

Ahmed I Elsheikh

List of Publications by Year in descending order

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161
papers

6,078
citations

81434

41
h-index

104191

69
g-index

164
all docs

164
docs citations

164
times ranked

3193
citing authors

#	ARTICLE	IF	CITATIONS
1	<i>In Vivo</i> Corneal Stiffness Mapping by the Stress-Strain Index Maps and Brillouin Microscopy. <i>Current Eye Research</i> , 2023, 48, 114-120.	0.7	7
2	Keratoconus: A Biomechanical Perspective. <i>Current Eye Research</i> , 2023, 48, 121-129.	0.7	7
3	Effect of travoprost, latanoprost and bimatoprost PGF ₂ treatments on the biomechanical properties of in-vivo rabbit cornea. <i>Experimental Eye Research</i> , 2022, 215, 108920.	1.2	5
4	Tropocollagen springs allow collagen fibrils to stretch elastically. <i>Acta Biomaterialia</i> , 2022, 142, 185-193.	4.1	6
5	Evaluation of corneal biomechanical behavior in vivo for healthy and keratoconic eyes using the stress-strain index. <i>Journal of Cataract and Refractive Surgery</i> , 2022, 48, 1162-1167.	0.7	12
6	Biomechanical Effects of tPRK, FS-LASIK, and SMILE on the Cornea. <i>Frontiers in Bioengineering and Biotechnology</i> , 2022, 10, 834270.	2.0	16
7	In Vivo Biomechanical Changes Associated With Keratoconus Progression. <i>Current Eye Research</i> , 2022, 47, 982-986.	0.7	6
8	The Effect of Intracorneal Ring Segments Implantation for Keratoconus on In Vivo Corneal Biomechanics Assessed With the Corvis ST. <i>Journal of Refractive Surgery</i> , 2022, 38, 264-269.	1.1	4
9	Accuracy and reliability of orthogonal polynomials in representing corneal topography. <i>Medicine in Novel Technology and Devices</i> , 2022, 15, 100133.	0.9	2
10	Biomechanical Evaluation of Topographically and Tomographically Normal Fellow Eyes of Patients With Keratoconus. <i>Journal of Refractive Surgery</i> , 2022, 38, 318-325.	1.1	8
11	The anterior cruciate ligament in murine post-traumatic osteoarthritis: markers and mechanics. <i>Arthritis Research and Therapy</i> , 2022, 24, .	1.6	1
12	Long-term Effects of Riboflavin Ultraviolet-A Induced CXL With Different Irradiances on the Biomechanics of In Vivo Rabbit Corneas. <i>Journal of Refractive Surgery</i> , 2022, 38, 389-397.	1.1	2
13	Combining Spectral-Domain OCT and Air-Puff Tonometry Analysis to Diagnose Keratoconus. <i>Journal of Refractive Surgery</i> , 2022, 38, 374-380.	1.1	8
14	Simultaneous multi-spot OCT measurements of air induced corneal deformations. , 2022, , .		0
15	Influence of analytical methods versus clamping procedure on biomechanical response of cornea through experimental strip tests. <i>Materials Today: Proceedings</i> , 2021, 44, 4375-4380.	0.9	2
16	Biomechanical Effects of Two Forms of PGF ₂ on Ex-vivo Rabbit Cornea. <i>Current Eye Research</i> , 2021, 46, 452-460.	0.7	5
17	Experimental evaluation of the viscoelasticity of porcine vitreous. <i>Journal of the Royal Society Interface</i> , 2021, 18, 20200849.	1.5	5
18	Determination of Optic Axes by Corneal Topography among Italian, Brazilian, and Chinese Populations. <i>Photonics</i> , 2021, 8, 61.	0.9	4

