Enrique Gomez-Barrena

List of Publications by Year in descending order

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129 papers 4,993 citations

33 h-index 98622 67 g-index

130 all docs

130 does citations

times ranked

130

6570 citing authors

#	Article	IF	CITATIONS
1	Oral dabigatran versus enoxaparin for thromboprophylaxis after primary total hip arthroplasty (RE-NOVATE II). Thrombosis and Haemostasis, 2011, 105, 721-729.	1.8	374
2	Bone fracture healing: Cell therapy in delayed unions and nonunions. Bone, 2015, 70, 93-101.	1.4	330
3	Bone regeneration and stem cells. Journal of Cellular and Molecular Medicine, 2011, 15, 718-746.	1.6	308
4	International survey of primary and revision total knee replacement. International Orthopaedics, 2011, 35, 1783-1789.	0.9	307
5	Special modes of corrosion under physiological and simulated physiological conditions. Acta Biomaterialia, 2008, 4, 468-476.	4.1	267
6	Topical Intra-Articular Compared with Intravenous Tranexamic Acid to Reduce Blood Loss in Primary Total Knee Replacement. Journal of Bone and Joint Surgery - Series A, 2014, 96, 1937-1944.	1.4	191
7	Evaluation of Quantitative Analysis of Cultures from Sonicated Retrieved Orthopedic Implants in Diagnosis of Orthopedic Infection. Journal of Clinical Microbiology, 2008, 46, 488-492.	1.8	142
8	Comparative fatigue behavior and toughness of remelted and annealed highly crosslinked polyethylenes. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2007, 83B, 380-390.	1.6	120
9	The relevance of biomaterials to the prevention and treatment of osteoporosis. Acta Biomaterialia, 2014, 10, 1793-1805.	4.1	120
10	Bone regeneration: stem cell therapies and clinical studies in orthopaedics and traumatology. Journal of Cellular and Molecular Medicine, 2011, 15, 1266-1286.	1.6	116
11	The osteoinductive properties of mesoporous silicate coated with osteostatin in a rabbit femur cavity defect model. Biomaterials, 2010, 31, 8564-8573.	5.7	87
12	Feasibility and safety of treating non-unions in tibia, femur and humerus with autologous, expanded, bone marrow-derived mesenchymal stromal cells associated with biphasic calcium phosphate biomaterials in a multicentric, non-comparative trial. Biomaterials, 2019, 196, 100-108.	5.7	87
13	Osteostatin-loaded bioceramics stimulate osteoblastic growth and differentiation. Acta Biomaterialia, 2010, 6, 797-803.	4.1	85
14	In vitro susceptibility to antibiotics of staphylococci in biofilms isolated from orthopaedic infections. International Journal of Antimicrobial Agents, 2013, 41, 521-523.	1.1	79
15	PCR-hybridization after sonication improves diagnosis of implant-related infection. Monthly Notices of the Royal Astronomical Society: Letters, 2012, 83, 299-304.	1.2	78
16	Blood transfusion after primary total knee arthroplasty can be significantly minimised through a multimodal blood-loss prevention approach. International Orthopaedics, 2014, 38, 347-354.	0.9	77
17	Role of Parathyroid Hormone-Related Protein in the Decreased Osteoblast Function in Diabetes-Related Osteopenia. Endocrinology, 2009, 150, 2027-2035.	1.4	68
18	Biocompatibility of total joint replacements: A review. Journal of Biomedical Materials Research - Part A, 2009, 90A, 603-618.	2.1	67

