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List of Publications by Citations

280 papers	80,549 citations	60 h-index	283 g-index
310 ext. papers	107,667 ext. citations	5.6 avg, IF	8.4 L-index

#	Paper	IF	Citations
280	NIH Image to ImageJ: 25 years of image analysis. *Nature Methods*, **2012**, 9, 671-5	21.6	31528
279	Fiji: an open-source platform for biological-image analysis. *Nature Methods*, **2012**, 9, 676-82	21.6	27799
278	ImageJ2: ImageJ for the next generation of scientific image data. *BMC Bioinformatics*, **2017**, 18, 529	3.6	2804
277	The ImageJ ecosystem: An open platform for biomedical image analysis. *Molecular Reproduction and Development*, **2015**, 82, 518-29	2.6	1501
276	TrackMate: An open and extensible platform for single-particle tracking. *Methods*, **2017**, 115, 80-90	4.6	1276
275	Collagen reorganization at the tumor-stromal interface facilitates local invasion. *BMC Medicine*, **2006**, 4, 38	11.4	1127
274	Collagen density promotes mammary tumor initiation and progression. *BMC Medicine*, **2008**, 6, 11	11.4	904
273	Trainable Weka Segmentation: a machine learning tool for microscopy pixel classification. *Bioinformatics*, **2017**, 33, 2424-2426	7.2	808
272	Aligned collagen is a prognostic signature for survival in human breast carcinoma. *American Journal of Pathology*, **2011**, 178, 1221-32	5.8	763
271	Improved structure, function and compatibility for CellProfiler: modular high-throughput image analysis software. *Bioinformatics*, **2011**, 27, 1179-80	7.2	741
270	In vivo multiphoton microscopy of NADH and FAD redox states, fluorescence lifetimes, and cellular morphology in precancerous epithelia. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 19494-9	11.5	691
269	Metadata matters: access to image data in the real world. *Journal of Cell Biology*, **2010**, 189, 777-82	7.3	544
268	Matrix density-induced mechanoregulation of breast cell phenotype, signaling and gene expression through a FAK-ERK linkage. *Oncogene*, **2009**, 28, 4326-43	9.2	467
267	Biological imaging software tools. *Nature Methods*, **2012**, 9, 697-710	21.6	377
266	Contact guidance mediated three-dimensional cell migration is regulated by Rho/ROCK-dependent matrix reorganization. *Biophysical Journal*, **2008**, 95, 5374-84	2.9	374
265	Metabolic mapping of MCF10A human breast cells via multiphoton fluorescence lifetime imaging of the coenzyme NADH. *Cancer Research*, **2005**, 65, 8766-73	10.1	285
264	3D collagen alignment limits protrusions to enhance breast cancer cell persistence. *Biophysical Journal*, **2014**, 107, 2546-58	2.9	265

263	The collagen receptor discoidin domain receptor 2 stabilizes SNAIL1 to facilitate breast cancer metastasis. *Nature Cell Biology*, **2013**, 15, 677-87	23.4	264
262	Postpartum mammary gland involution drives progression of ductal carcinoma in situ through collagen and COX-2. *Nature Medicine*, **2011**, 17, 1109-15	50.5	256
261	In vivo multiphoton fluorescence lifetime imaging of protein-bound and free nicotinamide adenine dinucleotide in normal and precancerous epithelia. *Journal of Biomedical Optics*, **2007**, 12, 024014	3.5	247
260	Beyond the margins: real-time detection of cancer using targeted fluorophores. *Nature Reviews Clinical Oncology*, **2017**, 14, 347-364	19.4	245
259	OpenSPIM: an open-access light-sheet microscopy platform. *Nature Methods*, **2013**, 10, 598-9	21.6	215
258	Computational segmentation of collagen fibers from second-harmonic generation images of breast cancer. *Journal of Biomedical Optics*, **2014**, 19, 16007	3.5	190