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19	Compressive behaviour of soft contact lenses and its effect on refractive power on the eye and handling off the eye. PLoS ONE, 2021, 16, e0247194.	1.1	2
20	Fibril density reduction in keratoconic corneas. Journal of the Royal Society Interface, 2021, 18, 20200900.	1.5	8
21	Computational and experimental analysis of a Glaucoma flat drainage device. Journal of Biomechanics, 2021, 118, 110234.	0.9	1
22	Stress–Strain Index Map: A New Way to Represent Corneal Material Stiffness. Frontiers in Bioengineering and Biotechnology, 2021, 9, 640434.	2.0	18
23	Unintended changes in ocular biometric parameters during a 6-month follow-up period after FS-LASIK and SMILE. Eye and Vision (London, England), 2021, 8, 9.	1.4	7
24	Evaluating Oxygen Tensions Related to Bone Marrow and Matrix for MSC Differentiation in 2D and 3D Biomimetic Lamellar Scaffolds. International Journal of Molecular Sciences, 2021, 22, 4010.	1.8	8
25	Clinical Validation of the Automated Characterization of Cone Size and Center in Keratoconic Corneas. Journal of Refractive Surgery, 2021, 37, 414-421.	1.1	3
26	Review of in-vivo characterisation of corneal biomechanics. Medicine in Novel Technology and Devices, 2021, 11, 100073.	0.9	21
27	Review of ex-vivo characterisation of corneal biomechanics. Medicine in Novel Technology and Devices, 2021, 11, 100074.	0.9	6
28	Detection of postlaser vision correction ectasia with a new combined biomechanical index. Journal of Cataract and Refractive Surgery, 2021, 47, 1314-1318.	0.7	22
29	Effect of external post-tensioning on steel–concrete composite beams with partial connection. Engineering Structures, 2021, 247, 113130.	2.6	14
30	Effect of Mydriasis-Caused Intraocular Pressure Changes on Corneal Biomechanical Metrics. Frontiers in Bioengineering and Biotechnology, 2021, 9, 751628.	2.0	5
31	Changes in Corneal Biomechanical Properties in PRK Followed by Two Accelerated CXL Energy Doses in Rabbit Eyes. Journal of Refractive Surgery, 2021, 37, 853-860.	1.1	3
32	A new approach for quantifying epithelial and stromal thickness changes after orthokeratology contact lens wear. Royal Society Open Science, 2021, 8, 211108.	1.1	6
33	Performance of Zernike polynomials in reconstructing raw-elevation data captured by Pentacam HR, Medmont E300 and Eye Surface Profiler. Heliyon, 2021, 7, e08623.	1.4	3
34	Corneal biomechanics and biomechanically corrected intraocular pressure in primary open-angle glaucoma, ocular hypertension and controls. British Journal of Ophthalmology, 2020, 104, 121-126.	2.1	67
35	Inflation experiments and inverse finite element modelling of posterior human sclera. Journal of Biomechanics, 2020, 98, 109438.	0.9	12
36	Effectiveness of the Goldmann Applanation Tonometer, the Dynamic Contour Tonometer, the Ocular Response Analyzer and the Corvis ST in Measuring Intraocular Pressure following FS-LASIK. Current Eye Research, 2020, 45, 144-152.	0.7	17

