Renato Natal Jorge

List of Publications by Year in Descending Order

261 papers	6,396 citations	44 h-index	73 g-index
302 ext. papers	7,067 ext. citations	2.7 avg, IF	5.93 L-index

#	Paper	IF	Citations
261	On the Management of Maternal Pushing During the Second Stage of Labor: A Biomechanical Study Considering Passive Tissue Fatigue Damage Accumulation.. *American Journal of Obstetrics and Gynecology*, **2022**,	6.4	1
260	On the hearing effects of a cholesteatoma growing: A biomechanical study. *Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine*, **2022**, 236, 72-83	1.7	
259	Biomechanical characterization of the small intestine to simulate gastrointestinal tract chyme propulsion.. *International Journal for Numerical Methods in Biomedical Engineering*, **2022**, e3588	2.6	
258	Interaction of Abdominal and Pelvic Floor Muscles **2022**, 235-245		
257	Modeling Permanent Deformation during Low-Cycle Fatigue: Application to the Pelvic Floor Muscles during Labor. *Journal of the Mechanics and Physics of Solids*, **2022**, 104908	5	
256	A finite element model to predict the consequences of endolymphatic hydrops in the basilar membrane. *International Journal for Numerical Methods in Biomedical Engineering*, **2021**, e3541	2.6	1
255	Finite element modelling of the surgical procedure for placement of a straight electrode array: Mechanical and clinical consequences. *Journal of Biomechanics*, **2021**, 129, 110812	2.9	0
254	Load adaptation through bone remodeling: a mechanobiological model coupled with the finite element method. *Biomechanics and Modeling in Mechanobiology*, **2021**, 20, 1495-1507	3.8	1
253	Mechanical Effects of a Maylard Scar During a Vaginal Birth After a Previous Caesarean. *Annals of Biomedical Engineering*, **2021**, 1	4.7	1
252	Identification of ulcers and erosions by the novel Pillcamâ□□Crohn□s Capsule using a convolutional neural network: a multicentre pilot study. *Journal of Crohn□s and Colitis*, **2021**,	1.5	7
251	A numerical study on fetal head molding during labor. *International Journal for Numerical Methods in Biomedical Engineering*, **2021**, 37, e3411	2.6	3
250	Sprouting Angiogenesis: A Numerical Approach with Experimental Validation. *Annals of Biomedical Engineering*, **2021**, 49, 871-884	4.7	4
249	A meshless study of antisymmetric angle-ply laminates using high-order shear deformation theories. *Composite Structures*, **2021**, 255, 112795	5.3	
248	A mathematical biomechanical model for bone remodeling integrated with a radial point interpolating meshless method. *Computers in Biology and Medicine*, **2021**, 129, 104170	7	2
247	Simulation of the viscoplastic extrusion process using the radial point interpolation meshless method. *Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications*, **2021**, 235, 1203-1225	1.3	1
246	Modelling human liver microphysiology on a chip through a finite element based design approach. *International Journal for Numerical Methods in Biomedical Engineering*, **2021**, 37, e3445	2.6	1
245	Influence of the basilar membrane shape and mechanical properties in the cochlear response: A numerical study. *Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine*, **2021**, 235, 743-750	1.7	0

244	Numerical analysis of honeycomb-shaped polymeric foams using the FEM and the RPIM. *Engineering Analysis With Boundary Elements*, **2021**, 129, 27-38	2.6	3
243	The bending behaviour of antisymmetric cross-ply laminates using high-order shear deformation theories and a Radial Point Interpolation Method. *Structures*, **2021**, 32, 1589-1603	3.4	1
242	Artificial intelligence and colon capsule endoscopy: development of an automated diagnostic system of protruding lesions in colon capsule endoscopy. *Techniques in Coloproctology*, **2021**, 25, 1243-1248	2.9	4