257	Multiphoton microscopy of endogenous fluorescence differentiates normal, precancerous, and cancerous squamous epithelial tissues. *Cancer Research*, **2005**, 65, 1180-6	10.1	184
256	Transition to invasion in breast cancer: a microfluidic in vitro model enables examination of spatial and temporal effects. *Integrative Biology (United Kingdom)*, **2011**, 3, 439-50	3.7	177
255	Multiphoton microscopy and fluorescence lifetime imaging microscopy (FLIM) to monitor metastasis and the tumor microenvironment. *Clinical and Experimental Metastasis*, **2009**, 26, 357-70	4.7	151
254	Lineage Reprogramming of Fibroblasts into Proliferative Induced Cardiac Progenitor Cells by Defined Factors. *Cell Stem Cell*, **2016**, 18, 354-67	18	131
253	Automated quantification of aligned collagen for human breast carcinoma prognosis. *Journal of Pathology Informatics*, **2014**, 5, 28	4.4	127
252	Non-line-of-sight imaging using a time-gated single photon avalanche diode. *Optics Express*, **2015**, 23, 20997-1011	3.3	124
251	Control of 3-dimensional collagen matrix polymerization for reproducible human mammary fibroblast cell culture in microfluidic devices. *Biomaterials*, **2009**, 30, 4833-41	15.6	123
250	Neuroendocrine Tumor-Targeted Upconversion Nanoparticle-Based Micelles for Simultaneous NIR-Controlled Combination Chemotherapy and Photodynamic Therapy, and Fluorescence Imaging. *Advanced Functional Materials*, **2017**, 27, 1604671	15.6	116
249	Mammary epithelial-specific disruption of focal adhesion kinase retards tumor formation and metastasis in a transgenic mouse model of human breast cancer. *American Journal of Pathology*, **2008**, 173, 1551-65	5.8	115
248	A subset of myofibroblastic cancer-associated fibroblasts regulate collagen fiber elongation, which is prognostic in multiple cancers. *Oncotarget*, **2016**, 7, 6159-74	3.3	105
247	Anthocyanin Vacuolar Inclusions Form by a Microautophagy Mechanism. *Plant Cell*, **2015**, 27, 2545-59	11.6	103
246	Fluorescence lifetime imaging of endogenous fluorophores in histopathology sections reveals differences between normal and tumor epithelium in carcinoma in situ of the breast. *Cell Biochemistry and Biophysics*, **2009**, 53, 145-57	3.2	102

245	Highly aligned stromal collagen is a negative prognostic factor following pancreatic ductal adenocarcinoma resection. *Oncotarget*, **2016**, 7, 76197-76213	3.3	100
244	Stiff collagen matrices increase tumorigenic prolactin signaling in breast cancer cells. *Journal of Biological Chemistry*, **2013**, 288, 12722-32	5.4	97
243	Filamin A-beta1 integrin complex tunes epithelial cell response to matrix tension. *Molecular Biology of the Cell*, **2009**, 20, 3224-38	3.5	97
242	A call for bioimaging software usability. *Nature Methods*, **2012**, 9, 666-70	21.6	92
241	Multi-functional self-fluorescent unimolecular micelles for tumor-targeted drug delivery and bioimaging. *Biomaterials*, **2015**, 47, 41-50	15.6	91
240	Simultaneous two-photon spectral and lifetime fluorescence microscopy. *Applied Optics*, **2004**, 43, 5173-82	1.7	86
239	Bioimage informatics for experimental biology. *Annual Review of Biophysics*, **2009**, 38, 327-46	21.1	82
238	Tumor mechanics and metabolic dysfunction. *Free Radical Biology and Medicine*, **2015**, 79, 269-80	7.8	79
237	Periductal stromal collagen topology of pancreatic ductal adenocarcinoma differs from that of normal and chronic pancreatitis. *Modern Pathology*, **2015**, 28, 1470-80	9.8	78
236	BI-24COLLAGEN PLAYS A ROLE IN GLIOBLASTOMA TUMOR INVASION AND PATIENT SURVIVAL. *Neuro-Oncology*, **2014**, 16, v28-v28	1	78
235	Cortical granule exocytosis in C. elegans is regulated by cell cycle components including separase. *Development (Cambridge)*, **2007**, 134, 3837-48	6.6	76
