Gwenole Quellec

List of Publications by Year
in descending order

84 papers	4,484 citations	159585 30 h-index	182427 51 g-index
84 all docs	84 docs citations	84 times ranked	3677 citing authors

#	Article	IF	Citations
1	Retinopathy Online Challenge: Automatic Detection of Microaneurysms in Digital Color Fundus Photographs. IEEE Transactions on Medical Imaging, 2010, 29, 185-195.	8.9	414
2	Deep image mining for diabetic retinopathy screening. Medical Image Analysis, 2017, 39, 178-193.	11.6	338
3	TeleOphta: Machine learning and image processing methods for teleophthalmology. Irbm, 2013, 34, 196-203.	5.6	334
4	Automated Analysis of Retinal Images for Detection of Referable Diabetic Retinopathy. JAMA Ophthalmology, 2013, 131, 351.	2.5	312
5	Optimal Wavelet Transform for the Detection of Microaneurysms in Retina Photographs. IEEE Transactions on Medical Imaging, 2008, 27, 1230-1241.	8.9	285
6	Exudate detection in color retinal images for mass screening of diabetic retinopathy. Medical Image Analysis, 2014, 18, 1026-1043.	11.6	225
7	Automated Early Detection of Diabetic Retinopathy. Ophthalmology, 2010, 117, 1147-1154.	5.2	221
8	Three-Dimensional Analysis of Retinal Layer Texture: Identification of Fluid-Filled Regions in SD-OCT of the Macula. IEEE Transactions on Medical Imaging, 2010, 29, 1321-1330.	8.9	186
9	Wavelet optimization for content-based image retrieval in medical databases. Medical Image Analysis, 2010, 14, 227-241.	11.6	164
10	IDRiD: Diabetic Retinopathy â€" Segmentation and Grading Challenge. Medical Image Analysis, 2020, 59, 101561.	11.6	162
11	Multiple-Instance Learning for Medical Image and Video Analysis. IEEE Reviews in Biomedical Engineering, 2017, 10, 213-234.	18.0	144
12	Validating Retinal Fundus Image Analysis Algorithms: Issues and a Proposal. , 2013, 54, 3546.		142
13	Quantitative Analysis of Fluorescence Lifetime Measurements of the Macula Using the Fluorescence Lifetime Imaging Ophthalmoscope in Healthy Subjects. , 2014, 55, 2106.		100
14	Optimal Filter Framework for Automated, Instantaneous Detection of Lesions in Retinal Images. IEEE Transactions on Medical Imaging, 2011, 30, 523-533.	8.9	97
15	Fast Wavelet-Based Image Characterization for Highly Adaptive Image Retrieval. IEEE Transactions on Image Processing, 2012, 21, 1613-1623.	9.8	89
16	Adaptive Nonseparable Wavelet Transform via Lifting and its Application to Content-Based Image Retrieval. IEEE Transactions on Image Processing, 2010, 19, 25-35.	9.8	87
17	A multiple-instance learning framework for diabetic retinopathy screening. Medical Image Analysis, 2012, 16, 1228-1240.	11.6	77
18	Retinal Fundus Multi-Disease Image Dataset (RFMiD): A Dataset for Multi-Disease Detection Research. Data, 2021, 6, 14.	2.3	75

