

Jeremy L Gilbert

List of Publications by Year in descending order

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152
papers

6,421
citations

94415

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h-index

76898

74
g-index

155
all docs

155
docs citations

155
times ranked

3581
citing authors

#	ARTICLE	IF	CITATIONS
1	Corrosion of Metal Orthopaedic Implants*. Journal of Bone and Joint Surgery - Series A, 1998, 80, 268-282.	3.0	807
2	In vivo corrosion of modular hip prosthesis components in mixed and similar metal combinations. The effect of crevice, stress, motion, and alloy coupling. Journal of Biomedical Materials Research Part B, 1993, 27, 1533-1544.	3.1	548
3	A Multicenter Retrieval Study of the Taper Interfaces of Modular Hip Prostheses. Clinical Orthopaedics and Related Research, 2002, 401, 149-161.	1.5	495
4	Do Ceramic Femoral Heads Reduce Taper Fretting Corrosion in Hip Arthroplasty? A Retrieval Study. Clinical Orthopaedics and Related Research, 2013, 471, 3270-3282.	1.5	215
5	Fretting corrosion of CoCrMo and Ti6Al4V interfaces. Biomaterials, 2012, 33, 5487-5503.	11.4	194
6	Is Increased Modularity Associated With Increased Fretting and Corrosion Damage in Metal-On-Metal Total Hip Arthroplasty Devices?. Journal of Arthroplasty, 2013, 28, 2-6.	3.1	160
7	<i>In vivo</i> severe corrosion and hydrogen embrittlement of retrieved modular body titanium alloy hip implants. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2009, 88B, 206-219.	3.4	155
8	In vitro corrosion testing of modular hip tapers. Journal of Biomedical Materials Research Part B, 2003, 64B, 78-93.	3.1	154
9	Direct <i>in vivo</i> inflammatory cell-induced corrosion of CoCrMo alloy orthopedic implant surfaces. Journal of Biomedical Materials Research - Part A, 2015, 103, 211-223.	4.0	120
10	Electrochemical response of CoCrMo to high-speed fracture of its metal oxide using an electrochemical scratch test method. , 1997, 37, 421-431.		118
11	The electrochemical and mechanical behavior of passivated and TiN/AlN-coated CoCrMo and Ti6Al4V alloys. Biomaterials, 2004, 25, 851-864.	11.4	118
12	Fretting crevice corrosion of stainless steel stem-CoCr femoral head connections: Comparisons of materials, initial moisture, and offset length. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2009, 88B, 162-173.	3.4	107
13	A theoretical and experimental analysis of polymerization shrinkage of bone cement: A potential major source of porosity. Journal of Biomedical Materials Research Part B, 2000, 52, 210-218.	3.1	104
14	Modern Trunnions Are More Flexible: A Mechanical Analysis of THA Taper Designs. Clinical Orthopaedics and Related Research, 2014, 472, 3963-3970.	1.5	93
15	In Vitro Targeting of Antibody-Conjugated Echogenic Liposomes for Site-Specific Ultrasonic Image Enhancement. Journal of Pharmaceutical Sciences, 1997, 86, 167-171.	3.3	89
16	Bond characteristics of porcelain fused to milled titanium. Dental Materials, 1994, 10, 134-140.	3.5	85
17	<i>In vivo</i> oxide-induced stress corrosion cracking of Ti-6Al-4V in a necked stem modular taper: Emergent behavior in a new mechanism of <i>in vivo</i> corrosion. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2012, 100B, 584-594.	3.4	84
18	Potential and frequency effects on fretting corrosion of Ti6Al4V and CoCrMo surfaces. Journal of Biomedical Materials Research - Part A, 2013, 101A, 2602-2612.	4.0	75

