

Christopher J Murphy

List of Publications by Year in descending order

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173
papers

9,656
citations

43973

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h-index

49773

87
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174
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174
docs citations

174
times ranked

11605
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Epithelial contact guidance on well-defined micro- and nanostructured substrates. <i>Journal of Cell Science</i> , 2003, 116, 1881-1892. | 1.2 | 902 |
| 2 | Indentation Versus Tensile Measurements of Young's Modulus for Soft Biological Tissues. <i>Tissue Engineering - Part B: Reviews</i> , 2011, 17, 155-164. | 2.5 | 533 |
| 3 | Elastic Modulus Determination of Normal and Glaucomatous Human Trabecular Meshwork. , 2011, 52, 2147. | | 314 |
| 4 | Biological length scale topography enhances cell-substratum adhesion of human corneal epithelial cells. <i>Journal of Cell Science</i> , 2004, 117, 3153-3164. | 1.2 | 284 |
| 5 | The effect of environmental factors on the response of human corneal epithelial cells to nanoscale substrate topography. <i>Biomaterials</i> , 2006, 27, 3945-3954. | 5.7 | 243 |
| 6 | Surfaces modified with nanometer-thick silver-impregnated polymeric films that kill bacteria but support growth of mammalian cells. <i>Biomaterials</i> , 2010, 31, 680-690. | 5.7 | 233 |
| 7 | The elastic modulus of Matrigel [®] as determined by atomic force microscopy. <i>Journal of Structural Biology</i> , 2009, 167, 216-219. | 1.3 | 222 |
| 8 | Responses of human keratocytes to micro- and nanostructured substrates. <i>Journal of Biomedical Materials Research Part B</i> , 2004, 71A, 369-376. | 3.0 | 218 |
| 9 | Modulation of osteogenic differentiation in hMSCs cells by submicron topographically-patterned ridges and grooves. <i>Biomaterials</i> , 2012, 33, 128-136. | 5.7 | 203 |
| 10 | Modulation of human vascular endothelial cell behaviors by nanotopographic cues. <i>Biomaterials</i> , 2010, 31, 5418-5426. | 5.7 | 185 |
| 11 | Defensins are mitogenic for epithelial cells and fibroblasts. <i>Journal of Cellular Physiology</i> , 1993, 155, 408-413. | 2.0 | 179 |
| 12 | Determining the mechanical properties of human corneal basement membranes with atomic force microscopy. <i>Journal of Structural Biology</i> , 2009, 167, 19-24. | 1.3 | 179 |
| 13 | Synergistic effects of substance P with insulin-like growth factor-1 on epithelial migration of the cornea. <i>Journal of Cellular Physiology</i> , 1996, 169, 159-166. | 2.0 | 162 |
| 14 | Biophysical Cues and Cell Behavior: The Big Impact of Little Things. <i>Annual Review of Biomedical Engineering</i> , 2013, 15, 155-176. | 5.7 | 145 |
| 15 | Companion animals: Translational scientist's new best friends. <i>Science Translational Medicine</i> , 2015, 7, 308ps21. | 5.8 | 145 |
| 16 | Characterization of Endothelial Basement Membrane Nanotopography in Rhesus Macaque as a Guide for Vessel Tissue Engineering. <i>Tissue Engineering - Part A</i> , 2009, 15, 2643-2651. | 1.6 | 142 |
