

Bruce Kenneth Milthorpe

List of Publications by Year in descending order

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Version: 2024-02-01

97
papers

4,325
citations

126907

33
h-index

123424

61
g-index

102
all docs

102
docs citations

102
times ranked

4910
citing authors

#	ARTICLE	IF	CITATIONS
1	Assessment of bone ingrowth into porous biomaterials using MICRO-CT. <i>Biomaterials</i> , 2007, 28, 2491-2504.	11.4	370
2	Sintering effects on the strength of hydroxyapatite. <i>Biomaterials</i> , 1995, 16, 409-415.	11.4	300
3	The correlation of pore morphology, interconnectivity and physical properties of 3D ceramic scaffolds with bone ingrowth. <i>Biomaterials</i> , 2009, 30, 1440-1451.	11.4	297
4	Engineering thick tissues - the vascularisation problem. , 2007, 14, 1-19.		203
5	Analysis of 3D bone ingrowth into polymer scaffolds via micro-computed tomography imaging. <i>Biomaterials</i> , 2004, 25, 4947-4954.	11.4	162
6	Title is missing!. <i>Journal of Sol-Gel Science and Technology</i> , 2001, 21, 39-48.	2.4	150
7	An evaluation of DNA fluorochromes, staining techniques, and analysis for flow cytometry. I. Unperturbed cell populations.. <i>Journal of Histochemistry and Cytochemistry</i> , 1980, 28, 1224-1232.	2.5	147
8	Interfacial bond strength of electrophoretically deposited hydroxyapatite coatings on metals. <i>Journal of Materials Science: Materials in Medicine</i> , 1999, 10, 401-409.	3.6	136
9	The effect of charged groups on protein interactions with poly(HEMA) hydrogels. <i>Biomaterials</i> , 2006, 27, 567-575.	11.4	125
10	The effect of silica nanoparticulate coatings on serum protein adsorption and cellular response. <i>Biomaterials</i> , 2006, 27, 4856-4862.	11.4	111
11	Effect of charged groups on the adsorption and penetration of proteins onto and into carboxymethylated poly(HEMA) hydrogels. <i>Biomaterials</i> , 1998, 19, 2175-2186.	11.4	103
12	Monitoring cell adhesion on tantalum and oxidised polystyrene using a quartz crystal microbalance with dissipation. <i>Biomaterials</i> , 2006, 27, 4529-4537.	11.4	101
13	Precipitation of hydroxyapatite nanoparticles: Effects of precipitation method on electrophoretic deposition. <i>Journal of Materials Science: Materials in Medicine</i> , 2005, 16, 319-324.	3.6	100
14	The direct analysis of sedimentation equilibrium results obtained with polymerizing systems. <i>Biophysical Chemistry</i> , 1975, 3, 169-176.	2.8	99
15	Polymerization pattern of insulin at pH 7.0. <i>Biochemistry</i> , 1976, 15, 4660-4665.	2.5	79
16	Hydroxyapatite-coated metals: Interfacial reactions during sintering. <i>Journal of Materials Science: Materials in Medicine</i> , 2005, 16, 101-106.	3.6	65
17	Xenografts for tendon and ligament repair. <i>Biomaterials</i> , 1994, 15, 745-752.	11.4	64
18	Lysozyme interaction with poly(HEMA)-based hydrogel. <i>Biomaterials</i> , 2006, 27, 1341-1345.	11.4	63

