

# Francisco Cavas-Martínez

## List of Publications by Year in descending order

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Version: 2024-02-01

56  
papers

405  
citations

840776

11  
h-index

839539

18  
g-index

60  
all docs

60  
docs citations

60  
times ranked

359  
citing authors

#	ARTICLE	IF	CITATIONS
1	Geometrical Custom Modeling of Human Cornea In Vivo and Its Use for the Diagnosis of Corneal Ectasia. <i>PLoS ONE</i> , 2014, 9, e110249.	2.5	43
2	A new approach to keratoconus detection based on corneal morphogeometric analysis. <i>PLoS ONE</i> , 2017, 12, e0184569.	2.5	31
3	Keratoconus Detection Based on a New Corneal Volumetric Analysis. <i>Scientific Reports</i> , 2017, 7, 15837.	3.3	26
4	Digital photography applied to irrigation management of Little Gem lettuce. <i>Agricultural Water Management</i> , 2015, 151, 148-157.	5.6	19
5	Social interaction learning strategies, motivation, first-year students' experiences and permanence in university studies. <i>Educational Psychology</i> , 2018, 38, 451-469.	2.7	19
6	Detection and Classification of Aircraft Fixation Elements during Manufacturing Processes Using a Convolutional Neural Network. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 6856.	2.5	18
7	3D Printed Personalized Corneal Models as a Tool for Improving Patients' Knowledge of an Asymmetric Disease. <i>Symmetry</i> , 2020, 12, 151.	2.2	18
8	Morphogeometric analysis for characterization of keratoconus considering the spatial localization and projection of apex and minimum corneal thickness point. <i>Journal of Advanced Research</i> , 2020, 24, 261-271.	9.5	17
9	Study of Morpho-Geometric Variables to Improve the Diagnosis in Keratoconus with Mild Visual Limitation. <i>Symmetry</i> , 2018, 10, 306.	2.2	15
10	EMKLAS: A New Automatic Scoring System for Early and Mild Keratoconus Detection. <i>Translational Vision Science and Technology</i> , 2020, 9, 30.	2.2	15
11	Subclinical keratoconus detection with three-dimensional (3D) morphogeometric and volumetric analysis. <i>Acta Ophthalmologica</i> , 2020, 98, e933-e942.	1.1	14
12	A mobile application to calculate optimum drip irrigation laterals. <i>Agricultural Water Management</i> , 2015, 151, 13-18.	5.6	11
13	Three-Dimensional Morphogeometric and Volumetric Characterization of Cornea in Pediatric Patients With Early Keratoconus. <i>American Journal of Ophthalmology</i> , 2021, 222, 102-111.	3.3	11
14	An agent-based paradigm for detecting and acting on vehicles driving in the opposite direction on highways. <i>Expert Systems With Applications</i> , 2013, 40, 5113-5124.	7.6	10
15	Effects of pre-college variables and first-year engineering students' experiences on academic achievement and retention: a structural model. <i>International Journal of Technology and Design Education</i> , 2019, 29, 915-928.	2.6	10
16	Changes in the 3D Corneal Structure and Morphogeometric Properties in Keratoconus after Corneal Collagen Crosslinking. <i>Diagnostics</i> , 2020, 10, 397.	2.6	10
17	Corneal stromal thickness changes after myopic laser corneal refractive surgery. <i>Journal of Cataract and Refractive Surgery</i> , 2022, 48, 334-341.	1.5	10
18	Lente intraocular rápida plegable acrílica de apoyo angular para la corrección de miopía: seguimiento de 5 años. <i>Archivos De La Sociedad Espanola De Oftalmologia</i> , 2017, 92, 4-11.	0.2	9

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19	A Machine-Learning Model Based on Morphogeometric Parameters for RETICS Disease Classification and GUI Development. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 1874.	2.5	9
20	Study and characterization of morphogeometric parameters to assist diagnosis of keratoconus. <i>BioMedical Engineering OnLine</i> , 2018, 17, 161.	2.7	8
21	Assessment of Pattern and Shape Symmetry of Bilateral Normal Corneas by Scheimpflug Technology. <i>Symmetry</i> , 2018, 10, 453.	2.2	8
22	Predicting First-Year College Student Retention: Validation of the College Persistence Questionnaire in a Spanish Sample. <i>Sustainability</i> , 2019, 11, 4425.	3.2	8
23	Assessment of the Association between In Vivo Corneal Morphogeometrical Changes and Keratoconus Eyes with Severe Visual Limitation. <i>Journal of Ophthalmology</i> , 2019, 2019, 1-7.	1.3	7
24	Dynamic Moduli of Polybutylene Terephthalate Glass Fiber Reinforced in High-Temperature Environments. <i>Materials</i> , 2021, 14, 483.	2.9	7
25	Relationship between Corneal Morphogeometrical Properties and Biomechanical Parameters Derived from Dynamic Bidirectional Air Applanation Measurement Procedure in Keratoconus. <i>Diagnostics</i> , 2020, 10, 640.	2.6	6
26	Evidence of a Down Syndrome Keratopathy: A Three-Dimensional (3-D) Morphogeometric and Volumetric Analysis. <i>Journal of Personalized Medicine</i> , 2021, 11, 82.	2.5	6
27	MODELADO VIRTUAL DE UNA ESTRUCTURA BIOLÓGICA: LA CORNEA HUMANA. <i>Dyna (Spain)</i> , 2015, 90, 648-652.	0.2	6
28	An agent-based approach for the application of nature's forms to product conceptual design. <i>PLoS ONE</i> , 2018, 13, e0208930.	2.5	4
29	Myopic Surface Ablation in Asymmetrical Topographies: Refractive Results and Theoretical Corneal Elastic Response. <i>American Journal of Ophthalmology</i> , 2017, 177, 34-43.	3.3	3
30	A Study for Parametric Morphogeometric Operators to Assist the Detection of Keratoconus. <i>Symmetry</i> , 2017, 9, 302.	2.2	3
31	New Affordable Method for Measuring Angular Variations Caused by High Heels on the Sagittal Plane of Feet Joints during Gait. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 5605.	2.5	3
32	Feasibility Analysis of Bolted Joints with Composite Fibre-Reinforced Thermoplastics. <i>Polymers</i> , 2021, 13, 1904.	4.5	3
33	SIMULACIÓN VIRTUAL: UNA TECNOLOGÍA PARA EL IMPULSO DE LA INNOVACIÓN Y LA COMPETITIVIDAD EN LA INDUSTRIA. <i>Dyna (Spain)</i> , 2019, 94, 118-119.	0.2	3
34	Reconstruction by Low Cost Software Based on Photogrammetry as a Reverse Engineering Process. <i>Lecture Notes in Computer Science</i> , 2018, , 145-154.	1.3	3
35	Iterative Methods for the Biomechanical Evaluation of Corneal Response. A Case Study in the Measurement Phase. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 10819.	2.5	3
36	Analysis of the Use of Genetic Algorithms in the Design of Models and Graphical Techniques for Early Detection, Diagnosis, and Characterization of Clinical Pathologies. <i>Lecture Notes in Mechanical Engineering</i> , 2022, , 201-207.	0.4	2