234	Matrix metalloproteinase 9 modulates collagen matrices and wound repair. *Development (Cambridge)*, **2015**, 142, 2136-46	6.6	74
233	Quantitating the cell: turning images into numbers with ImageJ. *Wiley Interdisciplinary Reviews: Developmental Biology*, **2017**, 6, e260	5.9	66
232	Elevated collagen-I augments tumor progressive signals, intravasation and metastasis of prolactin-induced estrogen receptor alpha positive mammary tumor cells. *Breast Cancer Research*, **2017**, 19, 9	8.3	64
231	The Action of Discoidin Domain Receptor 2 in Basal Tumor Cells and Stromal Cancer-Associated Fibroblasts Is Critical for Breast Cancer Metastasis. *Cell Reports*, **2016**, 15, 2510-23	10.6	64
230	Methods for Quantifying Fibrillar Collagen Alignment. *Methods in Molecular Biology*, **2017**, 1627, 429-451	1.4	64
229	Microtubules regulate GEF-H1 in response to extracellular matrix stiffness. *Molecular Biology of the Cell*, **2012**, 23, 2583-92	3.5	63
228	CGEF-1 and CHIN-1 regulate CDC-42 activity during asymmetric division in the Caenorhabditis elegans embryo. *Molecular Biology of the Cell*, **2010**, 21, 266-77	3.5	62

227	Second-harmonic generation imaging of cancer. *Methods in Cell Biology*, **2014**, 123, 531-46	1.8	61
226	Complex and Noncentrosymmetric Stacking of Layered Metal Dichalcogenide Materials Created by Screw Dislocations. *Journal of the American Chemical Society*, **2017**, 139, 3496-3504	16.4	60
225	Characterization of fibrillar collagens and extracellular matrix of glandular benign prostatic hyperplasia nodules. *PLoS ONE*, **2014**, 9, e109102	3.7	60
224	Structural changes in mixed Col I/Col V collagen gels probed by SHG microscopy: implications for probing stromal alterations in human breast cancer. *Biomedical Optics Express*, **2011**, 2, 2307-16	3.5	60
223	Induction of fibroblast senescence generates a non-fibrogenic myofibroblast phenotype that differentially impacts on cancer prognosis. *Aging*, **2016**, 9, 114-132	5.6	60
222	Aging and caloric restriction impact adipose tissue, adiponectin, and circulating lipids. *Aging Cell*, **2017**, 16, 497-507	9.9	59
221	Collagen Alignment as a Predictor of Recurrence after Ductal Carcinoma. *Cancer Epidemiology Biomarkers and Prevention*, **2018**, 27, 138-145	4	59
220	A shift in energy metabolism anticipates the onset of sarcopenia in rhesus monkeys. *Aging Cell*, **2013**, 12, 672-81	9.9	57
219	Selected mitochondrial DNA landscapes activate the SIRT3 axis of the UPR to promote metastasis. *Oncogene*, **2017**, 36, 4393-4404	9.2	56
218	Membrane dynamics during cellular wound repair. *Molecular Biology of the Cell*, **2016**, 27, 2272-85	3.5	55
217	Spatial and temporal analysis of extracellular matrix proteins in the developing murine heart: a blueprint for regeneration. *Tissue Engineering - Part A*, **2013**, 19, 1132-43	3.9	53
216	A three-dimensional computational model of collagen network mechanics. *PLoS ONE*, **2014**, 9, e111896	3.7	52
215	Comparison of Picrosirius Red Staining With Second Harmonic Generation Imaging for the Quantification of Clinically Relevant Collagen Fiber Features in Histopathology Samples. *Journal of Histochemistry and Cytochemistry*, **2016**, 64, 519-29	3.4	51
214	Nonlinear optical imaging of cellular processes in breast cancer. *Microscopy and Microanalysis*, **2008**, 14, 532-48	0.5	50
213	Shining new light on 3D cell motility and the metastatic process. *Trends in Cell Biology*, **2009**, 19, 638-48	18.3	48
212	Nonlinear optical imaging and spectral-lifetime computational analysis of endogenous and exogenous fluorophores in breast cancer. *Journal of Biomedical Optics*, **2008**, 13, 031220	3.5	48