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37	Simulation of Air Puff Tonometry Test Using Arbitrary Lagrangian-Eulerian (ALE) Deforming Mesh for Corneal Material Characterisation. International Journal of Environmental Research and Public Health, 2020, 17, 54.	1.2	22
38	Fluid-Structure Interaction Based Algorithms for IOP and Corneal Material Behavior. Frontiers in Bioengineering and Biotechnology, 2020, 8, 970.	2.0	11
39	Characterization of cone size and centre in keratoconic corneas. Journal of the Royal Society Interface, 2020, 17, 20200271.	1.5	14
40	A full-field 3D digital image correlation and modelling technique to characterise anterior cruciate ligament mechanics ex vivo. Acta Biomaterialia, 2020, 113, 417-428.	4.1	11
41	Effectiveness of 4 tonometers in measuring IOP after femtosecond laser-assisted LASIK, SMILE, and transepithelial photorefractive keratectomy. Journal of Cataract and Refractive Surgery, 2020, 46, 967-974.	0.7	13
42	The Effects of Shear Stud Distribution on the Fatigue Behavior of Steel-Concrete Composite Beams. Arabian Journal for Science and Engineering, 2020, 45, 8403-8426.	1.7	10
43	Biomechanical diagnostics of the cornea. Eye and Vision (London, England), 2020, 7, 9.	1.4	73
44	Multi-meridian corneal imaging of air-puff induced deformation for improved detection of biomechanical abnormalities. Biomedical Optics Express, 2020, 11, 6337.	1.5	28
45	Which feature influences on-eye power change of soft toric contact lenses: Design or corneal shape?. PLoS ONE, 2020, 15, e0242243.	1.1	5
46	Can the Corvis ST Estimate Corneal Viscoelasticity?. Journal of Refractive Surgery, 2020, 36, 346-347.	1.1	5
47	Viscoelastic characteristics of the canine cranial cruciate ligament complex at slow strain rates. PeerJ, 2020, 8, e10635.	0.9	5
48	Experimental evaluation of stiffening effect induced by UVA/Riboflavin corneal cross-linking using intact porcine eye globes. PLoS ONE, 2020, 15, e0240724.	1.1	6
49	Title is missing!. , 2020, 15, e0240724.		0
50	Title is missing!. , 2020, 15, e0240724.		0
51	Title is missing!. , 2020, 15, e0240724.		0
52	Title is missing!. , 2020, 15, e0240724.		0
53	Development and validation of a new intraocular pressure estimate for patients with soft corneas. Journal of Cataract and Refractive Surgery, 2019, 45, 1316-1323.	0.7	24
54	Artefact-free topography based scleral-asymmetry. PLoS ONE, 2019, 14, e0219789.	1.1	18

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55	<p>Biomechanically-Corrected Intraocular Pressure Compared To Pressure Measured With Commonly Used Tonometers In Normal Subjects</p>. Clinical Optometry, 2019, Volume 11, 127-133.	0.4	13
56	Simulation of the Effect of Material Properties on Soft Contact Lens On-Eye Power. Bioengineering, 2019, 6, 94.	1.6	8
57	Numerical Simulation of Corneal Fibril Reorientation in Response to External Loading. International Journal of Environmental Research and Public Health, 2019, 16, 3278.	1.2	1
58	Simulated optical performance of soft contact lenses on the eye. PLoS ONE, 2019, 14, e0216484.	1.1	14
59	Microstructure-based numerical simulation of the mechanical behaviour of ocular tissue. Journal of the Royal Society Interface, 2019, 16, 20180685.	1.5	26
60	Corneal deformation amplitude analysis for keratoconus detection through compensation for intraocular pressure and integration with horizontal thickness profile. Computers in Biology and Medicine, 2019, 109, 263-271.	3.9	10
61	Determination of Corneal Biomechanical Behavior in-vivo for Healthy Eyes Using CorVis ST Tonometry: Stress-Strain Index. Frontiers in Bioengineering and Biotechnology, 2019, 7, 105.	2.0	138
62	Regional changes in corneal shape over a 6-month follow-up after femtosecond-assisted LASIK. Journal of Cataract and Refractive Surgery, 2019, 45, 766-777.	0.7	11
63	Non-Orthogonal Refractive Lenses for Non-Orthogonal Astigmatic Eyes. Current Eye Research, 2019, 44, 781-789.	0.7	3
64	Analysis of X-ray scattering microstructure data for implementation in numerical simulations of ocular biomechanical behaviour. PLoS ONE, 2019, 14, e0214770.	1.1	10
65	Effect of freezing and thawing on the biomechanical characteristics of porcine ocular tissues. Journal of Biomechanics, 2019, 87, 93-99.	0.9	7
66	Efficacy and Safety of Transglutaminase-Induced Corneal Stiffening in Rabbits. Translational Vision Science and Technology, 2019, 8, 27.	1.1	14
67	Experimental Evaluation of Travoprost-Induced Changes in Biomechanical Behavior of Ex-Vivo Rabbit Corneas. Current Eye Research, 2019, 44, 19-24.	0.7	9
68	Non-Orthogonal Corneal Astigmatism among Normal and Keratoconic Brazilian and Chinese populations. Current Eye Research, 2018, 43, 717-724.	0.7	11
69	Numerical study of the effect of head and eye movement on progression of retinal detachment. Biomechanics and Modeling in Mechanobiology, 2018, 17, 975-983.	1.4	17
70	Development and clinical verification of numerical simulation for laser in situ keratomileusis. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 83, 126-134.	1.5	15
71	Clinical evaluation of a new correction algorithm for dynamic Scheimpflug analyzer tonometry before and after laser in situ keratomileusis and small-incision lenticule extraction. Journal of Cataract and Refractive Surgery, 2018, 44, 581-588.	0.7	22
72	The hierarchical response of human corneal collagen to load. Acta Biomaterialia, 2018, 65, 216-225.	4.1	55