| 17 | Cooperative modulation of neuritogenesis by PC12 cells by topography and nerve growth factor. <i>Biomaterials</i> , 2005, 26, 3639-3644. | 5.7 | 140 |
| 18 | Dexamethasone Stiffens Trabecular Meshwork, Trabecular Meshwork Cells, and Matrix. , 2015, 56, 4447. | | 132 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Compliance profile of the human cornea as measured by atomic force microscopy. <i>Micron</i> , 2012, 43, 1293-1298. | 1.1 | 123 |
| 20 | Stimulation of epithelial cell growth by the neuropeptide substance P. <i>Journal of Cellular Biochemistry</i> , 1993, 52, 476-485. | 1.2 | 117 |
| 21 | Using Liquid Crystals to Amplify Protein-Receptor Interactions: Design of Surfaces with Nanometer-Scale Topography that Present Histidine-Tagged Protein Receptors. <i>Langmuir</i> , 2003, 19, 1671-1680. | 1.6 | 111 |
| 22 | Elastic modulus and collagen organization of the rabbit cornea: Epithelium to endothelium. <i>Acta Biomaterialia</i> , 2014, 10, 785-791. | 4.1 | 96 |
| 23 | Role of Substratum Stiffness in Modulating Genes Associated with Extracellular Matrix and Mechanotransducers YAP and TAZ. , 2013, 54, 378. | | 92 |
| 24 | Nanoscale Topography-Induced Modulation of Fundamental Cell Behaviors of Rabbit Corneal Keratocytes, Fibroblasts, and Myofibroblasts. , 2010, 51, 1373. | | 90 |
| 25 | Sub-micron and nanoscale feature depth modulates alignment of stromal fibroblasts and corneal epithelial cells in serum-rich and serum-free media. <i>Journal of Biomedical Materials Research - Part A</i> , 2008, 86A, 725-735. | 2.1 | 89 |
| 26 | KCNJ15/Kir4.2 couples with polyamines to sense weak extracellular electric fields in galvanotaxis. <i>Nature Communications</i> , 2015, 6, 8532. | 5.8 | 83 |
| 27 | Integration of basal topographic cues and apical shear stress in vascular endothelial cells. <i>Biomaterials</i> , 2012, 33, 4126-4135. | 5.7 | 79 |
| 28 | The Applications of Atomic Force Microscopy to Vision Science. , 2010, 51, 6083. | | 78 |
| 29 | A nonhuman primate model of inherited retinal disease. <i>Journal of Clinical Investigation</i> , 2019, 129, 863-874. | 3.9 | 78 |
| 30 | Synergistic Effect of Substance P with Epidermal Growth Factor on Epithelial Migration in Rabbit Cornea. <i>Experimental Eye Research</i> , 1997, 65, 321-329. | 1.2 | 75 |
| 31 | Characterizing the Effects of Heparin Gel Stiffness on Function of Primary Hepatocytes. <i>Tissue Engineering - Part A</i> , 2013, 19, 2655-2663. | 1.6 | 74 |
| 32 | Characterizing Nanoscale Topography of the Aortic Heart Valve Basement Membrane for Tissue Engineering Heart Valve Scaffold Design. <i>Tissue Engineering</i> , 2006, 12, 413-421. | 4.9 | 73 |
| 33 | The effect of biophysical attributes of the ocular trabecular meshwork associated with glaucoma on the cell response to therapeutic agents. <i>Biomaterials</i> , 2011, 32, 2417-2423. | 5.7 | 73 |
| 34 | Polymeric multilayers that localize the release of chlorhexidine from biologic wound dressings. <i>Biomaterials</i> , 2012, 33, 6783-6792. | 5.7 | 73 |
| 35 | Tissue and cellular biomechanics during corneal wound injury and repair. <i>Acta Biomaterialia</i> , 2017, 58, 291-301. | 4.1 | 71 |