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19	Microstructure changes of extruded ultra high molecular weight polyethylene after gamma irradiation and shelf-aging. Polymer Degradation and Stability, 2005, 88, 435-443.	2.7	64
20	<i>In vitro</i> assessment of <i>Staphylococcus epidermidis</i> and <i>Staphylococcus aureus</i> adhesion on TiO ₂ nanotubes on Ti–6Al–4V alloy. Journal of Biomedical Materials Research - Part A, 2012, 100A, 1696-1705.	2.1	64
21	Update on UHMWPE research From the bench to the bedside. Monthly Notices of the Royal Astronomical Society: Letters, 2008, 79, 832-840.	1.2	62
22	Doped TiO2 anodic layers of enhanced antibacterial properties. Colloids and Surfaces B: Biointerfaces, 2013, 105, 106-112.	2.5	57
23	Bacterial adherence to separated modular components in joint prosthesis: A clinical study. Journal of Orthopaedic Research, 2012, 30, 1634-1639.	1.2	55
24	Biofilm development by clinical isolates of <i>Staphylococcus</i> spp. from retrieved orthopedic prostheses. Monthly Notices of the Royal Astronomical Society: Letters, 2010, 81, 674-679.	1.2	54
25	Influence of the remelting process on the fatigue behavior of electron beam irradiated UHMWPE. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2006, 76B, 346-353.	1.6	53
26	Influence of surface porosity and pH on bacterial adherence to hydroxyapatite and biphasic calcium phosphate bioceramics. Journal of Medical Microbiology, 2009, 58, 132-137.	0.7	53
27	Osteostatin-loaded onto mesoporous ceramics improves the early phase of bone regeneration in a rabbit osteopenia model. Acta Biomaterialia, 2012, 8, 2317-2323.	4.1	51
28	Usefulness of SBA-15 mesoporous ceramics as a delivery system for vancomycin, rifampicin and linezolid: a preliminary report. International Journal of Antimicrobial Agents, 2012, 40, 252-256.	1.1	48
29	The Câ€terminal fragment of parathyroid hormoneâ€related peptide promotes bone formation in diabetic mice with lowâ€turnover osteopaenia. British Journal of Pharmacology, 2011, 162, 1424-1438.	2.7	43
30	Compression behaviour of biphasic calcium phosphate and biphasic calcium phosphate–agarose scaffolds for bone regeneration. Acta Biomaterialia, 2011, 7, 841-847.	4.1	41
31	Strategy to control methicillin-resistant Staphylococcus aureus post-operative infection in orthopaedic surgery. International Orthopaedics, 2004, 28, 16-20.	0.9	39
32	Transportation Conditions for Prompt Use of (i) Ex Vivo (i) Expanded and Freshly Harvested Clinical-Grade Bone Marrow Mesenchymal Stromal/Stem Cells for Bone Regeneration. Tissue Engineering - Part C: Methods, 2014, 20, 239-251.	1.1	39
33	Profile of tollâ€like receptor–positive cells in septic and aseptic loosening of total hip arthroplasty implants. Journal of Biomedical Materials Research - Part A, 2010, 94A, 84-92.	2.1	38
34	Adhesion of staphylococcal and Cacoâ€2 cells on diamondâ€like carbon polymer hybrid coating. Journal of Biomedical Materials Research - Part A, 2008, 86A, 760-768.	2.1	34
35	Functional Performance with a Single-radius Femoral Design Total Knee Arthroplasty. Clinical Orthopaedics and Related Research, 2010, 468, 1214-1220.	0.7	34
36	Fractography evolution in accelerated aging of UHMWPE after gamma irradiation in air. Biomaterials, 2004, 25, 9-21.	5.7	33

