

Gladius Lewis

List of Publications by Citations

Source: <https://exaly.com/author-pdf/10126719/gladius-lewis-publications-by-citations.pdf>

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

83

papers

2,334

citations

24

h-index

47

g-index

84

ext. papers

2,480

ext. citations

3.2

avg, IF

5.74

L-index

#	Paper	IF	Citations
83	Properties of acrylic bone cement: state of the art review. <i>Journal of Biomedical Materials Research Part B</i> , 1997 , 38, 155-82		554
82	Injectable bone cements for use in vertebroplasty and kyphoplasty: state-of-the-art review. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2006 , 76, 456-68	3.5	212
81	Polyethylene wear in total hip and knee arthroplasties. <i>Journal of Biomedical Materials Research Part B</i> , 1997 , 38, 55-75		112
80	The use of nanoindentation for characterizing the properties of mineralized hard tissues: state-of-the art review. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2008 , 87, 286-301	3.5	105
79	Properties of open-cell porous metals and alloys for orthopaedic applications. <i>Journal of Materials Science: Materials in Medicine</i> , 2013 , 24, 2293-325	4.5	91
78	Fatigue testing and performance of acrylic bone-cement materials: state-of-the-art review. <i>Journal of Biomedical Materials Research Part B</i> , 2003 , 66, 457-86		86
77	A Review on Melt-Pool Characteristics in Laser Welding of Metals. <i>Advances in Materials Science and Engineering</i> , 2018 , 2018, 1-18	1.5	85
76	Properties of antibiotic-loaded acrylic bone cements for use in cemented arthroplasties: a state-of-the-art review. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2009 , 89, 558-574	3.5	81
75	Alternative acrylic bone cement formulations for cemented arthroplasties: present status, key issues, and future prospects. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2008 , 84, 301-19	3.5	78
74	Effect of mixing method and storage temperature of cement constituents on the fatigue and porosity of acrylic bone cement. <i>Journal of Biomedical Materials Research Part B</i> , 1999 , 48, 143-9		56
73	Mechanical properties of vacuum-mixed acrylic bone cement. <i>Journal of Applied Biomaterials: an Official Journal of the Society for Biomaterials</i> , 1994 , 5, 307-14		53
72	Viscoelastic properties of injectable bone cements for orthopaedic applications: state-of-the-art review. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2011 , 98, 171-91	3.5	49
71	Relative roles of cement molecular weight and mixing method on the fatigue performance of acrylic bone cement: Simplex P versus Osteopal. <i>Journal of Biomedical Materials Research Part B</i> , 2000 , 53, 119-30		40
70	Influence of the radiopacifier in an acrylic bone cement on its mechanical, thermal, and physical properties: barium sulfate-containing cement versus iodine-containing cement. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2005 , 73, 77-87	3.5	39
69	Nucleus pulposus replacement and regeneration/repair technologies: present status and future prospects. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2012 , 100, 1702-20	3.5	38
68	Estimation of the optimum loading of an antibiotic powder in an acrylic bone cement: gentamicin sulfate in SmartSet HV. <i>Monthly Notices of the Royal Astronomical Society: Letters</i> , 2006 , 77, 622-7	4.3	35
67	Materials, fluid dynamics, and solid mechanics aspects of coronary artery stents: a state-of-the-art review. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2008 , 86, 569-90	3.5	34

