Lucie Kubinova

List of Publications by Year
in descending order

79 papers	1,696 citations	279798 23 h-index	330143 37 g-index
79 all docs	79 docs citations	79 times ranked	2009 citing authors

#	Article	IF	Citations
1	Topological Properties and Spatial Organization of Villous Capillaries in Normal and Diabetic Placentas. Journal of Vascular Research, 2002, 39, 268-278.	1.4	96
2	Frequency of M-Cadherin-stained Satellite Cells Declines in Human Muscles During Aging. Journal of Histochemistry and Cytochemistry, 2004, 52, 179-185.	2.5	84
3	Flo11p, drug efflux pumps, and the extracellular matrix cooperate to form biofilm yeast colonies. Journal of Cell Biology, 2011, 194, 679-687.	5.2	83
4	Estimating surface area by the isotropic fakir method from thick slices cut in an arbitrary direction. Journal of Microscopy, 1998, 191, 201-211.	1.8	57
5	Methods for compensation of the light attenuation with depth of images captured by a confocal microscope. Microscopy Research and Technique, 2006, 69, 624-635.	2.2	55
6	Architecture of developing multicellular yeast colony: spatioâ€temporal expression of Ato1p ammonium exporter. Environmental Microbiology, 2009, 11, 1866-1877.	3.8	55
7	High-LET Radiation-Induced Response of Microvessels in the Hippocampus. Radiation Research, 2010, 173, 486-493.	1.5	55
8	Stomata and Mesophyll Characteristics of Barley Leaf as Affected by Light: Stereological Analysis. Journal of Experimental Botany, 1991, 42, 995-1001.	4.8	51
9	The branching pattern of villous capillaries and structural changes of placental terminal villi in type 1 diabetes mellitus. Placenta, 2012, 33, 343-351.	1.5	51
10	Recent stereological methods for measuring leaf anatomical characteristics: estimation of the number and sizes of stomata and mesophyll cells. Journal of Experimental Botany, 1994, 45, 119-127.	4.8	49
11	Confocal microscopy and stereology: Estimating volume, number, surface area and length by virtual test probes applied to three-dimensional images. Microscopy Research and Technique, 2001, 53, 425-435.	2.2	47
12	Three-dimensional Arrangement of the Capillary Bed and Its Relationship to Microrheology in the Terminal Villi of Normal Term Placenta. Placenta, 2008, 29, 892-897.	1.5	47
13	Advantages and pitfalls of using freeâ€hand sections of frozen needles for threeâ€dimensional analysis of mesophyll by stereology and confocal microscopy. Journal of Microscopy, 2008, 232, 56-63.	1.8	40
14	Three-dimensional study of the capillary supply of skeletal muscle fibres using confocal microscopy. Journal of Muscle Research and Cell Motility, 2001, 22, 217-227.	2.0	37
15	Recent Stereological Methods for the Measurement of Leaf Anatomical Characteristics: Estimation of Volume Density, Volume and Surface Area. Journal of Experimental Botany, 1993, 44, 165-173.	4.8	35
16	Comparison of several digital and stereological methods for estimating surface area and volume of cells studied by confocal microscopy. , 1999, 36, 85-95.		35
17	Image-Based Modeling of Blood Flow and Oxygen Transfer in Feto-Placental Capillaries. PLoS ONE, 2016, 11, e0165369.	2.5	35
18	Characterization of the Capillary Network in Skeletal Muscles From 3D Data. Physiological Research, 2011, 60, 1-13.	0.9	34

