# Hrvoje BogunoviÄ

List of Publications by Year
in descending order



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|---|---|---|---|
| 82 papers | 4,217 citations | 201385 27 h-index | 133063 59 g-index |
| 85 all docs | 85 docs citations | 85 times ranked | 4290 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Therapeutic response in the HAWK and HARRIER trials using deep learning in retinal fluid volume and compartment analysis. Eye, 2023, 37, 1160-1169. | 1.1 | 14 |
| 2 | Developing and validating a multivariable prediction model which predicts progression of intermediate to late age-related macular degenerationâ€"the PINNACLE trial protocol. Eye, 2023, 37, 1275-1283. | 1.1 | 9 |
| 3 | Personalized treatment supported by automated quantitative fluid analysis in active neovascular age-related macular degeneration (nAMD)â€"a phase III, prospective, multicentre, randomized study: design and methods. Eye, 2023, 37, 1464-1469. | 1.1 | 5 |
| 4 | Automated quantification of macular fluid in retinal diseases and their response to anti-VEGF therapy. British Journal of Ophthalmology, 2022, 106, 113-120. | 2.1 | 27 |
| 5 | AI-based monitoring of retinal fluid in disease activity and under therapy. Progress in Retinal and Eye Research, 2022, 86, 100972. | 7.3 | 30 |
| 6 | Linking Function and Structure with ReSensNet. Ophthalmology Retina, 2022, 6, 501-511. | 1.2 | 7 |
| 7 | Impact of Intra- and Subretinal Fluid on Vision Based on Volume Quantification in the HARBOR Trial. Ophthalmology Retina, 2022, 6, 291-297. | 1.2 | 14 |
| 8 | SYSTEMATIC CORRELATION OF CENTRAL SUBFIELD THICKNESS WITH RETINAL FLUID VOLUMES QUANTIFIED BY DEEP LEARNING IN THE MAJOR EXUDATIVE MACULAR DISEASES. Retina, 2022, 42, 831-841. | 1.0 | 10 |
| 9 | The Effect of Pegcetacoplan Treatment on Photoreceptor Maintenance in Geographic Atrophy Monitored by Artificial Intelligenceâ€"Based OCT Analysis. Ophthalmology Retina, 2022, 6, 1009-1018. | 1.2 | 27 |
| 10 | Projective Skip-Connections for Segmentation Along a Subset of Dimensions in Retinal OCT. Lecture Notes in Computer Science, 2021, , 431-441. | 1.0 | 6 |
| 11 | Predicting Progression of Age-Related Macular Degeneration Using OCT and Fundus Photography. Ophthalmology Retina, 2021, 5, 118-125. | 1.2 | 24 |
| 12 | Topographic Distribution and Progression of Soft Drusen Volume in Age-Related Macular Degeneration Implicate Neurobiology of Fovea. , 2021, 62, 26. | | 23 |
| 13 | Spatio-temporal alterations in retinal and choroidal layers in the progression of age-related macular degeneration (AMD) in optical coherence tomography. Scientific Reports, 2021, 11, 5743. | 1.6 | 13 |
| 14 | IMPACT OF RESIDUAL SUBRETINAL FLUID VOLUMES ON TREATMENT OUTCOMES IN A SUBRETINAL FLUIDâ€"TOLERANT TREAT-AND-EXTEND REGIMEN. Retina, 2021, 41, 2221-2228. | 1.0 | 17 |
| 15 | Deep Learning Prediction Of Age And Sex From Optical Coherence Tomography. , 2021, , . | | 5 |
| 16 | Identification and quantification of fibrotic areas in the human retina using polarization-sensitive OCT. Biomedical Optics Express, 2021, 12, 4380. | 1.5 | 15 |
| 17 | Fundus autofluorescence and optical coherence tomography biomarkers associated with the progression of geographic atrophy secondary to age-related macular degeneration. Eye, 2021, , . | 1.1 | 13 |
| 18 | Deep Learningâ€"Based Automated Optical Coherence Tomography Segmentation in Clinical Routine. JAMA Ophthalmology, 2021, 139, 973. | 1.4 | 2 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | ANALYSIS OF FLUID VOLUME AND ITS IMPACT ON VISUAL ACUITY IN THE FLUID STUDY AS QUANTIFIED WITH DEEP LEARNING. Retina, 2021, 41, 1318-1328. | 1.0 | 32 |