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19	Extracellular matrix remodelling during cell adhesion monitored by the quartz crystal microbalance. <i>Biomaterials</i> , 2008, 29, 2581-2587.	11.4	59
20	Comparative evaluation of treated bovine pericardium as a xenograft for hernia repair. <i>Biomaterials</i> , 1991, 12, 801-809.	11.4	47
21	Phosphorus studies in pigs. <i>British Journal of Nutrition</i> , 1993, 70, 249-268.	2.3	47
22	Marine Structure Derived Calcium Phosphate-Polymer Biocomposites for Local Antibiotic Delivery. <i>Marine Drugs</i> , 2015, 13, 666-680.	4.6	45
23	Measurement of the mechanical properties of the ovine anterior cruciate ligament bone-ligament-bone complex: a basis for prosthetic evaluation. <i>Biomaterials</i> , 1990, 11, 89-96.	11.4	43
24	Irreversible adsorption of human serum albumin to hydrogel contact lenses: a study using electron spin resonance spectroscopy. <i>Biomaterials</i> , 1999, 20, 1345-1356.	11.4	43
25	Hydroxyapatite-316L fibre composites prepared by vibration assisted slip casting. <i>Journal of Materials Science</i> , 2001, 36, 3323-3332.	3.7	40
26	The polymerization pattern of zinc(II)-insulin at pH 7.0. <i>Biochimica Et Biophysica Acta (BBA) - Protein Structure</i> , 1977, 495, 195-202.	1.7	39
27	Mechanical comparison of materials used for extra-capsular stabilisation of the stifle joint in dogs. <i>Australian Veterinary Journal</i> , 1997, 75, 890-896.	1.1	39
28	Natural and Synthetic Coral Biomineralization for Human Bone Revitalization. <i>Trends in Biotechnology</i> , 2017, 35, 43-54.	9.3	39
29	Development of an Isokinetic Functional Electrical Stimulation Cycle Ergometer. <i>Neuromodulation</i> , 2004, 7, 56-64.	0.8	38
30	The effects of sintering atmosphere on the chemical compatibility of hydroxyapatite and particulate additives at 1200°C. <i>Journal of Materials Science: Materials in Medicine</i> , 1995, 6, 297-301.	3.6	37
31	Controlled Release of Simvastatin from Biomimetic β -TCP Drug Delivery System. <i>PLoS ONE</i> , 2013, 8, e54676.	2.5	37
32	A Therapeutic Potential for Marine Skeletal Proteins in Bone Regeneration. <i>Marine Drugs</i> , 2013, 11, 1203-1220.	4.6	36
33	Bioresorbable zinc hydroxyapatite guided bone regeneration membrane for bone regeneration. <i>Clinical Oral Implants Research</i> , 2016, 27, 354-360.	4.5	35
34	Gold nanoparticles improve metabolic profile of mice fed a high-fat diet. <i>Journal of Nanobiotechnology</i> , 2018, 16, 11.	9.1	35
35	Bone Regeneration of Rat Tibial Defect by Zinc-Tricalcium Phosphate (Zn-TCP) Synthesized from Porous Foraminifera Carbonate Macrospheres. <i>Marine Drugs</i> , 2013, 11, 5148-5158.	4.6	34
36	FMFPAK1: A program package for routine analysis of single parameter flow microfluorimetric data on a low cost mini-computer. <i>Journal of Biomedical Informatics</i> , 1980, 13, 417-429.	0.7	33

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37	Bioinspired materials for regenerative medicine: going beyond the human archetypes. <i>Journal of Materials Chemistry B</i> , 2016, 4, 2396-2406.	5.8	33
38	Biomechanical Study of Canine Spinal Fracture Fixation Using Pins or Bone Screws With Polymethylmethacrylate. <i>Veterinary Surgery</i> , 1994, 23, 322-329.	1.0	32
39	Endothelial Cell Seeding of Small Diameter Vascular Grafts. <i>Artificial Organs</i> , 1990, 14, 355-360.	1.9	31
40	Autograft and Leeds-Keio Reconstructions of the Ovine Anterior Cruciate Ligament. <i>Clinical Orthopaedics and Related Research</i> , 1991, &NA;, 278??293.	1.5	31
41	Nitrous acid pretreatment of tendon xenografts cross-linked with glutaraldehyde and sterilized with gamma irradiation. <i>Biomaterials</i> , 1999, 20, 1003-1015.	11.4	31
42	Direct neural network application for automated cell recognition. <i>Cytometry</i> , 2004, 57A, 1-9.	1.8	31
43	Three-dimensional analysis of cortical bone structure using X-ray micro-computed tomography. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2004, 339, 125-130.	2.6	31
44	Stability of hydroxyapatite while processing short-fibre reinforced hydroxyapatite ceramics. <i>Biomaterials</i> , 1997, 18, 1523-1529.	11.4	26
45	The Therapeutic Effect on Bone Mineral Formation from Biomimetic Zinc Containing Tricalcium Phosphate (ZnTCP) in Zinc-Deficient Osteoporotic Mice. <i>PLoS ONE</i> , 2013, 8, e71821.	2.5	25
46	Strontium- and magnesium-enriched biomimetic β -TCP microspheres with potential for bone tissue morphogenesis. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2014, 8, 771-778.	2.7	25
47	Brushite (Ca,M)HPO ₄ ·2H ₂ O doping with bioactive ions (M ²⁺ = Mg ²⁺ , Sr ²⁺ , Zn ²⁺ , Cu ²⁺ , and Ag ⁺): a new path to functional biomaterials?. <i>Materials Today Chemistry</i> , 2020, 16, 100230.	3.5	25
48	The effectiveness of the controlled release of simvastatin from β -TCP microsphere in the treatment of OVX mice. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2016, 10, E195-E203.	2.7	24
49	Antibiotic delivery potential of nano- and micro-porous marine structure-derived β -tricalcium phosphate spheres for medical applications. <i>Nanomedicine</i> , 2014, 9, 1131-1139.	3.3	23
50	Effect of biomimetic zinc-containing tricalcium phosphate (Zn-TCP) on the growth and osteogenic differentiation of mesenchymal stem cells. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2015, 9, 852-858.	2.7	23
51	Valproic Acid Promotes Early Neural Differentiation in Adult Mesenchymal Stem Cells Through Protein Signalling Pathways. <i>Cells</i> , 2020, 9, 619.	4.1	23
52	Collagen Cross-Linking and Resorption: Effect of Glutaraldehyde Concentration. <i>Artificial Organs</i> , 1990, 14, 443-448.	1.9	22
53	Interdiffusion in short-fibre reinforced hydroxyapatite ceramics. <i>Journal of Materials Science: Materials in Medicine</i> , 1998, 9, 589-596.	3.6	22
54	Investigation of microstructural features in regenerating bone using micro computed tomography. <i>Journal of Materials Science: Materials in Medicine</i> , 2004, 15, 529-532.	3.6	22