| 36 | The origins of lactation and the evolution of milk: a review with new hypotheses. <i>Mammal Review</i> , 1989, 19, 1-26. | 2.2 | 69 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Meet the corneal myofibroblast: the role of myofibroblast transformation in corneal wound healing and pathology. <i>Veterinary Ophthalmology</i> , 2009, 12, 25-27. | 0.6 | 69 |
| 38 | The Pharmacologic Assessment of A Novel Lymphocyte Function-Associated Antigen-1 Antagonist (SAR) Tj ETQq0 0 0 rgBT /Overlock 10 | | 69 |
| 39 | Substratum Topography Modulates Corneal Fibroblast to Myofibroblast Transformation. , 2012, 53, 811. | | 69 |
| 40 | Electron Microscopy of the Canine Corneal Basement Membranes. <i>Cells Tissues Organs</i> , 2002, 170, 251-257. | 1.3 | 68 |
| 41 | Substratum stiffness and latrunculin B modulate the gene expression of the mechanotransducers YAP and TAZ in human trabecular meshwork cells. <i>Experimental Eye Research</i> , 2013, 113, 66-73. | 1.2 | 67 |
| 42 | Alterations in gene expression of human vascular endothelial cells associated with nanotopographic cues. <i>Biomaterials</i> , 2010, 31, 8882-8888. | 5.7 | 66 |
| 43 | Tryptophan Inhibits Biofilm Formation by <i>Pseudomonas aeruginosa</i> . <i>Antimicrobial Agents and Chemotherapy</i> , 2013, 57, 1921-1925. | 1.4 | 66 |
| 44 | The role of hepatocyte growth factor in corneal wound healing. <i>Experimental Eye Research</i> , 2018, 166, 49-55. | 1.2 | 65 |
| 45 | Ultrastructural basement membrane topography of the bladder epithelium. <i>Urological Research</i> , 2003, 31, 341-346. | 1.5 | 64 |
| 46 | Adhesion and proliferation of corneal epithelial cells on self-assembled monolayers. <i>Journal of Biomedical Materials Research Part B</i> , 2000, 52, 261-269. | 3.0 | 63 |
| 47 | Cell behavior on lithographically defined nanostructured substrates. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2003, 21, 683. | 1.6 | 57 |
| 48 | The ability of corneal epithelial cells to recognize high aspect ratio nanostructures. <i>Biomaterials</i> , 2010, 31, 4064-4072. | 5.7 | 56 |
| 49 | What do mechanotransduction, Hippo, Wnt, and TGF β 2 have in common? YAP and TAZ as key orchestrating molecules in ocular health and disease. <i>Experimental Eye Research</i> , 2013, 115, 1-12. | 1.2 | 54 |
| 50 | Automated AFM force curve analysis for determining elastic modulus of biomaterials and biological samples. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2014, 37, 209-218. | 1.5 | 54 |
| 51 | The intrinsic stiffness of human trabecular meshwork cells increases with senescence. <i>Oncotarget</i> , 2015, 6, 15362-15374. | 0.8 | 54 |
| 52 | Polymeric Multilayers that Contain Silver Nanoparticles can be Stamped onto Biological Tissues to Provide Antibacterial Activity. <i>Advanced Functional Materials</i> , 2011, 21, 1863-1873. | 7.8 | 53 |
| 53 | Interfacial Phenomena and the Ocular Surface. <i>Ocular Surface</i> , 2014, 12, 178-201. | 2.2 | 53 |
| 54 | The role of substratum compliance of hydrogels on vascular endothelial cell behavior. <i>Biomaterials</i> , 2011, 32, 5056-5064. | 5.7 | 52 |

