Metin N Gurcan

List of Publications by Year
in descending order

114	6,258	147801	71685
papers	citations	31 h-index	76 g-index

119	119	119	7672
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Histopathological Image Analysis: A Review. IEEE Reviews in Biomedical Engineering, 2009, 2, 147-171.	18.0	1,511
2	Digital pathology and artificial intelligence. Lancet Oncology, The, 2019, 20, e253-e261.	10.7	597
3	Pten in stromal fibroblasts suppresses mammary epithelial tumours. Nature, 2009, 461, 1084-1091.	27.8	475
4	Diagnosis of thyroid cancer using deep convolutional neural network models applied to sonographic images: a retrospective, multicohort, diagnostic study. Lancet Oncology, The, 2019, 20, 193-201.	10.7	279
5	Lung nodule detection on thoracic computed tomography images: Preliminary evaluation of a computer-aided diagnosis system. Medical Physics, 2002, 29, 2552-2558.	3.0	270
6	Mitosis detection in breast cancer histological images An ICPR 2012 contest. Journal of Pathology Informatics, 2013, 4, 8.	1.7	205
7	Computer-aided prognosis of neuroblastoma on whole-slide images: Classification of stromal development. Pattern Recognition, 2009, 42, 1093-1103.	8.1	188
8	Partitioning Histopathological Images: An Integrated Framework for Supervised Color-Texture Segmentation and Cell Splitting. IEEE Transactions on Medical Imaging, 2011, 30, 1661-1677.	8.9	174
9	Computerized classification of intraductal breast lesions using histopathological images. IEEE Transactions on Biomedical Engineering, 2011, 58, 1977-1984.	4.2	159
10	Computer-aided characterization of mammographic masses: accuracy of mass segmentation and its effects on characterization. IEEE Transactions on Medical Imaging, 2001, 20, 1275-1284.	8.9	152
11	Computer-aided evaluation of neuroblastoma on whole-slide histology images: Classifying grade of neuroblastic differentiation. Pattern Recognition, 2009, 42, 1080-1092.	8.1	135
12	Content-Based Microscopic Image Retrieval System for Multi-Image Queries. IEEE Transactions on Information Technology in Biomedicine, 2012, 16, 758-769.	3.2	95
13	Lung necrosis and neutrophils reflect common pathways of susceptibility to Mycobacterium tuberculosis in genetically diverse, immune competent mice. DMM Disease Models and Mechanisms, 2015, 8, 1141-53.	2.4	94
14	Computer-Aided Detection of Centroblasts for Follicular Lymphoma Grading Using Adaptive Likelihood-Based Cell Segmentation. IEEE Transactions on Biomedical Engineering, 2010, 57, 2613-2616.	4.2	79
15	DeepFocus: Detection of out-of-focus regions in whole slide digital images using deep learning. PLoS ONE, 2018, 13, e0205387.	2.5	75
16	Analysis of temporal changes of mammographic features: Computer-aided classification of malignant and benign breast masses. Medical Physics, 2001, 28, 2309-2317.	3.0	65
17	Optimal Neural Network Architecture Selection. Academic Radiology, 2002, 9, 420-429.	2.5	63
18	Computerized segmentation and measurement of chronic wound images. Computers in Biology and Medicine, 2015, 60, 74-85.	7.0	62

