Ahmed I Elsheikh

List of Publications by Year
in descending order

161 papers	6,078 citations	71102 41 h-index	91884 69 g-index
164 all docs	164 docs citations	164 times ranked	2933 citing authors

#	Article	IF	Citations
1	Corneal Thickness- and Age-Related Biomechanical Properties of the Cornea Measured with the Ocular Response Analyzer. , 2006, 47, 5337.		396
2	Detection of Keratoconus With a New Biomechanical Index. Journal of Refractive Surgery, 2016, 32, 803-810.	2.3	363
3	Assessment of Corneal Biomechanical Properties and Their Variation with Age. Current Eye Research, 2007, 32, 11-19.	1.5	336
4	Integration of Scheimpflug-Based Corneal Tomography and Biomechanical Assessments for Enhancing Ectasia Detection. Journal of Refractive Surgery, 2017, 33, 434-443.	2.3	309
5	Biomechanical properties of human and porcine corneas. Experimental Eye Research, 2008, 86, 783-790.	2.6	198
6	Introduction of Two Novel Stiffness Parameters and Interpretation of Air Puffâ€“Induced Biomechanical Deformation Parameters With a Dynamic Scheimpflug Analyzer. Journal of Refractive Surgery, 2017, 33, 266-273.	2.3	190
7	Comparative study of corneal strip extensometry and inflation tests. Journal of the Royal Society Interface, 2005, 2, 177-185.	3.4	175
8	Influence of Pachymetry and Intraocular Pressure on Dynamic Corneal Response Parameters in Healthy Patients. Journal of Refractive Surgery, 2016, 32, 550-561.	2.3	168
9	Characterization of age-related variation in corneal biomechanical properties. Journal of the Royal Society Interface, 2010, 7, 1475-1485.	3.4	163
10	Determination of the Modulus of Elasticity of the Human Cornea. Journal of Refractive Surgery, 2007, 23, 808-818.	2.3	140
11	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.	4.1	138
12	Development and validation of a correction equation for Corvis tonometry. Computer Methods in Biomechanics and Biomedical Engineering, 2016, 19, 943-953.	1.6	129
13	Regional variation in the biomechanical properties of the human sclera. Experimental Eye Research, 2010, 90, 624-633.	2.6	126
14	Age-related variations in the biomechanical properties of human sclera. Journal of the Mechanical Behavior of Biomedical Materials, 2012, 16, 181-191.	3.1	104
15	Assessment of the epithelium's contribution to corneal biomechanics. Experimental Eye Research, 2008, 86, 445-451.	2.6	91
16	Mechanical anisotropy of porcine cornea and correlation with stromal microstructure. Experimental Eye Research, 2009, 88, 1084-1091.	2.6	80
17	Experimental Assessment of Corneal Anisotropy. Journal of Refractive Surgery, 2008, 24, 178-187.	2.3	78
18	Biomechanical model of the human cornea: Considering shear stiffness and regional variation of collagen anisotropy and density. Journal of the Mechanical Behavior of Biomedical Materials, 2015, 42, 76-87.	3.1	73