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37	Virtual Surgical Planning for Mandibular Reconstruction: Improving the Fibula Bone Flap. Lecture Notes in Computer Science, 2017, , 282-291.	1.3	1
38	Detection of Subclinical Keratoconus Using Biometric Parameters. Lecture Notes in Computer Science, 2019, , 490-501.	1.3	1
39	Efficacy of Morpho-Geometrical Analysis of the Corneal Surfaces in Keratoconus Disease According to Moderate Visual Limitation. Lecture Notes in Mechanical Engineering, 2020, , 263-272.	0.4	1
40	Initiation to Reverse Engineering by Using Activities Based on Photogrammetry as New Teaching Method in University Technical Studies. Lecture Notes in Computer Science, 2019, , 159-176.	1.3	1
41	Comparison of Corneal Morphologic Parameters and High Order Aberrations in Keratoconus and Normal Eyes. Lecture Notes in Computer Science, 2020, , 87-97.	1.3	1
42	Variable Complexity Corneal Surfaces Characterization by Modal Geometrical Reconstruction Methods: Comparative Study. Lecture Notes in Mechanical Engineering, 2022, , 237-247.	0.4	1
43	Optical Impact of Corneal Clearance in Healthy Eyes Fitted with Scleral Contact Lenses: A Pilot Study. Journal of Clinical Medicine, 2022, 11, 3424.	2.4	1
44	Geometric Modelling of the Human Cornea: A New Approach for the Study of Corneal Ectatic Disease. A Pilot Investigation. Lecture Notes in Computer Science, 2017, , 271-281.	1.3	0
45	Early Keratoconus Detection Enhanced by Modern Diagnostic Technology. Essentials in Ophthalmology, 2017, , 129-139.	0.1	0
46	Geometrical Analysis of Corneal Topography. Essentials in Ophthalmology, 2017, , 103-128.	0.1	0
47	Diagnostic Approach of Corneal Topography Maps. Essentials in Ophthalmology, 2017, , 87-102.	0.1	0
48	Analysis of the Accuracy of Reconstruction of a Human Cornea by Two Geometric Modelling Techniques: A Comparative Study. Lecture Notes in Mechanical Engineering, 2021, , 255-260.	0.4	0
49	Keratoconus Diagnosis by Patient-Specific 3D Modelling and Geometric Parameters Analysis. Lecture Notes in Computer Science, 2017, , 176-187.	1.3	0
50	Nature Inspired Redesign of the Visual Appearance of an Industrial Product. Lecture Notes in Mechanical Engineering, 2020, , 47-58.	0.4	0
51	Experimental Determination of Corneal Elastic Constants and Their Use in Biomechanical Modeling. Applied Sciences (Switzerland), 2021, 11, 11292.	2.5	0
52	TEST ANXIETY ON ENGINEERING STUDIES: ASSOCIATIONS WITH STUDENTS' SOCIO-PERSONAL, COGNITIVE-MOTIVATIONAL AND EMOTIONAL VARIABLES. INTED Proceedings, 2022, , .	0.0	0
53	MITIGATING THE EFFECT OF EDUCATIONAL SHORTCOMINGS IN THE FIELD OF GRAPHICAL EXPRESSION BY A SELF-GUIDED COURSE: A PILOT EXPERIENCE IN HIGHER ENGINEERING STUDIES. INTED Proceedings, 2022, , .	0.0	0
54	Fixing Elements Localization in Aircraft Large Structures Using Machine Learning Techniques. Lecture Notes in Mechanical Engineering, 2022, , 139-146.	0.4	0

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55	A New Method for Measuring Angular Variations Caused by High Heels in Sagittal Plane of Tibiotalar and Metatarsophalangeal Joints During Gait. Lecture Notes in Mechanical Engineering, 2022, , 208-216.	0.4	0
56	Geometrical optimization of thermoforming continuous fibers reinforced thermoplastics with Finite Element Models: A case study. Composites Part B: Engineering, 2022, , 109950.	12.0	0