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19	Bonding characteristics of low-fusing porcelain bonded to pure titanium and palladium-copper alloy. <i>Journal of Prosthetic Dentistry</i> , 1995, 73, 17-25.	2.8	74
20	The Effect of Tibial Stem Design on Component Micromotion in Knee Arthroplasty. <i>Clinical Orthopaedics and Related Research</i> , 1997, 345, 44-52.	1.5	74
21	Ceramic Heads Decrease Metal Release Caused by Head-taper Fretting and Corrosion. <i>Clinical Orthopaedics and Related Research</i> , 2016, 474, 985-994.	1.5	69
22	Does taper angle clearance influence fretting and corrosion damage at the head-stem interface? A matched cohort retrieval study. <i>Seminars in Arthroplasty</i> , 2013, 24, 246-254.	0.7	61
23	The reduction half cell in biomaterials corrosion: Oxygen diffusion profiles near and cell response to polarized titanium surfaces. , 1998, 42, 321-330.		60
24	Effect of hydrogen peroxide on titanium surfaces: In situ imaging and step-polarization impedance spectroscopy of commercially pure titanium and titanium, 6-aluminum, 4-vanadium. <i>Journal of Biomedical Materials Research Part B</i> , 2003, 67A, 702-712.	3.1	58
25	Corrosion in the Human Body: Metallic Implants in the Complex Body Environment. <i>Corrosion</i> , 2017, 73, 1478-1495.	1.1	57
26	Focal Osteolysis at the Junctions of a Modular Stainless-Steel Femoral Intramedullary Nail. <i>Journal of Bone and Joint Surgery - Series A</i> , 2001, 83, 537-548.	3.0	57
27	Quantification of the kinetics and thermodynamics of protein adsorption using atomic force microscopy. <i>Journal of Biomedical Materials Research - Part A</i> , 2005, 72A, 246-257.	4.0	54
28	Controlling <i>Pseudomonas aeruginosa</i> persister cells by weak electrochemical currents and synergistic effects with tobramycin. <i>Biomaterials</i> , 2012, 33, 7356-7365.	11.4	54
29	Does Taper Size Have an Effect on Taper Damage in Retrieved Metal-on-Polyethylene Total Hip Devices?. <i>Journal of Arthroplasty</i> , 2016, 31, 277-281.	3.1	53
30	Direct observation of hydration of TiO ₂ on Ti using electrochemical AFM: freely corroding versus potentiostatically held. <i>Surface Science</i> , 2001, 491, 370-387.	1.9	52
31	A novel high-viscosity, two-solution acrylic bone cement: Effect of chemical composition on properties. , 1999, 47, 36-45.		50
32	The effect of simulated inflammatory conditions and pH on fretting corrosion of CoCrMo alloy surfaces. <i>Wear</i> , 2017, 390-391, 302-311.	3.1	50
33	Electrochemical control of cell death by reduction-induced intrinsic apoptosis and oxidation-induced necrosis on CoCrMo alloy in vitro. <i>Biomaterials</i> , 2012, 33, 6295-6304.	11.4	48
34	Corrosion Damage and Wear Mechanisms in Long-Term Retrieved CoCr Femoral Components for Total Knee Arthroplasty. <i>Journal of Arthroplasty</i> , 2016, 31, 2900-2906.	3.1	48
35	Incorporation of Ca and P on anodized titanium surface: Effect of high current density. <i>Materials Science and Engineering C</i> , 2014, 37, 223-231.	7.3	47
36	Local and Distant Products From Modularity. <i>Clinical Orthopaedics and Related Research</i> , 1995, &NA;, 94-105.	1.5	46