241	Simulation of the process of angiogenesis: Quantification and assessment of vascular patterning in the chicken chorioallantoic membrane. *Computers in Biology and Medicine*, **2021**, 136, 104647	7	3
240	Effect of mesh anchoring technique in uterine prolapse repair surgery: A finite element analysis. *Journal of Biomechanics*, **2021**, 127, 110649	2.9	2
239	Optimizing a meshless method for the simulation of the extrusion of non-Newtonian materials. *International Journal of Mechanical Sciences*, **2021**, 208, 106688	5.5	0
238	Predicting bone remodeling using a mechano-biological mathematical model combined with a natural neighbor meshless method. *Engineering Analysis With Boundary Elements*, **2021**, 132, 437-445	2.6	2
237	A new non targeted bone remodeling model combined with an interpolation meshless method. *Mathematics and Computers in Simulation*, **2021**, 190, 23-37	3.3	1
236	Application of an enhanced homogenization technique to the structural multiscale analysis of a femur bone. *Computer Methods in Biomechanics and Biomedical Engineering*, **2020**, 23, 868-878	2.1	1
235	Numerical simulation of lateral and transforaminal lumbar interbody fusion, two minimally invasive surgical approaches. *Computer Methods in Biomechanics and Biomedical Engineering*, **2020**, 23, 408-421	2.1	5
234	Minimally invasive transforaminal and anterior lumbar interbody fusion surgery at level L5-S1. *Computer Methods in Biomechanics and Biomedical Engineering*, **2020**, 23, 384-395	2.1	4
233	Characterization of hyperelastic and damage behavior of tendons. *Computer Methods in Biomechanics and Biomedical Engineering*, **2020**, 23, 213-223	2.1	4
232	On the mechanical response of the actomyosin cortex during cell indentations. *Biomechanics and Modeling in Mechanobiology*, **2020**, 19, 2061-2079	3.8	1
231	Altered mechanics of vaginal smooth muscle cells due to the lysyl oxidase-like1 knockout. *Acta Biomaterialia*, **2020**, 110, 175-187	10.8	4
230	Biomechanical Simulation of Vaginal Childbirth: The Colors of the Pelvic Floor Muscles **2020**, 1-17		0
229	Development of a Constitutive Model to Predict the Elasto-Plastic Behaviour of 3D-Printed Thermoplastics: A Meshless Formulation. *Advanced Structured Materials*, **2020**, 311-329	0.6	
228	Bone remodeling: an improved spatiotemporal mathematical model. *Archive of Applied Mechanics*, **2020**, 90, 635-649	2.2	2
227	The numerical analysis of symmetric cross-ply laminates using the natural neighbour radial point interpolation method and high-order shear deformation theories. *Engineering Structures*, **2020**, 225, 111247	4.7	2

226	Investigating the birth-related caudal maternal pelvic floor muscle injury: The consequences of low cycle fatigue damage. *Journal of the Mechanical Behavior of Biomedical Materials*, **2020**, 110, 103956	4.1	4
225	A preliminary study of endothelial cell migration during angiogenesis using a meshless method approach. *International Journal for Numerical Methods in Biomedical Engineering*, **2020**, 36, e3393	2.6	1
224	Analysis of antisymmetric cross-ply laminates using high-order shear deformation theories: a meshless approach. *Acta Mechanica Sinica/Lixue Xuebao*, **2020**, 36, 1078-1098	2	2
223	Simulation of the uterine contractions and foetus expulsion using a chemo-mechanical constitutive model. *Biomechanics and Modeling in Mechanobiology*, **2019**, 18, 829-843	3.8	6
222	Numerical Assessment of Bone Tissue Remodeling of a Proximal Femur After Insertion of a Femoral Implant Using an Interpolating Meshless Method **2019**, 405-412		
221	A new numerical approach to mechanically analyse biological structures. *Computer Methods in Biomechanics and Biomedical Engineering*, **2019**, 22, 100-111	2.1	1