| 20 | REFUGEÂChallenge: A unified framework for evaluating automatedÂmethods for glaucomaÂassessment from fundus photographs. Medical Image Analysis, 2020, 59, 101570. | 7.0 | 354 |
| 21 | Exploiting Epistemic Uncertainty of Anatomy Segmentation for Anomaly Detection in Retinal OCT. IEEE Transactions on Medical Imaging, 2020, 39, 87-98. | 5.4 | 88 |
| 22 | MORPHOLOGICAL AND FUNCTIONAL CHARACTERISTICS AT THE ONSET OF EXUDATIVE CONVERSION IN AGE-RELATED MACULAR DEGENERATION. Retina, 2020, 40, 1070-1078. | 1.0 | 11 |
| 23 | AGE challenge: Angle Closure Glaucoma Evaluation in Anterior Segment Optical Coherence Tomography. Medical Image Analysis, 2020, 66, 101798. | 7.0 | 35 |
| 24 | Quantification of Fluid Resolution and Visual Acuity Gain in Patients With Diabetic Macular Edema Using Deep Learning. JAMA Ophthalmology, 2020, 138, 945. | 1.4 | 49 |
| 25 | Unbiased identification of novel subclinical imaging biomarkers using unsupervised deep learning. Scientific Reports, 2020, 10, 12954. | 1.6 | 22 |
| 26 | Characterization of Drusen and Hyperreflective Foci as Biomarkers for Disease Progression in Age-Related Macular Degeneration Using Artificial Intelligence in Optical Coherence Tomography. JAMA Ophthalmology, 2020, 138, 740. | 1.4 | 99 |
| 27 | End-to-End Deep Learning Model for Predicting Treatment Requirements in Neovascular AMD From Longitudinal Retinal OCT Imaging. IEEE Journal of Biomedical and Health Informatics, 2020, 24, 3456-3465. | 3.9 | 35 |
| 28 | Role of Deep Learningâ€“Quantified Hyperreflective Foci for the Prediction of Geographic Atrophy Progression. American Journal of Ophthalmology, 2020, 216, 257-270. | 1.7 | 48 |
| 29 | Application of Automated Quantification of Fluid Volumes to Antiâ€“VEGF Therapy of Neovascular Age-Related Macular Degeneration. Ophthalmology, 2020, 127, 1211-1219. | 2.5 | 89 |
| 30 | Automated Quantification of Photoreceptor alteration in macular disease using Optical Coherence Tomography and Deep Learning. Scientific Reports, 2020, 10, 5619. | 1.6 | 21 |
| 31 | Reducing image variability across OCT devices with unsupervised unpaired learning for improved segmentation of retina. Biomedical Optics Express, 2020, 11, 346. | 1.5 | 36 |
| 32 | Artificial Intelligence in Retinal Vascular Imaging. Retina Atlas, 2020, , 133-145. | 0.0 | 1 |
| 33 | Using Cyclegans for Effectively Reducing Image Variability Across OCT Devices and Improving Retinal Fluid Segmentation. , 2019, , . | | 13 |
| 34 | U2-Net: A Bayesian U-Net Model With Epistemic Uncertainty Feedback For Photoreceptor Layer Segmentation In Pathological OCT Scans. , 2019, , . | | 34 |
| 35 | Impact of Drusen Volume on Quantitative Fundus Autofluorescence in Early and Intermediate Age-Related Macular Degeneration. , 2019, 60, 1937. | | 20 |
| 36 | RETOUCH: The Retinal OCT Fluid Detection and Segmentation Benchmark and Challenge. IEEE Transactions on Medical Imaging, 2019, 38, 1858-1874. | 5.4 | 139 |

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|---|---|---|---|
| 37 | OCT fluid detection and quantification. , 2019, , 273-298. | | 1 |
| 38 | Unsupervised Identification of Disease Marker Candidates in Retinal OCT Imaging Data. IEEE Transactions on Medical Imaging, 2019, 38, 1037-1047. | 5.4 | 67 |