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19	Biomechanical diagnostics of the cornea. Eye and Vision (London, England), 2020, 7, 9.	3.0	73
20	Experimental Assessment of Human Corneal Hysteresis. Current Eye Research, 2008, 33, 205-213.	1.5	67
21	Corneal biomechanics and biomechanically corrected intraocular pressure in primary open-angle glaucoma, ocular hypertension and controls. British Journal of Ophthalmology, 2020, 104, 121-126.	3.9	67
22	Repeatability and Reproducibility of Intraocular Pressure and Dynamic Corneal Response Parameters Assessed by the Corvis ST. Journal of Ophthalmology, 2017, 2017, 1-4.	1.3	65
23	Nanopatterning of Collagen Scaffolds Improve the Mechanical Properties of Tissue Engineered Vascular Grafts. Biomacromolecules, 2009, 10, 814-821.	5.4	63
24	Finite Element Modeling of Corneal Biomechanical Behavior. Journal of Refractive Surgery, 2010, 26, 289-300.	2.3	62
25	Ex-vivo experimental validation of biomechanically-corrected intraocular pressure measurements on human eyes using the CorVis ST. Experimental Eye Research, 2018, 175, 98-102.	2.6	60
26	Consideration of corneal biomechanics in the diagnosis and management of keratoconus: is it important?. Eye and Vision (London, England), 2016, 3, 18.	3.0	59
27	Changes in biomechanically corrected intraocular pressure and dynamic corneal response parameters before and after transepithelial photorefractive keratectomy and femtosecond laserâ€“assisted laser in situ keratomileusis. Journal of Cataract and Refractive Surgery, 2017, 43, 1495-1503.	1.5	59
28	Evaluation of Goldmann Applanation Tonometry Using a Nonlinear Finite Element Ocular Model. Annals of Biomedical Engineering, 2006, 34, 1628-1640.	2.5	58
29	Corneal biomechanical characteristics in patients with diabetes mellitus. Journal of Cataract and Refractive Surgery, 2010, 36, 1822-1828.	1.5	57
30	Stress free configuration of the human eye. Medical Engineering and Physics, 2013, 35, 211-216.	1.7	57
31	Corneal Biomechanics in Ectatic Diseases: Refractive Surgery Implications. Open Ophthalmology Journal, 2017, 11, 176-193.	0.2	56
32	Effect of human corneal keratocytes and retinal pigment epithelial cells on the mechanical properties of micropatterned collagen films. Biomaterials, 2007, 28, 4303-4310.	11.4	55
33	The hierarchical response of human corneal collagen to load. Acta Biomaterialia, 2018, 65, 216-225.	8.3	55
34	Numerical modelling of corneal biomechanical behaviour. Computer Methods in Biomechanics and Biomedical Engineering, 2007, 10, 85-95.	1.6	54
35	Fast segmentation of anterior segment optical coherence tomography images using graph cut. Eye and Vision (London, England), 2015, 2, 1.	3.0	52
36	Numerical Study of the Effect of Corneal Layered Structure on Ocular Biomechanics. Current Eye Research, 2009, 34, 26-35.	1.5	50

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37	Evaluation of the relationship of corneal biomechanical metrics with physical intraocular pressure and central corneal thickness in exÂvivo rabbit eye globes. Experimental Eye Research, 2015, 137, 11-17.	2.6	49
38	Ex vivo testing of intact eye globes under inflation conditions to determine regional variation of mechanical stiffness. Eye and Vision (London, England), 2016, 3, 21.	3.0	49
39	Determination of the modulus of elasticity of the human cornea. Journal of Refractive Surgery, 2007, 23, 808-18.	2.3	48
40	Multiparameter Correction Equation for Goldmann Applanation Tonometry. Optometry and Vision Science, 2011, 88, E102-E112.	1.2	47
41	A uniform database of teleseismic shear wave splitting measurements for the western and central United States. Geochemistry, Geophysics, Geosystems, 2014, 15, 2075-2085.	2.5	46
42	Changes in Corneal Biomechanical Properties With Different Corneal Cross-linking Irradiances. Journal of Refractive Surgery, 2018, 34, 51-58.	2.3	42
43	The Relationship Between Mechanical Properties, Ultrastructural Changes, and Intrafibrillar Bond Formation in Corneal UVA/Riboflavin Cross-linking Treatment for Keratoconus. Journal of Refractive Surgery, 2018, 34, 264-272.	2.3	38
44	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. Journal of Cataract and Refractive Surgery, 2017, 43, 937-945.	1.5	37
45	In vivo study of corneal responses to increased intraocular pressure loading. Eye and Vision (London,) Tj ETQq1 1 0.784314 rgBT /Ove	3.0	35
46	Ultrastructural changes in the retinopathy, globe enlarged (rge) chick cornea. Journal of Structural Biology, 2009, 166, 195-204.	2.8	33
47	In Vivo Evidence for a Bridging Role of a Collagen V Subtype at the Epidermisâ€“Dermis Interface. Journal of Investigative Dermatology, 2012, 132, 1841-1849.	0.7	33
48	Automatic segmentation of anterior segment optical coherence tomography images. Journal of Biomedical Optics, 2013, 18, 056003.	2.6	33
49	Reconstruction of 3D surface maps from anterior segment optical coherence tomography images using graph theory and genetic algorithms. Biomedical Signal Processing and Control, 2016, 25, 91-98.	5.7	33
50	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. Journal of Glaucoma, 2016, 25, 510-519.	1.6	32
51	A wide-angle X-ray fibre diffraction method for quantifying collagen orientation across large tissue areas: application to the human eyeball coat. Journal of Applied Crystallography, 2013, 46, 1481-1489.	4.5	31
52	A viscoelastic anisotropic hyperelastic constitutive model of the human cornea. Biomechanics and Modeling in Mechanobiology, 2018, 17, 19-29.	2.8	31
53	Effect of glucose on the stressâ€“strain behavior of ex-vivo rabbit cornea. Experimental Eye Research, 2011, 92, 353-360.	2.6	29
54	Effects of diabetes mellitus on biomechanical properties of the rabbit cornea. Experimental Eye Research, 2017, 161, 82-88.	2.6	29