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37	Biofilm development by clinical strains of non-pigmented rapidly growing mycobacteria. Clinical Microbiology and Infection, 2009, 15, 931-936.	2.8	33
38	Materials in total joint replacement. Orthopaedics and Trauma, 1998, 12, 51-57.	0.3	32
39	Innervation of the Joint and Role of Neuropeptides. Annals of the New York Academy of Sciences, 2006, 1069, 149-154.	1.8	32
40	Effect of surface roughness and sterilization on bacterial adherence to ultra-high molecular weight polyethylene. Clinical Microbiology and Infection, 2010, 16, 1036-1041.	2.8	32
41	Osteostatin-Coated Porous Titanium Can Improve Early Bone Regeneration of Cortical Bone Defects in Rats. Tissue Engineering - Part A, 2015, 21, 1495-1506.	1.6	32
42	Early efficacy evaluation of mesenchymal stromal cells (MSC) combined to biomaterials to treat long bone non-unions. Injury, 2020, 51, S63-S73.	0.7	32
43	Role of the N- and C-terminal Fragments of Parathyroid-Hormone-Related Protein as Putative Therapies to Improve Bone Regeneration Under High Glucocorticoid Treatment. Tissue Engineering - Part A, 2010, 16, 1157-1168.	1.6	31
44	Bacterial adherence on UHMWPE with vitamin E: an in vitro study. Journal of Materials Science: Materials in Medicine, 2011, 22, 1701-1706.	1.7	30
45	Blood Loss Control with Two Doses of Tranexamic Acid in a Multimodal Protocol for Total Knee Arthroplasty. The Open Orthopaedics Journal, 2011, 5, 44-48.	0.1	30
46	Parathyroid hormone-related protein (107-111) improves the bone regeneration potential of gelatin–glutaraldehyde biopolymer-coated hydroxyapatite. Acta Biomaterialia, 2014, 10, 3307-3316.	4.1	28
47	Segmental sensory innervation of the anterior cruciate ligament and the patellar tendon of the cat's knee. Acta Orthopaedica, 1996, 67, 545-552.	1.4	27
48	Influence of the nanostructure of <scp>F</scp> â€doped TiO ₂ films on osteoblast growth and function. Journal of Biomedical Materials Research - Part A, 2015, 103, 1985-1990.	2.1	27
49	The contribution of the histopathological examination to the diagnosis of adverse local tissue reactions in arthroplasty. EFORT Open Reviews, 2021, 6, 399-419.	1.8	27
50	Traumatic Dislocation of the Tibialis Posterior Tendon. Arteriosclerosis, Thrombosis, and Vascular Biology, 1995, 39, 1198-1200.	1.1	26
51	A Multicentric, Open-Label, Randomized, Comparative Clinical Trial of Two Different Doses of Expanded hBM-MSCs Plus Biomaterial versus Iliac Crest Autograft, for Bone Healing in Nonunions after Long Bone Fractures: Study Protocol. Stem Cells International, 2018, 2018, 1-13.	1.2	25
52	Comparative cyclic stress-strain and fatigue resistance behavior of electron-beam- and gamma-irradiated ultrahigh molecular weight polyethylene., 2004, 70B, 152-160.		24
53	Sonication of Intramedullary Nails: Clinically-Related Infection and Contamination. The Open Orthopaedics Journal, 2012, 6, 255-260.	0.1	24
54	Resuming hip and knee arthroplasty after COVID-19: ethical implications for wellbeing, safety and the economy. HIP International, 2020, 30, 492-499.	0.9	23

