

Antonio Apicella

List of Publications by Year in descending order

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121
papers

3,746
citations

172457

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149698

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124
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124
docs citations

124
times ranked

2232
citing authors

#	ARTICLE	IF	CITATIONS
1	Effect of adhesive layer properties on stress distribution in composite restorations—a 3D finite element analysis. <i>Dental Materials</i> , 2002, 18, 295-303.	3.5	256
2	3D FEA of cemented steel, glass and carbon posts in a maxillary incisor. <i>Dental Materials</i> , 2005, 21, 709-715.	3.5	246
3	Evaluation of the biomechanical behavior of maxillary central incisors restored by means of endocrowns compared to a natural tooth: A 3D static linear finite elements analysis. <i>Dental Materials</i> , 2006, 22, 1035-1044.	3.5	192
4	3D-finite element analyses of cusp movements in a human upper premolar, restored with adhesive resin-based composites. <i>Journal of Biomechanics</i> , 2001, 34, 1269-1277.	2.1	156
5	Effect of thermal history on water sorption, elastic properties and the glass transition of epoxy resins. <i>Polymer</i> , 1979, 20, 1143-1148.	3.8	143
6	Poly(Ethylene oxide) (PEO) and different molecular weight PEO blends monolithic devices for drug release. <i>Biomaterials</i> , 1993, 14, 83-90.	11.4	123
7	Nano-Diamond Hybrid Materials for Structural Biomedical Application. <i>American Journal of Biochemistry and Biotechnology</i> , 2017, 13, 34-41.	0.4	122
8	Three-dimensional finite element analysis of strain and stress distributions in endodontically treated maxillary central incisors restored with different post, core and crown materials. <i>Dental Materials</i> , 2007, 23, 983-993.	3.5	120
9	Evaluation of structural changes in epoxy systems by moisture sorption-desorption and dynamic mechanical studies. <i>Polymer Composites</i> , 1982, 3, 118-124.	4.6	102
10	A model for the thermal and chemorheological behavior of thermosets. I: Processing of epoxy-based composites. <i>Polymer Engineering and Science</i> , 1989, 29, 973-983.	3.1	85
11	Thermokinetics and chemorheology of the cure reactions of the tetraglycidyl diamino diphenyl methane—diamino diphenyl sulfone epoxy systems. <i>Journal of Applied Polymer Science</i> , 1984, 29, 2083-2096.	2.6	84
12	Mandibular flexure and stress build-up in mandibular full-arch fixed prostheses supported by osseointegrated implants. <i>Clinical Oral Implants Research</i> , 2003, 14, 103-114.	4.5	84
13	Development of hybrid materials based on hydroxyethylmethacrylate as supports for improving cell adhesion and proliferation. <i>Biomaterials</i> , 2004, 25, 3645-3653.	11.4	84
14	Non-linear elastic three-dimensional finite element analysis on the effect of endocrown material rigidity on alveolar bone remodeling process. <i>Dental Materials</i> , 2009, 25, 678-690.	3.5	79
15	The effect of the prepolymer composition of amino-hardened epoxy resins on the water sorption behavior and plasticization. <i>Journal of Applied Polymer Science</i> , 1982, 27, 105-112.	2.6	78
16	Factors affecting water sorption in and solute release from glassy ethylene—vinyl alcohol copolymers. <i>Journal of Membrane Science</i> , 1981, 8, 273-282.	8.2	75
17	Influence of tooth preparation design on the stress distribution in maxillary central incisors restored by means of alumina porcelain veneers: A 3D-finite element analysis. <i>Dental Materials</i> , 2005, 21, 1178-1188.	3.5	64
18	Hygrothermal history dependence of moisture sorption kinetics in epoxy resins. <i>Polymer Engineering and Science</i> , 1981, 21, 18-22.	3.1	58