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37	Bending and fracture toughness of woven self-reinforced composite poly(methyl methacrylate). , 1997, 36, 441-453.		46
38	In situ imaging and impedance measurements of titanium surfaces using AFM and SPIS. Biomaterials, 2003, 24, 1837-1852.	11.4	46
39	Effect of initiation chemistry on the fracture toughness, fatigue strength, and residual monomer content of a novel high-viscosity, two-solution acrylic bone cement. Journal of Biomedical Materials Research Part B, 2002, 59, 411-421.	3.1	43
40	Mechanical Characterization of the Injured Spinal Cord after Lateral Spinal Hemisection Injury in the Rat. Journal of Neurotrauma, 2012, 29, 1747-1757.	3.4	41
41	Fretting initiated crevice corrosion of 316LVM stainless steel in physiological phosphate buffered saline: Potential and cycles to initiation. Acta Biomaterialia, 2019, 97, 565-577.	8.3	40
42	Mechanically Assisted Taper Corrosion in Modular TKA. Journal of Arthroplasty, 2014, 29, 205-208.	3.1	39
43	The voltage-dependent electrochemical impedance spectroscopy of CoCrMo medical alloy using time-domain techniques: Generalized Cauchy-Lorentz, and KWW-Randles functions describing non-ideal interfacial behaviour. Corrosion Science, 2011, 53, 582-588.	6.6	37
44	Corrosion in stainless-steel and nickel-titanium files. Journal of Endodontics, 1999, 25, 17-20.	3.1	36
45	The effect of simulated inflammatory conditions and Fenton chemistry on the electrochemistry of CoCrMo alloy. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2018, 106, 209-220.	3.4	35
46	The effect of cathodic electrochemical potential of Ti-6Al-4V on cell viability: voltage threshold and time dependence. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2013, 101, 1489-1497.	3.4	34
47	A computer-based biomechanical analysis of the three-dimensional motion of cementless hip prostheses. Journal of Biomechanics, 1992, 25, 329-340.	2.1	32
48	Scanning electrochemical microscopy of metallic biomaterials: Reaction rate and ion release imaging modes. Journal of Biomedical Materials Research Part B, 1993, 27, 1357-1366.	3.1	29
49	Effect of simulated inflammatory conditions and potential on dissolution and surface oxide of CoCrMo alloy: In situ electrochemical atomic force microscopy study. Electrochimica Acta, 2018, 262, 252-263.	5.2	29
50	Comparison of four techniques for monitoring the setting kinetics of gypsum. Journal of Prosthetic Dentistry, 1998, 79, 532-536.	2.8	27
51	Sensitizing Pseudomonas aeruginosa to antibiotics by electrochemical disruption of membrane functions. Biomaterials, 2016, 74, 267-279.	11.4	27
52	In vitro fretting crevice corrosion damage of CoCrMo alloys in phosphate buffered saline: Debris generation, chemistry and distribution. Acta Biomaterialia, 2020, 114, 449-459.	8.3	27
53	Step-polarization impedance spectroscopy of implant alloys in physiologic solutions. , 1998, 40, 233-243.		26
54	Surface micromechanics of ultrahigh molecular weight polyethylene: Microindentation testing, crosslinking, and material behavior. Journal of Biomedical Materials Research Part B, 2002, 61, 270-281.	3.1	26

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55	Titanium is not the most biocompatible metal under cathodic potential: The relationship between voltage and MC3T3 preosteoblast behavior on electrically polarized cpTi surfaces. <i>Journal of Biomedical Materials Research - Part A</i> , 2010, 93A, 1500-1509.	4.0	26
56	A versatile mesoindentation system to evaluate the micromechanical properties of soft, hydrated substrates on a cellular scale. <i>Journal of Biomedical Materials Research - Part A</i> , 2009, 90A, 1206-1217.	4.0	23
57	Design, Material, and Seating Load Effects on In Vitro Fretting Corrosion Performance of Modular Head-Neck Tapers. <i>Journal of Arthroplasty</i> , 2019, 34, 991-1002.	3.1	23
58	On the nature and crystallographic orientation of subsurface cracks in high cycle fatigue of Ti-6Al-4V. <i>Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science</i> , 1993, 24, 669-680.	1.4	22
59	A study of biologically active peptide sequences (P-15) on the surface of an ABM scaffold (PepGen) Tj ETQq1 1 0.784314 rgBJ, Overl	4.0	22
60	Intraoperative Neuromonitoring. <i>Journal of Clinical Neurophysiology</i> , 2012, 29, 502-508.	1.7	22
61	The effect of static applied potential on the 24-hour impedance behavior of commercially pure titanium in simulated biological conditions. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2010, 93B, 106-112.	3.4	21
62	Endoscopic thoracic sympathectomy: Evaluation of pulsatile laser, non-pulsatile laser, and radiofrequency-generated thermocoagulation. <i>Lasers in Surgery and Medicine</i> , 1991, 11, 18-25.	2.1	20
63	Quantification of fibrinogen adsorption onto 316L stainless steel. <i>Journal of Biomedical Materials Research - Part A</i> , 2007, 81A, 465-473.	4.0	19
64	Oxidative Stress, Inflammation, and the Corrosion of Metallic Biomaterials. , 2016, , 59-88.		19
65	Compliant interfaces and fretting corrosion of modular taper junctions in total hip implants: The micromechanics of contact. <i>Tribology International</i> , 2020, 151, 106437.	5.9	19
66	A metallic biomaterial tribocorrosion model linking fretting mechanics, currents, and potentials: Model development and experimental comparison. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2020, 108, 3174-3189.	3.4	19
67	Cytotoxic effect of galvanically coupled magnesium-titanium particles. <i>Acta Biomaterialia</i> , 2016, 30, 368-377.	8.3	18
68	Electrosurgery Induced Damage to Ti-6Al-4V and CoCrMo Alloy Surfaces in Orthopedic Implants In Vivo and In Vitro. <i>Journal of Arthroplasty</i> , 2017, 32, 3533-3538.	3.1	18
69	Eradication of <i>Pseudomonas aeruginosa</i> cells by cathodic electrochemical currents delivered with graphite electrodes. <i>Acta Biomaterialia</i> , 2017, 50, 344-352.	8.3	18
70	Micromechanics of shelf-aged and retrieved UHMWPE tibial inserts: Indentation testing, oxidative profiling, and thickness effects. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2005, 75B, 113-121.	3.4	17
71	Electrochemical investigation of chromium oxide-coated Ti-6Al-4V and Co-Cr-Mo alloy substrates. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2011, 98B, 369-378.	3.4	17
72	Medical Implant Corrosion: Electrochemistry at Metallic Biomaterial Surfaces. , 2012, , 1-28.		17