211	Optical workstation with concurrent, independent multiphoton imaging and experimental laser microbeam capabilities. *Review of Scientific Instruments*, **2003**, 74, 193-201	1.7	48
210	In Vivo Visualization of Stromal Macrophages via label-free FLIM-based metabolite imaging. *Scientific Reports*, **2016**, 6, 25086	4.9	48

209	Association of collagen architecture with glioblastoma patient survival. *Journal of Neurosurgery*, **2017**, 126, 1812-1821	3.2	46
208	Extraction of optical properties and prediction of light distribution in rat brain tissue. *Journal of Biomedical Optics*, **2014**, 19, 75001	3.5	45
207	A bioengineered heterotypic stroma-cancer microenvironment model to study pancreatic ductal adenocarcinoma. *Lab on A Chip*, **2013**, 13, 3965-75	7.2	43
206	Open source bioimage informatics for cell biology. *Trends in Cell Biology*, **2009**, 19, 656-60	18.3	43
205	Closed-Loop Optogenetic Brain Interface. *IEEE Transactions on Biomedical Engineering*, **2015**, 62, 2327-37	5	42
204	The Presence of Cyclooxygenase 2, Tumor-Associated Macrophages, and Collagen Alignment as Prognostic Markers for Invasive Breast Carcinoma Patients. *American Journal of Pathology*, **2018**, 188, 559-573	5.8	42
203	The effect of micro-ECoG substrate footprint on the meningeal tissue response. *Journal of Neural Engineering*, **2014**, 11, 046011	5	42
202	Nonlinear optical microscopy and ultrasound imaging of human cervical structure. *Journal of Biomedical Optics*, **2013**, 18, 031110	3.5	41
201	Mechanical signals regulate and activate SNAIL1 protein to control the fibrogenic response of cancer-associated fibroblasts. *Journal of Cell Science*, **2016**, 129, 1989-2002	5.3	41
200	Pancreatic □Cells From Mice Offset Age-Associated Mitochondrial Deficiency With Reduced KATP Channel Activity. *Diabetes*, **2016**, 65, 2700-10	0.9	40
199	Fluorescence of Picrosirius Red Multiplexed With Immunohistochemistry for the Quantitative Assessment of Collagen in Tissue Sections. *Journal of Histochemistry and Cytochemistry*, **2017**, 65, 479-490	3.4	40
198	Laser scanning confocal microscopy: history, applications, and related optical sectioning techniques. *Methods in Molecular Biology*, **2014**, 1075, 9-47	1.4	39
197	Calsyntenin-1 regulates axon branching and endosomal trafficking during sensory neuron development in vivo. *Journal of Neuroscience*, **2014**, 34, 9235-48	6.6	39
196	Dense collagen-I matrices enhance pro-tumorigenic estrogen-prolactin crosstalk in MCF-7 and T47D breast cancer cells. *PLoS ONE*, **2015**, 10, e0116891	3.7	37
195	Calcific Aortic Valve Disease Is Associated with Layer-Specific Alterations in Collagen Architecture. *PLoS ONE*, **2016**, 11, e0163858	3.7	37
194	OptogenSIM: a 3D Monte Carlo simulation platform for light delivery design in optogenetics. *Biomedical Optics Express*, **2015**, 6, 4859-70	3.5	36
193	Targeted matrisome analysis identifies thrombospondin-2 and tenascin-C in aligned collagen stroma from invasive breast carcinoma. *Scientific Reports*, **2018**, 8, 12941	4.9	36
192	Charcot-Marie-Tooth 2b associated Rab7 mutations cause axon growth and guidance defects during vertebrate sensory neuron development. *Neural Development*, **2016**, 11, 2	3.9	35

191	Quantification of collagen organization and extracellular matrix factors within the healing ligament. *Microscopy and Microanalysis*, **2011**, 17, 779-87	0.5	35
190	Analysis of histology specimens using lifetime multiphoton microscopy. *Journal of Biomedical Optics*, **2003**, 8, 376-80	3.5	35