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19	Multiple-Instance Learning for Anomaly Detection in Digital Mammography. IEEE Transactions on Medical Imaging, 2016, 35, 1604-1614.	8.9	59
20	CATARACTS: Challenge on automatic tool annotation for cataRACT surgery. Medical Image Analysis, 2019, 52, 24-41.	11.6	58
21	Real-Time Segmentation and Recognition of Surgical Tasks in Cataract Surgery Videos. IEEE Transactions on Medical Imaging, 2014, 33, 2352-2360.	8.9	53
22	Monitoring tool usage in surgery videos using boosted convolutional and recurrent neural networks. Medical Image Analysis, 2018, 47, 203-218.	11.6	53
23	Automatic detection of rare pathologies in fundus photographs using few-shot learning. Medical Image Analysis, 2020, 61, 101660.	11.6	53
24	Case Retrieval in Medical Databases by Fusing Heterogeneous Information. IEEE Transactions on Medical Imaging, 2011, 30, 108-118.	8.9	51
25	A new deep learning-based method for the detection of gait events in children with gait disorders: Proof-of-concept and concurrent validity. Journal of Biomechanics, 2020, 98, 109490.	2.1	44
26	Real-Time Task Recognition in Cataract Surgery Videos Using Adaptive Spatiotemporal Polynomials. IEEE Transactions on Medical Imaging, 2015, 34, 877-887.	8.9	40
27	Automatic detection of referral patients due to retinal pathologies through data mining. Medical Image Analysis, 2016, 29, 47-64.	11.6	39
28	Real-time recognition of surgical tasks in eye surgery videos. Medical Image Analysis, 2014, 18, 579-590.	11.6	37
29	Content Based Image Retrieval based on Wavelet Transform coefficients distribution. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 4532-5.	0.5	36
30	Real-time analysis of cataract surgery videos using statistical models. Multimedia Tools and Applications, 2017, 76, 22473-22491.	3.9	34
31	CaDIS: Cataract dataset for surgical RGB-image segmentation. Medical Image Analysis, 2021, 71, 102053.	11.6	34
32	Automated Assessment of Diabetic Retinopathy Severity Using Content-Based Image Retrieval in Multimodal Fundus Photographs. , 2011, 52, 8342.		33
33	Medical Case Retrieval From a Committee of Decision Trees. IEEE Transactions on Information Technology in Biomedicine, 2010, 14, 1227-1235.	3.2	31
34	ExplAIn: Explanatory artificial intelligence for diabetic retinopathy diagnosis. Medical Image Analysis, 2021, 72, 102118.	11.6	28
35	Content-based image retrieval in homomorphic encryption domain. , 2015, 2015, 2944-7.		24
36	Detection of lesions in retina photographs based on the wavelet transform. , 2006, 2006, 2618-21.		23

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37	Suitability of a Low-Cost, Handheld, Nonmydriatic Retinograph for Diabetic Retinopathy Diagnosis. Translational Vision Science and Technology, 2016, 5, 16.	2.2	23
38	Towards improved breast mass detection using dual-view mammogram matching. Medical Image Analysis, 2021, 71, 102083.	11.6	16
39	Weakly supervised classification of medical images. , 2012, , .		15
40	Surgical tool detection in cataract surgery videos through multi-image fusion inside a convolutional neural network. , 2017, 2017, 2002-2005.		15
41	Computational Quantification of Complex Fundus Phenotypes in Age-Related Macular Degeneration and Stargardt Disease. , 2011, 52, 2976.		14
42	Automated surgical step recognition in normalized cataract surgery videos. , 2014, 2014, 4647-50.		14
43	Cascaded multi-scale convolutional encoder-decoders for breast mass segmentation in high-resolution mammograms. , 2019, 2019, 6738-6741.		14
44	Real-time retrieval of similar videos with application to computer-aided retinal surgery. , 2011, 2011, 4465-8.		13
45	Multimedia medical case retrieval using decision trees. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 4536-9.	0.5	12
46	Feasibility of support vector machine learning in age−related macular degeneration using small sample yielding sparse optical coherence tomography data. Acta Ophthalmologica, 2019, 97, e719-e728.	1.1	10
47	Two-stage multi-scale breast mass segmentation for full mammogram analysis without user intervention. Biocybernetics and Biomedical Engineering, 2021, 41, 746-757.	5.9	10
48	Normalizing videos of anterior eye segment surgeries. , 2014, 2014, 122-5.		9
49	Estimating maximal measurable performance for automated decision systems from the characteristics of the reference standard. application to diabetic retinopathy screening. , 2014, 2014, 154-7.		9
50	Automated Quantification of Inherited Phenotypes from Color Images: A Twin Study of the Variability of Optic Nerve Head Shape. , 2010, 51, 5870.		8
51	Proxy Re-Encryption Based on Homomorphic Encryption. , 2017, , .		8
52	Multimodal medical case retrieval using the Dezert-Smarandache theory. , 2008, 2008, 394-7.		7
53	Automated Discovery and Quantification of Image-Based Complex Phenotypes: A Twin Study of Drusen Phenotypes in Age-Related Macular Degeneration. , 2011, 52, 9195.		7
54	Motion-based video retrieval with application to computer-assisted retinal surgery. , 2012, 2012, 4962-5.		7