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73	A viscoelastic anisotropic hyperelastic constitutive model of the human cornea. <i>Biomechanics and Modeling in Mechanobiology</i> , 2018, 17, 19-29.	1.4	31
74	Three-dimensional non-parametric method for limbus detection. <i>PLoS ONE</i> , 2018, 13, e0207710.	1.1	22
75	Using Imbalanced Learning: A Case Study in Refractive Surgery Outcome Prediction. , 2018, , .		0
76	Intelligent Planning for Laser Refractive Surgeries. <i>Journal of Physics: Conference Series</i> , 2018, 976, 012009.	0.3	1
77	Biomechanical behaviour of Anisotropy of eye cornea through experimental strip tests. <i>IOP Conference Series: Materials Science and Engineering</i> , 2018, 310, 012075.	0.3	4
78	Should the Corvis Biomechanical Index (CBI) Include Corneal Thickness Parameters?. <i>Journal of Refractive Surgery</i> , 2018, 34, 213-216.	1.1	8
79	Positions of Ocular Geometrical and Visual Axes in Brazilian, Chinese and Italian Populations. <i>Current Eye Research</i> , 2018, 43, 1404-1414.	0.7	13
80	Ex-vivo experimental validation of biomechanically-corrected intraocular pressure measurements on human eyes using the CorVis ST. <i>Experimental Eye Research</i> , 2018, 175, 98-102.	1.2	60
81	Changes in Corneal Biomechanical Properties With Different Corneal Cross-linking Irradiances. <i>Journal of Refractive Surgery</i> , 2018, 34, 51-58.	1.1	42
82	The Relationship Between Mechanical Properties, Ultrastructural Changes, and Intrafibrillar Bond Formation in Corneal UVA/Riboflavin Cross-linking Treatment for Keratoconus. <i>Journal of Refractive Surgery</i> , 2018, 34, 264-272.	1.1	38
83	Bulk changes in posterior scleral collagen microstructure in human high myopia. <i>Molecular Vision</i> , 2018, 24, 818-833.	1.1	13
84	Human adipose derived stem cells are superior to human osteoblasts (HOB) in bone tissue engineering on a collagen-fibroin-ELR blend. <i>Bioactive Materials</i> , 2017, 2, 71-81.	8.6	21
85	Effects of diabetes mellitus on biomechanical properties of the rabbit cornea. <i>Experimental Eye Research</i> , 2017, 161, 82-88.	1.2	29
86	Role of Corneal Biomechanics in the Diagnosis and Management of Keratoconus. <i>Essentials in Ophthalmology</i> , 2017, , 141-150.	0.0	1
87	Effect of accelerated corneal crosslinking combined with transepithelial photorefractive keratectomy on dynamic corneal response parameters and biomechanically corrected intraocular pressure measured with a dynamic Scheimpflug analyzer in healthy myopic patients. <i>Journal of Cataract and Refractive Surgery</i> , 2017, 43, 937-945.	0.7	37
88	Evaluating the repeatability of corneal elevation through calculating the misalignment between Successive topography measurements during the follow up of LASIK. <i>Scientific Reports</i> , 2017, 7, 3122.	1.6	6
89	Integration of Scheimpflug-Based Corneal Tomography and Biomechanical Assessments for Enhancing Ectasia Detection. <i>Journal of Refractive Surgery</i> , 2017, 33, 434-443.	1.1	309
90	Changes in biomechanically corrected intraocular pressure and dynamic corneal response parameters before and after transepithelial photorefractive keratectomy and femtosecond laser-assisted laser in situ keratomileusis. <i>Journal of Cataract and Refractive Surgery</i> , 2017, 43, 1495-1503.	0.7	59