220	The Elasto-plastic Analysis of Polymers Subject to Traction and Compression Using Advanced Discretization Techniques. *Structural Integrity*, **2019**, 401-406	0.2	
219	A Stress Intensity Factor Study for a Pressure Vessel CT Specimen Using Finite Element Method. *Structural Integrity*, **2019**, 181-186	0.2	2
218	The Natural Neighbour Radial Point Interpolation Method to Predict the Compression and Traction Behavior of Thermoplastics. *Structural Integrity*, **2019**, 393-399	0.2	
217	USING MESHLESS METHODS TO SIMULATE BLOOD CLOTS **2019**,		1
216	Biomechanical Simulation of a Dental Implant using Finite Element Method Analysis * **2019**,		1
215	A new biological bone remodeling in silico model combined with advanced discretization methods. *International Journal for Numerical Methods in Biomedical Engineering*, **2019**, 35, e3196	2.6	4
214	A multiscale homogenization procedure combining the fabric tensor with a natural neighbour meshless method. *Engineering Analysis With Boundary Elements*, **2019**, 100, 211-224	2.6	4
213	Urinary incontinence and disordered eating in female elite athletes. *Journal of Science and Medicine in Sport*, **2019**, 22, 140-144	4.4	17
212	Biomechanical Analysis of Bone Tissue After Insertion of Dental Implants Using Meshless Methods: Stress Analysis and Osseointegration **2019**, 393-403		2
211	Determination of the Anisotropic Mechanical Properties of Bone Tissue Using a Homogenization Technique Combined With Meshless Methods **2019**, 201-213		2
210	Computational simulation of the vestibular system using a meshless particle method **2019**, 129-134		
209	Characterizing the Biomechanical Properties of the Pubovisceralis Muscle Using a Genetic Algorithm and the Finite Element Method. *Journal of Biomechanical Engineering*, **2019**, 141,	2.1	8

208	Mechanical bone remodelling: Comparative study of distinct numerical approaches. *Engineering Analysis With Boundary Elements*, **2019**, 100, 125-139	2.6	10
207	Characterization of the passive and active material parameters of the pubovisceralis muscle using an inverse numerical method. *Journal of Biomechanics*, **2018**, 71, 100-110	2.9	7
206	Biomechanical Analysis of the Damage in the Pelvic Floor Muscles During Childbirth. *Lecture Notes in Computational Vision and Biomechanics*, **2018**, 133-142	0.3	
205	Designing the mechanical frame of an active exoskeleton for gait assistance. *Advances in Mechanical Engineering*, **2018**, 10, 168781401774366	1.2	3
204	A brain impact stress analysis using advanced discretization meshless techniques. *Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine*, **2018**, 232, 257-270	1.7	5
203	Homogenization technique for heterogeneous composite materials using meshless methods. *Engineering Analysis With Boundary Elements*, **2018**, 92, 73-89	2.6	13
202	Searching for the Tissue Mechanical Properties in Pelvic Floor Dysfunction by Computational Modeling. *Lecture Notes in Computational Vision and Biomechanics*, **2018**, 203-215	0.3	
201	The free vibrations analysis of the cupula in the inner ear using a natural neighbor meshless method. *Engineering Analysis With Boundary Elements*, **2018**, 92, 50-63	2.6	7
200	Performing high-level sport is strongly associated with urinary incontinence in elite athletes: a comparative study of 372 elite female athletes and 372 controls. *British Journal of Sports Medicine*, **2018**, 52, 1586-1590	10.3	23
199	Continuum mechanical model for cross-linked actin networks with contractile bundles. *Journal of the Mechanics and Physics of Solids*, **2018**, 110, 100-117	5	8
198	The analysis of composite laminated beams using a 2D interpolating meshless technique. *Acta Mechanica Sinica/Lixue Xuebao*, **2018**, 34, 99-116	2	4