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19	Functional heterogeneity of Thy-1 membrane microdomains in rat basophilic leukemia cells. European Journal of Immunology, 1998, 28, 1847-1858.	2.9	32
20	Volume reconstruction of large tissue specimens from serial physical sections using confocal microscopy and correction of cutting deformations by elastic registration. Microscopy Research and Technique, 2009, 72, 110-119.	2.2	32
21	Spatial arrangement of fetal placental capillaries in terminal villi: a study using confocal microscopy. Anatomy and Embryology, 1998, 197, 263-272.	1.5	30
22	Reversible and Irreversible Modulation of Tubulin Selfâ€Assembly by Intense Nanosecond Pulsed Electric Fields. Advanced Materials, 2019, 31, 1903636.	21.0	29
23	Stereological methods based on point counting and unbiased counting frames for two-dimensional measurements in muscles: comparison with manual and image analysis methods. Journal of Muscle Research and Cell Motility, 1995, 16, 295-302.	2.0	25
24	Three-dimensional computer reconstruction of large tissue volumes based on composing series of high-resolution confocal images by GlueMRC and LinkMRC software. Microscopy Research and Technique, 2003, 62, 415-422.	2.2	25
25	3D Visualization and Measurement of Capillaries Supplying Metabolically Different Fiber Types in the Rat Extensor Digitorum Longus Muscle During Denervation and Reinnervation. Journal of Histochemistry and Cytochemistry, 2009, 57, 437-447.	2.5	24
26	Analysis and three-dimensional visualization of collagen in artificial scaffolds using nonlinear microscopy techniques. Journal of Biomedical Optics, 2010, 15, 1.	2.6	24
27	Improvement in volume estimation from confocal sections after image deconvolution. Microscopy Research and Technique, 2004, 64, 151-155.	2.2	23
28	Novel efficient methods for measuring mesophyll anatomical characteristics from fresh thick sections using stereology and confocal microscopy: application on acid rain-treated Norway spruce needles. Journal of Experimental Botany, 2007, 58, 1451-1461.	4.8	23
29	The estimation error of skeletal muscle capillary supply is significantly reduced by 3D method. Microvascular Research, 2010, 79, 40-46.	2.5	23
30	DISECTOR PROGRAM FOR UNBIASED ESTIMATION OF PARTICLE NUMBER, NUMERICAL DENSITY AND MEAN VOLUME. Image Analysis and Stereology, 2001, 20, 119.	0.9	23
31	A novel method for evaluation of capillarity in human skeletal muscles from confocal 3D images. Microvascular Research, 2011, 81, 231-238.	2.5	22
32	The Heterogeneity of Structural and Functional Photosynthetic Characteristics of Mesophyll Chloroplasts in Various Parts of Mature or Senescing Leaf Blade of Two Maize (Zea Mays L.) Genotypes. Photosynthetica, 2001, 39, 497-506.	1.7	21
33	A novel staining method for quantification and 3D visualisation of capillaries and muscle fibres. European Journal of Histochemistry, 2004, 48, 151.	1.5	21
34	Unbiased estimation of chloroplast number in mesophyll cells: advantage of a genuine three-dimensional approach. Journal of Experimental Botany, 2014, 65, 609-620.	4.8	21
35	Quantification of Rat Retinal Growth and Vascular Population Changes after Single and Split Doses of Proton Irradiation: Translational Study Using Stereology Methods. Radiation Research, 2003, 160, 5-13.	1.5	20
36	Nerve injury affects the capillary supply in rat slow and fast muscles differently. Cell and Tissue Research, 2006, 323, 305-312.	2.9	19

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37	Software for muscle fibre type classification and analysis. European Journal of Histochemistry, 2009, 53, 87-95.	1.5	16
38	Visualization of Reinkeâ€™s crystals in normal and cryptorchid testis. Histochemistry and Cell Biology, 2011, 135, 215-228.	1.7	16
39	Confocal stereology: an efficient tool for measurement of microscopic structures. Cell and Tissue Research, 2015, 360, 13-28.	2.9	16
40	Imaging of mouse experimental melanoma in vivo and ex vivo by combination of confocal and nonlinear microscopy. Microscopy Research and Technique, 2009, 72, 411-423.	2.2	15
41	The impact of long-term CO2 enrichment on sun and shade needles of Norway spruce (Picea abies): Photosynthetic performance, needle anatomy and phenolics accumulation. Plant Science, 2012, 188-189, 60-70.	3.6	15
42	Three-dimensional reconstructions from non-deparaffinized tissue sections. Anatomy and Embryology, 2005, 210, 163-173.	1.5	14
43	Adaptation of muscle fibre types and capillary network to acute denervation and shortlasting reinnervation. Cell and Tissue Research, 2007, 330, 279-289.	2.9	14
44	Ultraviolet light-irradiated collagen III modulates expression of cytoskeletal and surface adhesion molecules in rat aortic smooth muscle cells in vitro. Virchows Archiv Fur Pathologische Anatomie Und Physiologie Und Fur Klinische Medizin, 2002, 440, 50-62.	2.8	13
45	Microtubule Cytoskeleton Remodeling by Nanosecond Pulsed Electric Fields. Advanced Biology, 2020, 4, e2000070.	3.0	13
46	Quantitative Analysis of the Structure of Etiolated Barley Leaf Using Stereological Methods. Journal of Experimental Botany, 1991, 42, 1311-1314.	4.8	12
47	Confocal microscopy of chloroplast morphology and ontogeny in three strains ofDictyochloropsis(Trebouxiophyceae, Chlorophyta). Phycologia, 2005, 44, 261-269.	1.4	12
48	Norway spruce needle size and cross section shape variability induced by irradiance on a macro- and microscale and CO2 concentration. Trees - Structure and Function, 2018, 32, 231-244.	1.9	12
49	Nanosecond Pulsed Electric Field Labâ€onâ€Chip Integrated in Superâ€Resolution Microscope for Cytoskeleton Imaging. Advanced Materials Technologies, 2020, 5, 1900669.	5.8	11
50	Visualisation of human dental pulp vasculature by immunohistochemical and immunofluorescent detection of CD34: A comparative study. Australian Endodontic Journal, 2006, 32, 101-106.	1.5	10
51	Testate Amoebae Examined by Confocal and Two-Photon Microscopy: Implications for Taxonomy and Ecophysiology. Microscopy and Microanalysis, 2010, 16, 735-746.	0.4	10
52	3D analysis of capillary network in skeletal muscle of obese insulin-resistant mice. Histochemistry and Cell Biology, 2019, 152, 323-331.	1.7	10
53	Stereology Techniques in Radiation Biology. Radiation Research, 2003, 160, 110-119.	1.5	9
54	Ecology of Testate Amoebae in the KomoÅ™any Ponds in the Vltava Basin. Microbial Ecology, 2012, 64, 117-130.	2.8	8