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19	Quantification of liver fat: A comprehensive review. Computers in Biology and Medicine, 2016, 71, 174-189.	7.0	58
20	Feature-based registration of histopathology images with different stains: An application for computerized follicular lymphoma prognosis. Computer Methods and Programs in Biomedicine, 2009, 96, 182-192.	4.7	57
21	Efficacy of Onalespib, a Long-Acting Second-Generation HSP90 Inhibitor, as a Single Agent and in Combination with Temozolomide against Malignant Gliomas. Clinical Cancer Research, 2017, 23, 6215-6226.	7.0	53
22	Semi-automated segmentation to assess the lateral meniscus in normal and osteoarthritic knees. Osteoarthritis and Cartilage, 2010, 18, 344-353.	1.3	51
23	An Image Analysis Resource for Cancer Research: PIIPâ€"Pathology Image Informatics Platform for Visualization, Analysis, and Management. Cancer Research, 2017, 77, e83-e86.	0.9	50
24	Automatic graph-cut based segmentation of bones from knee magnetic resonance images for osteoarthritis research. Medical Image Analysis, 2011, 15, 438-448.	11.6	49
25	Barriers and facilitators to adoption of soft copy interpretation from the user perspective: Lessons learned from filmless radiology for slideless pathology. Journal of Pathology Informatics, 2011, 2, 1.	1.7	48
26	Convolutional Neural Network-Based Clinical Predictors of Oral Dysplasia: Class Activation Map Analysis of Deep Learning Results. Cancers, 2021, 13, 1291.	3.7	45
27	Optimized generation of high-resolution phantom images using cGAN: Application to quantification of Ki67 breast cancer images. PLoS ONE, 2018, 13, e0196846.	2.5	39
28	Digital otoscopy versus microscopy: How correct and confident are ear experts in their diagnoses?. Journal of Telemedicine and Telecare, 2018, 24, 453-459.	2.7	36
29	Identifying tumor in pancreatic neuroendocrine neoplasms from Ki67 images using transfer learning. PLoS ONE, 2018, 13, e0195621.	2.5	36
30	Detection of Follicles From IHC-Stained Slides of Follicular Lymphoma Using Iterative Watershed. IEEE Transactions on Biomedical Engineering, 2010, 57, 2609-2612.	4.2	34
31	An efficient computational framework for the analysis of whole slide images: Application to follicular lymphoma immunohistochemistry. Journal of Computational Science, 2012, 3, 269-279.	2.9	34
32	Rosâ€NET: A deep convolutional neural network for automatic identification of rosacea lesions. Skin Research and Technology, 2020, 26, 413-421.	1.6	34
33	Automatic detection of follicular regions in H&E images using iterative shape index. Computerized Medical Imaging and Graphics, 2011, 35, 592-602.	5.8	31
34	Anatomically Anchored Template-Based Level Set Segmentation: Application to Quadriceps Muscles in MR Images from the Osteoarthritis Initiative. Journal of Digital Imaging, 2011, 24, 28-43.	2.9	31
35	A general framework for the segmentation of follicular lymphoma virtual slides. Computerized Medical Imaging and Graphics, 2012, 36, 442-451.	5.8	30
36	Microscopic image analysis for quantitative characterization of muscle fiber type composition. Computerized Medical Imaging and Graphics, 2011, 35, 616-628.	5.8	29

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37	Impact of Diffusion Barriers to Small Cytotoxic Molecules on the Efficacy of Immunotherapy in Breast Cancer. PLoS ONE, 2013, 8, e61398.	2.5	29
38	Cloud-Based Federated Learning Implementation Across Medical Centers. JCO Clinical Cancer Informatics, 2021, 5, 1-11.	2.1	29
39	Automated fluorescent miscroscopic image analysis of PTBP1 expression in glioma. PLoS ONE, 2017, 12, e0170991.	2.5	28
40	OtoMatch: Content-based eardrum image retrieval using deep learning. PLoS ONE, 2020, 15, e0232776.	2.5	28
41	Value of Public Challenges for the Development of Pathology Deep Learning Algorithms. Journal of Pathology Informatics, 2020, 11, 7.	1.7	26
42	Identification of difficult to intubate patients from frontal face images using an ensemble of deep learning models. Computers in Biology and Medicine, 2021, 136, 104737.	7.0	25
43	Selection of an optimal neural network architecture for computer-aided detection of microcalcifications-Comparison of automated optimization techniques. Medical Physics, 2001, 28, 1937-1948.	3.0	24
44	Biomedical imaging ontologies: A survey and proposal for future work. Journal of Pathology Informatics, 2015, 6, 37.	1.7	24
45	GridIMAGE: A Novel Use of Grid Computing to Support Interactive Human and Computer-Assisted Detection Decision Support. Journal of Digital Imaging, 2007, 20, 160-171.	2.9	21
46	Relationship between the Ki67 index and its area based approximation in breast cancer. BMC Cancer, 2018, 18, 867.	2.6	21
47	Bioreactor design and validation for manufacturing strategies in tissue engineering. Bio-Design and Manufacturing, 2022, 5, 43-63.	7.7	21
48	Computerized detection and segmentation of mitochondria on electron microscope images. Journal of Microscopy, 2012, 246, 248-265.	1.8	20
49	Inter-reader variability in follicular lymphoma grading: Conventional and digital reading. Journal of Pathology Informatics, 2013, 4, 30.	1.7	20
50	Stroma classification for neuroblastoma on graphics processors. International Journal of Data Mining and Bioinformatics, 2009, 3, 280.	0.1	19
51	Temporal Analysis of Tumor Heterogeneity and Volume for Cervical Cancer Treatment Outcome Prediction: Preliminary Evaluation. Journal of Digital Imaging, 2010, 23, 342-357.	2.9	19
52	Perceptual clustering for automatic hotspot detection from Kiâ€67â€stained neuroendocrine tumour images. Journal of Microscopy, 2014, 256, 213-225.	1.8	19
53	Histopathological image analysis for centroblasts classification through dimensionality reduction approaches. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2014, 85, 242-255.	1.5	19
54	CXCL1: A new diagnostic biomarker for human tuberculosis discovered using Diversity Outbred mice. PLoS Pathogens, 2021, 17, e1009773.	4.7	19