| 39 | Neuroretinal atrophy following resolution of macular oedema in retinal vein occlusion. British Journal of Ophthalmology, 2019, 103, 36-42. | 2.1 | 13 |
| 40 | Modeling Disease Progression in Retinal OCTs with Longitudinal Self-supervised Learning. Lecture Notes in Computer Science, 2019, , 44-52. | 1.0 | 8 |
| 41 | Machine Learning to Analyze the Prognostic Value of Current Imaging Biomarkers in Neovascular Age-Related Macular Degeneration. Ophthalmology Retina, 2018, 2, 24-30. | 1.2 | 143 |
| 42 | Fully Automated Detection and Quantification of Macular Fluid in OCT Using Deep Learning. Ophthalmology, 2018, 125, 549-558. | 2.5 | 384 |
| 43 | Why rankings of biomedical image analysis competitions should be interpreted with care. Nature Communications, 2018, 9, 5217. | 5.8 | 198 |
| 44 | How to Exploit Weaknesses in Biomedical Challenge Design and Organization. Lecture Notes in Computer Science, 2018, , 388-395. | 1.0 | 10 |
| 45 | Prediction of Individual Disease Conversion in Early AMD Using Artificial Intelligence. , 2018, 59, 3199. | | 144 |
| 46 | Artificial intelligence in retina. Progress in Retinal and Eye Research, 2018, 67, 1-29. | 7.3 | 469 |
| 47 | Supervised learning and dimension reduction techniques for quantification of retinal fluid in optical coherence tomography images. Eye, 2017, 31, 1212-1220. | 1.1 | 22 |
| 48 | Computational image analysis for prognosis determination in DME. Vision Research, 2017, 139, 204-210. | 0.7 | 42 |
| 49 | Evaluating the impact of vitreomacular adhesion on anti-VEGF therapy for retinal vein occlusion using machine learning. Scientific Reports, 2017, 7, 2928. | 1.6 | 18 |
| 50 | A view of the current and future role of optical coherence tomography in the management of age-related macular degeneration. Eye, 2017, 31, 26-44. | 1.1 | 113 |
| 51 | Joint retinal layer and fluid segmentation in OCT scans of eyes with severe macular edema using unsupervised representation and auto-context. Biomedical Optics Express, 2017, 8, 1874. | 1.5 | 82 |
| 52 | Impact of B-Scan Averaging on Spectralis Optical Coherence Tomography Image Quality before and after Cataract Surgery. Journal of Ophthalmology, 2017, 2017, 1-8. | 0.6 | 4 |
| 53 | Machine Learning of the Progression of Intermediate Age-Related Macular Degeneration Based on OCT Imaging. , 2017, 58, BIO141. | | 87 |
| 54 | Prediction of Anti-VEGF Treatment Requirements in Neovascular AMD Using a Machine Learning Approach. , 2017, 58, 3240. | | 128 |

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|---|---|---|---|
| 55 | Spatial Correspondence Between Intraretinal Fluid, Subretinal Fluid, and Pigment Epithelial Detachment in Neovascular Age-Related Macular Degeneration. , 2017, 58, 4039. | | 30 |
| 56 | Automated Segmentability Index for Layer Segmentation of Macular SD-OCT Images. Translational Vision Science and Technology, 2016, 5, 14. | 1.1 | 15 |
| 57 | Choroidal thickness maps from spectral domain and swept source optical coherence tomography: algorithmic versus ground truth annotation. British Journal of Ophthalmology, 2016, 100, 1372-1376. | 2.1 | 34 |
| 58 | Relationships of Retinal Structure and Humphrey 24-2 Visual Field Thresholds in Patients With Glaucoma. Investigative Ophthalmology and Visual Science, 2015, 56, 259-271. | 3.3 | 43 |
| 59 | Multi-Surface and Multi-Field Co-Segmentation of 3-D Retinal Optical Coherence Tomography. IEEE Transactions on Medical Imaging, 2014, 33, 2242-2253. | 5.4 | 29 |