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55	Multi-meridian corneal imaging of air-puff induced deformation for improved detection of biomechanical abnormalities. Biomedical Optics Express, 2020, 11, 6337.	2.9	28
56	Influence of keratocytes and retinal pigment epithelial cells on the mechanical properties of polyester-based tissue engineering micropatterned films. Biomaterials, 2007, 28, 3489-3496.	11.4	27
57	Estimation of Shear Strength of Structural Shear Walls. Journal of Structural Engineering, 2010, 136, 1215-1224.	3.4	27
58	Ectasia Detection by the Assessment of Corneal Biomechanics. Cornea, 2016, 35, e18-e20.	1.7	26
59	Microstructure-based numerical simulation of the mechanical behaviour of ocular tissue. Journal of the Royal Society Interface, 2019, 16, 20180685.	3.4	26
60	Evaluation of the Shape Symmetry of Bilateral Normal Corneas in a Chinese Population. PLoS ONE, 2013, 8, e73412.	2.5	25
61	Development and validation of a new intraocular pressure estimate for patients with soft corneas. Journal of Cataract and Refractive Surgery, 2019, 45, 1316-1323.	1.5	24
62	Assessment of the Ocular Response Analyzer as a Tool for Intraocular Pressure Measurement. Journal of Biomechanical Engineering, 2009, 131, 081010.	1.3	22
63	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.	1.5	22
64	Three-dimensional non-parametric method for limbus detection. PLoS ONE, 2018, 13, e0207710.	2.5	22
65	Simulation of Air Puff Tonometry Test Using Arbitrary Lagrangianâ€“Eulerian (ALE) Deforming Mesh for Corneal Material Characterisation. International Journal of Environmental Research and Public Health, 2020, 17, 54.	2.6	22
66	Detection of postlaser vision correction ectasia with a new combined biomechanical index. Journal of Cataract and Refractive Surgery, 2021, 47, 1314-1318.	1.5	22
67	Human adipose derived stem cells are superior to human osteoblasts (HOB) in bone tissue engineering on a collagen-fibroin-ELR blend. Bioactive Materials, 2017, 2, 71-81.	15.6	21
68	Review of in-vivo characterisation of corneal biomechanics. Medicine in Novel Technology and Devices, 2021, 11, 100073.	1.6	21
69	Assessment of the Ocular Response Analyzer as an Instrument for Measurement of Intraocular Pressure and Corneal Biomechanics. Current Eye Research, 2015, 40, 1111-1119.	1.5	19
70	Assessment of Corneal Biomechanical Behavior Under Posterior and Anterior Pressure. Journal of Refractive Surgery, 2013, 29, 64-71.	2.3	19
71	The Influence of Lamellar Orientation on Corneal Material Behavior: Biomechanical and Structural Changes in an Avian Corneal Disorder. , 2011, 52, 1243.		18
72	Reliability of the Effect of Artificial Anterior Chamber Pressure and Corneal Drying on Corneal Graft Thickness. Cornea, 2015, 34, 866-869.	1.7	18