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55	Attention2majority: Weak multiple instance learning for regenerative kidney grading on whole slide images. Medical Image Analysis, 2022, 79, 102462.	11.6	19
56	Automatic discovery of clinically interpretable imaging biomarkers for Mycobacterium tuberculosis supersusceptibility using deep learning. EBioMedicine, 2020, 62, 103094.	6.1	18
57	VirtualPACSâ€"A Federating Gateway to Access Remote Image Data Resources over the Grid. Journal of Digital Imaging, 2009, 22, 1-10.	2.9	17
58	Computerâ€aided diagnostics in digital pathology. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2017, 91, 551-554.	1.5	17
59	A modular cGAN classification framework: Application to colorectal tumor detection. Scientific Reports, 2019, 9, 18969.	3.3	17
60	Deep learning predicts gene expression as an intermediate data modality to identify susceptibility patterns in Mycobacterium tuberculosis infected Diversity Outbred mice. EBioMedicine, 2021, 67, 103388.	6.1	17
61	Detection of eardrum abnormalities using ensemble deep learning approaches. , 2018, , .		17
62	Ki-67 assessment of pancreatic neuroendocrine neoplasms: Systematic review and meta-analysis of manual vs. digital pathology scoring. Modern Pathology, 2022, 35, 712-720.	5.5	17
63	GridCAD: Grid-based Computer-aided Detection System. Radiographics, 2007, 27, 889-897.	3.3	15
64	Heterogeneity assessment of histological tissue sections in whole slide images. Computerized Medical Imaging and Graphics, 2015, 42, 51-55.	5.8	14
65	Pathological image compression for big data image analysis: Application to hotspot detection in breast cancer. Artificial Intelligence in Medicine, 2019, 95, 82-87.	6.5	14
66	Computer-Assisted Grading of Neuroblastic Differentiation. Archives of Pathology and Laboratory Medicine, 2008, 132, 903-904.	2.5	14
67	Detecting and characterizing cellular responses to Mycobacterium tuberculosis from histology slides. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2014, 85, 151-161.	1.5	13
68	Automated global matching of temporal thoracic helical CT studies: feasibility study. International Congress Series, 2003, 1256, 1031-1036.	0.2	11
69	Image Analysis for Cystic Fibrosis: Computer-Assisted Airway Wall and Vessel Measurements from Low-Dose, Limited Scan Lung CT Images. Journal of Digital Imaging, 2013, 26, 82-96.	2.9	11
70	Applying dynamic contrast enhanced MSOT imaging to intratumoral pharmacokinetic modeling. Photoacoustics, 2018, 11, 28-35.	7.8	11
71	Tumor Budding Detection System in Whole Slide Pathology Images. Journal of Medical Systems, 2020, 44, 38.	3.6	11
72	Semantic segmentation to identify bladder layers from H&E Images. Diagnostic Pathology, 2020, 15, 87.	2.0	11

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73	SelectStitch: Automated Frame Segmentation and Stitching to Create Composite Images from Otoscope Video Clips. Applied Sciences (Switzerland), 2020, 10, 5894.	2.5	10
74	Creating learning health systems and the emerging role of biomedical informatics. Learning Health Systems, 2022, 6, e10259.	2.0	10
75	Digital Otoscopy Videos Versus Composite Images: A Reader Study to Compare the Accuracy of ENT Physicians. Laryngoscope, 2021, 131, E1668-E1676.	2.0	9
76	Decision fusion on image analysis and tympanometry to detect eardrum abnormalities. , 2020, , .		9
77	A multi-resolution textural approach to diagnostic neuropathology reporting. Journal of Neuro-Oncology, 2015, 124, 393-402.	2.9	8
78	Autoscope: automated otoscopy image analysis to diagnose ear pathology and use of clinically motivated eardrum features. Proceedings of SPIE, 2017, , .	0.8	8
79	New Targets of Therapy in T-Cell Lymphomas. Current Drug Targets, 2010, 11, 482-493.	2.1	8
80	A Knowledge-Anchored Integrative Image Search and Retrieval System. Journal of Digital Imaging, 2009, 22, 166-182.	2.9	7
81	Nuclear IHC enumeration: A digital phantom to evaluate the performance of automated algorithms in digital pathology. PLoS ONE, 2018, 13, e0196547.	2.5	7
82	Automated Image Analysis Methodologies to Compute Bioink Printability. Advanced Engineering Materials, 2021, 23, 2000900.	3.5	7
83	Acne image analysis: lesion localization and classification. Proceedings of SPIE, 2016, , .	0.8	6
84	Automatic Detection of Granuloma Necrosis in Pulmonary Tuberculosis Using a Two-Phase Algorithm: 2D-TB. Microorganisms, 2019, 7, 661.	3.6	6
85	OtoPair: Combining Right and Left Eardrum Otoscopy Images to Improve the Accuracy of Automated Image Analysis. Applied Sciences (Switzerland), 2021, 11, 1831.	2.5	6
86	Advances in Artificial Intelligence to Diagnose Otitis Media: State of the Art Review. Otolaryngology - Head and Neck Surgery, 2023, 168, 635-642.	1.9	6
87	Special issue on whole slide microscopic image processing. Computerized Medical Imaging and Graphics, 2011, 35, 493-495.	5.8	5
88	Computerâ€assisted quantification of CD3+ T cells in follicular lymphoma. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2017, 91, 609-621.	1.5	5
89	Advancing Clinicopathologic Diagnosis of High-risk Neuroblastoma Using Computerized Image Analysis and Proteomic Profiling. Pediatric and Developmental Pathology, 2017, 20, 394-402.	1.0	5
90	A computational framework to detect normal and tuberculosis infected lung from H and E-stained whole slide images. Proceedings of SPIE, 2017, , .	0.8	5