197	Viscous effects in pelvic floor muscles during childbirth: A numerical study. *International Journal for Numerical Methods in Biomedical Engineering*, **2018**, 34, e2927	2.6	10
196	Material homogenization technique for composites: A meshless formulation. *Science and Technology of Materials*, **2018**, 30, 50-59		3
195	A computational framework to simulate the endolymph flow due to vestibular rehabilitation maneuvers assessed from accelerometer data. *Computer Methods in Biomechanics and Biomedical Engineering*, **2018**, 21, 461-469	2.1	4
194	On the effect of labour durations using an anisotropic visco-hyperelastic-damage approach to simulate vaginal deliveries. *Journal of the Mechanical Behavior of Biomedical Materials*, **2018**, 88, 120-126	4.1	9
193	Simulating fracture propagation in brittle materials using a meshless approach. *Engineering With Computers*, **2018**, 34, 503-522	4.5	4
192	Numerical simulation of compression and tensile tests on thermoplastics: A meshless approach. *Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications*, **2018**, 146442071881030	1.3	0
191	Association Between Physical Activity Level and Pelvic Floor Muscle Variables in Women. *International Journal of Sports Medicine*, **2018**, 39, 995-1000	3.6	10

190	Modelling skin wound healing angiogenesis: A review. *Journal of Theoretical Biology*, **2018**, 459, 1-17	2.3	31
189	Aluminum foam sandwich with adhesive bonding: Computational modeling **2017**, 93, 1025-1047		2
188	Estudo biomecânico da coluna cervical com patologia. *Revista Internacional De Metodos Numericos Para Calculo Y Diseno En Ingenieria*, **2017**, 33, 72-78	1.8	
187	Pubovisceralis Muscle Fiber Architecture Determination: Comparison Between Biomechanical Modeling and Diffusion Tensor Imaging. *Annals of Biomedical Engineering*, **2017**, 45, 1255-1265	4.7	9
186	A general framework for the numerical implementation of anisotropic hyperelastic material models including non-local damage. *Biomechanics and Modeling in Mechanobiology*, **2017**, 16, 1119-1140	3.8	11
185	A holistic view of the effects of episiotomy on pelvic floor. *International Journal for Numerical Methods in Biomedical Engineering*, **2017**, 33, e2892	2.6	2
184	The human otitis media with effusion: a numerical-based study. *Computer Methods in Biomechanics and Biomedical Engineering*, **2017**, 20, 958-966	2.1	7
183	A Numerical Study of Fenestral Otosclerosis. *Advanced Structured Materials*, **2017**, 147-155	0.6	
182	A numerical study of the human ear **2017**,		1
181	Biomechanical properties of the pelvic floor muscles of continent and incontinent women using an inverse finite element analysis. *Computer Methods in Biomechanics and Biomedical Engineering*, **2017**, 20, 842-852	2.1	17
180	THE INFLUENCE OF PELVIC ORGAN PROLAPSE ON THE PASSIVE BIOMECHANICAL PROPERTIES OF PELVIC FLOOR MUSCLES. *Journal of Mechanics in Medicine and Biology*, **2017**, 17, 1750090	0.7	5
179	Urinary Incontinence in Physically Active Young Women: Prevalence and Related Factors. *International Journal of Sports Medicine*, **2017**, 38, 937-941	3.6	27
178	THERMAL ANALYSIS IN DRILLING OF EX VIVO BOVINE BONES. *Journal of Mechanics in Medicine and Biology*, **2017**, 17, 1750082	0.7	16
177	Application of virtual reality techniques to a birth simulation **2017**,		1
176	Biomechanical Study of the Vestibular System of the Inner Ear Using a Numerical Method. *Procedia IUTAM*, **2017**, 24, 30-37		6
175	The management of episiotomy technique and its effect on pelvic floor muscles during a malposition childbirth. *Computer Methods in Biomechanics and Biomedical Engineering*, **2017**, 20, 1249-1259	2.1	8
