Susmita Bose

List of Publications by Year
in descending order

211 papers	22,272 citations	9428 76 h-index	10679 143 g-index
239 all docs	239 docs citations	239 times ranked	21278 citing authors

#	Article	IF	Citations
1	Alloy design via additive manufacturing: Advantages, challenges, applications and perspectives. Materials Today, 2022, 52, 207-224.	8.3	88
2	Metal Additive Manufacturing for Load-Bearing Implants. Journal of the Indian Institute of Science, 2022, 102, 561-584.	0.9	12
3	Translation of 3D printed materials for medical applications. MRS Bulletin, 2022, 47, 39-48.	1.7	10
4	Ginger and Garlic Extracts Enhance Osteogenesis in 3D Printed Calcium Phosphate Bone Scaffolds with Bimodal Pore Distribution. ACS Applied Materials & Interfaces, 2022, 14, 12964-12975.	4.0	12
5	Additive manufacturing of Ti-Ni bimetallic structures. Materials and Design, 2022, 215, 110461.	3.3	17
6	Effects of Vitamin A (Retinol) Release from Calcium Phosphate Matrices and Porous 3D Printed Scaffolds on Bone Cell Proliferation and Maturation. ACS Applied Bio Materials, 2022, 5, 1120-1129.	2.3	5
7	Laser-based directed energy deposition (DED-LB) of advanced materials. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 840, 142967.	2.6	82
8	Plasma sprayed fluoride and zinc doped hydroxyapatite coated titanium for load-bearing implants. Surface and Coatings Technology, 2022, 440, 128464.	2.2	14
9	3D printed hydroxyapatite-nacre-starch based bone grafts: Evaluation of biological and mechanical properties. Journal of Materials Research, 2022, 37, 2033-2044.	1.2	2
10	Zinc curcumin complex on fluoride doped hydroxyapatite with enhanced biological properties for dental and orthopedic applications. Journal of Materials Research, 2022, 37, 2009-2020.	1.2	9
11	3D printed hydroxyapatite â€“ Zn^{2+} functionalized starch composite bone grafts for orthopedic and dental applications. Materials and Design, 2022, 221, 110903.	3.3	17
12	Effects of surface area and topography on 3D printed tricalcium phosphate scaffolds for bone grafting applications. Additive Manufacturing, 2021, 39, 101870.	1.7	21
13	Hydroxyapatite reinforced Ti6Al4V composites for load-bearing implants. Acta Biomaterialia, 2021, 123, 379-392.	4.1	37
14	Influence of random and designed porosities on 3D printed tricalcium phosphate-bioactive glass scaffolds. Additive Manufacturing, 2021, 40, 101895.	1.7	18
15	3D Printing in alloy design to improve biocompatibility in metallic implants. Materials Today, 2021, 45, 20-34.	8.3	74
16	Natural medicine delivery from biomedical devices to treat bone disorders: A review. Acta Biomaterialia, 2021, 126, 63-91.	4.1	37
17	Directed energy deposition (DED) additive manufacturing: Physical characteristics, defects, challenges and applications. Materials Today, 2021, 49, 271-295.	8.3	351
18	Nature-inspired materials and structures using 3D Printing. Materials Science and Engineering Reports, 2021, 145, 100609.	14.8	36