189	Distinct inflammatory and wound healing responses to complex caudal fin injuries of larval zebrafish. *ELife*, **2019**, 8,	8.9	35
188	3D texture analysis for classification of second harmonic generation images of human ovarian cancer. *Scientific Reports*, **2016**, 6, 35734	4.9	34
187	Resveratrol metabolites do not elicit early pro-apoptotic mechanisms in neuroblastoma cells. *Journal of Agricultural and Food Chemistry*, **2011**, 59, 4979-86	5.7	34
186	Visualization approaches for multidimensional biological image data. *BioTechniques*, **2007**, 43, 31, 33-6	2.5	34
185	SORCS1 is necessary for normal insulin secretory granule biogenesis in metabolically stressed cells. *Journal of Clinical Investigation*, **2014**, 124, 4240-56	15.9	34
184	Mesenchymal stem cell interactions with 3D ECM modules fabricated via multiphoton excited photochemistry. *Biomacromolecules*, **2012**, 13, 2917-25	6.9	33
183	Goniometric measurements of thick tissue using Monte Carlo simulations to obtain the single scattering anisotropy coefficient. *Biomedical Optics Express*, **2012**, 3, 2707-19	3.5	33
182	Lactation opposes pappalysin-1-driven pregnancy-associated breast cancer. *EMBO Molecular Medicine*, **2016**, 8, 388-406	12	32
181	GSK3Regulates Brain Energy Metabolism. *Cell Reports*, **2018**, 23, 1922-1931.e4	10.6	32
180	Damage-induced reactive oxygen species regulate and dynamic collagen-based projections to mediate wound repair. *ELife*, **2018**, 7,	8.9	32
179	SHARPIN regulates collagen architecture and ductal outgrowth in the developing mouse mammary gland. *EMBO Journal*, **2017**, 36, 165-182	13	31
178	Unifying Biological Image Formats with HDF5. *Communications of the ACM*, **2009**, 52, 42-47	2.5	30
177	Quantification of collagen organization in histopathology samples using liquid crystal based polarization microscopy. *Biomedical Optics Express*, **2017**, 8, 4243-4256	3.5	29
176	VisBio: a computational tool for visualization of multidimensional biological image data. *Traffic*, **2004**, 5, 411-7	5.7	29
175	Dual-stream Multiple Instance Learning Network for Whole Slide Image Classification with Self-supervised Contrastive Learning.. *IEEE Computer Society Conference on Computer Vision and Pattern Recognition Workshops*, **2021**, 2021, 14318-14328	1.3	29
174	Cortex-wide neural interfacing via transparent polymer skulls. *Nature Communications*, **2019**, 10, 1500	17.4	28

173	A microfluidic coculture and multiphoton FAD analysis assay provides insight into the influence of the bone microenvironment on prostate cancer cells. *Integrative Biology (United Kingdom)*, **2014**, 6, 627-635	3.7	28
172	ECM-incorporated hydrogels cross-linked via native chemical ligation to engineer stem cell microenvironments. *Biomacromolecules*, **2013**, 14, 3102-11	6.9	28
171	Autofluorescence lifetime imaging of cellular metabolism: Sensitivity toward cell density, pH, intracellular, and intercellular heterogeneity. *Cytometry Part A: the Journal of the International Society for Analytical Cytology*, **2019**, 95, 56-69	4.6	28
170	Human pancreatic stellate cells modulate 3D collagen alignment to promote the migration of pancreatic ductal adenocarcinoma cells. *Biomedical Microdevices*, **2016**, 18, 105	3.7	27
169	RhoA is down-regulated at cell-cell contacts via p190RhoGAP-B in response to tensional homeostasis. *Molecular Biology of the Cell*, **2013**, 24, 1688-99, S1-3	3.5	26
168	Engineering three-dimensional collagen matrices to provide contact guidance during 3D cell migration. *Current Protocols in Cell Biology*, **2010**, Chapter 10, Unit 10.17	2.3	26
167	Lrrc10 is required for early heart development and function in zebrafish. *Developmental Biology*, **2007**, 308, 494-506	3.1	26