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|----|--|-----|-----------|
| 55 | Glaucomatous cell derived matrices differentially modulate non-glaucomatous trabecular meshwork cellular behavior. <i>Acta Biomaterialia</i> , 2018, 71, 444-459. | 4.1 | 51 |
| 56 | Nano- and Microscale Holes Modulate Cell-Substrate Adhesion, Cytoskeletal Organization, and β 1 Integrin Localization in Sv40 Human Corneal Epithelial Cells. <i>IEEE Transactions on Nanobioscience</i> , 2006, 5, 273-280. | 2.2 | 49 |
| 57 | Periocular and Intra-Articular Injection of Canine Adipose-Derived Mesenchymal Stem Cells: An In Vivo Imaging and Migration Study. <i>Journal of Ocular Pharmacology and Therapeutics</i> , 2012, 28, 307-317. | 0.6 | 49 |
| 58 | Non-toxic thermotropic liquid crystals for use with mammalian cells. <i>Liquid Crystals</i> , 2004, 31, 611-621. | 0.9 | 48 |
| 59 | Biophysical Cueing and Vascular Endothelial Cell Behavior. <i>Materials</i> , 2010, 3, 1620-1639. | 1.3 | 47 |
| 60 | The effect of elevated extracellular glucose on migration, adhesion and proliferation of SV40 transformed human corneal epithelial cells. <i>Current Eye Research</i> , 1998, 17, 924-932. | 0.7 | 46 |
| 61 | Topographic Modulation of the Orientation and Shape of Cell Nuclei and Their Influence on the Measured Elastic Modulus of Epithelial Cells. <i>Biophysical Journal</i> , 2011, 101, 2139-2146. | 0.2 | 46 |
| 62 | Substratum Compliance Modulates Corneal Fibroblast to Myofibroblast Transformation. , 2013, 54, 5901. | | 46 |
| 63 | Wnt inhibition induces persistent increases in intrinsic stiffness of human trabecular meshwork cells. <i>Experimental Eye Research</i> , 2015, 132, 174-178. | 1.2 | 46 |
| 64 | Hydrogels with well-defined peptide-hydrogel spacing and concentration: impact on epithelial cell behavior. <i>Soft Matter</i> , 2012, 8, 390-398. | 1.2 | 45 |
| 65 | Substratum Stiffness and Latrunculin B Regulate Matrix Gene and Protein Expression in Human Trabecular Meshwork Cells. , 2012, 53, 952. | | 44 |
| 66 | Anchoring a cytoactive factor in a wound bed promotes healing. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2016, 10, 1012-1020. | 1.3 | 44 |
| 67 | Safety and immunomodulatory effects of allogeneic canine adipose-derived mesenchymal stromal cells transplanted into the region of the lacrimal gland, the gland of the third eyelid and the knee joint. <i>Cytotherapy</i> , 2013, 15, 1498-1510. | 0.3 | 42 |
| 68 | Refractive state, ocular anatomy, and accommodative range of the sea otter (<i>Enhydra lutris</i>). <i>Vision Research</i> , 1990, 30, 23-32. | 0.7 | 41 |
| 69 | Successful Six-Day Kidney Preservation Using Trophic Factor Supplemented Media and Simple Cold Storage. <i>American Journal of Transplantation</i> , 2002, 2, 712-718. | 2.6 | 40 |
| 70 | PDGF-BB Does Not Accelerate Healing in Diabetic Mice with Splinted Skin Wounds. <i>PLoS ONE</i> , 2014, 9, e104447. | 1.1 | 39 |
| 71 | Response of Human Trabecular Meshwork Cells to Topographic Cues on the Nanoscale Level. , 2008, 49, 629. | | 38 |
| 72 | Antibacterial Efficacy of Silver-Impregnated Polyelectrolyte Multilayers Immobilized on a Biological Dressing in a Murine Wound Infection Model. <i>Annals of Surgery</i> , 2012, 256, 371-377. | 2.1 | 38 |

