives of Oto-Rhino-Laryngology, 2016, 273, 159-168.	1.6	10
28	Development of a Reference Image Collection Library for Histopathology Image Processing, Analysis and Decision Support Systems Research. Journal of Digital Imaging, 2017, 30, 287-295.	2.9	10
29	Colour-Texture based image analysis method for assessing the Hormone Receptors status in Breast tissue sections. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 4985-8.	0.5	9
30	EEG-based investigation of brain connectivity changes in psychotic patients undergoing the primitive expression form of dance therapy: a methodological pilot study. Cognitive Neurodynamics, 2015, 9, 231-248.	4.0	9
31	Fuzzy C-means-driven FHCE contextual segmentation method for mammographic microcalcification detection. Imaging Science Journal, 2010, 58, 146-154.	0.5	8
32	Multifeature Quantification of Nuclear Properties from Images of H&E-Stained Biopsy Material for Investigating Changes in Nuclear Structure with Advancing CIN Grade. Journal of Healthcare Engineering, 2018, 2018, 1-11.	1.9	7
33	Independent Components of Sleep Spindles. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 4002-5.	0.5	6
34	A morphological index for assessing hip osteoarthritis severity from radiographic images. British Journal of Radiology, 2008, 81, 129-136.	2.2	6
35	Development and evaluation of a PDA-based teleradiology terminal in thyroid nodule diagnosis. Journal of Telemedicine and Telecare, 2010, 16, 232-236.	2.7	6
36	Development of the probabilistic neural network–cubic least squares mapping (PNN–LSM3) classifier to assess carotid plaque's risk. Pattern Recognition Letters, 2004, 25, 249-258.	4.2	5

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37	An intensity-region driven multi-classifier scheme for improving the classification accuracy of proteomic MS-spectra. Computer Methods and Programs in Biomedicine, 2010, 99, 147-153.	4.7	5
38	Assessing the performance of four different categories of histological criteria in brain tumours grading by means of a computer‑aided diagnosis image analysis system. Journal of Microscopy, 2015, 260, 37-46.	1.8	5
39	Design of a hybrid deep learning system for discriminating between low- and high-grade colorectal cancer lesions, using microscopy images of IHC stained for AIB1 expression biopsy material. Machine Vision and Applications, 2021, 32, 1.	2.7	5
40	Cascade pattern recognition structure for improving quantitative assessment of estrogen receptor status in breast tissue carcinomas. , 2008, 30, 218-25.		5
41	Computer-based association of the texture of expressed estrogen receptor nuclei with histologic grade using immunohistochemically-stained breast carcinomas. , 2009, 31, 187-96.		5
42	Design and implementation of a multi-PNN structure for discriminating one-month abstinent heroin addicts from healthy controls using the P600 component of ERP signals. Pattern Recognition Letters, 2005, 26, 1691-1700.	4.2	4
43	Correlating Changes in the Epithelial Gland Tissue With Advancing Colorectal Cancer Histologic Grade, Using IHC Stained for AIB1 Expression Biopsy Material. Applied Immunohistochemistry and Molecular Morphology, 2019, 27, 749-757.	1.2	3
44	Effective Quantification of Gene Expression Levels in Microarray Images Using a Spot-Adaptive Compound Clustering-Enhancement-Segmentation Scheme. , 2007, , 555-565.		3
45	Dynamics of regional brain activity in epilepsy: a cross-disciplinary study on both intracranial and scalp-recorded epileptic seizures. Journal of Neural Engineering, 2014, 11, 026012.	3.5	2
46	Employing machine learning and microscopy images of AIB1 ‑stained biopsy material to assess the 5‑year survival of patients with colorectal cancer. Microscopy Research and Technique, 2021, 84, 2421-2433.	2.2	2
47	A Decision Support System for the Automatic Assessment of Hip Osteoarthritis Severity by Hip Joint Space Contour Spectral Analysis. Lecture Notes in Computer Science, 2006, , 451-462.	1.3	2
48	Computer-based image analysis system designed to differentiate between low-grade and high-grade laryngeal cancer cases. Analytical and Quantitative Cytopathology and Histopathology, 2013, 35, 261-72.	0.2	2
49	Slow and fast EEG sleep spindle component extraction using Independent Component Analysis. , 2008, , .		1
50	Computer Based Correlation of the Texture of P63 Expressed Nuclei with Histological Tumour Grade, in Laryngeal Carcinomas. Analytical Cellular Pathology, 2014, 2014, 1-13.	1.4	1
51	A GPU-based computer-assisted microscopy system for assessing the importance of different families of histological characteristics in cancer diagnosis. , 2014, , .		1
52	GPU-enabled design of an adaptable pattern recognition system for discriminating squamous intraepithelial lesions of the cervix. Biomedizinische Technik, 2020, 65, 315-325.	0.8	1
53	Assessment of HPV Risk Type in H&E-stained Biopsy Specimens of the Cervix by Microscopy Image Analysis. Applied Immunohistochemistry and Molecular Morphology, 2020, 28, 702-710.	1.2	1
54	An Automatic Microarray Image Gridding Technique Based on Continuous Wavelet Transform. Lecture Notes in Computer Science, 2007, , 864-870.	1.3	1

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55	Biomarker Selection, Employing an Iterative Peak Selection Method, and Prostate Spectra Characterization for Identifying Biomarkers Related to Prostate Cancer. , 2007, , 566-574.		1
56	Genes expression level quantification using a spot-based algorithmic pipeline. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 1148-51.	0.5	0
57	A pattern recognition system for prostate mass spectra discrimination based on the CUDA parallel programming model. Journal of Physics: Conference Series, 2014, 490, 012144.	0.4	0
58	Development of a Cascade Processing Method for Microarray Spot Segmentation. Lecture Notes in Computer Science, 2007, , 410-417.	1.3	0