66	Effect of mixing method on selected properties of acrylic bone cement. <i>Journal of Biomedical Materials Research Part B</i> , 1997 , 38, 221-8		33
65	Percutaneous vertebroplasty and kyphoplasty for the stand-alone augmentation of osteoporosis-induced vertebral compression fractures: present status and future directions. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2007 , 81, 371-86	3.5	30
64	Influence of a pre-blended antibiotic (gentamicin sulfate powder) on various mechanical, thermal, and physical properties of three acrylic bone cements. <i>Journal of Biomaterials Applications</i> , 2006 , 20, 377-408	2.9	30
63	Rheological properties of acrylic bone cement during curing and the role of the size of the powder particles. <i>Journal of Biomedical Materials Research Part B</i> , 2002 , 63, 191-9		30
62	Effect of test frequency on the in vitro fatigue life of acrylic bone cement. <i>Biomaterials</i> , 2003 , 24, 1111-15	5.6	29
61	Toward standardization of methods of determination of fracture properties of acrylic bone cement and statistical analysis of test results. <i>Journal of Biomedical Materials Research Part B</i> , 2000 , 53, 748-68		27
60	The in vitro elution of gentamicin sulfate from a commercially available gentamicin-loaded acrylic bone cement, VersaBond AB. <i>Journal of Biomedical Materials Research Part B</i> , 2004 , 71, 77-83		25
59	Biomechanics of and research challenges in uncemented total ankle replacement. <i>Clinical Orthopaedics and Related Research</i> , 2004 , 89-97	2.2	24
58	Deposition Methods for Microstructured and Nanostructured Coatings on Metallic Bone Implants: A Review. <i>Advances in Materials Science and Engineering</i> , 2017 , 2017, 1-9	1.5	23
57	An Approach for determining antibiotic loading for a physician-directed antibiotic-loaded PMMA bone cement formulation. <i>Clinical Orthopaedics and Related Research</i> , 2010 , 468, 2092-100	2.2	21
56	Properties of nanofiller-loaded poly (methyl methacrylate) bone cement composites for orthopedic applications: a review. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2017 , 105, 1260-1284	3.5	20
55	Evaluation of two novel aluminum-free, zinc-based glass polyalkenoate cements as alternatives to PMMA bone cement for use in vertebroplasty and balloon kyphoplasty. <i>Journal of Materials Science: Materials in Medicine</i> , 2010 , 21, 59-66	4.5	18
54	Use of isothermal heat-conduction microcalorimetry (IHCMC) for the evaluation of synthetic biomaterials. <i>Journal of Biomedical Materials Research Part B</i> , 2003 , 66, 487-501		18
53	Effect of test specimen cross-sectional shape on the in vitro fatigue life of acrylic bone cement. <i>Biomaterials</i> , 2003 , 24, 4315-21	15.6	18
52	Influence of powder-to-liquid monomer ratio on properties of an injectable iodine-containing acrylic bone cement for vertebroplasty and balloon kyphoplasty. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2009 , 91, 537-44	3.5	17
51	Influence of strontia on various properties of surgical simplex P acrylic bone cement and experimental variants. <i>Acta Biomaterialia</i> , 2007 , 3, 970-9	10.8	16
50	Critical comparison of two methods for the determination of nanomechanical properties of a material: application to synthetic and natural biomaterials. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2006 , 78, 312-7	3.5	13
49	Alendronate in bone cement: fatigue life degraded by liquid, not by powder. <i>Clinical Orthopaedics and Related Research</i> , 2006 , 445, 233-8	2.2	13

