

Michel Mesnard

List of Publications by Year in descending order

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papers

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#	ARTICLE	IF	CITATIONS
1	Straight, semi-anatomic and anatomic TMJ implants: The influence of condylar geometry and bone fixation screws. <i>Journal of Cranio-Maxillo-Facial Surgery</i> , 2011, 39, 343-350.	0.7	54
2	Biomechanical Analysis Comparing Natural and Alloplastic Temporomandibular Joint Replacement Using a Finite Element Model. <i>Journal of Oral and Maxillofacial Surgery</i> , 2011, 69, 1008-1017.	0.5	50
3	3D kinematic and dynamic analysis of the front crawl tumble turn in elite male swimmers. <i>Journal of Biomechanics</i> , 2012, 45, 510-515.	0.9	49
4	Numerical and Experimental Models of the Mandible. <i>Experimental Mechanics</i> , 2011, 51, 1053-1059.	1.1	41
5	Influence of the moment exerted by the athlete on the pole in pole-vaulting performance. <i>Journal of Biomechanics</i> , 2007, 40, 2261-2267.	0.9	25
6	Prediction at long-term condyle screw fixation of temporomandibular joint implant: A numerical study. <i>Journal of Cranio-Maxillo-Facial Surgery</i> , 2015, 43, 469-474.	0.7	22
7	Stress Analysis of Temporomandibular Joint Disc During Maintained Clenching Using a Viscohyperelastic Finite Element Model. <i>Journal of Oral and Maxillofacial Surgery</i> , 2014, 72, 1070-1077.	0.5	21
8	Load transfer in Christensen® TMJ in alloplastic total joint replacement for two different mouth apertures. <i>Journal of Cranio-Maxillo-Facial Surgery</i> , 2014, 42, 1442-1449.	0.7	18
9	The stock alloplastic temporomandibular joint implant can influence the behavior of the opposite native joint: A numerical study. <i>Journal of Cranio-Maxillo-Facial Surgery</i> , 2015, 43, 1384-1391.	0.7	18
10	Relationships between geometry and kinematic characteristics in the temporomandibular joint. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2012, 15, 393-400.	0.9	17
11	Theoretical assessment of an intramedullary condylar component versus screw fixation for the condylar component of a hemiarthroplasty alloplastic TMJ replacement system. <i>Journal of Cranio-Maxillo-Facial Surgery</i> , 2014, 42, 169-174.	0.7	17
12	Influences of geometrical and mechanical properties of bone tissues in mandible behaviour – experimental and numerical predictions. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2017, 20, 1004-1014.	0.9	17
13	A new condyle implant design concept for an alloplastic temporomandibular joint in bone resorption cases. <i>Journal of Cranio-Maxillo-Facial Surgery</i> , 2016, 44, 1670-1677.	0.7	16
14	Influences of implant condyle geometry on bone and screw strains in a temporomandibular implant. <i>Journal of Cranio-Maxillo-Facial Surgery</i> , 2014, 42, 194-200.	0.7	15
15	Christensen vs Biomet Microfixation alloplastic TMJ implant: Are there improvements? A numerical study. <i>Journal of Cranio-Maxillo-Facial Surgery</i> , 2015, 43, 1398-1403.	0.7	15
16	Fibre Bragg grating sensing and finite element analysis of the biomechanics of the mandible. , 2005, , .		14
17	Discrimination of objective kinematic characters in temporomandibular joint displacements. <i>Archives of Oral Biology</i> , 2008, 53, 453-461.	0.8	14
18	Comparison of load transfers in TMJ replacement using a standard and a custom-made temporal component. <i>Journal of Cranio-Maxillo-Facial Surgery</i> , 2014, 42, 1766-1772.	0.7	13