166	Blue Light Modulates Murine Microglial Gene Expression in the Absence of Optogenetic Protein Expression. *Scientific Reports*, **2016**, 6, 21172	4.9	26
165	Enriching Islet Phospholipids With Eicosapentaenoic Acid Reduces Prostaglandin E Signaling and Enhances Diabetic Cell Function. *Diabetes*, **2017**, 66, 1572-1585	0.9	25
164	A nondenatured, noncrosslinked collagen matrix to deliver stem cells to the heart. *Regenerative Medicine*, **2011**, 6, 569-82	2.5	25
163	Applications of combined spectral lifetime microscopy for biology. *BioTechniques*, **2006**, 41, 249, 251, 253 passim	2.5	25
162	Tools for visualizing multidimensional images from living specimens. *Photochemistry and Photobiology*, **2005**, 81, 1116-22	3.6	25
161	Applying multiphoton imaging to the study of membrane dynamics in living cells. *Traffic*, **2001**, 2, 775-80	5.7	25
160	Administration of Non-Torsadogenic human Ether-go-go-Related Gene Inhibitors Is Associated with Better Survival for High hERG-Expressing Glioblastoma Patients. *Clinical Cancer Research*, **2017**, 23, 73-80	12.9	24
159	Chemically Derived Kirigami of WSe. *Journal of the American Chemical Society*, **2018**, 140, 10980-10987	16.4	23
158	Syndecan-1 induction in lung microenvironment supports the establishment of breast tumor metastases. *Breast Cancer Research*, **2018**, 20, 66	8.3	23
157	Experimental and simulation study of the wavelength dependent second harmonic generation of collagen in scattering tissues. *Optics Letters*, **2014**, 39, 1897-900	3	22
156	The ImageJ ecosystem: Open-source software for image visualization, processing, and analysis. *Protein Science*, **2021**, 30, 234-249	6.3	22

155	Void spot assay procedural optimization and software for rapid and objective quantification of rodent voiding function, including overlapping urine spots. *American Journal of Physiology - Renal Physiology*, **2018**, 315, F1067-F1080	4.3	21
154	Imaging cardiac extracellular matrices: a blueprint for regeneration. *Trends in Biotechnology*, **2012**, 30, 233-40	15.1	21
153	Open-source deep-learning software for bioimage segmentation. *Molecular Biology of the Cell*, **2021**, 32, 823-829	3.5	21
152	Regional metabolic heterogeneity of the hippocampus is nonuniformly impacted by age and caloric restriction. *Aging Cell*, **2016**, 15, 100-10	9.9	20
151	Stromal alterations in ovarian cancers via wavelength dependent Second Harmonic Generation microscopy and optical scattering. *BMC Cancer*, **2017**, 17, 102	4.8	19
150	Collagen organization of renal cell carcinoma differs between low and high grade tumors. *BMC Cancer*, **2019**, 19, 490	4.8	19
149	zWEDGI: Wounding and Entrapment Device for Imaging Live Zebrafish Larvae. *Zebrafish*, **2017**, 14, 42-502		19
148	The Kinesin Adaptor Calsyntenin-1 Organizes Microtubule Polarity and Regulates Dynamics during Sensory Axon Arbor Development. *Frontiers in Cellular Neuroscience*, **2017**, 11, 107	6.1	19
147	Image-inspired 3D multiphoton excited fabrication of extracellular matrix structures by modulated raster scanning. *Optics Express*, **2013**, 21, 25346-55	3.3	19
146	Three-dimensional surface profiling and optical characterization of liquid microlens using a Shack-Hartmann wave front sensor. *Applied Physics Letters*, **2011**, 98, 171104	3.4	18
145	Opportunities for multiple-beam synchrotron-based mid-infrared imaging at IRENI. *Vibrational Spectroscopy*, **2012**, 60, 10-15	2.1	17
144	Cell death, non-invasively assessed by intrinsic fluorescence intensity of NADH, is a predictive indicator of functional differentiation of embryonic stem cells. *Biology of the Cell*, **2012**, 104, 352-64	3.5	17