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19	Environmental degradation of the electrical and thermal properties of organic insulating materials. <i>Journal of Materials Science</i> , 1988, 23, 729-735.	3.7	54
20	Different solvent stability of the crystalline polymorphic forms of syndiotactic polystyrene. <i>Journal of Materials Science Letters</i> , 1991, 10, 1084-1087.	0.5	50
21	Rheological behaviour of a commercial TGDDM-DDS based epoxy matrix during the isothermal cure. <i>Rheologica Acta</i> , 1984, 23, 291-296.	2.4	44
22	Biomechanically Inspired Shape Memory Effect Machines Driven by Muscle like Acting NiTi Alloys. <i>American Journal of Applied Sciences</i> , 2016, 13, 1264-1271.	0.2	40
23	Dimensional stability of polystyrene/polymeric liquid crystal blends. <i>Polymer Engineering and Science</i> , 1986, 26, 600-604.	3.1	38
24	The Basic Elements of Life's. <i>American Journal of Engineering and Applied Sciences</i> , 2016, 9, 1189-1197.	0.6	38
25	Biomimetic and Evolutionary Design Driven Innovation in Sustainable Products Development. <i>American Journal of Engineering and Applied Sciences</i> , 2016, 9, 1027-1036.	0.6	38
26	Water-swelling behavior of an ethylene±vinyl alcohol copolymer in the presence of sorbed sodium chloride. <i>Journal of Applied Polymer Science</i> , 1982, 27, 1139-1148.	2.6	36
27	Physical degradation by water clustering in epoxy resins. <i>Journal of Applied Polymer Science</i> , 1983, 28, 2881-2885.	2.6	36
28	Environmental Protection through Nuclear Energy. <i>American Journal of Applied Sciences</i> , 2016, 13, 941-946.	0.2	36
29	Non-equilibrium glassy properties and their relevance in Case II transport kinetics. <i>Polymer</i> , 1980, 21, 1031-1036.	3.8	35
30	Carbon fiber post adhesion to resin luting cement in the restoration of endodontically treated teeth. <i>Journal of Materials Science: Materials in Medicine</i> , 2000, 11, 201-206.	3.6	34
31	One Can Slow Down the Aging through Antioxidants. <i>American Journal of Engineering and Applied Sciences</i> , 2016, 9, 1112-1126.	0.6	34
32	Dynamic Elements at MP3R. <i>Journal of Mechatronics and Robotics</i> , 2017, 1, 24-37.	0.3	34
33	Geometry and Direct Kinematics to MP3R with 4±4 Operators. <i>Journal of Mechatronics and Robotics</i> , 2017, 1, 38-46.	0.3	34
34	Water sorption kinetics in poly(aryl ether ether ketone). <i>Journal of Applied Polymer Science</i> , 1989, 37, 381-392.	2.6	32
35	Influence of abutment material on the fracture strength and failure modes of abutment-fixture assemblies when loaded in a bio-faithful simulation. <i>Clinical Oral Implants Research</i> , 2011, 22, 182-188.	4.5	31
36	Non-linear Viscoelastic Finite Element Analysis of the Effect of the Length of Glass Fiber Posts on the Biomechanical Behaviour of Directly Restored Incisors and Surrounding Alveolar Bone. <i>Dental Materials Journal</i> , 2008, 27, 485-498.	1.8	29