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73	Study of cellular dynamics on polarized CoCrMo alloy using time-lapse live-cell imaging. <i>Acta Biomaterialia</i> , 2013, 9, 9220-9228.	8.3	17
74	Sub-nano to nanometer wear and tribocorrosion of titanium oxide-metal surfaces by in situ atomic force microscopy. <i>Acta Biomaterialia</i> , 2021, 126, 477-484.	8.3	17
75	Investigation of stiffness and microstructure of joints soldered with gas-oxygen torch infrared methods. <i>Journal of Prosthetic Dentistry</i> , 1994, 72, 8-15.	2.8	16
76	Comparison of chemical analysis of residual monomer in a chemical-cured dental acrylic material to an FTIR method. <i>Dental Materials</i> , 1997, 13, 240-245.	3.5	16
77	Rate effects on the microindentation-based mechanical properties of oxidized, crosslinked, and highly crystalline ultrahigh-molecular-weight polyethylene. <i>Journal of Biomedical Materials Research Part B</i> , 2004, 71A, 549-558.	3.1	16
78	Fibrinogen adsorption onto 316L stainless steel under polarized conditions. <i>Journal of Biomedical Materials Research - Part A</i> , 2008, 85A, 176-187.	4.0	16
79	Area-dependent impedance-based voltage shifts during tribocorrosion of Ti-6Al-4V biomaterials: theory and experiment. <i>Surface Topography: Metrology and Properties</i> , 2016, 4, 034002.	1.6	16
80	Fretting crevice corrosion of 316L stainless steel in physiological phosphate buffered saline: Load, potential and alloy counterface effects. <i>Tribology International</i> , 2021, 164, 107198.	5.9	16
81	Primary hip replacement stem taper fracture due to corrosion in 3 patients. <i>Monthly Notices of the Royal Astronomical Society: Letters</i> , 2016, 87, 189-192.	3.3	15
82	The effect of the inflammatory species hypochlorous acid on the corrosion and surface damage of Ti-6Al-4V and CoCrMo alloys. <i>Journal of Biomedical Materials Research - Part A</i> , 2018, 106, 3185-3194.	4.0	15
83	Interfacial compliance, energy dissipation, frequency effects, and long-term fretting corrosion performance of Ti-6Al-4V/CoCrMo interfaces. <i>Journal of Biomedical Materials Research - Part A</i> , 2022, 110, 409-423.	4.0	15
84	Method of Characterizing Fretting and Corrosion at the Various Taper Connections of Retrieved Modular Components from Metal-on-Metal Total Hip Arthroplasty. , 2013, , 146-156.		15
85	Corrosion properties of low carbon CoCrMo and additively manufactured CoCr alloys for dental applications. <i>Dental Materials</i> , 2022, 38, 1184-1193.	3.5	15
86	Two- μ solution bone cements with cross-linked micro and nano- μ particles for vertebral fracture applications: Effects of zirconium dioxide content on the material and setting properties. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2010, 92B, 13-23.	3.4	14
87	Voltage-controlled cellular viability of preosteoblasts on polarized cpTi with varying surface oxide thickness. <i>Bioelectrochemistry</i> , 2013, 94, 53-60.	4.6	14
88	Voltage and wear debris from Ti-6Al-4V interact to affect cell viability during in-vitro fretting corrosion. <i>Journal of Biomedical Materials Research - Part A</i> , 2018, 106, 160-167.	4.0	14
89	A fluorescent approach for detecting and measuring reduction reaction byproducts near cathodically-biased metallic surfaces: Reactive oxygen species production and quantification. <i>Bioelectrochemistry</i> , 2019, 129, 235-241.	4.6	14
90	Mechanical Properties of Metal Connectors Soldered by Gas Torch Versus an Infrared Technique. <i>Journal of Prosthodontics</i> , 1993, 2, 103-109.	3.7	13