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73	Artefact-free topography based scleral-asymmetry. PLoS ONE, 2019, 14, e0219789.	2.5	18
74	Stressâ€“Strain Index Map: A New Way to Represent Corneal Material Stiffness. Frontiers in Bioengineering and Biotechnology, 2021, 9, 640434.	4.1	18
75	Correction Factors for Goldmann Tonometry. Journal of Glaucoma, 2013, 22, 156-163.	1.6	17
76	Influence of glucocorticosteroids on the biomechanical properties of in-vivo rabbit cornea. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 29, 350-359.	3.1	17
77	Numerical study of the effect of head and eye movement on progression of retinal detachment. Biomechanics and Modeling in Mechanobiology, 2018, 17, 975-983.	2.8	17
78	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.	1.5	17
79	Tonometry â€“ Past, Present and Future. , 0, , .		16
80	Is scleral crossâ€linking a feasible treatment for myopia control?. Ophthalmic and Physiological Optics, 2013, 33, 385-389.	2.0	16
81	Clinical evaluation of multiparameter correction equations for Goldmann applanation tonometry. Eye, 2013, 27, 621-629.	2.1	16
82	Strain-rate sensitivity of porcine and ovine corneas. Acta of Bioengineering and Biomechanics, 2011, 13, 25-36.	0.4	16
83	Biomechanical Effects of tPRK, FS-LASIK, and SMILE on the Cornea. Frontiers in Bioengineering and Biotechnology, 2022, 10, 834270.	4.1	16
84	Development and clinical verification of numerical simulation for laser in situ keratomileusis. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 83, 126-134.	3.1	15
85	Simulated optical performance of soft contact lenses on the eye. PLoS ONE, 2019, 14, e0216484.	2.5	14
86	Efficacy and Safety of Transglutaminase-Induced Corneal Stiffening in Rabbits. Translational Vision Science and Technology, 2019, 8, 27.	2.2	14
87	Characterization of cone size and centre in keratoconic corneas. Journal of the Royal Society Interface, 2020, 17, 20200271.	3.4	14
88	Effect of external post-tensioning on steelâ€“concrete composite beams with partial connection. Engineering Structures, 2021, 247, 113130.	5.3	14
89	Goldmann Tonometry Correction Factors Based on Numerical Analysis. Journal of Biomechanical Engineering, 2009, 131, 111013.	1.3	13
90	Positions of Ocular Geometrical and Visual Axes in Brazilian, Chinese and Italian Populations. Current Eye Research, 2018, 43, 1404-1414.	1.5	13

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91	Biomechanically-Corrected Intraocular Pressure Compared To Pressure Measured With Commonly Used Tonometers In Normal Subjects . Clinical Optometry, 2019, Volume 11, 127-133.	1.2	13
92	Effectiveness of 4 tonometers in measuring IOP after femtosecond laserâ€“assisted LASIK, SMILE, and transepithelial photorefractive keratectomy. Journal of Cataract and Refractive Surgery, 2020, 46, 967-974.	1.5	13
93	Biometry of the Cornea in Myopic Chinese Patients. Journal of Refractive Surgery, 2011, 27, 345-355.	2.3	13
94	Bulk changes in posterior scleral collagen microstructure in human high myopia. Molecular Vision, 2018, 24, 818-833.	1.1	13
95	Inflation experiments and inverse finite element modelling of posterior human sclera. Journal of Biomechanics, 2020, 98, 109438.	2.1	12
96	Evaluation of corneal biomechanical behavior in vivo for healthy and keratoconic eyes using the stressâ€“strain index. Journal of Cataract and Refractive Surgery, 2022, 48, 1162-1167.	1.5	12
97	Non-Orthogonal Corneal Astigmatism among Normal and Keratoconic Brazilian and Chinese populations. Current Eye Research, 2018, 43, 717-724.	1.5	11
98	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.	1.5	11
99	Fluid-Structure Interaction Based Algorithms for IOP and Corneal Material Behavior. Frontiers in Bioengineering and Biotechnology, 2020, 8, 970.	4.1	11
100	A full-field 3D digital image correlation and modelling technique to characterise anterior cruciate ligament mechanics ex vivo. Acta Biomaterialia, 2020, 113, 417-428.	8.3	11
101	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.	7.0	10
102	Analysis of X-ray scattering microstructure data for implementation in numerical simulations of ocular biomechanical behaviour. PLoS ONE, 2019, 14, e0214770.	2.5	10
103	The Effects of Shear Stud Distribution on the Fatigue Behavior of Steelâ€“Concrete Composite Beams. Arabian Journal for Science and Engineering, 2020, 45, 8403-8426.	3.0	10
104	Repeatability of corneal elevation maps in keratoconus patients using the tomography matching method. Scientific Reports, 2017, 7, 17457.	3.3	9
105	Experimental Evaluation of Travoprost-Induced Changes in Biomechanical Behavior of Ex-Vivo Rabbit Corneas. Current Eye Research, 2019, 44, 19-24.	1.5	9
106	Changes in posterior scleral collagen microstructure in canine eyes with an ADAMTS10 mutation. Molecular Vision, 2016, 22, 503-17.	1.1	9
107	Should the Corvis Biomechanical Index (CBI) Include Corneal Thickness Parameters?. Journal of Refractive Surgery, 2018, 34, 213-216.	2.3	8
108	Simulation of the Effect of Material Properties on Soft Contact Lens On-Eye Power. Bioengineering, 2019, 6, 94.	3.5	8