174	Variation of elasticity in the pelvic floor muscles for incontinent and prolapsed women. *European Journal of Obstetrics, Gynecology and Reproductive Biology*, **2017**, 211, 203	2.4	
173	The Natural Neighbor Radial Point Interpolation Method in Computational Fracture Mechanics: A 2D Preliminary Study. *International Journal of Computational Methods*, **2017**, 14, 1750045	1.1	6

172	The anisotropic elasto-plastic analysis using a natural neighbour RPIM version. *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, **2017**, 39, 1773-1795	2	7
171	Meshless methods in oral biomechanics **2017**, 29-34		
170	Finite element analysis of the transfer of sound in the myringosclerotic ear. *Computer Methods in Biomechanics and Biomedical Engineering*, **2016**, 19, 248-256	2.1	5
169	Cellular modelling in functional tissue engineering: review oriented for pelvic floor dysfunctions. *Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications*, **2016**, 230, 5-17	1.3	
168	Numerical analysis of dental implants using a new advanced discretization technique. *Mechanics of Advanced Materials and Structures*, **2016**, 23, 467-479	1.8	9
167	Modeling the contraction of the pelvic floor muscles. *Computer Methods in Biomechanics and Biomedical Engineering*, **2016**, 19, 347-56	2.1	8
166	Thermal analysis during bone drilling using rigid polyurethane foams: numerical and experimental methodologies. *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, **2016**, 38, 1855-1863	2	13
165	Effects of the fibers distribution in the human eardrum: A biomechanical study. *Journal of Biomechanics*, **2016**, 49, 1518-1523	2.9	8
164	Numerical simulation of the damage evolution in the pelvic floor muscles during childbirth. *Journal of Biomechanics*, **2016**, 49, 594-601	2.9	25
163	Establishing the biomechanical properties of the pelvic soft tissues through an inverse finite element analysis using magnetic resonance imaging. *Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine*, **2016**, 230, 298-309	1.7	15
162	The Natural Neighbor Radial Point Interpolation Method Extended to the Crack Growth Simulation. *International Journal of Applied Mechanics*, **2016**, 08, 1650006	2.4	25
161	The analysis of the bone remodelling around femoral stems: A meshless approach. *Mathematics and Computers in Simulation*, **2016**, 121, 64-94	3.3	13
160	A study on the formability of aluminum tailor welded blanks produced by friction stir welding. *International Journal of Advanced Manufacturing Technology*, **2016**, 83, 2129-2141	3.2	37
159	The analysis of laminated plates using distinct advanced discretization meshless techniques. *Composite Structures*, **2016**, 143, 165-179	5.3	44
158	Estudo do comportamento do ouvido mdio considerando a presen de fluido. *Revista Internacional De Metodos Numericos Para Calculo Y Diseno En Ingenieria*, **2016**, 32, 188-191	1.8	
157	A biomechanical analysis on the impact of episiotomy during childbirth. *Biomechanics and Modeling in Mechanobiology*, **2016**, 15, 1523-1534	3.8	19
156	Finite element modelling of sound transmission from outer to inner ear. *Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine*, **2016**, 230, 999-1007	1.7	12
155	Study on the influence of the fetus head molding on the biomechanical behavior of the pelvic floor muscles, during vaginal delivery. *Journal of Biomechanics*, **2015**, 48, 1600-5	2.9	30

154	The Elasto-plastic Response of the Bone Tissue Due to the Insertion of Dental Implants. *Procedia Engineering*, **2015**, 110, 37-44		8
153	TOTAL OSSICULAR REPLACEMENT PROSTHESIS OF THE MIDDLE EAR: A BIOMECHANICAL ANALYSIS. *Journal of Mechanics in Medicine and Biology*, **2015**, 15, 1540006	0.7	4
152	Crack path prediction using the natural neighbour radial point interpolation method. *Engineering Analysis With Boundary Elements*, **2015**, 59, 144-158	2.6	27