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19	Topography and wettability characterization of surfaces manufactured by SLM and treated by chemical etching. <i>Mechanics of Advanced Materials and Structures</i> , 2022, 29, 1674-1691.	1.5	11
20	Towards a Rigorous Approach to Designing a TemporoMandibular Joint Prosthesis. From Clinical Challenge to Numerical Prototype. <i>Procedia CIRP</i> , 2013, 5, 141-146.	1.0	8
21	Experimental and numerical predictions of Biomet® alloplastic implant in a cadaveric mandibular ramus. <i>Journal of Cranio-Maxillo-Facial Surgery</i> , 2016, 44, 608-615.	0.7	8
22	Patent-based creativity method for early design stages: case study in locking systems for medical applications. <i>International Journal on Interactive Design and Manufacturing</i> , 2017, 11, 689-701.	1.3	8
23	Determinants of the surface quality, density and dimensional correctness in selective laser melting of the Ti-13Zr-13Nb alloy. <i>Materiaux Et Techniques</i> , 2018, 106, 405.	0.3	8
24	Pole-Vaulting: Identification of the Pole Local Bending Rigidities by an Updating Technique. <i>Journal of Applied Biomechanics</i> , 2008, 24, 140-148.	0.3	6
25	Dynamics and kinematics in tumble turn: an analysis of performance. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2010, 13, 109-111.	0.9	6
26	Ex-vivo and inÂvitro validation of an innovative mandibular condyle implant concept. <i>Journal of Cranio-Maxillo-Facial Surgery</i> , 2019, 47, 112-119.	0.7	6
27	Trajectories and kinematic characters in temporomandibular joint displacements. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2008, 11, 63-65.	0.9	5
28	Evaluation of a primary TMJ implant fixation using screws: a numerical study. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2013, 16, 242-243.	0.9	5
29	An innovative design approach to develop external articular medical devices. <i>International Journal on Interactive Design and Manufacturing</i> , 2017, 11, 375-383.	1.3	5
30	Review of expandable dental implants. <i>British Journal of Oral and Maxillofacial Surgery</i> , 2021, 59, 546-554.	0.4	5
31	The effect of mechanical properties of bone in the mandible, a numerical case study. <i>Advances in Biomechanics and Applications</i> , 2014, 1, 67-76.	0.2	5
32	The effect of osteochondral lesion size and ankle joint position on cartilage behavior - numerical and in vitro experimental results. <i>Medical Engineering and Physics</i> , 2021, 98, 73-82.	0.8	5
33	An essential performance factor in pole-vaulting. <i>Comptes Rendus - Mecanique</i> , 2007, 335, 382-387.	2.1	4
34	The influence of condylar geometry and positions of bone fixation screws on a TMJ implant. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2010, 13, 115-116.	0.9	4
35	The importance of the geometry of the screws in TMJ implant fixation. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2013, 16, 258-259.	0.9	4
36	Strain induced in the condyle by self-tapping screws in the Biomet alloplastic temporomandibular joint: a preliminary experimental study. <i>International Journal of Oral and Maxillofacial Surgery</i> , 2015, 44, 1376-1382.	0.7	4