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91	Histopathological Image Analysis: Path to Acceptance through Evaluation. Microscopy and Microanalysis, 2016, 22, 1004-1005.	0.4	4
92	A multidimensional scaling and sample clustering to obtain a representative subset of training data for transfer learning-based rosacea lesion identification. , 2020, , .		4
93	TMOD-35. PREDICTION OF OVERALL SURVIVAL, AND MOLECULAR MARKERS IN GLIOMAS VIA ANALYSIS OF DIGITAL PATHOLOGY IMAGES USING DEEP LEARNING. Neuro-Oncology, 2019, 21, vi270-vi270.	1.2	3
94	Generalization of tumor identification algorithms. , 2019, , .		3
95	OtoXNetâ€"automated identification of eardrum diseases from otoscope videos: a deep learning study for video-representing images. Neural Computing and Applications, 2022, 34, 12197-12210.	5.6	3
96	Development of Computer Based System To Aid Pathologists in Histological Grading of Follicular Lymphomas.. Blood, 2007, 110, 3318-3318.	1.4	2
97	Frequency band characteristics of tree-structured filter banks. Electronics Letters, 1996, 32, 724.	1.0	1
98	Nonlinear subband decomposition structures in GF-(N) arithmetic. Signal Processing, 1998, 64, 209-213.	3.7	1
99	Identification of Relative Protein Bands in Polyacrylamide Gel Electrophoresis (PAGE) Using a Multi-Resolution Snake Algorithm. BioTechniques, 1999, 26, 1162-1169.	1.8	1
100	Guest Editorial to the Special Letters Issue on Emerging Technologies in Multiparameter Biomedical Optical Imaging and Image Analysis. IEEE Transactions on Biomedical Engineering, 2010, 57, 2551-2554.	4.2	1
101	Predicting Opportunities and Challenges Prior to Transitioning to Digital Pathology: An Interview Envisioning Study with 11 Pathologists. Proceedings of the International Symposium of Human Factors and Ergonomics in Healthcare, 2019, 8, 9-12.	0.3	1
102	Predicting HER2 scores from registered HER2 and H&E images. , 2022, , .		1
103	Vastus Intermedius Cross-sectional Area Is Associated With Radiographic Severity Of Knee Osteoarthritis. Medicine and Science in Sports and Exercise, 2011, 43, 253-254.	0.4	0
104	Applying knowledge-anchored hypothesis discovery methods to advance clinical and translational research: the OAMiner project. Journal of the American Medical Informatics Association: JAMIA, 2012, 19, 1110-1114.	4.4	0
105	Intra-Reader Variability In Identifying Centroblast Cells From Digital Follicular Lymphoma Cases. Blood, 2010, 116, 5097-5097.	1.4	0
106	Inter-Reader Variability In Identifying Centroblast Cells From Digital Follicular Lymphoma Cases. Blood, 2010, 116, 5095-5095.	1.4	0
107	Hotspot detection in pancreatic neuroendocrine images using local depth. , 2020, , .		0
108	An application of transfer learning to neutrophil cluster detection for tuberculosis: Efficient implementation with nonmetric multidimensional scaling and sampling. Proceedings of SPIE, 2018, 10581, .	0.8	0

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109	Tumor Budding Detection in H&E-Stained Images Using Deep Semantic Learning. , 2020, , .		0
110	History of the SPIE Medical Imaging Digital Pathology Conference. Journal of Medical Imaging, 2022, 9, 012203.	1.5	0
111	OtoMatch: Content-based eardrum image retrieval using deep learning. , 2020, 15, e0232776.		0
112	OtoMatch: Content-based eardrum image retrieval using deep learning. , 2020, 15, e0232776.		0
113	OtoMatch: Content-based eardrum image retrieval using deep learning. , 2020, 15, e0232776.		0
114	OtoMatch: Content-based eardrum image retrieval using deep learning. , 2020, 15, e0232776.		0