# Olaf Ronneberger

## List of Publications by Year in Descending Order



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|---|---|---|---|
| 40 papers | 19,460 citations | 24 h-index | 46 g-index |
| 46 ext. papers | 34,281 ext. citations | 12.9 avg, IF | 7.47 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 40 | Microridge-like structures anchor motile cilia.. *Nature Communications*, **2022**, 13, 2056 | 17.4 | 1 |
| 39 | Deep learning is widely applicable to phenotyping embryonic development and disease. *Development (Cambridge)*, **2021**, 148, | 6.6 | 2 |
| 38 | Applying and improving AlphaFold at CASP14. *Proteins: Structure, Function and Bioinformatics*, **2021** , 89, 1711-1721 | 4.2 | 41 |
| 37 | Highly accurate protein structure prediction with AlphaFold. *Nature*, **2021**, 596, 583-589 | 50.4 | 2381 |
| 36 | Highly accurate protein structure prediction for the human proteome. *Nature*, **2021**, 596, 590-596 | 50.4 | 399 |
| 35 | Clinically Applicable Segmentation of Head and Neck Anatomy for Radiotherapy: Deep Learning Algorithm Development and Validation Study. *Journal of Medical Internet Research*, **2021**, 23, e26151 | 7.6 | 24 |
| 34 | U-Net: deep learning for cell counting, detection, and morphometry. *Nature Methods*, **2019**, 16, 67-70 | 21.6 | 636 |
| 33 | Data-Driven Modeling of Intracellular Auxin Fluxes Indicates a Dominant Role of the ER in Controlling Nuclear Auxin Uptake. *Cell Reports*, **2018**, 22, 3044-3057 | 10.6 | 20 |
| 32 | Clinically applicable deep learning for diagnosis and referral in retinal disease. *Nature Medicine*, **2018**, 24, 1342-1350 | 50.5 | 938 |
| 31 | A new fate mapping system reveals context-dependent random or clonal expansion of microglia. *Nature Neuroscience*, **2017**, 20, 793-803 | 25.5 | 316 |
| 30 | An objective comparison of cell-tracking algorithms. *Nature Methods*, **2017**, 14, 1141-1152 | 21.6 | 242 |
| 29 | A 3D digital atlas of the Nicotiana tabacum root tip and its use to investigate changes in the root apical meristem induced by the Agrobacterium 6b oncogene. *Plant Journal*, **2017**, 92, 31-42 | 6.9 | 14 |
| 28 | Gland segmentation in colon histology images: The glas challenge contest. *Medical Image Analysis*, **2017**, 35, 489-502 | 15.4 | 263 |
| 27 | Spatiotemporal Deformable Prototypes for Motion Anomaly Detection. *International Journal of Computer Vision*, **2017**, 122, 502-523 | 10.6 | 3 |
| 26 | 3D U-Net: Learning Dense Volumetric Segmentation from Sparse Annotation. *Lecture Notes in Computer Science*, **2016**, 424-432 | 0.9 | 1247 |
| 25 | Automated analysis of retinal imaging using machine learning techniques for computer vision. *F1000Research*, **2016**, 5, 1573 | 3.6 | 27 |
| 24 | B cell antigen receptors of the IgM and IgD classes are clustered in different protein islands that are altered during B cell activation. *Science Signaling*, **2015**, 8, ra93 | 8.8 | 71 |

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| 23 | Spontaneous and electric field-controlled front-rear polarization of human keratinocytes. *Molecular Biology of the Cell*, **2015**, 26, 4373-86 | 3.5 | 14 |
| 22 | The polarity protein Inturned links NPHP4 to Daam1 to control the subapical actin network in multiciliated cells. *Journal of Cell Biology*, **2015**, 211, 963-73 | 7.3 | 40 |
| 21 | Standardized evaluation of algorithms for computer-aided diagnosis of dementia based on structural MRI: the CADDementia challenge. *NeuroImage*, **2015**, 111, 562-79 | 7.9 | 193 |
| 20 | The Rac1 regulator ELMO controls basal body migration and docking in multiciliated cells through interaction with Ezrin. *Development (Cambridge)*, **2015**, 142, 174-84 | 6.6 | 35 |
| 19 | U-Net: Convolutional Networks for Biomedical Image Segmentation. *Lecture Notes in Computer Science*, **2015**, 234-241 | 0.9 | 11746 |
| 18 | Correction of inter-scanner and within-subject variance in structural MRI based automated diagnosing. *NeuroImage*, **2014**, 98, 405-15 | 7.9 | 29 |
| 17 | The iRoCS Toolbox--3D analysis of the plant root apical meristem at cellular resolution. *Plant Journal*, **2014**, 77, 806-14 | 6.9 | 48 |
| 16 | Rotation-Invariant HOG Descriptors Using Fourier Analysis in Polar and Spherical Coordinates. *International Journal of Computer Vision*, **2014**, 106, 342-364 | 10.6 | 91 |
| 15 | Variational attenuation correction in two-view confocal microscopy. *BMC Bioinformatics*, **2013**, 14, 366 | 3.6 | 4 |
| 14 | Automated processing of zebrafish imaging data: a survey. *Zebrafish*, **2013**, 10, 401-21 | 2 | 65 |
| 13 | Blind Deconvolution of Widefield Fluorescence Microscopic Data by Regularization of the Optical Transfer Function (OTF) **2013**, | | 6 |
| 12 | Joint 3D cell segmentation and classification in the Arabidopsis root using energy minimization and shape priors **2013**, | | 3 |
| 11 | Discriminative Detection and Alignment in Volumetric Data. *Lecture Notes in Computer Science*, **2013**, 205-214 | 0.9 | 3 |
| 10 | Fast rotation invariant 3D feature computation utilizing efficient local neighborhood operators. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **2012**, 34, 1563-75 | 13.3 | 30 |
| 9 | 2D/3D rotation-invariant detection using equivariant filters and kernel weighted mapping **2012**, | | 3 |
| 8 | ViBE-Z: a framework for 3D virtual colocalization analysis in zebrafish larval brains. *Nature Methods*, **2012**, 9, 735-42 | 21.6 | 103 |
| 7 | Shroom3 is required downstream of FGF signalling to mediate proneuromast assembly in zebrafish. *Development (Cambridge)*, **2012**, 139, 4571-81 | 6.6 | 44 |
| 6 | Blind deconvolution with PSF regularization for wide-field microscopy **2012**, | | 1 |

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| 5 | Comprehensive catecholaminergic projectome analysis reveals single-neuron integration of zebrafish ascending and descending dopaminergic systems. *Nature Communications*, **2011**, 2, 171 | 17.4 | 199 |
| 4 | Harmonic filters for 3D multichannel data: rotation invariant detection of mitoses in colorectal cancer. *IEEE Transactions on Medical Imaging*, **2010**, 29, 1485-95 | 11.7 | 12 |
| 3 | Fast computation of 3D spherical Fourier harmonic descriptors - a complete orthonormal basis for a rotational invariant representation of three-dimensional objects **2009**, | | 5 |
| 2 | Protein complex prediction with AlphaFold-Multimer | | 126 |
| 1 | Light dynamically regulates growth rate and cellular organisation of the Arabidopsis root meristem | | 2 |