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55	Bacterial adherence to SiO ₂ â€based multifunctional bioceramics. Journal of Biomedical Materials Research - Part A, 2009, 89A, 215-223.	2.1	22
56	Interactions of human bone cells with diamond-like carbon polymer hybrid coatings. Acta Biomaterialia, 2010, 6, 3325-3338.	4.1	22
57	Evaluation of bacterial adherence of clinical isolates of <i>Staphylococcus sp.</i> using a competitive model. Bone and Joint Research, 2017, 6, 315-322.	1.3	22
58	Tranexamic Acid in a Multimodal Blood Loss Prevention Protocol to Decrease Blood Loss in Revision Total Knee Arthroplasty: A Cohort Study. The Open Orthopaedics Journal, 2016, 10, 439-447.	0.1	22
59	Drug treatments for prosthetic joint infections in the era of multidrug resistance. Expert Opinion on Pharmacotherapy, 2016, 17, 1233-1246.	0.9	21
60	Mid-Term Comparative Outcomes of Autologous Bone-Marrow Concentration to Treat Osteonecrosis of the Femoral Head in Standard Practice. HIP International, 2016, 26, 432-437.	0.9	21
61	Meniscal degeneration in human knee osteoarthritis: in situ hybridization and immunohistochemistry study. Archives of Orthopaedic and Trauma Surgery, 2016, 136, 175-183.	1.3	21
62	An update about molecular biology techniques to detect orthopaedic implant-related infections. EFORT Open Reviews, 2021, 6, 93-100.	1.8	21
63	Insufficient recovery of neuromuscular activity around the knee after experimental anterior cruciate ligament reconstruction. Monthly Notices of the Royal Astronomical Society: Letters, 2008, 79, 39-47.	1.2	20
64	Osteoporotic hip fractures: Bisphosphonates sales and observed turning point in trend. A population-based retrospective study. Bone, 2013, 53, 430-436.	1.4	20
65	In vitro susceptibility of Staphylococcus aureus and Staphylococcus epidermidis isolated from prosthetic joint infections. Journal of Antibiotics, 2012, 65, 505-508.	1.0	19
66	Regulatory authorities and orthopaedic clinical trials on expanded mesenchymal stem cells. International Orthopaedics, 2014, 38, 1803-1809.	0.9	19
67	Osteonecrosis of the Femoral Head Safely Healed with Autologous, Expanded, Bone Marrow-Derived Mesenchymal Stromal Cells in a Multicentric Trial with Minimum 5 Years Follow-Up. Journal of Clinical Medicine, 2021, 10, 508.	1.0	19
68	Fracture behavior of UHMWPE in non-implanted, shelf-aged knee prostheses after gamma irradiation in air. Biomaterials, 2001, 22, 2107-2114.	5.7	18
69	Sequential changes of parathyroid hormone related protein (PTHrP) in articular cartilage during progression of inflammatory and degenerative arthritis. Annals of the Rheumatic Diseases, 2004, 63, 917-922.	0.5	18
70	Evaluation of a minimally aggressive method of patellofemoral osteoarthritis treatment at 10 years minimum follow-up. Knee, 2013, 20, 476-481.	0.8	18
71	Validation of a long bone fracture non-union healing score after treatment with mesenchymal stromal cells combined to biomaterials. Injury, 2020, 51, S55-S62.	0.7	18
72	Anterior cruciate ligament reconstruction affects proprioception in the cat's knee. Acta Orthopaedica, 1999, 70, 185-193.	1.4	17

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73	Low-volume formulation of intra-articular tranexamic acid, 25-ml tranexamic acid (2.5 g) plus 20-ml saline, is effective in decreasing blood transfusion rate in primary total knee replacement even without preoperative haemoglobin optimization. Blood Coagulation and Fibrinolysis, 2016, 27, 660-666.	0.5	16
74	Neural and muscular electric activity in the cat's knee: Changes when the anterior cruciate ligament is transected. Acta Orthopaedica, 1997, 68, 149-155.	1.4	15
75	Loss of neuromuscular control related to motion in the acutely ACL-injured knee: an experimental study. European Journal of Applied Physiology, 2008, 104, 567-577.	1.2	15
76	DLC coatings for UHMWPE: Relationship between bacterial adherence and surface properties. Journal of Biomedical Materials Research - Part A, 2012, 100A, 2813-2820.	2.1	15
77	On the interactions of human bone cells with Ti6Al4V thermally oxidized by means of laser shock processing. Biomedical Materials (Bristol), 2016, 11, 015009.	1.7	15
78	Smart Implants as a Novel Strategy to Regenerate Well-Founded Cartilage. Trends in Biotechnology, 2017, 35, 8-11.	4.9	15
79	Substrate Microarchitecture Shapes the Paracrine Crosstalk of Stem Cells with Endothelial Cells and Osteoblasts. Scientific Reports, 2017, 7, 15182.	1.6	15
80	Polyethylene Oxidation in Total Hip Arthroplasty: Evolution and New Advances. The Open Orthopaedics Journal, 2009, 3, 115-120.	0.1	13
81	Knee model of hydrodynamic lubrication during the gait cycle and the influence of prosthetic joint conformity. Journal of Orthopaedic Science, 2009, 14, 68-75.	0.5	13
82	An experimental study of COMP (cartilage oligomeric matrix protein) in the rabbit menisci. Archives of Orthopaedic and Trauma Surgery, 2011, 131, 1167-1176.	1.3	12
83	European musculoskeletal health and mobility in Horizon 2020. Bone and Joint Research, 2014, 3, 48-50.	1.3	12
84	Bacterial adhesion on biomedical surfaces covered by yttria stabilized zirconia. Journal of Materials Science: Materials in Medicine, 2016, 27, 6.	1.7	11
85	Changes of Bone Turnover Markers in Long Bone Nonunions Treated with a Regenerative Approach. Stem Cells International, 2017, 2017, 1-11.	1.2	11
86	Frontiers in non-union research. EFORT Open Reviews, 2020, 5, 574-583.	1.8	11
87	Bacterial adhesion on biomedical surfaces covered by micrometric silver Islands. Journal of Biomedical Materials Research - Part A, 2012, 100A, 1521-1528.	2.1	10
88	Bacterial Adherence to Biomaterials Used in Surgical Procedures. , 2014, , 41-57.		10
89	Cellular and molecular meniscal changes in the degenerative knee: a review. Journal of Experimental Orthopaedics, 2018, 5, 11.	0.8	10
90	Limiting spread of COVID-19 in an orthopaedic department—a perspective from Spain. Journal of Surgical Case Reports, 2020, 2020, rjaa095.	0.2	10