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37	Smart-Factory: Optimization and Process Control of Composite Centrifuged Pipes. American Journal of Applied Sciences, 2016, 13, 1330-1341.	0.2	28
38	Geometry and Inverse Kinematic at the MP3R Mobile Systems. Journal of Mechatronics and Robotics, 2017, 1, 58-65.	0.3	27
39	Analysis and Synthesis of Mechanisms with Bars and Gears Used in Robots and Manipulators. Journal of Mechatronics and Robotics, 2017, 1, 98-108.	0.3	27
40	Current Stage in the Field of Mechanisms with Gears and Rods. Journal of Mechatronics and Robotics, 2017, 1, 47-57.	0.3	27
41	Nonlinear viscoelastic finite element analysis of different porcelain veneers configuration. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2009, 91B, 727-736.	3.4	26
42	Geometry and Determining the Positions of a Plan Transporter Manipulator. Journal of Mechatronics and Robotics, 2017, 1, 118-126.	0.3	25
43	Kinematics and Forces to a New Model Forging Manipulator. American Journal of Applied Sciences, 2017, 14, 60-80.	0.2	25
44	The effect of physical aging on long-term properties of poly-ether-ketone (PEEK) and PEEK-based composites. Journal of Applied Polymer Science, 1990, 39, 1163-1174.	2.6	24
45	Mitochondria are Naturally Micro Robots - A review. American Journal of Engineering and Applied Sciences, 2016, 9, 991-1002.	0.6	24
46	Flexible Stem Trabecular Prostheses. American Journal of Engineering and Applied Sciences, 2016, 9, 1213-1221.	0.6	24
47	Effect of Porous Microstructures on the Biomechanical Characteristics of a Root Analogue Implant: An Animal Study and a Finite Element Analysis. ACS Biomaterials Science and Engineering, 2020, 6, 6356-6367.	5.2	24
48	Solvent induced crystallization in poly(aryl-ether-ether-ketone). Journal of Materials Science, 1990, 25, 2963-2970.	3.7	23
49	About Homeopathy or "Similia Similibus Curentur"; American Journal of Engineering and Applied Sciences, 2016, 9, 1164-1172.	0.6	23
50	Hybrid Ceramo-Polymeric Nanocomposite for Biomimetic Scaffolds Design and Preparation. American Journal of Engineering and Applied Sciences, 2016, 9, 1096-1105.	0.6	23
51	Physiologic Human Fluids and Swelling Behavior of Hydrophilic Biocompatible Hybrid Ceramo-Polymeric Materials. American Journal of Engineering and Applied Sciences, 2016, 9, 962-972.	0.6	23
52	Low temperature melting behavior of CO2 crystallized modified PETs. Polymer Engineering and Science, 1995, 35, 506-512.	3.1	21
53	In vitro biological response to a light-cured composite when used for cementation of composite inlays. Dental Materials, 2006, 22, 1081-1085.	3.5	21
54	Glassy Amorphous Metal Injection Molded Induced Morphological Defects. American Journal of Applied Sciences, 2016, 13, 1476-1482.	0.2	21

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55	Time and temperature dependent sorption in poly-ether-ether-ketone (PEEK). Polymer Engineering and Science, 1989, 29, 1786-1795.	3.1	19
56	We are Addicted to Vitamins C and E-A Review. American Journal of Engineering and Applied Sciences, 2016, 9, 1003-1018.	0.6	19
57	Combined microcomputed tomography, biomechanical and histomorphometric analysis of the peri-implant bone: a pilot study in minipig model. Dental Materials, 2016, 32, 794-806.	3.5	19
58	Implant-to-bone force transmission: a pilot study for in vivo strain gauge measurement technique. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 90, 173-181.	3.1	19
59	Present a Mechatronic System Having Able to Determine the Concentration of Carotenoids. American Journal of Engineering and Applied Sciences, 2016, 9, 1106-1111.	0.6	18
60	Processability of Bulk Metallic Glasses. American Journal of Applied Sciences, 2017, 14, 294-301.	0.2	18
61	Something about the Balancing of Thermal Motors. American Journal of Engineering and Applied Sciences, 2017, 10, 200-217.	0.6	17
62	Something about the V Engines Design. American Journal of Applied Sciences, 2017, 14, 34-52.	0.2	17
63	Direct restoration modalities of fractured central maxillary incisors: A multi-levels validated finite elements analysis with in vivo strain measurements. Dental Materials, 2015, 31, e289-e305.	3.5	16
64	From Structural Colors to Super-Hydrophobicity and Achromatic Transparent Protective Coatings: Ion Plating Plasma Assisted TiO ₂ and SiO ₂ Nano-Film Deposition. SSRN Electronic Journal, 0, , .	0.4	16
65	A finite-element model study of occlusal schemes in full-arch implant restoration. Journal of Materials Science: Materials in Medicine, 1998, 9, 191-196.	3.6	15
66	The importance of cortical bone orthotropicity, maximum stiffness direction and thickness on the reliability of mandible numerical models. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2010, 93B, 150-163.	3.4	14
67	Future Medicine Services Robotics. American Journal of Engineering and Applied Sciences, 2016, 9, 1062-1087.	0.6	14
68	Ecosphere Protection through Green Energy. American Journal of Applied Sciences, 2016, 13, 1027-1032.	0.2	14
69	Biomimetic Finite Element Analysis Bone Modeling for Customized Hybrid Biological Prostheses Development. American Journal of Applied Sciences, 2016, 13, 1060-1067.	0.2	14
70	Gears-Part I. American Journal of Engineering and Applied Sciences, 2017, 10, 457-472.	0.6	14
71	Nonlinear visco-elastic finite element analysis of porcelain veneers: a submodelling approach to strain and stress distributions in adhesive and resin cement. Journal of Adhesive Dentistry, 2010, 12, 403-413.	0.5	14
72	Something about the Mechanical Moment of Inertia. American Journal of Applied Sciences, 2016, 13, 1085-1090.	0.2	13