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91	Interfacial properties of self-reinforced composite poly(methyl methacrylate). , 1998, 43, 153-161.		13
92	Synergy between tobramycin and trivalent chromium ion in electrochemical control of Pseudomonas aeruginosa. Acta Biomaterialia, 2016, 36, 286-295.	8.3	13
93	The effect of cell density, proximity, and time on the cytotoxicity of magnesium and galvanically coupled magnesium-titanium particles in vitro. Journal of Biomedical Materials Research - Part A, 2018, 106, 1428-1439.	4.0	13
94	Cathodic activation and inflammatory species are critical to simulating in vivo Ti-6Al-4V selective dissolution. Acta Biomaterialia, 2022, 149, 399-409.	8.3	13
95	A comparison of the hardness of different types of titanium and conventional metal ceramics. Journal of Prosthetic Dentistry, 1994, 72, 314-319.	2.8	12
96	The effect of processing conditions on the properties of poly(methyl methacrylate) fibers. Journal of Biomedical Materials Research Part B, 2002, 63, 152-160.	3.1	12
97	The electrochemical impedance of polarized 316L stainless steel: Structure-property-adsorption correlation. Journal of Biomedical Materials Research - Part A, 2009, 90A, 121-132.	4.0	12
98	Effects of Seating Load Magnitude on Incremental Cyclic Fretting Corrosion in 5 ^Å 40 ^Å ™ Mixed Alloy Modular Taper Junctions. Journal of Arthroplasty, 2018, 33, 1953-1961.	3.1	12
99	The seating mechanics of head-neck modular tapers in vitro: Load-displacement measurements, moisture, and rate effects. Journal of Orthopaedic Research, 2018, 36, 1164-1172.	2.3	12
100	In vitro cytotoxicity of galvanically coupled magnesium-titanium particles on human osteosarcoma SAOS2 cells: A potential cancer therapy. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2019, 107, 178-189.	3.4	12
101	Analysis of Electrochemical Impedance Spectra Using Phase Angle Symmetry Across Log Frequency. Journal of the Electrochemical Society, 2020, 167, 021505.	2.9	12
102	Fretting corrosion of Si ₃ N ₄ vs CoCrMo femoral heads on Ti-6Al-4V trunnions. Journal of Orthopaedic Research, 2020, 38, 1617-1626.	2.3	11
103	Micromechanical measurement of adhesion of dehydrating silicone hydrogel contact lenses to corneal tissue. Acta Biomaterialia, 2021, 127, 242-251.	8.3	11
104	Correlating Fretting Corrosion and Micromotions in Modular Tapers: Test Method Development and Assessment. , 2015, , 259-282.		11
105	Micro-asperity tribocorrosion of CoCrMo, Ti6Al4V, and 316 stainless steel in air and physiological solution: Small scale reciprocal sliding of a single diamond tip. Wear, 2022, 498-499, 204332.	3.1	11
106	Grain egression: A new mechanism of fatigue-crack initiation in Ti-6Al-4V. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1989, 20, 1715-1725.	1.4	10
107	Laser acoustic emission thermal technique (LAETT): A technique for generating acoustic emission in dental composites. Dental Materials, 1996, 12, 13-18.	3.5	10
108	A time-based potential step analysis of electrochemical impedance incorporating a constant phase element: A study of commercially pure titanium in phosphate buffered saline. Journal of Biomedical Materials Research - Part A, 2010, 93A, 576-584.	4.0	10