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55	An end to end secure CBIR over encrypted medical database. , 2016, 2016, 2537-2540.		7
56	A Polynomial Model of Surgical Gestures for Real-Time Retrieval of Surgery Videos. Lecture Notes in Computer Science, 2013, , 10-20.	1.3	7
57	Content-Based Medical Video Retrieval Based on Region Motion Trajectories. IFMBE Proceedings, 2011, , 622-625.	0.3	6
58	Automatic Detection of Suspicious Lesions inÂDigital X-ray Mammograms. Lecture Notes in Electrical Engineering, 2017, , 375-385.	0.4	6
59	Unsupervised learning-based long-term superpixel tracking. Image and Vision Computing, 2019, 89, 289-301.	4.5	6
60	Multi-tasking Siamese Networks for Breast Mass Detection Using Dual-View Mammogram Matching. Lecture Notes in Computer Science, 2020, , 312-321.	1.3	6
61	Automation of dry eye disease quantitative assessment: A review. Clinical and Experimental Ophthalmology, 2022, 50, 653-666.	2.6	6
62	Multimedia data mining for automatic diabetic retinopathy screening. , 2013, 2013, 7144-7.		5
63	Image Change Detection Using Paradoxical Theory for Patient Follow-Up Quantitation and Therapy Assessment. IEEE Transactions on Medical Imaging, 2012, 31, 1743-1753.	8.9	4
64	Automatic Diagnosing of Suspicious Lesions in Digital Mammograms. International Journal of Advanced Computer Science and Applications, 2016, 7, .	0.7	4
65	Recherche de cas mÃ©dicaux multimodaux Ã lâ€™aide dâ€™arbres de dÃ©cision. Irbm, 2008, 29, 35-43.	5.6	3
66	Multimodal medical case retrieval using Bayesian networks and the Dezert-Smarandache theory. , 2008, , .		3
67	Multiple-instance learning for breast cancer detection in mammograms. , 2015, 2015, 7055-8.		3
68	Smart data augmentation for surgical tool detection on the surgical tray. , 2017, 2017, 4407-4410.		3
69	Optical flow estimation in ocular endoscopy videos using flownet on simulated endoscopy data. , 2018, , .		3
70	Longitudinal Detection of Diabetic Retinopathy Early Severity Grade Changes Using Deep Learning. Lecture Notes in Computer Science, 2021, , 11-20.	1.3	3
71	Multimodal Medical Case Retrieval using Dezert-Smarandache Theory with A Priori Knowledge. IFMBE Proceedings, 2009, , 716-719.	0.3	3
72	A general framework for detecting diabetic retinopathy lesions in eye fundus images. , 2012, , .		2

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73	Studying disagreements among retinal experts through image analysis. , 2012, 2012, 5959-62.		2
74	Comprehensive wavelet-based image characterization for Content-Based Image Retrieval. , 2012, , .		2
75	Mass segmentation in mammograms by using Bidimensional Emperical Mode Decomposition BEMD. , 2013, 2013, 5441-4.		2
76	Robust Supervoxel Matching Combining Mid-Level Spectral and Context-Rich Features. Lecture Notes in Computer Science, 2018, , 39-47.	1.3	2
77	Fouille dâ€™images multi-instance et multi-rÃ©solution appliquÃ©e au dÃ©pistage de la rÃ©tinopathie diabÃ©tique. Irbm, 2011, 32, 342-350.	5.6	1
78	Deep Active Learning for Dual-View Mammogram Analysis. Lecture Notes in Computer Science, 2021, , 180-189.	1.3	1
79	Automatic Screening for Ocular Anomalies Using Fundus Photographs. Optometry and Vision Science, 2021, Publish Ahead of Print, .	1.2	1
80	Use of a twin dataset to identify AMD-related visual patterns controlled by genetic factors. Proceedings of SPIE, 2010, , .	0.8	0
81	Mapping the retinas of a patient using a mixed set of fundus photographs from both eyes. , 2016, 2016, 3239-3242.		0
82	Long-term superpixel tracking using unsupervised learning and multi-step integration. , 2018, , .		0
83	Recherche en temps rÃ©el de sÃ©quences vidÃ©o similaires par le contenu. Traitement Du Signal, 2012, 29, 83-100.	1.3	0
84	Multimedia Information Retrieval from Ophthalmic Digital Archives. , 2015, , 95-114.		0