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91	Repeatability of corneal elevation maps in keratoconus patients using the tomography matching method. <i>Scientific Reports</i> , 2017, 7, 17457.	1.6	9
92	Repeatability and Reproducibility of Intraocular Pressure and Dynamic Corneal Response Parameters Assessed by the Corvis ST. <i>Journal of Ophthalmology</i> , 2017, 2017, 1-4.	0.6	65
93	Application of particle swarm optimization in inverse finite element modeling to determine the cornea's mechanical behavior. <i>Acta Scientiarum - Technology</i> , 2017, 39, 325.	0.4	4
94	Corneal Biomechanics in Ectatic Diseases: Refractive Surgery Implications. <i>Open Ophthalmology Journal</i> , 2017, 11, 176-193.	0.1	56
95	Introduction of Two Novel Stiffness Parameters and Interpretation of Air Puff-Induced Biomechanical Deformation Parameters With a Dynamic Scheimpflug Analyzer. <i>Journal of Refractive Surgery</i> , 2017, 33, 266-273.	1.1	190
96	Influence of Pachymetry and Intraocular Pressure on Dynamic Corneal Response Parameters in Healthy Patients. <i>Journal of Refractive Surgery</i> , 2016, 32, 550-561.	1.1	168
97	Consideration of corneal biomechanics in the diagnosis and management of keratoconus: is it important?. <i>Eye and Vision (London, England)</i> , 2016, 3, 18.	1.4	59
98	Clinical Evaluation of Methods to Correct Intraocular Pressure Measurements by the Goldmann Applanation Tonometer, Ocular Response Analyzer, and Corvis ST Tonometer for the Effects of Corneal Stiffness Parameters. <i>Journal of Glaucoma</i> , 2016, 25, 510-519.	0.8	32
99	Detection of Keratoconus With a New Biomechanical Index. <i>Journal of Refractive Surgery</i> , 2016, 32, 803-810.	1.1	363
100	Ex vivo testing of intact eye globes under inflation conditions to determine regional variation of mechanical stiffness. <i>Eye and Vision (London, England)</i> , 2016, 3, 21.	1.4	49
101	Development and validation of a correction equation for Corvis tonometry. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2016, 19, 943-953.	0.9	129
102	Ectasia Detection by the Assessment of Corneal Biomechanics. <i>Cornea</i> , 2016, 35, e18-e20.	0.9	26
103	Reconstruction of 3D surface maps from anterior segment optical coherence tomography images using graph theory and genetic algorithms. <i>Biomedical Signal Processing and Control</i> , 2016, 25, 91-98.	3.5	33
104	Biomechanically Corrected IOP Measurement. <i>Highlights of Ophthalmology</i> , 2016, 44, 7-8.	0.0	1
105	Changes in posterior scleral collagen microstructure in canine eyes with an ADAMTS10 mutation. <i>Molecular Vision</i> , 2016, 22, 503-17.	1.1	9
106	In vivo study of corneal responses to increased intraocular pressure loading. <i>Eye and Vision (London, England)</i> , 2016, 3, 21.	1.4	49
107	Reliability of the Effect of Artificial Anterior Chamber Pressure and Corneal Drying on Corneal Graft Thickness. <i>Cornea</i> , 2015, 34, 866-869.	0.9	18
108	Effect of Misalignment between Successive Corneal Videokeratography Maps on the Repeatability of Topography Data. <i>PLoS ONE</i> , 2015, 10, e0139541.	1.1	6