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|----|--|-----|-----------|
| 73 | Biomechanical relationships between the corneal endothelium and Descemet's membrane. <i>Experimental Eye Research</i> , 2016, 152, 57-70. | 1.2 | 38 |
| 74 | Identification of genes required for eye development by high-throughput screening of mouse knockouts. <i>Communications Biology</i> , 2018, 1, 236. | 2.0 | 37 |
| 75 | Involvement of YAP, TAZ and HSP90 in Contact Guidance and Intercellular Junction Formation in Corneal Epithelial Cells. <i>PLoS ONE</i> , 2014, 9, e109811. | 1.1 | 37 |
| 76 | Nerve growth factor and corneal wound healing in dogs. <i>Experimental Eye Research</i> , 2005, 80, 633-642. | 1.2 | 36 |
| 77 | Thermal cautery of the cornea for treatment of spontaneous chronic corneal epithelial defects in dogs and horses. <i>Journal of the American Veterinary Medical Association</i> , 2004, 224, 250-253. | 0.2 | 35 |
| 78 | Intravitreal Administration of Human Bone Marrow CD34+ Stem Cells in a Murine Model of Retinal Degeneration. , 2016, 57, 4125. | | 34 |
| 79 | Human Trabecular Meshwork Cells Exhibit Several Characteristics of, but Are Distinct from, Adipose-Derived Mesenchymal Stem Cells. <i>Journal of Ocular Pharmacology and Therapeutics</i> , 2014, 30, 254-266. | 0.6 | 33 |
| 80 | Early responses of vascular endothelial cells to topographic cues. <i>American Journal of Physiology - Cell Physiology</i> , 2013, 305, C290-C298. | 2.1 | 32 |
| 81 | Structural organization of the cytoskeleton in SV40 human corneal epithelial cells cultured on nano- and microscale grooves. <i>Scanning</i> , 2008, 30, 405-413. | 0.7 | 31 |
| 82 | Effect of Stratification on Surface Properties of Corneal Epithelial Cells. , 2015, 56, 8340. | | 31 |
| 83 | In Vivo Imaging of Corneal Endothelial Dystrophy in Boston Terriers: A Spontaneous, Canine Model for Fuchs' Endothelial Corneal Dystrophy. , 2016, 57, OCT495. | | 31 |
| 84 | A Population Study of Common Ocular Abnormalities in C57BL/6N Mice. , 2018, 59, 2252. | | 31 |
| 85 | YAP and TAZ are distinct effectors of corneal myofibroblast transformation. <i>Experimental Eye Research</i> , 2019, 180, 102-109. | 1.2 | 31 |
| 86 | The influence of substrate topography on the migration of corneal epithelial wound borders. <i>Biomaterials</i> , 2013, 34, 9244-9251. | 5.7 | 30 |
| 87 | Refractive state, corneal curvature, accommodative range and ocular anatomy of the Asian elephant (<i>Elephas maximus</i>). <i>Vision Research</i> , 1992, 32, 2013-2021. | 0.7 | 29 |
| 88 | Improved survival of orthotopic liver allograft in swine by addition of trophic factors to University of Wisconsin solution. <i>Transplantation</i> , 2004, 77, 302-304. | 0.5 | 29 |
| 89 | Substratum Compliance Regulates Human Trabecular Meshwork Cell Behaviors and Response to Latrunculin B. , 2011, 52, 9298. | | 29 |
| 90 | Reduction in Wound Bioburden using a Silver-Loaded Dissolvable Microfilm Construct. <i>Advanced Healthcare Materials</i> , 2014, 3, 916-928. | 3.9 | 29 |