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109	Fibril density reduction in keratoconic corneas. Journal of the Royal Society Interface, 2021, 18, 20200900.	3.4	8
110	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.	4.1	8
111	Biomechanical Evaluation of Topographically and Tomographically Normal Fellow Eyes of Patients With Keratoconus. Journal of Refractive Surgery, 2022, 38, 318-325.	2.3	8
112	Combining Spectral-Domain OCT and Air-Puff Tonometry Analysis to Diagnose Keratoconus. Journal of Refractive Surgery, 2022, 38, 374-380.	2.3	8
113	Effect of freezing and thawing on the biomechanical characteristics of porcine ocular tissues. Journal of Biomechanics, 2019, 87, 93-99.	2.1	7
114	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.	3.0	7
115	InÂVivo Corneal Stiffness Mapping by the Stress-Strain Index Maps and Brillouin Microscopy. Current Eye Research, 2023, 48, 114-120.	1.5	7
116	Keratoconus: A Biomechanical Perspective. Current Eye Research, 2023, 48, 121-129.	1.5	7
117	Effect of Misalignment between Successive Corneal Videokeratography Maps on the Repeatability of Topography Data. PLoS ONE, 2015, 10, e0139541.	2.5	6
118	Evaluating the repeatability of corneal elevation through calculating the misalignment between Successive topography measurements during the follow up of LASIK. Scientific Reports, 2017, 7, 3122.	3.3	6
119	Review of ex-vivo characterisation of corneal biomechanics. Medicine in Novel Technology and Devices, 2021, 11, 100074.	1.6	6
120	Experimental evaluation of stiffening effect induced by UVA/Riboflavin corneal cross-linking using intact porcine eye globes. PLoS ONE, 2020, 15, e0240724.	2.5	6
121	Tropocollagen springs allow collagen fibrils to stretch elastically. Acta Biomaterialia, 2022, 142, 185-193.	8.3	6
122	In Vivo Biomechanical Changes Associated With Keratoconus Progression. Current Eye Research, 2022, 47, 982-986.	1.5	6
123	A new approach for quantifying epithelial and stromal thickness changes after orthokeratology contact lens wear. Royal Society Open Science, 2021, 8, 211108.	2.4	6
124	Biomechanical Effects of Two Forms of PGF2Î± on Ex-vivo Rabbit Cornea. Current Eye Research, 2021, 46, 452-460.	1.5	5
125	Experimental evaluation of the viscoelasticity of porcine vitreous. Journal of the Royal Society Interface, 2021, 18, 20200849.	3.4	5
126	Which feature influences on-eye power change of soft toric contact lenses: Design or corneal shape?. PLoS ONE, 2020, 15, e0242243.	2.5	5