143	Association of cellular and molecular responses in the rat mammary gland to 17□estradiol with susceptibility to mammary cancer. *BMC Cancer*, **2013**, 13, 573	4.8	17
142	Cooperativity among Rev-associated nuclear export signals regulates HIV-1 gene expression and is a determinant of virus species tropism. *Journal of Virology*, **2014**, 88, 14207-21	6.6	17
141	Multiphoton flow cytometry to assess intrinsic and extrinsic fluorescence in cellular aggregates: applications to stem cells. *Microscopy and Microanalysis*, **2011**, 17, 540-54	0.5	17
140	Pycro-Manager: open-source software for customized and reproducible microscope control. *Nature Methods*, **2021**, 18, 226-228	21.6	17
139	SCIFIO: an extensible framework to support scientific image formats. *BMC Bioinformatics*, **2016**, 17, 521	3.6	16
138	Advanced Materials for Neural Surface Electrodes. *Current Opinion in Solid State and Materials Science*, **2014**, 18, 301-307	12	16

137	Validation of an arterial constitutive model accounting for collagen content and crosslinking. *Acta Biomaterialia*, **2016**, 31, 276-287	10.8	16
136	Molecular and Functional Networks Linked to Sarcopenia Prevention by Caloric Restriction in Rhesus Monkeys. *Cell Systems*, **2020**, 10, 156-168.e5	10.6	15
135	Quantitative phase imaging of stromal prognostic markers in pancreatic ductal adenocarcinoma. *Biomedical Optics Express*, **2020**, 11, 1354-1364	3.5	15
134	Integration of the ImageJ Ecosystem in the KNIME Analytics Platform. *Frontiers in Computer Science* , **2020**, 2,	3.4	14
133	Endogenous fluorescence signatures in living pluripotent stem cells change with loss of potency. *PLoS ONE*, **2012**, 7, e43708	3.7	14
132	Prolactin signaling through focal adhesion complexes is amplified by stiff extracellular matrices in breast cancer cells. *Oncotarget*, **2016**, 7, 48093-48106	3.3	14
131	Quantitative Histopathology of Stained Tissues using Color Spatial Light Interference Microscopy (cSLIM). *Scientific Reports*, **2019**, 9, 14679	4.9	13
130	Using fluorescence lifetime microscopy to study the subcellular localization of anthocyanins. *Plant Journal*, **2016**, 88, 895-903	6.9	13
129	Patterned optogenetic modulation of neurovascular and metabolic signals. *Journal of Cerebral Blood Flow and Metabolism*, **2015**, 35, 140-7	7.3	12
128	ImageJ-MATLAB: a bidirectional framework for scientific image analysis interoperability. *Bioinformatics*, **2017**, 33, 629-630	7.2	12
127	Simultaneous determination of the second-harmonic generation emission directionality and reduced scattering coefficient from three-dimensional imaging of thick tissues. *Journal of Biomedical Optics*, **2013**, 18, 116008	3.5	12
126	Navigating the Collagen Jungle: The Biomedical Potential of Fiber Organization in Cancer. *Bioengineering*, **2021**, 8,	5.3	12
125	Harnessing non-destructive 3D pathology. *Nature Biomedical Engineering*, **2021**, 5, 203-218	19	12
124	Fibrillar Collagen Quantification With Curvelet Transform Based Computational Methods. *Frontiers in Bioengineering and Biotechnology*, **2020**, 8, 198	5.8	11
123	Nonlinear optical microscopy and computational analysis of intrinsic signatures in breast cancer. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2009**, 2009, 4077-80	0.9	11
122	Scientific Community Image Forum: A discussion forum for scientific image software. *PLoS Biology*, **2019**, 17, e3000340	9.7	10
121	Three-Dimensional Surface Profile Measurement of Microlenses Using the Shack–Hartmann Wavefront Sensor. *Journal of Microelectromechanical Systems*, **2012**, 21, 530-540	2.5	10