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73	Biofidel FEA Modeling of Customized Hybrid Biological Hip Joint Prostheses, Part I: Biomechanical Behavior of Implanted Femur. American Journal of Biochemistry and Biotechnology, 2016, 12, 270-276.	0.4	13
74	Processing of composite structures. Pure and Applied Chemistry, 1985, 57, 1701-1706.	1.9	12
75	The Quality of Transport and Environmental Protection, Part I. American Journal of Engineering and Applied Sciences, 2017, 10, 738-755.	0.6	11
76	Testing by Non-Destructive Control. American Journal of Engineering and Applied Sciences, 2017, 10, 568-583.	0.6	11
77	Biofidel FEA Modeling of Customized Hybrid Biological Hip Joint Design Part II: Flexible Stem Trabecular Prostheses. American Journal of Biochemistry and Biotechnology, 2016, 12, 277-285.	0.4	9
78	Something about Electron Dimension. American Journal of Applied Sciences, 2016, 13, 1272-1276.	0.2	9
79	Hybrid Ceramo-Polymeric Nano-Diamond Composites. American Journal of Engineering and Applied Sciences, 2018, 11, 766-782.	0.6	9
80	Calorimetric quality control of UV cured optical fiber-coatings. Journal of Applied Polymer Science, 1987, 33, 2077-2086.	2.6	7
81	Compositional influence on toughness of structural acrylic adhesives. Journal of Materials Science, 1991, 26, 434-440.	3.7	7
82	Light shielding effect of overlaying resin composite on the photopolymerization cure kinetics of a resin composite and a dentin adhesive. Dental Materials, 2005, 21, 954-961.	3.5	6
83	Multiaxial Fatigue Strength to Notched specimens made of 40CrMoV13.9. American Journal of Engineering and Applied Sciences, 2016, 9, 1269-1291.	0.6	6
84	About the Gear Efficiency to a Simple Planetary Train. American Journal of Applied Sciences, 2016, 13, 1428-1436.	0.2	6
85	Bioresorption Control and Biological Response of Magnesium Alloy AZ31 Coated with Poly- β -Hydroxybutyrate. Applied Sciences (Switzerland), 2021, 11, 5627.	2.5	6
86	Inlay shading effect on the photopolymerization kinetic of a dental composite material used as bonding system in an indirect restoration technique. Dental Materials, 2005, 21, 689-694.	3.5	5
87	Mechanically Stimulated Osteoblast Cells Growth. American Journal of Engineering and Applied Sciences, 2018, 11, 1023-1036.	0.6	5
88	Biomechanically Tunable Nano-Silica/P-HEMA Structural Hydrogels for Bone Scaffolding. Bioengineering, 2021, 8, 45.	3.5	5
89	Quality control of the cure process of thermosetting resins by means of differential scanning calorimetry. Journal of Thermal Analysis, 1985, 30, 1349-1357.	0.6	4
90	Cold Crystallization Behaviour of a Commercial Zr44-Ti11-Cu10-Ni10-Be25 Metal Glassy Alloy. Advanced Materials Research, 2015, 1088, 206-212.	0.3	4