| 60 | Three-Dimensional Automated Choroidal Volume Assessment on Standard Spectral-Domain Optical Coherence Tomography and Correlation With the Level ofÂDiabetic Macular Edema. American Journal of Ophthalmology, 2014, 158, 1039-1048.e1. | 1.7 | 70 |
| 61 | Anatomical Labeling of the Circle of Willis Using Maximum A Posteriori Probability Estimation. IEEE Transactions on Medical Imaging, 2013, 32, 1587-1599. | 5.4 | 55 |
| 62 | AngioLabâ€"A software tool for morphological analysis and endovascular treatment planning of intracranial aneurysms. Computer Methods and Programs in Biomedicine, 2012, 108, 806-819. | 2.6 | 24 |
| 63 | Automated landmarking and geometric characterization of the carotid siphon. Medical Image Analysis, 2012, 16, 889-903. | 7.0 | 32 |
| 64 | Automated segmentation of cerebral vasculature with aneurysms in 3DRA and TOFâ€MRA using geodesic active regions: An evaluation study. Medical Physics, 2011, 38, 210-222. | 1.6 | 67 |
| 65 | Automatic Aneurysm Neck Detection Using Surface Voronoi Diagrams. IEEE Transactions on Medical Imaging, 2011, 30, 1863-1876. | 5.4 | 25 |
| 66 | Patient-Specific Computational Hemodynamics of Intracranial Aneurysms from 3D Rotational Angiography and CT Angiography: An In Vivo Reproducibility Study. American Journal of Neuroradiology, 2011, 32, 581-586. | 1.2 | 56 |
| 67 | Anatomical Labeling of the Anterior Circulation of the Circle of Willis Using Maximum a Posteriori Classification. Lecture Notes in Computer Science, 2011, 14, 330-337. | 1.0 | 7 |
| 68 | 3D Modeling of Coronary Artery Bifurcations from CTA and Conventional Coronary Angiography. Lecture Notes in Computer Science, 2011, 14, 395-402. | 1.0 | 6 |
| 69 | Cerebral Aneurysms: A Patient-Specific and Image-Based Management Pipeline. Computational Methods in Applied Sciences (Springer), 2011, , 327-349. | 0.1 | 2 |
| 70 | Toward integrated management of cerebral aneurysms. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2010, 368, 2961-2982. | 1.6 | 18 |
| 71 | Fast 3D centerline computation for tubular structures by front collapsing and fast marching. , 2010, , . | | 5 |
| 72 | Automatic identification of internal carotid artery from 3DRA images. , 2010, 2010, 5343-6. | | 5 |

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|---|---|---|---|
| 73 | AngioLab: Integrated technology for patient-specific management of intracranial aneurysms. , 2010, 2010, 6801-4. | | 4 |
| 74 | Reproducibility of image-based computational hemodynamics in intracranial aneurysms: Comparison of CTA AND 3DRA. , 2009, , . | | 7 |
| 75 | Standardized evaluation methodology and reference database for evaluating coronary artery centerline extraction algorithms. Medical Image Analysis, 2009, 13, 701-714. | 7.0 | 295 |
| 76 | Image intensity standardization in 3D rotational angiography and its application to vascular segmentation. , 2008, , . | | 12 |
| 77 | The Structure of the Pyramidia E-learning Tool - the Programmer's Point of View. , 2007, , . | | 3 |
| 78 | Denoising of Time-Density Data in Digital Subtraction Angiography. Lecture Notes in Computer Science, 2005, , 1157-1166. | 1.0 | 1 |
| 79 | Estimating perfusion using X-ray angiography. Proc Int Symp Image Signal Process Anal, 2005, , . | 0.0 | 6 |
| 80 | Face image validation system. Proc Int Symp Image Signal Process Anal, 2005, , . | 0.0 | 27 |
| 81 | An electronic journal management system. , 0, , . | | 2 |
| 82 | Predicting Drusen Regression from OCT in Patients with Age-Related Macular Degeneration. , 0, , . | | 1 |