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91	Bacterial adherence to anodized titanium alloy. Journal of Physics: Conference Series, 2010, 252, 012011.	0.3	9
92	Factors influencing regional variability in the rate of total knee arthroplasty. Knee, 2014, 21, 236-241.	0.8	9
93	Biomarkers of bone healing induced by a regenerative approach based on expanded bone marrow–derived mesenchymal stromal cells. Cytotherapy, 2019, 21, 870-885.	0.3	9
94	Parámetros de marcha en una muestra de referencia de escolares sanos españoles: descripción multivariante y asimetrÃas entre ciclos izquierdos y derechos. NeurologÃa, 2013, 28, 145-152.	0.3	8
95	Epidemiology of long bone non-unions in Spain. Injury, 2021, 52, S3-S7.	0.7	8
96	Influence of platelet time activation on articular cartilage growth in the rabbit knee. Knee, 2008, 15, 314-317.	0.8	7
97	Bacterial adherence to vitamin E UHMWPE. Considerations about in vitro studies. Journal of Orthopaedic Research, 2012, 30, 1181-1181.	1.2	7
98	Mullins effect behaviour under compression in micelle-templated silica and micelle-templated silica/agarose systems. Journal of Materials Science: Materials in Medicine, 2012, 23, 229-238.	1.7	6
99	Effect of different agents with potential antibiofilm activity on antimicrobial susceptibility of biofilms formed by Staphylococcus spp. isolated from implant-related infections. Journal of Antibiotics, 2016, 69, 686-688.	1.0	6
100	Regional variability in the rates of total hip replacement in Spain. HIP International, 2014, 24, 81-90.	0.9	5
101	Complications in Total Joint Arthroplasties. Journal of Clinical Medicine, 2019, 8, 1891.	1.0	5
102	Prevention of Periprosthetic Joint Infection in Total Hip and Knee Replacement: One European Consensus. Journal of Clinical Medicine, 2022, 11, 381.	1.0	5
103	Proprioception in the ACL-ruptured knee: The contribution of the medial collateral ligament and patellar ligament. An in vivo experimental study in the cat. Knee, 2007, 14, 39-45.	0.8	4
104	Bacterial adherence on fluorinated carbon based coatings deposited on polyethylene surfaces. Journal of Physics: Conference Series, 2010, 252, 012013.	0.3	4
105	Reliability of a simple fluoroscopic method to study sagittal plane femorotibial contact changes in total knee arthroplasties during flexion. Knee, 2007, 14, 289-294.	0.8	3
106	Human boneâ€lineage cell responses to anisotropic Ti6Al4V surfaces are dependent on their maturation state. Journal of Biomedical Materials Research - Part A, 2014, 102, 3154-3166.	2.1	3
107	CORR Insights \hat{A}^{\odot} : Periprosthetic Occult Fractures of the Acetabulum Occur Frequently During Primary THA. Clinical Orthopaedics and Related Research, 2017, 475, 495-497.	0.7	3
108	Implantation of autologous Expanded Mesenchymal Stromal Cells in Hip Osteonecrosis through Percutaneous Forage: Evaluation of the Operative Technique. Journal of Clinical Medicine, 2021, 10, 743.	1.0	3