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109	The effect of scanning electrochemical potential on the short-term impedance of commercially pure titanium in simulated biological conditions. <i>Journal of Biomedical Materials Research - Part A</i> , 2010, 94A, 781-789.	4.0	10
110	Influence of the annealing treatment on the tribocorrosion properties of Ca and P containing TiO ₂ produced by plasma electrolytic oxidation. <i>Materials Technology</i> , 2016, 31, 719-725.	3.0	10
111	Properties and Corrosion Performance of Self-reinforced Composite PEEK for Proposed Use as a Modular Taper Gasket. <i>Clinical Orthopaedics and Related Research</i> , 2016, 474, 2414-2427.	1.5	10
112	Shear test of composite bonded to dentin: Er:YAG laser versus dental handpiece preparations. , 1995, , .		9
113	Freeze-drying and scanning electron microscopy of setting dental gypsum. <i>Dental Materials</i> , 1995, 11, 226-230.	3.5	9
114	Electrochemical investigation of chromium nanocarbide coated Ti-6Al-4V and Co-Cr-Mo alloy substrates. <i>Electrochimica Acta</i> , 2012, 59, 387-397.	5.2	9
115	Electrochemical potential zone of viability on CoCrMo surfaces is affected by cell type: Macrophages under cathodic bias are more resistant to killing. <i>Journal of Biomedical Materials Research - Part A</i> , 2019, 107, 526-534.	4.0	9
116	In vitro test methods for seating and fretting corrosion behavior of modular metal-metal acetabular tapers. <i>Journal of Orthopaedic Research</i> , 2020, 38, 1089-1100.	2.3	9
117	<sc>Nontribological</sc> corrosion modes dominate wrought <sc>CoCrMo</sc> acetabular taper corrosion: A retrieval study. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2021, 109, 2000-2013.	3.4	9
118	Corrosion of Modular Tapers in Total Joint Replacements: A Critical Assessment of Design, Materials, Surface Structure, Mechanics, Electrochemistry, and Biology. , 2015, , 192-223.		9
119	Gentamicin release from two-solution and powder-liquid poly(methyl methacrylate)-based bone cements by using novel pH method. <i>Journal of Biomedical Materials Research Part B</i> , 2004, 69A, 577-583.	3.1	8
120	Material dependent fretting corrosion in spinal fusion devices: Evaluation of onset and long-term response. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2018, 106, 2858-2868.	3.4	8
121	Single asperity sub-nano to nanoscale wear and tribocorrosion of wrought CoCrMo and additively manufactured CoCrMoW alloys. <i>Tribology International</i> , 2022, 174, 107770.	5.9	8
122	Differential Gene Expression to Investigate the Effects of Low-level Electrochemical Currents on <i>Bacillus subtilis</i> . <i>AMB Express</i> , 2011, 1, 39.	3.0	7
123	Effect of mixed alloy combinations on fretting corrosion performance of spinal screw and rod implants. , 2017, 105, 1169-1177.		7
124	Transient electric fields induced by mechanically assisted corrosion of Ti-6Al-4V. <i>Journal of Biomedical Materials Research Part B</i> , 2001, 56, 184-194.	3.1	6
125	Effects of seating load magnitude and load orientation on seating mechanics in 5°-40° mixed-alloy modular taper junctions. <i>Journal of Biomechanics</i> , 2019, 82, 251-258.	2.1	6
126	Constrained shrinkage of highly oriented poly(methyl methacrylate) fibers. <i>Journal of Applied Polymer Science</i> , 2004, 91, 4047-4056.	2.6	5