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37	Optimizing the Architecture of a Dynamic Spinal Implant for Customized Mechanical Behavior. <i>Procedia CIRP</i> , 2017, 65, 273-278.	1.0	4
38	Predictions of Birmingham hip resurfacing implant offset - In vitro and numerical models. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2019, 22, 352-363.	0.9	4
39	Numerical study of the mandible geometry influences using two different TMJ implants. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2009, 12, 209-210.	0.9	3
40	Three-dimensional kinematic and dynamic analysis of the crawl tumble turn performance: the expertise effect. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2011, 14, 215-216.	0.9	3
41	Implant fixation of novel and commercial TMJ implants. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2012, 15, 324-325.	0.9	3
42	How can the orientation of CT scanning undermine the biomechanical performance of the intact mandible? A finite element study. <i>Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization</i> , 2014, 2, 38-45.	1.3	3
43	An Exhaustive Method for Researching Articular Orthosis Mechanisms at the Conceptual Design Stage. <i>Procedia CIRP</i> , 2017, 60, 482-487.	1.0	3
44	Study of fixation of a mandibular plate for favourable fractures of the mandibular angle: numerical predictions. <i>British Journal of Oral and Maxillofacial Surgery</i> , 2020, 58, 652-658.	0.4	3
45	Selection of polymer material in the design optimization of a new dynamic spinal implant. <i>Biomaterials and Biomechanics in Bioengineering</i> , 2015, 2, 237-248.	0.4	3
46	Stress distribution in the TMJ disc during a jaw opening movement simulated with a 2D finite element model. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2009, 12, 33-34.	0.9	2
47	Characterization of morphological trunk changes in camptocormia patients. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2015, 18, 1930-1931.	0.9	2
48	Design Method to Structure Orthosis Design: Camptocormia Postural Brace Case Study. <i>Journal of Healthcare Engineering</i> , 2019, 2019, 1-9.	1.1	2
49	A Cellular Potts energy-based approach to analyse the influence of the surface topography on single cell motility. <i>Journal of Theoretical Biology</i> , 2021, 509, 110487.	0.8	2
50	Temporo Mandibular Joint Kinematic: The Specificity of the Rotatory Component Involved in Disc-Condyle Displacements along the Temporal Bone Surface. <i>IFMBE Proceedings</i> , 2011, , 799-802.	0.2	2
51	Biomécanique articulaire et osseuse / Bone and joint Biomechanics. <i>Archives of Physiology and Biochemistry</i> , 2002, 110, 53-58.	1.0	1
52	Mechanical actions and pressure in functioning of the human temporomandibular joint. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2007, 10, 187-188.	0.9	1
53	An optimisation approach of a new dynamic spinal device. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2012, 15, 321-323.	0.9	1
54	An ex vivo experimental study of strain and stiffness of different cadaveric mandible condyle sizes. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2015, 18, 2036-2037.	0.9	1

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55	Optimization of a Dynamic Intervertebral Lumbar Implant. <i>Procedia CIRP</i> , 2016, 50, 192-197.	1.0	1
56	Finite element model of a dynamic spinal implant. , 2017, , .		1
57	Designing simplification strategy for solutions analysis and selection at the architectural design stage. <i>Procedia CIRP</i> , 2018, 70, 25-28.	1.0	1
58	Ex-vivo and in-vitro validation of an innovative mandibular condyle implant concept: report of a collaborative study. <i>International Journal of Oral and Maxillofacial Surgery</i> , 2019, 48, 272.	0.7	1
59	The Influence of Screw Positions of Bone Fixation Screws on a TMJ Implant. <i>IFMBE Proceedings</i> , 2010, , 597-600.	0.2	1
60	Biomechanical Characterization and Modeling of Natural and Alloplastic Human Temporomandibular Joint. <i>Lecture Notes in Computational Vision and Biomechanics</i> , 2012, , 39-66.	0.5	1
61	The influence of disc wear on the behavior of the temporomandibular joint: a finite element analysis in a specific case. <i>Advances in Biomechanics and Applications</i> , 2014, 1, 159-167.	0.2	1
62	Mandibular protrusion: its influence on static balance. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2007, 10, 139-140.	0.9	0
63	Mechanical modelling of the temporo-mandibular joint, a kinematic discrimination approach. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2007, 10, 189-190.	0.9	0
64	Stabilometric study of changes in body posture during mandibular advancement. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2008, 11, 25-27.	0.9	0
65	2D-finite element models of the TMJ in three different mandible positions, simulation of clenching. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2010, 13, 15-17.	0.9	0
66	Variations of podal support influence on the cranio-facial muscular equilibrium. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2010, 13, 23-24.	0.9	0
67	A numerical study on the influence of CT scan orientation for mandible biomechanical simulation. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2012, 15, 72-73.	0.9	0
68	Managing the variability of biomechanical characteristics before the preliminary design stage of a medical device. <i>CIRP Annals - Manufacturing Technology</i> , 2014, 63, 161-164.	1.7	0
69	Experimental and numerical study of the biomechanics of a human joint. , 2015, , .		0