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109	Both younger and elderly patients in pain are willing to undergo knee replacement despite the COVID-19 pandemic: a study on surgical waiting lists. Knee Surgery, Sports Traumatology, Arthroscopy, 2022, 30, 2723-2730.	2.3	3
110	Widespread of total knee arthroplasty perioperative blood management techniques based on tranexamic acid: barriers and opportunities. Annals of Translational Medicine, 2015, 3, 299.	0.7	3
111	Antibacterial properties of biomedical surfaces containing micrometric silver islands. Journal of Physics: Conference Series, 2010, 252, 012015.	0.3	2
112	Histomorphometry of the Ligaments Using a Generic-Purpose Image Processing Software, a New Strategy for Semi-Automatized Measurements. Journal of Digital Imaging, 2012, 25, 527-536.	1.6	2
113	CORR Insights®: Revision of Metal-on-metal Hip Prostheses Results in Marked Reduction of Blood Cobalt and Chromium Ion Concentrations. Clinical Orthopaedics and Related Research, 2015, 473, 2314-2315.	0.7	2
114	One-Year, Efficacy and Safety Open Label Study, with a Single Injection of a New Hyaluronan for Knee OA: The SOYA Trial. Journal of Pain Research, 2021, Volume 14, 2229-2237.	0.8	2
115	Microbiological Diagnosis of Prosthetic Joint Infection. , 2012, , 165-179.		2
116	Periarticular muscle stimulation controls anterior tibial laxity after experimental ACL section: an experimental study. Archives of Orthopaedic and Trauma Surgery, 2009, 129, 1053-1061.	1.3	1
117	Influencia del concentrado de plaquetas sobre la reconstrucción de defectos de cartÃłago articular en la rodilla de cordero. Revista Española De CirugÃa Ortopédica Y TraumatologÃa, 2010, 54, 378-382.	0.1	1
118	CORR Insights \hat{A}^{\otimes} : Retrieval Analysis of Sequentially Annealed Highly Crosslinked Polyethylene Used in Total Hip Arthroplasty. Clinical Orthopaedics and Related Research, 2015, 473, 972-973.	0.7	1
119	Sonication of Removed Implants in the Infected Total Knee Arthroplasty. , 2018, , 117-121.		1
120	Defining the Most Effective Patient Blood Management Combined with Tranexamic Acid Regime in Primary Uncemented Total Hip Replacement Surgery. Journal of Clinical Medicine, 2020, 9, 1952.	1.0	1
121	Molecular Diagnosis of Prosthetic Joint Infection. , 2012, , 193-211.		1
122	Knee ligaments and proprioception. Acta Orthopaedica, 1997, 68, 183-185.	1.4	0
123	Evaluation of the effect of vitamin E doped UHMWPE on biofilm development and infection using an <i>in vivo</i> experimental model. Journal of Physics: Conference Series, 2010, 252, 012016.	0.3	O
124	Yrjö Tapio Konttinen 1952–2014. Monthly Notices of the Royal Astronomical Society: Letters, 2015, 86, 145-146.	1.2	0
125	CORR Insights \hat{A}° : High Oxidation Stability of Tea Polyphenol-stabilized Highly Crosslinked UHMWPE Under an in Vitro Aggressive Oxidative Condition. Clinical Orthopaedics and Related Research, 2019, 477, 1956-1957.	0.7	O
126	Neuromuscular Control of Dynamic Joint Stabilization with a Knee Brace: Implications to Improve Muscle and Balance Control. Biosystems and Biorobotics, 2013, , 167-171.	0.2	0

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127	Late Infections of the Knee Joint: Arthrodesis or Other Solutions. , 2016, , 283-291.		O
128	Intra-articular Corticosteroids and Hyaluronic Acid in the Knee Joint., 2017,, 23-28.		0
129	Complications and surgical treatment after pathological fracture associated to HIV secondary disease. A case report. Journal of Surgical Case Reports, 2022, 2022, .	0.2	O