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127	Can the Corvis ST Estimate Corneal Viscoelasticity?. Journal of Refractive Surgery, 2020, 36, 346-347.	2.3	5
128	Age-Related Variation in the Biomechanical and Structural Properties of the Corneo-Scleral Tunic. Engineering Materials and Processes, 2015, , 207-235.	0.4	5
129	Viscoelastic characteristics of the canine cranial cruciate ligament complex at slow strain rates. PeerJ, 2020, 8, e10635.	2.0	5
130	Effect of Mydriasis-Caused Intraocular Pressure Changes on Corneal Biomechanical Metrics. Frontiers in Bioengineering and Biotechnology, 2021, 9, 751628.	4.1	5
131	Effect of travoprost, latanoprost and bimatoprost PGF2Î± treatments on the biomechanical properties of in-vivo rabbit cornea. Experimental Eye Research, 2022, 215, 108920.	2.6	5
132	<b>Application of particle swarm optimization in inverse finite element modeling to determine the corneaÂ´s mechanical behavior. Acta Scientiarum - Technology, 2017, 39, 325.	0.4	4
133	Biomechanical behaviour â€“ Anisotropy of eye cornea through experimental strip tests. IOP Conference Series: Materials Science and Engineering, 2018, 310, 012075.	0.6	4
134	Determination of Optic Axes by Corneal Topography among Italian, Brazilian, and Chinese Populations. Photonics, 2021, 8, 61.	2.0	4
135	The Effect of Intracorneal Ring Segments Implantation for Keratoconus on In Vivo Corneal Biomechanics Assessed With the Corvis ST. Journal of Refractive Surgery, 2022, 38, 264-269.	2.3	4
136	Corneal topography matching by iterative registration. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2014, 228, 1154-1167.	1.8	3
137	Non-Orthogonal Refractive Lenses for Non-Orthogonal Astigmatic Eyes. Current Eye Research, 2019, 44, 781-789.	1.5	3
138	Clinical Validation of the Automated Characterization of Cone Size and Center in Keratoconic Corneas. Journal of Refractive Surgery, 2021, 37, 414-421.	2.3	3
139	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.	2.3	3
140	Performance of Zernike polynomials in reconstructing raw-elevation data captured by Pentacam HR, Medmont E300 and Eye Surface Profiler. Heliyon, 2021, 7, e08623.	3.2	3
141	In vivo Assessment of Localised Corneal Biomechanical Deterioration With Keratoconus Progression. Frontiers in Bioengineering and Biotechnology, 0, 10, .	4.1	3
142	Effect of translation and rotation fitting on analysis of corneal topography. Journal of Medical Engineering and Technology, 2015, 39, 309-315.	1.4	2
143	Influence of analytical methods versus clamping procedure on biomechanical response of cornea through experimental strip tests. Materials Today: Proceedings, 2021, 44, 4375-4380.	1.8	2
144	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.	2.5	2

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145	Accuracy and reliability of orthogonal polynomials in representing corneal topography. Medicine in Novel Technology and Devices, 2022, 15, 100133.	1.6	2
146	Long-term Effects of Riboflavin Ultraviolet-Aâ€“Induced CXL With Different Irradiances on the Biomechanics of In Vivo Rabbit Corneas. Journal of Refractive Surgery, 2022, 38, 389-397.	2.3	2
147	Structural Assessment of Rapid Deployment Canopy Structure. Advances in Structural Engineering, 2006, 9, 241-256.	2.4	1
148	Corneal Mechanical Stiffness and its Effect on Tonometry. Journal of Glaucoma, 2012, 21, 1.	1.6	1
149	Role of Corneal Biomechanics in the Diagnosis and Management of Keratoconus. Essentials in Ophthalmology, 2017, , 141-150.	0.1	1
150	Intelligent Planning for Laser Refractive Surgeries. Journal of Physics: Conference Series, 2018, 976, 012009.	0.4	1
151	Numerical Simulation of Corneal Fibril Reorientation in Response to External Loading. International Journal of Environmental Research and Public Health, 2019, 16, 3278.	2.6	1
152	Computational and experimental analysis of a Glaucoma flat drainage device. Journal of Biomechanics, 2021, 118, 110234.	2.1	1
153	Biomechanically Corrected IOP Measurement. Highlights of Ophthalmology, 2016, 44, 7-8.	0.0	1
154	The anterior cruciate ligament in murine post-traumatic osteoarthritis: markers and mechanics. Arthritis Research and Therapy, 2022, 24, .	3.5	1
155	Using Imbalanced Learning: A Case Study in Refractive Surgery Outcome Prediction. , 2018, , .		0
156	Modelo biomecÃ¡nico de la cÃ³rnea humana considerando la variaciÃ³n regional de la anisotropÃa, la densidad y la cohesiÃ³n interlaminar de las fibrillas de colÃ¡geno. , 2014, , 343-357.		0
157	Title is missing!. , 2020, 15, e0240724.		0
158	Title is missing!. , 2020, 15, e0240724.		0
159	Title is missing!. , 2020, 15, e0240724.		0
160	Title is missing!. , 2020, 15, e0240724.		0
161	Simultaneous multi-spot OCT measurements of air induced corneal deformations. , 2022, , .		0