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|-----|---|-----|-----------|
| 91 | Impact of Nanotopography, Heparin Hydrogel Microstructures, and Encapsulated Fibroblasts on Phenotype of Primary Hepatocytes. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 12299-12308. | 4.0 | 29 |
| 92 | Compatibility of lyotropic liquid crystals with viruses and mammalian cells that support the replication of viruses. <i>Biomaterials</i> , 2005, 26, 7173-7182. | 5.7 | 28 |
| 93 | The Influence of a Biologically Relevant Substratum Topography on Human Aortic and Umbilical Vein Endothelial Cells. <i>Biophysical Journal</i> , 2012, 102, 1224-1233. | 0.2 | 28 |
| 94 | Robust and artifact-free mounting of tissue samples for atomic force microscopy. <i>BioTechniques</i> , 2014, 56, 40-42. | 0.8 | 27 |
| 95 | The effect of chronic corneal epithelial debridement on epithelial and stromal morphology in dogs. <i>Investigative Ophthalmology and Visual Science</i> , 2002, 43, 2136-42. | 3.3 | 27 |
| 96 | Corneal Storage Medium Preservation with Defensins. <i>Cornea</i> , 1992, 11, 370-375. | 0.9 | 26 |
| 97 | Importance of defining experimental conditions in a mouse excisional wound model. <i>Wound Repair and Regeneration</i> , 2015, 23, 251-261. | 1.5 | 26 |
| 98 | Assessment of tear film osmolality using the TearLab [®] osmometer in normal dogs and dogs with keratoconjunctivitis sicca. <i>Veterinary Ophthalmology</i> , 2017, 20, 357-364. | 0.6 | 26 |
| 99 | The use of native chemical functional groups presented by wound beds for the covalent attachment of polymeric microcarriers of bioactive factors. <i>Biomaterials</i> , 2013, 34, 340-352. | 5.7 | 25 |
| 100 | Influence of Extracellular Matrix Proteins and Substratum Topography on Corneal Epithelial Cell Alignment and Migration. <i>Tissue Engineering - Part A</i> , 2013, 19, 1713-1722. | 1.6 | 24 |
| 101 | Species Differences in the Geometry of the Anterior Segment Differentially Affect Anterior Chamber Cell Scoring Systems in Laboratory Animals. <i>Journal of Ocular Pharmacology and Therapeutics</i> , 2016, 32, 28-37. | 0.6 | 24 |
| 102 | Expression of Matrix Metalloproteinase 2 and 9 in Experimentally Wounded Canine Corneas and Spontaneous Chronic Corneal Epithelial Defects. <i>Cornea</i> , 2007, 26, 1213-1219. | 0.9 | 23 |
| 103 | Altered Stability of mRNAs Associated with Glaucoma Progression in Human Trabecular Meshwork Cells Following Oxidative Stress. , 2012, 53, 1734. | | 23 |
| 104 | Transforming Growth Factor Beta 3 Modifies Mechanics and Composition of Extracellular Matrix Deposited by Human Trabecular Meshwork Cells. <i>ACS Biomaterials Science and Engineering</i> , 2015, 1, 110-118. | 2.6 | 23 |
| 105 | Biomimetic stochastic topography and electric fields synergistically enhance directional migration of corneal epithelial cells in a MMP-3-dependent manner. <i>Acta Biomaterialia</i> , 2015, 12, 102-112. | 4.1 | 23 |
| 106 | Species variation and spatial differences in mucin expression from corneal epithelial cells. <i>Experimental Eye Research</i> , 2016, 152, 43-48. | 1.2 | 23 |
| 107 | <i>In vivo</i> evaluation of the cornea and conjunctiva of the normal laboratory beagle using time-domain and Fourier domain optical coherence tomography and ultrasound pachymetry. <i>Veterinary Ophthalmology</i> , 2016, 19, 50-56. | 0.6 | 23 |
| 108 | The modulation of canine mesenchymal stem cells by nano-topographic cues. <i>Experimental Cell Research</i> , 2012, 318, 2438-2445. | 1.2 | 22 |