48	Estimation of the minimum number of test specimens for fatigue testing of acrylic bone cement. <i>Biomaterials</i> , 2004 , 25, 4425-32	15.6	12
47	Influence of changes in the composition of an acrylic bone cement on its polymerization kinetics. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2007 , 81, 524-9	3.5	11
46	Evaluation of a synthetic vertebral body augmentation model for rapid and reliable cyclic compression life testing of materials for balloon kyphoplasty. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2008 , 87, 179-88	3.5	11
45	X-ray photoelectron spectroscopy study of surface layers on orthopaedic alloys. II. CoCrMo (ASTM F-75) alloy. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1993 , 11, 168-174	2.9	11
44	Dependence of in vitro fatigue properties of PMMA bone cement on the polydispersity index of its powder. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2010 , 3, 94-101	4.1	10
43	The relative influence of five variables on the in vitro wear rate of uncrosslinked UHMWPE acetabular cup liners. <i>Biomaterials</i> , 2003 , 24, 1925-35	15.6	10
42	Key issues involved with the use of miniature specimens in the characterization of the mechanical behavior of polymeric biomaterials--a review. <i>Journal of Biomedical Materials Research Part B</i> , 2002 , 63, 455-66		9
41	X-ray photoelectron study of surface layers on orthopaedic alloys. I. Ti6Al4V (ASTM F-136) alloy. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1993 , 11, 325-335	2.9	9
40	Not all approved antibiotic-loaded PMMA bone cement brands are the same: ranking using the utility materials selection concept. <i>Journal of Materials Science: Materials in Medicine</i> , 2015 , 26, 5388	4.5	8
39	Dynamic thermomechanical properties and crystallinity of ultrahigh molecular weight polyethylene tibial inserts. <i>Journal of Biomedical Materials Research Part B</i> , 1998 , 43, 249-60		7
38	Electrochemical behavior of Ti-6Al-4V alloy in static biosimulating solutions. <i>Journal of Applied Biomaterials: an Official Journal of the Society for Biomaterials</i> , 1993 , 4, 47-54		7
37	INFLUENCE OF THE CONSTITUTIVE MATERIAL BEHAVIOR MODEL ASSIGNED TO THE ANNULUS FIBROSUS AND THE NUCLEUS PULPOSUS ON THE BIOMECHANICAL PERFORMANCE OF A MODEL OF THE CERVICAL SPINE: A FINITE ELEMENT ANALYSIS STUDY. <i>Journal of Mechanics in Medicine and Biology</i> , 2010 , 10, 151-166	0.7	6
36	Influence of the activator in an acrylic bone cement on an array of cement properties. <i>Journal of Biomedical Materials Research - Part A</i> , 2007 , 81, 544-53	5.4	6
35	Evaluation of an accelerated aging medium for acrylic bone cement based on analysis of nanoindentation measurements on laboratory-prepared and retrieved specimens. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2007 , 81, 544-50	3.5	6
34	Effect of fabrication pressure on the fatigue performance of Cemex XL acrylic bone cement. <i>Biomaterials</i> , 2004 , 25, 1415-20	15.6	6
33	Finite element analysis of a model of a therapeutic shoe: effect of material selection for the outsole. <i>Bio-Medical Materials and Engineering</i> , 2003 , 13, 75-81	1	6
32	One equivalent electrical circuit is applicable to model the interface between the passive surface layer on an orthopaedic alloy and a biosimulating aqueous solution. <i>Bio-Medical Materials and Engineering</i> , 2007 , 17, 97-108	1	6
31	Creep Constitutive Model and Component Lifetime Estimation: The Case of Niobium-Modified 9Cr-1Mo Steel Weldments. <i>Journal of Materials Engineering and Performance</i> , 2011 , 20, 1310-1314	1.6	4