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91	Liquid Crystalline Polymers Compatibilization and Adhesion Enhancement by Reactive Blending in Post-Consumers PET’s. American Journal of Engineering and Applied Sciences, 2016, 9, 530-539.	0.6	4
92	Osmotic Tension, Plasticization and Viscoelastic response of amorphous Poly-Ether-Ether-Ketone (PEEK) equilibrated in humid environments. American Journal of Engineering and Applied Sciences, 2016, 9, 565-573.	0.6	4
93	From Structural Colors to Super-Hydrophobicity and Achromatic Transparent Protective Coatings: Ion Plating Plasma Assisted TiO ₂ and SiO ₂ Nano-Film Deposition. American Journal of Engineering and Applied Sciences, 2016, 9, 1037-1045.	0.6	4
94	Influence of Curing Light Type and Staining Medium on the Discoloring Stability of Dental Restorative Composite. American Journal of Biochemistry and Biotechnology, 2017, 13, 42-50.	0.4	4
95	About the Internal Structure of a Bone and its Functional Role. American Journal of Engineering and Applied Sciences, 2018, 11, 914-931.	0.6	4
96	A nanodiamond for structural biomimetic scaffolds. Engineering Review, 2019, 39, 81-89.	0.5	4
97	Effect of simulated microgravity induced PI3K-nos2b signalling on zebrafish cardiovascular plexus network formation. Journal of Biomechanics, 2019, 87, 83-92.	2.1	4
98	Network structure and plasticization of epoxy-based resins. Makromolekulare Chemie Macromolecular Symposia, 1987, 7, 97-113.	0.6	3
99	Thermal and chemorheological modelling of the processing of advanced epoxy based composites. Makromolekulare Chemie Macromolecular Symposia, 1989, 25, 45-54.	0.6	3
100	Extreme Environmental Resistance of PEEK Matrix. Journal of Reinforced Plastics and Composites, 1993, 12, 1138-1149.	3.1	3
101	Near Critical Carbon Dioxide Sorption Induced Crystallization in PET. American Journal of Engineering and Applied Sciences, 2016, 9, 846-853.	0.6	3
102	Innovative Biomaterials in Bone Tissue Engineering and Regenerative Medicine. Pancreatic Islet Biology, 2017, , 63-84.	0.3	3
103	Bio-Mechanically Active Ceramic-Polymeric Hybrid Scaffolds for Tissue Engineering. , 2016, , .		3
104	Enamel Erosion Reduction through Coupled Sodium Fluoride and Laser Treatments before Exposition in an Acid Environment: An In Vitro Randomized Control SEM Morphometric Analysis. Applied Sciences (Switzerland), 2022, 12, 1495.	2.5	3
105	Solvent mixtures sorption in amorphous peek. Polymer Bulletin, 1991, 27, 323-330.	3.3	2
106	Application of nanostructured smart materials in sustainable buildings. International Journal of Sustainable Manufacturing, 2010, 2, 66.	0.3	1
107	Ion Plating Plasma Assisted SiO ₂ and TiO ₂ Protective Nano-Coatings for Antique Ceramics Preservation. Advanced Materials Research, 2015, 1088, 701-705.	0.3	1
108	New Biomimetic Hybrid Nanocomposites for early Fixation Prostheses. Advanced Materials Research, 2015, 1088, 487-494.	0.3	1

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109	Biologically structured materials. Independent Journal of Management & Production, 2020, 11, 1119.	0.4	1
110	3D Analysis and Nano-Indentation Mechanical Characterization of a Commercial Zr ₄₄ Ti ₁₁ Cu ₁₀ Ni ₁₀ Be ₂₅ Metal Glassy Alloy. Advanced Materials Research, 2015, 1096, 120-124.	0.3	0
111	Periodontal Bone Substitutes Application Techniques and Cost Evaluation: A Review. American Journal of Engineering and Applied Sciences, 2016, 9, 951-961.	0.6	0
112	Factors Affecting Chemo-physical and Rheological Behaviour of Zr ₄₄ Ti ₁₁ Cu ₁₀ Ni ₁₀ Be ₂₅ Metal Glassy Alloy Supercooled Liquids. American Journal of Engineering and Applied Sciences, 2016, 9, 98-106.	0.6	0
113	Geometry and Inverse Kinematic at the MP3R Mobile Systems. SSRN Electronic Journal, 0, , .	0.4	0
114	Some Aspects of the Human Body's Hydraulics. OnLine Journal of Biological Sciences, 2019, 19, 159-185.	0.4	0
115	Presents some Biologically Structured Materials. OnLine Journal of Biological Sciences, 2020, 20, 8-36.	0.4	0
116	Current Stage in the Field of Mechanisms with Gears and Rods. SSRN Electronic Journal, 0, , .	0.4	0
117	Synthesis of Optimal Trajectories with Functions Control at the Level of the Kinematic Drive Couplings. SSRN Electronic Journal, 0, , .	0.4	0
118	Geometry and Direct Kinematics to MP3R with 444 Operators. SSRN Electronic Journal, 0, , .	0.4	0
119	Dynamic Elements at MP3R. SSRN Electronic Journal, 0, , .	0.4	0
120	Under Water. OnLine Journal of Biological Sciences, 2017, 17, 70-87.	0.4	0
121	Modern Propulsions for the Aerospace Industry. SSRN Electronic Journal, 0, , .	0.4	0