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|-----|--|-----|-----------|
| 109 | Nuclear and cellular alignment of primary corneal epithelial cells on topography. <i>Journal of Biomedical Materials Research - Part A</i> , 2013, 101A, 1069-1079. | 2.1 | 22 |
| 110 | Modulation of human corneal stromal cell differentiation by hepatocyte growth factor and substratum compliance. <i>Experimental Eye Research</i> , 2018, 176, 235-242. | 1.2 | 22 |
| 111 | Topical Rho-Associated Kinase Inhibitor, Y27632, Accelerates Corneal Endothelial Regeneration in a Canine Cryoinjury Model. <i>Cornea</i> , 2019, 38, 352-359. | 0.9 | 22 |
| 112 | Inhibition of <i>Pseudomonas aeruginosa</i> biofilm formation on wound dressings. <i>Wound Repair and Regeneration</i> , 2015, 23, 842-854. | 1.5 | 21 |
| 113 | Biosynthetic Corneal Substitute Implantation in Dogs. <i>Cornea</i> , 2010, 29, 910-916. | 0.9 | 20 |
| 114 | A Cell Culture Substrate with Biologically Relevant Size-Scale Topography and Compliance of the Basement Membrane. <i>Langmuir</i> , 2014, 30, 2101-2108. | 1.6 | 19 |
| 115 | Latrunculin B and substratum stiffness regulate corneal fibroblast to myofibroblast transformation. <i>Experimental Eye Research</i> , 2018, 170, 101-107. | 1.2 | 19 |
| 116 | Biomechanical changes to Descemet's membrane precede endothelial cell loss in an early-onset murine model of Fuchs endothelial corneal dystrophy. <i>Experimental Eye Research</i> , 2019, 180, 18-22. | 1.2 | 19 |
| 117 | Focal adhesion kinase knockdown modulates the response of human corneal epithelial cells to topographic cues. <i>Acta Biomaterialia</i> , 2012, 8, 4285-4294. | 4.1 | 18 |
| 118 | Phenotypic Characterization of Corneal Endothelial Dystrophy in German Shorthaired and Wirehaired Pointers Using In Vivo Advanced Corneal Imaging and Histopathology. <i>Cornea</i> , 2018, 37, 88-94. | 0.9 | 18 |
| 119 | Comprehensive Clinical, Diagnostic, and Advanced Imaging Characterization of the Ocular Surface in Spontaneous Aqueous Deficient Dry Eye Disease in Dogs. <i>Cornea</i> , 2019, 38, 1568-1575. | 0.9 | 18 |
| 120 | Cell sorting but not serum starvation is effective for SV40 human corneal epithelial cell cycle synchronization. <i>Experimental Eye Research</i> , 2006, 83, 61-68. | 1.2 | 17 |
| 121 | Refractive state and accommodation in the eyes of free-swimming versus restrained juvenile lemon sharks (<i>Negaprion brevirostris</i>). <i>Vision Research</i> , 2001, 41, 1885-1889. | 0.7 | 16 |
| 122 | Biomechanical, ultrastructural, and electrophysiological characterization of the non-human primate experimental glaucoma model. <i>Scientific Reports</i> , 2017, 7, 14329. | 1.6 | 16 |
| 123 | Animal models of corneal endothelial dysfunction to facilitate development of novel therapies. <i>Annals of Translational Medicine</i> , 2021, 9, 1271-1271. | 0.7 | 16 |
| 124 | Spectacle Wound Healing in the Royal Python (<i>Python regius</i>). <i>Journal of Herpetological Medicine and Surgery</i> , 2010, 20, 29. | 0.2 | 15 |
| 125 | Heat shock protein expression in canine corneal wound healing. <i>Veterinary Ophthalmology</i> , 2016, 19, 262-266. | 0.6 | 15 |
| 126 | Engineered metal oxide nanomaterials inhibit corneal epithelial wound healing in vitro and in vivo. <i>NanoImpact</i> , 2020, 17, 100198. | 2.4 | 14 |