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55	CAPILLARY NETWORK IN SLOW AND FAST MUSCLES AND IN OXIDATIVE AND GLYCOLYTIC MUSCLE FIBRES. Image Analysis and Stereology, 2005, 24, 51.	0.9	8
56	Correlation of function and structure in developing rat distal colon. Cell and Tissue Research, 1997, 288, 95-99.	2.9	7
57	Surface density and volume density measurements of chloroplast thylakoids in maize (Zea mays L.) under chilling conditions. Photosynthetica, 2007, 45, 481-488.	1.7	7
58	Compensation of inhomogeneous fluorescence signal distribution in 2D images acquired by confocal microscopy. Microscopy Research and Technique, 2011, 74, 831-838.	2.2	7
59	IMPROVING METHODOLOGICAL STRATEGIES FOR SATELLITE CELLS COUNTING IN HUMAN MUSCLE DURING AGEING. Image Analysis and Stereology, 2002, 21, 7.	0.9	7
60	Stereological and Digital Methods for Estimating Geometrical Characteristics of Biological Structures Using Confocal Microscopy. , 2005, , 271-321.		6
61	Blood Capillary Length Estimation from Three-Dimensional Microscopic Data by Image Analysis and Stereology. Microscopy and Microanalysis, 2013, 19, 898-906.	0.4	6
62	STEREOLOGY, AN UNBIASED METHODOLOGICAL APPROACH TO STUDY PLANT ANATOMY AND CYTOLOGY: PAST, PRESENT AND FUTURE. Image Analysis and Stereology, 2017, 36, 187.	0.9	6
63	VARIANCES OF LENGTH AND SURFACE AREA ESTIMATES BY SPATIAL GRIDS: PRELIMINARY STUDY. Image Analysis and Stereology, 2010, 29, 45.	0.9	6
64	Human Masseter Muscle Fibers From the Elderly Express Less Neonatal Myosin Than Those of Young Adults. Anatomical Record, 2012, 295, 1364-1372.	1.4	5
65	Advantages of stereological methods in biomedicine. Efficiently obtaining unbiased estimates of geometrical characteristics for 3-D structures. IEEE Engineering in Medicine and Biology Magazine, 1998, 17, 110-115.	0.8	3
66	Nonrigid Registration of CLSM Images of Physical Sections with Discontinuous Deformations. Microscopy and Microanalysis, 2011, 17, 923-936.	0.4	3
67	Capillary Network Morphometry of Pig Soleus Muscle Significantly Changes in 24 Hours After Death. Journal of Histochemistry and Cytochemistry, 2018, 66, 23-31.	2.5	3
68	Local Immune Changes in Early Stages of Inflammation and Carcinogenesis Correlate with the Collagen Scaffold Changes of the Colon Mucosa. Cancers, 2021, 13, 2463.	3.7	3
69	Non-destructive stereological method for estimating the length of rigid root systems. Biologia Plantarum, 1997, 39, 311-316.	1.9	2
70	Quantitative analysis of embryonic kidney impairment by confocal microscopy and stereology: effect of 1,2-dibromoethane in the chick mesonephros. British Poultry Science, 2005, 46, 661-667.	1.7	2
71	ReinkeÂ´s Crystals in Perivascular and Peritubular Leydig Cells. Croatica Chemica Acta, 2011, 84, 159-167.	0.4	2
72	UNBIASED ESTIMATION OF NORWAY SPRUCE (PICEA ABIES L. KARST.) CHLOROPLAST STRUCTURE: HETEROGENEITY WITHIN NEEDLE MESOPHYLL UNDER DIFFERENT IRRADIANCE AND [CO2]. Image Analysis and Stereology, 2019, 38, 83.	0.9	2

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73	Stereology Techniques Haveâ€"or Should Haveâ€"a Role in Preclinical Radiation Therapy. Radiation Research, 2003, 160, 120-123.	1.5	1
74	THE CAPILLARY PATTERN IN HUMAN MASSETER MUSCLE DURING AGEING. Image Analysis and Stereology, 2013, 32, 135.	0.9	1
75	Time hierarchy in systems with general attractors. Mathematical Modelling, 1987, 8, 61-65.	0.2	0
76	Matching of irreversibly deformed images in microscopy based on piecewise monotone subgradient optimization using parallel processing. , 2012, , .		0
77	Tracing Tubular Objects in 3D Confocal Images Using Haptic Device. Microscopy and Microanalysis, 2014, 20, 822-823.	0.4	0
78	Computerized Reconstruction of Pulpal Blood Vessels Examined under Confocal Microscope. Balkan Journal of Dental Medicine, 2015, 19, 43-49.	0.2	0
79	Application of Confocal Microscopy to 3-D Reconstruction and Morphometrical Analysis of Capillaries. , 1996, , 285-289.		0