151	Football practice and urinary incontinence: Relation between morphology, function and biomechanics. *Journal of Biomechanics*, **2015**, 48, 1587-92	2.9	22
150	A semi-implicit finite strain shell algorithm using in-plane strains based on least-squares. *Computational Mechanics*, **2015**, 55, 673-696	4	9
149	The numerical analysis of a restored tooth using meshless methods **2015**,		1
148	The osteointegration numerical prediction of a femur stem using a meshless approach **2015**,		1
147	THE MANDIBLE REMODELING INDUCED BY DENTAL IMPLANTS: A MESHLESS APPROACH. *Journal of Mechanics in Medicine and Biology*, **2015**, 15, 1550059	0.7	14
146	Using an inverse method for optimizing the material constants of the Mooney-Rivlin constitutive model **2015**,		1
145	Urinary Incontinence and Levels of Regular Physical Exercise in Young Women. *International Journal of Sports Medicine*, **2015**, 36, 776-80	3.6	35
144	Study of Formability of Sandwich Shells with Metal Foam Cores Based on Punch Penetration Test. *Key Engineering Materials*, **2015**, 651-653, 1307-1311	0.4	
143	Biomechanical study on the bladder neck and urethral positions: simulation of impairment of the pelvic ligaments. *Journal of Biomechanics*, **2015**, 48, 217-23	2.9	39
142	A comparative study of forming limit diagram prediction of tailor welded blanks. *International Journal of Material Forming*, **2015**, 8, 293-304	2	18
141	The Meshless Methods in the Bone Tissue Remodelling Analysis. *Procedia Engineering*, **2015**, 110, 51-58		11
140	Effect of surgical mesh implant in the uterine prolapse correction **2015**,		1
139	Fibre Reinforcement in Living Cells: A Preliminary Study of the F-actin Filaments. *Procedia Engineering*, **2015**, 110, 2-7		1
138	Volume of training and the ranking level are associated with the leakage of urine in young female trampolinists. *Clinical Journal of Sport Medicine*, **2015**, 25, 270-5	3.2	38
137	Effects of a Pelvic Floor Muscle Training in Nulliparous Athletes with Urinary Incontinence: Biomechanical Models Protocol. *Lecture Notes in Computational Vision and Biomechanics*, **2015**, 83-90	0.3	3

136	An elasto-plastic model to analyse the biomechanical behaviour of the atherosclerotic plaque tissue **2015**,		1
135	Necromechanics: Death-induced changes in the mechanical properties of human tissues. *Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine*, **2015**, 229, 343-9	1.7	6
134	Comparison of otoacoustic emissions in patients with tinnitus having normal hearing versus mild hearing loss. *International Tinnitus Journal*, **2015**, 19, 39-46	1.6	2
133	Pelvic Floor Muscles Behavior in Practitioners of High and Low Impact Sports. *Lecture Notes in Computational Vision and Biomechanics*, **2015**, 75-82	0.3	
132	The Impairment of Female Pelvic Ligaments and Its Relation With Pelvic Floor Dysfunction: Biomechanical Analysis. *Lecture Notes in Computational Vision and Biomechanics*, **2015**, 63-73	0.3	
131	What Exists in the Scientific Literature About Biomechanical Models in Pelvic Floor?â Systematic Review. *Lecture Notes in Computational Vision and Biomechanics*, **2015**, 49-62	0.3	
130	Biomechanical Study of the Cervical Spine. *Lecture Notes in Computational Vision and Biomechanics*, **2015**, 91-103	0.3	
129	Injury Simulation of Anterior Cruciate Ligament Using Isogeometric Analysis. *Lecture Notes in Computational Vision and Biomechanics*, **2015**, 105-121	0.3	
128	Understanding the travel experience and its impact on attitudes, emotions and loyalty towards the transportation providerâA quantitative study with mid-distance bus trips. *Transport Policy*, **2014**, 31, 35-46	5.7	67