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109	Evaluation of the relationship of corneal biomechanical metrics with physical intraocular pressure and central corneal thickness in ex vivo rabbit eye globes. <i>Experimental Eye Research</i> , 2015, 137, 11-17.	1.2	49
110	Effect of translation and rotation fitting on analysis of corneal topography. <i>Journal of Medical Engineering and Technology</i> , 2015, 39, 309-315.	0.8	2
111	Assessment of the Ocular Response Analyzer as an Instrument for Measurement of Intraocular Pressure and Corneal Biomechanics. <i>Current Eye Research</i> , 2015, 40, 1111-1119.	0.7	19
112	Fast segmentation of anterior segment optical coherence tomography images using graph cut. <i>Eye and Vision (London, England)</i> , 2015, 2, 1.	1.4	52
113	Biomechanical model of the human cornea: Considering shear stiffness and regional variation of collagen anisotropy and density. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2015, 42, 76-87.	1.5	73
114	Age-Related Variation in the Biomechanical and Structural Properties of the Corneo-Scleral Tunic. <i>Engineering Materials and Processes</i> , 2015, , 207-235.	0.2	5
115	A uniform database of teleseismic shear wave splitting measurements for the western and central United States. <i>Geochemistry, Geophysics, Geosystems</i> , 2014, 15, 2075-2085.	1.0	46
116	Corneal topography matching by iterative registration. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2014, 228, 1154-1167.	1.0	3
117	Influence of glucocorticosteroids on the biomechanical properties of in-vivo rabbit cornea. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2014, 29, 350-359.	1.5	17
118	Modelo biomecánico de la córnea humana considerando la variación regional de la anisotropía, la densidad y la cohesión interlaminar de las fibrillas de colágeno. , 2014, , 343-357.		0
119	Is scleral cross-linking a feasible treatment for myopia control?. <i>Ophthalmic and Physiological Optics</i> , 2013, 33, 385-389.	1.0	16
120	Stress free configuration of the human eye. <i>Medical Engineering and Physics</i> , 2013, 35, 211-216.	0.8	57
121	Clinical evaluation of multiparameter correction equations for Goldmann applanation tonometry. <i>Eye</i> , 2013, 27, 621-629.	1.1	16
122	Automatic segmentation of anterior segment optical coherence tomography images. <i>Journal of Biomedical Optics</i> , 2013, 18, 056003.	1.4	33
123	A wide-angle X-ray fibre diffraction method for quantifying collagen orientation across large tissue areas: application to the human eyeball coat. <i>Journal of Applied Crystallography</i> , 2013, 46, 1481-1489.	1.9	31
124	Correction Factors for Goldmann Tonometry. <i>Journal of Glaucoma</i> , 2013, 22, 156-163.	0.8	17
125	Evaluation of the Shape Symmetry of Bilateral Normal Corneas in a Chinese Population. <i>PLoS ONE</i> , 2013, 8, e73412.	1.1	25
126	Assessment of Corneal Biomechanical Behavior Under Posterior and Anterior Pressure. <i>Journal of Refractive Surgery</i> , 2013, 29, 64-71.	1.1	19