120	Super-resolution recurrent convolutional neural networks for learning with multi-resolution whole slide images. *Journal of Biomedical Optics*, **2019**, 24, 1-15	3.5	10

119	Review of quantitative multiscale imaging of breast cancer. *Journal of Medical Imaging*, **2018**, 5, 010901	2.6	10
118	Intensity-based registration of bright-field and second-harmonic generation images of histopathology tissue sections. *Biomedical Optics Express*, **2020**, 11, 160-173	3.5	10
117	TRIM32 cooperates with glycolytic enzymes to promote cell growth. *ELife*, **2020**, 9,	8.9	10
116	Non-disruptive collagen characterization in clinical histopathology using cross-modality image synthesis. *Communications Biology*, **2020**, 3, 414	6.7	10
115	Optimization of interstrand interactions enables burn detection with a collagen-mimetic peptide. *Organic and Biomolecular Chemistry*, **2019**, 17, 9906-9912	3.9	10
114	Convolutional neural networks for whole slide image superresolution. *Biomedical Optics Express*, **2018**, 9, 5368-5386	3.5	10
113	Automated and Robust Quantification of Colocalization in Dual-Color Fluorescence Microscopy: A Nonparametric Statistical Approach. *IEEE Transactions on Image Processing*, **2018**, 27, 622-636	8.7	9
112	Preparation of 3D Collagen Gels and Microchannels for the Study of 3D Interactions In Vivo. *Journal of Visualized Experiments*, **2016**,	1.6	9
111	Bimolecular fluorescence complementation analysis of eukaryotic fusion products. *Biology of the Cell*, **2010**, 102, 525-37	3.5	9
110	Machine Learning Methods for Fluorescence Lifetime Imaging (FLIM) Based Label-Free Detection of Microglia. *Frontiers in Neuroscience*, **2020**, 14, 931	5.1	9
109	Transglutaminase-2 Mediates the Biomechanical Properties of the Colorectal Cancer Tissue Microenvironment that Contribute to Disease Progression. *Cancers*, **2019**, 11,	6.6	8
108	PGC-1a integrates a metabolism and growth network linked to caloric restriction. *Aging Cell*, **2019**, 18, e12999	9.9	8
107	A beam optics study of a modular multi-source X-ray tube for novel computed tomography applications. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2017**, 868, 1-9	1.2	8
106	3D second harmonic generation imaging tomography by multi-view excitation. *Optica*, **2017**, 4, 1171-1178	8.6	8
105	Nonparametric empirical Bayesian framework for fluorescence-lifetime imaging microscopy. *Biomedical Optics Express*, **2019**, 10, 5497-5517	3.5	8
104	A novel bioreactor for combined magnetic resonance spectroscopy and optical imaging of metabolism in 3D cell cultures. *Magnetic Resonance in Medicine*, **2019**, 81, 3379-3391	4.4	8
103	Collagen Organization in Relation to Ductal Carcinoma Pathology and Outcomes. *Cancer Epidemiology Biomarkers and Prevention*, **2021**, 30, 80-88	4	8
102	Imaging the Cardiac Extracellular Matrix. *Advances in Experimental Medicine and Biology*, **2018**, 1098, 21-44	3.6	8

101	Diverse activities of viral cis-acting RNA regulatory elements revealed using multicolor, long-term, single-cell imaging. *Molecular Biology of the Cell*, **2017**, 28, 476-487	3.5	7
100	Endogenous Optical Signals Reveal Changes of Elastin and Collagen Organization During Differentiation of Mouse Embryonic Stem Cells. *Tissue Engineering - Part C: Methods*, **2015**, 21, 995-1004	2.9	7
99	ImageJ for the Next Generation of Scientific Image Data. *Microscopy and Microanalysis*, **2019**, 25, 142-143	0.5	7
98	NAD(P)H fluorescence lifetime measurements in fixed biological tissues. *Methods and Applications in Fluorescence*, **2019**, 7, 044005	3.1	7
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