127	Anlise de vigas laminadas utilizando o natural neighbour radial point interpolation method. *Revista Internacional De Metodos Numericos Para Calculo Y Diseno En Ingenieria*, **2014**, 30, 108-120	1.8	19
126	Facial pressure zones of an oronasal interface for noninvasive ventilation: a computer model analysis. *Jornal Brasileiro De Pneumologia*, **2014**, 40, 652-7	1.1	6
125	ANALYSIS OF EARDRUM PATHOLOGIES USING THE FINITE ELEMENT METHOD. *Journal of Mechanics in Medicine and Biology*, **2014**, 14, 1450034	0.7	9
124	The biomechanical effects of stapes replacement by prostheses on the tympano-ossicular chain. *International Journal for Numerical Methods in Biomedical Engineering*, **2014**, 30, 1409-20	2.6	7
123	A STATISTICAL STUDY REGARDING THE STATE-OF-THE-ART OF ACTIVE MOTION-ORIENTED ASSISTIVE DEVICES. *Biomedical Engineering - Applications, Basis and Communications*, **2014**, 26, 1450047	0.6	1
122	Study on the forming of sandwich shells with closed-cell foam cores. *International Journal of Material Forming*, **2014**, 7, 413-424	2	7
121	A Global Numerical analysis of the "central incisor/local maxillary bone" system using a meshless method. *MCB Molecular and Cellular Biomechanics*, **2014**, 11, 151-84	1.2	6
120	The natural radial element method. *International Journal for Numerical Methods in Engineering*, **2013**, 93, 1286-1313	2.4	49
119	Oxford Grading Scale vs manometer for assessment of pelvic floor strength in nulliparous sports students. *Physiotherapy*, **2013**, 99, 207-11	3	34

118	Strength of round and uterosacral ligaments: a biomechanical study. *Archives of Gynecology and Obstetrics*, **2013**, 287, 313-8	2.5	25
117	Towards a holistic approach to the travel experience: A qualitative study of bus transportation. *Transport Policy*, **2013**, 25, 233-243	5.7	49
116	Analysis of thick plates by the natural radial element method. *International Journal of Mechanical Sciences*, **2013**, 76, 33-48	5.5	47
115	Implant shape influence on the mechanical behavior of breast implants **2013**,		3
114	Nitinol artificial anterior cruciate ligament: A finite element study **2013**,		1
113	Free vibration analysis of functionally graded shells by a higher-order shear deformation theory and radial basis functions collocation, accounting for through-the-thickness deformations. *European Journal of Mechanics, A/Solids*, **2013**, 37, 24-34	3.7	127
112	Segmentation of female pelvic organs in axial magnetic resonance images using coupled geometric deformable models. *Computers in Biology and Medicine*, **2013**, 43, 248-58	7	20
111	A level set based algorithm to reconstruct the urinary bladder from multiple views. *Medical Engineering and Physics*, **2013**, 35, 1819-24	2.4	7
110	Moment of inertia as a means to evaluate the biomechanical impact of pelvic organ prolapse. *International Journal of Urology*, **2013**, 20, 86-92	2.3	6
109	The influence of muscles activation on the dynamical behaviour of the tympano-ossicular system of the middle ear. *Computer Methods in Biomechanics and Biomedical Engineering*, **2013**, 16, 392-402	2.1	17
108	The influence of regional profiles and senescence on the biomechanical properties of the temporalis muscle. *Journal of Biomechanics*, **2013**, 46, 1592-5	2.9	1
107	Composite laminated plate analysis using the natural radial element method. *Composite Structures*, **2013**, 103, 50-67	5.3	47
106	A meshless microscale bone tissue trabecular remodelling analysis considering a new anisotropic bone tissue material law. *Computer Methods in Biomechanics and Biomedical Engineering*, **2013**, 16, 1170-84	2.1	33
105	Experimental and Numerical Study on the Temperature Field during Surface Grinding of a Ti-6Al-4V Titanium Alloy. *Mechanics of Advanced Materials and Structures*, **2013**, 20, 397-404	1.8	3