30	Finite element analysis of a three-dimensional model of a proximal femur-cemented femoral THJR component construct: influence of assigned interface conditions on strain energy density. <i>Bio-Medical Materials and Engineering</i> , 2006 , 16, 319-27	1	4
29	A room-temperature autonomically-healing PMMA bone cement: influence of composition on fatigue crack propagation rate. <i>Journal of Applied Biomaterials and Biomechanics</i> , 2009 , 7, 90-6		4
28	Influence of assigned material combination in a simulated total cervical disc replacement design on kinematics of a model of the full cervical spine: A finite element analysis study. <i>Bio-Medical Materials and Engineering</i> , 2016 , 27, 633-646	1	3
27	FINITE ELEMENT ANALYSIS OF A MODEL OF SIMULATED VERTEBRAL CEMENT AUGMENTATION: INFLUENCE OF THE REPRESENTATION OF THE SHAPE OF THE CEMENT DOMAIN ON BIOMECHANICAL PARAMETERS. <i>Journal of Mechanics in Medicine and Biology</i> , 2010 , 10, 291-311	0.7	3
26	Modeling the tensile behavior of human Achilles tendon. <i>Bio-Medical Materials and Engineering</i> , 1997 , 7, 231-244	1	3
25	Preheating acrylic bone cement powder is not recommended for all brands. <i>Journal of Arthroplasty</i> , 2007 , 22, 428-34	4.4	3
24	Geometric element analysis of fretting in a model of a modular femoral component of a hip implant. <i>Bio-Medical Materials and Engineering</i> , 2004 , 14, 43-51	1	3
23	Fracture Toughness and Quantitative Computed Tomography Number of Human Tibia Cortical Bone. <i>Journal of Musculoskeletal Research</i> , 1998 , 02, 151-165	0.1	2
22	The elbow joint and its total arthroplasty. Part I. A state-of-the-art review. <i>Bio-Medical Materials and Engineering</i> , 1996 , 6, 353-365	1	2
21	Constitutive Equations for the Creep of a Silicon Carbide Whisker-Reinforced Polycrystalline Alumina Composite Material. <i>Journal of the American Ceramic Society</i> , 1992 , 75, 3481-3484	3.8	2
20	Properties of acrylic bone cement: State of the art review		2
19	Effect of the archwire slot profile on the performance of bonded orthodontic brackets. <i>Bio-Medical Materials and Engineering</i> , 1997 , 7, 205-212	1	1
18	Rapid and reliable biomechanical screening of injectable bone cements for autonomous augmentation of osteoporotic vertebral bodies: appropriate values of elastic constants for finite element models. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2007 , 82, 408-17	3.5	1
17	Effect of debonding forces on bonded orthodontic brackets: finite element study. <i>Bio-Medical Materials and Engineering</i> , 1996 , 6, 113-121	1	1
16	Predictors of Clinical Wear of Restorative Dental Composite Materials. <i>Bio-Medical Materials and Engineering</i> , 1993 , 3, 167-174	1	1
15	Influence of Powder Sterilization Method on Properties of PMMA Bone Cement using Novel Wedge-splitting Test Compact Tension Method. <i>Current Applied Polymer Science</i> , 2018 , 1,	0.2	1
14	Antibiotic-free antimicrobial poly (methyl methacrylate) bone cements: A state-of-the-art review.. <i>World Journal of Orthopedics</i> , 2022 , 13, 339-353	2.2	0
13	Influence of Exogenous Variables on Intrusion Depth of PMMA Bone Cement: Revision of ISO 5833 Standard. <i>Current Applied Polymer Science</i> , 2020 , 3, 189-196	0.2	

- 12 Evaluation of tibial interlocking intramedullary nails. *Bio-Medical Materials and Engineering*, **1997**, 7, 315-325
- 11 Mechanical evaluation of humeral interlocking intramedullary nails. *Bio-Medical Materials and Engineering*, **1997**, 7, 149-157 1
- 10 Characterization of Biomedical Polymer Surface Interaction with Human Factor Xa. *Bio-Medical Materials and Engineering*, **1995**, 5, 65-82 1
- 9 The elbow joint and its total arthroplasty. Part II. Finite element study. *Bio-Medical Materials and Engineering*, **1996**, 6, 367-377 1
- 8 Parametric stress analysis of bonded combination-materials type of orthodontic brackets. *Bio-Medical Materials and Engineering*, **1996**, 6, 33-45 1
- 7 Use of Enzyme-Linked Immunosorbent Assay (ELISA) for Detection and Quantification of Monoclonal Antibodies. *Bio-Medical Materials and Engineering*, **1994**, 4, 363-367 1
- 6 Comparative Influence of Two Compositional Modifications on Maximum Exotherm Temperature and Other Properties of an Antibiotic-Loaded PMMA Bone Cement. *Current Applied Polymer Science*, **2018**, 2, 76-88 0.2
- 5 Effect of loading rate on the apparent fracture toughness of acrylic bone cement. *Bio-Medical Materials and Engineering*, **2002**, 12, 149-55 1
- 4 Effect of an accelerated aging protocol on viscoelastic properties of UHMWPE. *Bio-Medical Materials and Engineering*, **2002**, 12, 299-308 1
- 3 The influence of the viscosity classification of an acrylic bone cement on its in vitro fatigue performance. *Bio-Medical Materials and Engineering*, **2004**, 14, 33-42 1
- 2 Evaluation of a performance index of the padding material in an external hip protector. *Bio-Medical Materials and Engineering*, **2006**, 16, 359-61 1
- 1 Thermal stability of acrylic bone cement powder under shelf storage conditions: an isothermal microcalorimetric study. *Bio-Medical Materials and Engineering*, **2008**, 18, 83-90 1