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55	Adult stem cell coatings for regenerative medicine. <i>Materials Today</i> , 2012, 15, 60-66.	14.2	22
56	Gold nanoparticles as cell regulators: beneficial effects of gold nanoparticles on the metabolic profile of mice with pre-existing obesity. <i>Journal of Nanobiotechnology</i> , 2018, 16, 88.	9.1	22
57	Measurement of microtomy induced section distortion and its correction for 3-dimensional histological reconstructions. <i>Cytometry</i> , 1994, 15, 95-105.	1.8	21
58	Protein adsorption on derivatives of hyaluronic acid and subsequent cellular response. <i>Journal of Biomedical Materials Research - Part A</i> , 2009, 91A, 635-646.	4.0	21
59	Fibrinogen adsorption and platelet adhesion to silica surfaces with stochastic nanotopography. <i>Biointerphases</i> , 2014, 9, 041002.	1.6	21
60	An experimental model of affinity cell separation. <i>Cytometry</i> , 1994, 16, 25-33.	1.8	19
61	Hydroxyapatite sintering characteristics: correlation with powder morphology by high-resolution microscopy. <i>Journal of Materials Science Letters</i> , 1995, 14, 744.	0.5	19
62	Proteomic Analysis of Human Adipose Derived Stem Cells during Small Molecule Chemical Stimulated Pre-neuronal Differentiation. <i>International Journal of Stem Cells</i> , 2017, 10, 193-217.	1.8	17
63	Improvement of Elongation in Nanosurface Modified Bioglass/PLA Thin Film Composites. <i>Current Nanoscience</i> , 2014, 10, 200-204.	1.2	17
64	The sedimentation equilibrium of heterogeneously associating systems and mixtures of non-interacting solutes: analysis without determination of molecular weight averages. <i>Biophysical Chemistry</i> , 1976, 4, 259-267.	2.8	16
65	Identification and quantitation of tumour cells in cell suspensions: a comparison of cytology and flow cytometry. <i>British Journal of Cancer</i> , 1981, 43, 526-531.	6.4	16
66	Shielding of augmented tendon-tendon repair. <i>Biomaterials</i> , 1995, 16, 803-807.	11.4	16
67	In Vitro Adsorption of Tear Proteins to Hydroxyethyl Methacrylate-Based Contact Lens Materials. <i>Eye and Contact Lens</i> , 2009, 35, 320-328.	1.6	16
68	Development and dissolution studies of bisphosphonate (clodronate)-containing hydroxyapatite-poly(lactic acid) biocomposites for slow drug delivery. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2017, 11, 1723-1731.	2.7	15
69	Coral Exoskeletons as a Precursor Material for the Development of a Calcium Phosphate Drug Delivery System for Bone Tissue Engineering. <i>Biological and Pharmaceutical Bulletin</i> , 2013, 36, 1662-1665.	1.4	13
70	Selectively-Packaged Proteins in Breast Cancer Extracellular Vesicles Involved in Metastasis. <i>International Journal of Molecular Sciences</i> , 2020, 21, 4990.	4.1	13
71	In vivo Patency of Endothelial Cell-lined Expanded Polytetrafluoroethylene Prostheses in an Ovine Model. <i>Artificial Organs</i> , 1992, 16, 346-353.	1.9	12
72	Simvastatin-loaded β -TCP Drug Delivery System Induces Bone Formation and Prevents Rhabdomyolysis in OVX Mice. <i>Advanced Healthcare Materials</i> , 2013, 2, 678-681.	7.6	12