104	Static, free vibration and buckling analysis of isotropic and sandwich functionally graded plates using a quasi-3D higher-order shear deformation theory and a meshless technique. *Composites Part B: Engineering*, **2013**, 44, 657-674	10	352
103	Magnetic resonance imaging of the pelvic floor: from clinical to biomechanical imaging. *Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine*, **2013**, 227, 1324-32	1.7	12
102	Determination of expander apparatus displacements and contact pressures on the mucosa using FEM modelling considering mandibular asymmetries. *Computer Methods in Biomechanics and Biomedical Engineering*, **2013**, 16, 954-62	2.1	3
101	Study of Formability of Sandwich Shells with Metal Foam Cores. *Key Engineering Materials*, **2013**, 554-557, 2252-2255	0.4	2

100	Development of an extended Kansei engineering method to incorporate experience requirements in productâservice system design. *Journal of Engineering Design*, **2013**, 24, 738-764	1.8	46
99	Biomechanical study of a fetus during a vaginal delivery **2013**,		1
98	Biomechanical properties of vaginal tissue in women with pelvic organ prolapse. *Gynecologic and Obstetric Investigation*, **2013**, 75, 85-92	2.5	33
97	Mechanical characterization and constitutive modelling of the damage process in rectus sheath. *Journal of the Mechanical Behavior of Biomedical Materials*, **2012**, 8, 111-22	4.1	50
96	Static analysis of functionally graded sandwich plates according to a hyperbolic theory considering Zig-Zag and warping effects. *Advances in Engineering Software*, **2012**, 52, 30-43	3.6	79
95	Experimental study of the influence of senescence in the biomechanical properties of the temporal tendon and deep temporal fascia based on uniaxial tension tests. *Journal of Biomechanics*, **2012**, 45, 199-201	2.9	20
94	Estimation of the forces generated by the thigh muscles for transtibial amputee gait. *Journal of Biomechanics*, **2012**, 45, 972-7	2.9	6
93	Bone tissue remodelling analysis considering a radial point interpolator meshless method. *Engineering Analysis With Boundary Elements*, **2012**, 36, 1660-1670	2.6	44
92	Buckling analysis of sandwich plates with functionally graded skins using a new quasi-3D hyperbolic sine shear deformation theory and collocation with radial basis functions. *ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik*, **2012**, 92, 749-766	1	41
91	Segmentation of female pelvic cavity in axial T2-weighted MR images towards the 3D reconstruction. *International Journal for Numerical Methods in Biomedical Engineering*, **2012**, 28, 714-26	2.6	15
90	Experimental and numerical study of the temperature field during creep feed grinding. *International Journal of Advanced Manufacturing Technology*, **2012**, 61, 127-134	3.2	15
89	Pelvic floor muscle training to improve urinary incontinence in young, nulliparous sport students: a pilot study. *International Urogynecology Journal*, **2012**, 23, 1069-73	2	48
88	A quasi-3D sinusoidal shear deformation theory for the static and free vibration analysis of functionally graded plates. *Composites Part B: Engineering*, **2012**, 43, 711-725	10	254
87	A quasi-3D hyperbolic shear deformation theory for the static and free vibration analysis of functionally graded plates. *Composite Structures*, **2012**, 94, 1814-1825	5.3	205
86	Buckling behaviour of cross-ply laminated plates by a higher-order shear deformation theory. *Science and Engineering of Composite Materials*, **2012**, 19, 119-125	1.5	6
85	Numerical Modelling and Experimental Study of Sandwich Shells with Metal Foam Cores. *Key Engineering Materials*, **2012**, 504-506, 449-454	0.4	3
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