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127	Complexity in modeling of residual stresses and strains during polymerization of bone cement: Effects of conversion, constraint, heat transfer, and viscoelastic property changes. <i>Journal of Biomedical Materials Research - Part A</i> , 2006, 79A, 999-1014.	4.0	5
128	Effect of the support systemsâ€™ compliance on total hip modular taper seating stability. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2018, 232, 862-870.	1.8	5
129	Effect of multipurpose care solutions upon physical dimensions of silicone hydrogel contact lenses. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2020, 108, 1915-1924.	3.4	5
130	Sensing Localized Surface Corrosion Damage of CoCrMo Alloys and Modular Tapers of Total Hip Retrievals Using Nearfield Electrochemical Impedance Spectroscopy. <i>ACS Biomaterials Science and Engineering</i> , 2020, 6, 1344-1354.	5.2	5
131	Effects of moisture content, temperature and pollutant mixture on atmospheric corrosion of copper and silver and implications for the environmental design of data centers (RP-1755). <i>Science and Technology for the Built Environment</i> , 2020, 26, 567-586.	1.7	5
132	Tissue response to in situ polymerization of a new two-solution bone cement: Evaluation in a sheep model. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2006, 79B, 441-452.	3.4	4
133	The effect of hypochlorous acid on the tribocorrosion of CoCrMo bearing couples. <i>Journal of Biomedical Materials Research - Part A</i> , 2021, 109, 2536-2544.	4.0	4
134	Self-reinforced poly(ether ether ketone) and polyethylene composite gaskets for prevention of mechanically-assisted corrosion in modular taper junctions: Seating, micromotion and short-term fretting corrosion. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2021, 119, 104454.	3.1	4
135	Long-term fretting corrosion performance of modular head-neck junctions with self-reinforced composite gaskets from PEEK and UHMWPE. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2022, 129, 105149.	3.1	4
136	PMMA brush-containing two-solution bone cement: preparation, characterization, and influence of composition on cement properties. <i>Journal of Materials Science: Materials in Medicine</i> , 2014, 25, 79-89.	3.6	3
137	Technical Note: Is Corrosion a Threat to the Strength of the Taper Connection in Femoral Components of Total Hip Replacements?. <i>Corrosion</i> , 2017, 73, 1538-1543.	1.1	3
138	Synthetic periprosthetic synovial fluid development for in vitro cell tribocorrosion testing using the Taguchi array approach. <i>Journal of Biomedical Materials Research - Part A</i> , 2021, 109, 551-561.	4.0	3
139	Is Taper Fretting Corrosion a Threat to the Clinical Performance of Large-Diameter Hips with Highly Crosslinked Polyethylene Bearings?. , 2015, , 45-58.		3
140	Evaluation of a solvent-softened gutta-percha obturation technique in curved canals. <i>Journal of Endodontics</i> , 1995, 21, 459-463.	3.1	2
141	Quantitative analysis of monomer vapor release from two-solution bone cement by using a novel FTIR technique. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2005, 74B, 643-648.	3.4	2
142	The dangers in adopting a tissue-engineering-centric agenda: A president's perspective. <i>Journal of Biomedical Materials Research - Part A</i> , 2011, 96A, 273-274.	4.0	2
143	Metallic Degradation and the Biological Environment. , 2020, , 941-954.		2
144	Cytotoxic effect of galvanically coupled magnesiumâ€™titanium particles on Escherichia coli. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2021, 109, 2162-2173.	3.4	2

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145	Microscale and nanoscale surface strain mapping of single asperity wear in ultra high molecular weight polyethylene: Effects of materials, load, and asperity geometry. Journal of Biomedical Materials Research - Part A, 2010, 93A, 1442-1453.	4.0	1
146	Nano- and Microindentation Testing of UHMWPE. , 2016, , 772-785.		1
147	A novel high viscosity, two solution acrylic bone cement: Effect of chemical composition on properties. Journal of Biomedical Materials Research Part B, 1999, 47, 36-45.	3.1	1
148	<title>Novel use of the CO$_2$ laser on dental hard tissues: an SEM study</title>. , 1997, , .		0
149	Nano- and Microindentation Testing of UHMWPE. , 2009, , 497-509.		0
150	The Arc of Scientific Journals â€“ 50 Years of Publishing: 1985â€“2035. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2016, 104, 7-7.	3.4	0
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