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73	Mechanisms of Head and Neck Injuries Sustained by Helmeted Motorcyclists in Fatal Real-World Crashes: Analysis of 47 In-Depth Cases. <i>Journal of Neurotrauma</i> , 2016, 33, 1802-1807.	3.4	11
74	Hollow-fiber assay for ligand-mediated cell adhesion. <i>Cytometry</i> , 2004, 57A, 39-44.	1.8	10
75	Hydroxyapatite/PLA Biocomposite Thin Films for Slow Drug Delivery of Antibiotics for the Treatment of Bone and Implant-Related Infections. <i>Key Engineering Materials</i> , 0, 696, 271-276.	0.4	10
76	Induction of endothelial cell migration by proline analogs and its relevance to angiogenesis. <i>Experimental Cell Research</i> , 1988, 176, 248-257.	2.6	9
77	Resorbable and non-resorbable augmentation devices for tenorrhaphy of xenografts in extensor tendon deficits: 12 week study. <i>Biomaterials</i> , 1997, 18, 225-234.	11.4	9
78	Full-face motorcycle helmet protection from facial impacts: an investigation using THOR dummy impacts and SIMon finite element head model. <i>Injury Prevention</i> , 2017, 23, 205-210.	2.4	9
79	Proteomic Analysis of Cyclic Ketamine Compounds Ability to Induce Neural Differentiation in Human Adult Mesenchymal Stem Cells. <i>International Journal of Molecular Sciences</i> , 2019, 20, 523.	4.1	9
80	Molecular Mechanisms Involved in Neural Substructure Development during Phosphodiesterase Inhibitor Treatment of Mesenchymal Stem Cells. <i>International Journal of Molecular Sciences</i> , 2020, 21, 4867.	4.1	8
81	Microcomputer-based system for tensile testing of biological materials. <i>Medical and Biological Engineering and Computing</i> , 1988, 26, 161-166.	2.8	7
82	Hydroxyapatite -Zirconia Functionally Graded Bioceramics Prepared by Hot Isostatic Pressing. <i>Key Engineering Materials</i> , 2003, 240-242, 591-594.	0.4	7
83	APPLICATION OF BIOMECHANICS TO TISSUE ENGINEERING: A PERSONAL VIEW. <i>Journal of Mechanics in Medicine and Biology</i> , 2008, 08, 153-160.	0.7	7
84	The synthesis of hydroxyapatite from artificially grown Red Sea hydrozoan coral for antimicrobial drug delivery system applications. <i>Journal of the Australian Ceramic Society</i> , 2021, 57, 399-407.	1.9	6
85	Protein Adsorption on Derivatives of Hyaluronan. <i>Macromolecular Symposia</i> , 2008, 266, 17-22.	0.7	4
86	Nanomaterial research in Australia and New Zealand. <i>Nanomedicine</i> , 2013, 8, 1999-2006.	3.3	4
87	Response of a full-face motorcycle helmet FE model to the UNECE 22.05 chin bar impact test. <i>International Journal of Crashworthiness</i> , 2016, 21, 555-565.	1.9	4
88	Molecular Dynamics of Cytokine Interactions and Signalling of Mesenchymal Stem Cells Undergoing Directed Neural-like Differentiation. <i>Life</i> , 2022, 12, 392.	2.4	4
89	Trace elemental imaging of coralline hydroxyapatite by laser-ablation inductively coupled plasma-mass spectroscopy. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2012, 8, n/a-n/a.	2.7	3
90	Adipose Stem Cell Coating of Biomimetic β -TCP Macrospheres by Use of Laboratory Centrifuge. <i>BioResearch Open Access</i> , 2013, 2, 67-71.	2.6	3

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91	In Vitro Study of Shear Force on Interbody Implants. Journal of Spinal Disorders and Techniques, 2006, 19, 32-36.	1.9	2
92	Quantitative Proteomic Profiling of Small Molecule Treated Mesenchymal Stem Cells Using Chemical Probes. International Journal of Molecular Sciences, 2021, 22, 160.	4.1	2
93	A Molecular Analysis of Cytokine Content across Extracellular Vesicles, Secretions, and Intracellular Space from Different Site-Specific Adipose-Derived Stem Cells. International Journal of Molecular Sciences, 2022, 23, 397.	4.1	2
94	A New Role for Marine Skeletal Proteins in Regenerative Orthopaedics. Key Engineering Materials, 0, 529-530, 654-659.	0.4	1
95	Multifunctional-Dual Drug Delivery Poly-Lactic Acid Biocomposite Coating with Hydroxyapatite for Bone Implants. Key Engineering Materials, 2018, 782, 212-217.	0.4	1
96	Optical endpoint sensing in an automatic whole blood clotting timer. Medical and Biological Engineering and Computing, 1984, 22, 401-405.	2.8	0
97	The Controlled Release of Simvastatin from Biomimetic Macrospheres. Key Engineering Materials, 0, 529-530, 461-464.	0.4	0