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|-----|--|-----|-----------|
| 127 | The functional significance of crescent-shaped pupils and multiple pupillary apertures. <i>The Journal of Experimental Zoology</i> , 1990, 256, 22-28. | 1.4 | 13 |
| 128 | The Effect of Trophic Factor Supplementation on Cold Ischemia-Induced Early Apoptotic Changes. <i>Transplantation</i> , 2007, 83, 91-94. | 0.5 | 13 |
| 129 | The formation of cortical actin arrays in human trabecular meshwork cells in response to cytoskeletal disruption. <i>Experimental Cell Research</i> , 2014, 328, 164-171. | 1.2 | 12 |
| 130 | <i>In vivo</i> ocular imaging of the cornea of the normal female laboratory beagle using confocal microscopy. <i>Veterinary Ophthalmology</i> , 2016, 19, 63-67. | 0.6 | 12 |
| 131 | Effect of substance P, insulin-like growth factor-1 and vasoactive intestinal polypeptide on corneal re-epithelialization in galactosemic rats. <i>Current Eye Research</i> , 1998, 17, 1143-1149. | 0.7 | 11 |
| 132 | Topical therapeutic agents that modulate corneal wound healing. <i>Veterinary Clinics of North America - Small Animal Practice</i> , 2004, 34, 623-638. | 0.5 | 11 |
| 133 | Gross anatomy and morphometric evaluation of the canine lacrimal and third eyelid glands. <i>Veterinary Ophthalmology</i> , 2016, 19, 230-236. | 0.6 | 11 |
| 134 | Clinical findings and normative ocular data for free-living Anna's (<i>Calypte anna</i>) and Black-chinned (<i>Archilochus alexandri</i>) Hummingbirds. <i>Veterinary Ophthalmology</i> , 2019, 22, 13-23. | 0.6 | 11 |
| 135 | Integration of Silver Nanoparticle-impregnated Polyelectrolyte Multilayers Into Murine-Splinted Cutaneous Wound Beds. <i>Journal of Burn Care and Research</i> , 2013, 34, e359-e367. | 0.2 | 10 |
| 136 | Gallium-Loaded Dissolvable Microfilm Constructs that Provide Sustained Release of Ga ³⁺ for Management of Biofilms. <i>Advanced Healthcare Materials</i> , 2015, 4, 2849-2859. | 3.9 | 10 |
| 137 | <i>Arap1</i> Deficiency Causes Photoreceptor Degeneration in Mice. , 2017, 58, 1709. | | 10 |
| 138 | Ocular phenotypic consequences of a single copy deletion of the gene () in mice. <i>Molecular Vision</i> , 2019, 25, 129-142. | 1.1 | 10 |
| 139 | A novel herpesvirus associated with chronic superficial keratitis and proliferative conjunctivitis in a great horned owl (<i>Bubo virginianus</i>). <i>Veterinary Ophthalmology</i> , 2019, 22, 67-75. | 0.6 | 9 |
| 140 | Stromal Collagen Arrangement Correlates with Stiffness of the Canine Cornea. <i>Bioengineering</i> , 2020, 7, 4. | 1.6 | 9 |
| 141 | Prevention of cold ischemia/rewarming-induced ERK 1/2, p38 kinase and HO-1 activation by trophic factor supplementation of UW solution. <i>Cryobiology</i> , 2008, 57, 72-74. | 0.3 | 8 |
| 142 | Epidermal Growth Factor-Functionalized Polymeric Multilayer Films: Interplay between Spatial Location and Bioavailability of EGF. <i>Journal of Investigative Dermatology</i> , 2014, 134, 1757-1760. | 0.3 | 8 |
| 143 | Blind free-living kiwi offer a unique window into the ecology and evolution of vertebrate vision. <i>BMC Biology</i> , 2017, 15, 85. | 1.7 | 8 |
| 144 | Lipoidal corneal degeneration in aged falcons. <i>Veterinary Ophthalmology</i> , 2018, 21, 332-338. | 0.6 | 8 |

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|-----|---|-----|-----------|
| 145 | Suppression of cold ischemic injury in stored kidneys by the antimicrobial peptide bactenecin. <i>Cryobiology</i> , 2004, 49, 230-240. | 0.3 | 7 |
| 146 | Ocular anatomy of the black pacu (<i>Colossoma macropomum</i>): gross, histologic, and diagnostic imaging. <i>Veterinary Ophthalmology</i> , 2018, 21, 507-515. | 0.6 | 7 |
| 147 | Whorl pattern keratopathies in veterinary and human patients. <i>Veterinary Ophthalmology</i> , 2018, 21, 661-667. | 0.6 | 7 |
| 148 | Genetic analysis of optic nerve head coloboma in the Nova Scotia Duck Tolling Retriever identifies discordance with the NHEJ1 intronic deletion (collie eye anomaly mutation). <i>Veterinary Ophthalmology</i> , 2018, 21, 144-150. | 0.6 | 7 |
| 149 | Effects of 5% sodium chloride ophthalmic ointment on thickness and morphology of the normal canine cornea. <i>Veterinary Ophthalmology</i> , 2019, 22, 229-237. | 0.6 | 7 |
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