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127	Corneal Mechanical Stiffness and its Effect on Tonometry. Journal of Glaucoma, 2012, 21, 1.	0.8	1
128	In Vivo Evidence for a Bridging Role of a Collagen V Subtype at the Epidermis-Dermis Interface. Journal of Investigative Dermatology, 2012, 132, 1841-1849.	0.3	33
129	Age-related variations in the biomechanical properties of human sclera. Journal of the Mechanical Behavior of Biomedical Materials, 2012, 16, 181-191.	1.5	104
130	Effect of glucose on the stress-strain behavior of ex-vivo rabbit cornea. Experimental Eye Research, 2011, 92, 353-360.	1.2	29
131	Multiparameter Correction Equation for Goldmann Applanation Tonometry. Optometry and Vision Science, 2011, 88, E102-E112.	0.6	47
132	The Influence of Lamellar Orientation on Corneal Material Behavior: Biomechanical and Structural Changes in an Avian Corneal Disorder. , 2011, 52, 1243.		18
133	Biometry of the Cornea in Myopic Chinese Patients. Journal of Refractive Surgery, 2011, 27, 345-355.	1.1	13
134	Strain-rate sensitivity of porcine and ovine corneas. Acta of Bioengineering and Biomechanics, 2011, 13, 25-36.	0.2	16
135	Characterization of age-related variation in corneal biomechanical properties. Journal of the Royal Society Interface, 2010, 7, 1475-1485.	1.5	163
136	Corneal biomechanical characteristics in patients with diabetes mellitus. Journal of Cataract and Refractive Surgery, 2010, 36, 1822-1828.	0.7	57
137	Regional variation in the biomechanical properties of the human sclera. Experimental Eye Research, 2010, 90, 624-633.	1.2	126
138	Estimation of Shear Strength of Structural Shear Walls. Journal of Structural Engineering, 2010, 136, 1215-1224.	1.7	27
139	Finite Element Modeling of Corneal Biomechanical Behavior. Journal of Refractive Surgery, 2010, 26, 289-300.	1.1	62
140	Assessment of the Ocular Response Analyzer as a Tool for Intraocular Pressure Measurement. Journal of Biomechanical Engineering, 2009, 131, 081010.	0.6	22
141	Goldmann Tonometry Correction Factors Based on Numerical Analysis. Journal of Biomechanical Engineering, 2009, 131, 111013.	0.6	13
142	Nanopatterning of Collagen Scaffolds Improve the Mechanical Properties of Tissue Engineered Vascular Grafts. Biomacromolecules, 2009, 10, 814-821.	2.6	63
143	Mechanical anisotropy of porcine cornea and correlation with stromal microstructure. Experimental Eye Research, 2009, 88, 1084-1091.	1.2	80
144	Ultrastructural changes in the retinopathy, globe enlarged (rge) chick cornea. Journal of Structural Biology, 2009, 166, 195-204.	1.3	33

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145	Numerical Study of the Effect of Corneal Layered Structure on Ocular Biomechanics. Current Eye Research, 2009, 34, 26-35.	0.7	50
146	Assessment of the epithelium's contribution to corneal biomechanics. Experimental Eye Research, 2008, 86, 445-451.	1.2	91
147	Biomechanical properties of human and porcine corneas. Experimental Eye Research, 2008, 86, 783-790.	1.2	198
148	Experimental Assessment of Human Corneal Hysteresis. Current Eye Research, 2008, 33, 205-213.	0.7	67
149	Experimental Assessment of Corneal Anisotropy. Journal of Refractive Surgery, 2008, 24, 178-187.	1.1	78
150	Assessment of Corneal Biomechanical Properties and Their Variation with Age. Current Eye Research, 2007, 32, 11-19.	0.7	336
151	Numerical modelling of corneal biomechanical behaviour. Computer Methods in Biomechanics and Biomedical Engineering, 2007, 10, 85-95.	0.9	54
152	Influence of keratocytes and retinal pigment epithelial cells on the mechanical properties of polyester-based tissue engineering micropatterned films. Biomaterials, 2007, 28, 3489-3496.	5.7	27
153	Effect of human corneal keratocytes and retinal pigment epithelial cells on the mechanical properties of micropatterned collagen films. Biomaterials, 2007, 28, 4303-4310.	5.7	55
154	Determination of the Modulus of Elasticity of the Human Cornea. Journal of Refractive Surgery, 2007, 23, 808-818.	1.1	140
155	Determination of the modulus of elasticity of the human cornea. Journal of Refractive Surgery, 2007, 23, 808-18.	1.1	48
156	Corneal Thickness- and Age-Related Biomechanical Properties of the Cornea Measured with the Ocular Response Analyzer. , 2006, 47, 5337.		396
157	Structural Assessment of Rapid Deployment Canopy Structure. Advances in Structural Engineering, 2006, 9, 241-256.	1.2	1
158	Evaluation of Goldmann Applanation Tonometry Using a Nonlinear Finite Element Ocular Model. Annals of Biomedical Engineering, 2006, 34, 1628-1640.	1.3	58
159	Comparative study of corneal strip extensometry and inflation tests. Journal of the Royal Society Interface, 2005, 2, 177-185.	1.5	175
160	Tonometry â€œ Past, Present and Future. , 0, , .		16
161	In vivo Assessment of Localised Corneal Biomechanical Deterioration With Keratoconus Progression. Frontiers in Bioengineering and Biotechnology, 0, 10, .	2.0	3