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19	Osteoclast-mediated resorption on additively manufactured porous metal and plasma-sprayed HA-coated Ti implants. Journal of Materials Research, 2021, 36, 3894-3904.	1.2	4
20	Beta-phase stabilization and increased osteogenic differentiation of stem cells by solid-state synthesized magnesium tricalcium phosphate. Journal of Materials Research, 2021, 36, 3041-3049.	1.2	4
21	3D printing of biomedical materials and devices. Journal of Materials Research, 2021, 36, 3713-3724.	1.2	18
22	Vitamin D3 Release from Traditionally and Additively Manufactured Tricalcium Phosphate Bone Tissue Engineering Scaffolds. Annals of Biomedical Engineering, 2020, 48, 1025-1033.	1.3	17
23	Biointegration of three-dimensionalâ€“printed biomaterials and biomedical devices. , 2020, , 433-482.		3
24	Natural Medicinal Compounds in Bone Tissue Engineering. Trends in Biotechnology, 2020, 38, 404-417.	4.9	87
25	Natural Antibiotic Oregano in Hydroxyapatite-Coated Titanium Reduces Osteoclastic Bone Resorption for Orthopedic and Dental Applications. ACS Applied Materials & Interfaces, 2020, 12, 52383-52392.	4.0	18
26	3D Printing for Bone Regeneration. Current Osteoporosis Reports, 2020, 18, 505-514.	1.5	43
27	Effects of chitosan-loaded hydroxyapatite on osteoblasts and osteosarcoma for chemopreventative applications. Materials Science and Engineering C, 2020, 115, 111041.	3.8	16
28	Thermal Oxide Layer Enhances Crystallinity and Mechanical Properties for Plasma-Sprayed Hydroxyapatite Biomedical Coatings. ACS Applied Materials & Interfaces, 2020, 12, 33465-33472.	4.0	26
29	Enhanced osteogenesis of 3D printed Î²-TCP scaffolds with Cissus Quadrangularis extract-loaded polydopamine coatings. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 111, 103945.	1.5	16
30	Controlled release of soy isoflavones from multifunctional 3D printed bone tissue engineering scaffolds. Acta Biomaterialia, 2020, 114, 407-420.	4.1	41
31	Controlled Delivery of Curcumin and Vitamin K2 from Hydroxyapatite-Coated Titanium Implant for Enhanced in Vitro Chemoprevention, Osteogenesis, and in Vivo Osseointegration. ACS Applied Materials & Interfaces, 2020, 12, 13644-13656.	4.0	58
32	Cytotoxic and osteogenic effects of crocin and bicarbonate from calcium phosphates for potential chemopreventative and anti-inflammatory applications <i>in vitro</i> and <i>in vivo</i>. Journal of Materials Chemistry B, 2020, 8, 2048-2062.	2.9	13
33	Recent developments in metal additive manufacturing. Current Opinion in Chemical Engineering, 2020, 28, 96-104.	3.8	88
34	Effects of vitamin C on osteoblast proliferation and osteosarcoma inhibition using plasma coated hydroxyapatite on titanium implants. Surface and Coatings Technology, 2020, 394, 125793.	2.2	10
35	Additively Manufactured Ti6Al4V-Si-Hydroxyapatite composites for articulating surfaces of load-bearing implants. Additive Manufacturing, 2020, 34, 101241.	1.7	17
36	Additive manufacturing of natural biopolymers and composites for bone tissue engineering. Materials Horizons, 2020, 7, 2011-2027.	6.4	81

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37	Effects of amylose content on the mechanical properties of starch-hydroxyapatite 3D printed bone scaffolds. Additive Manufacturing, 2019, 30, 100817.	1.7	22
38	Electrically polarized TiO2 nanotubes on Ti implants to enhance early-stage osseointegration. Acta Biomaterialia, 2019, 96, 686-693.	4.1	69
39	Sustained release of vitamin C from PCL coated TCP induces proliferation and differentiation of osteoblast cells and suppresses osteosarcoma cell growth. Materials Science and Engineering C, 2019, 105, 110096.	3.8	36
40	Clinical significance of three-dimensional printed biomaterials and biomedical devices. MRS Bulletin, 2019, 44, 494-504.	1.7	23
41	Effects of Aloe Vera Gel Extract in Doped Hydroxyapatite-Coated Titanium Implants on <i>in Vivo</i> and <i>in Vitro</i> Biological Properties. ACS Applied Bio Materials, 2019, 2, 3194-3202.	2.3	22
42	Enhanced osteogenic protein expression on human osteoblast-osteoclast co-culture system using doped hydroxyapatite plasma coatings for orthopedic and dental applications. Materials Today Communications, 2019, 21, 100534.	0.9	12
43	Effects of polymer chemistry, concentration, and pH on doxorubicin release kinetics from hydroxyapatite-PCL-PLGA composite. Journal of Materials Research, 2019, 34, 1692-1703.	1.2	4
44	Mechanical and biological properties of ZnO, SiO2, and Ag2O doped plasma sprayed hydroxyapatite coating for orthopaedic and dental applications. Acta Biomaterialia, 2019, 92, 325-335.	4.1	107
45	Additively manufactured calcium phosphate reinforced CoCrMo alloy: Bio-tribological and biocompatibility evaluation for load-bearing implants. Additive Manufacturing, 2019, 28, 312-324.	1.7	47
46	Direct comparison of additively manufactured porous titanium and tantalum implants towards in vivo osseointegration. Additive Manufacturing, 2019, 28, 259-266.	1.7	74
47	Titania nanotube interface to increase adhesion strength of hydroxyapatite sol-gel coatings on Ti-6Al-4V for orthopedic applications. Surface and Coatings Technology, 2019, 372, 140-147.	2.2	50
48	Liposome-Encapsulated Curcumin-Loaded 3D Printed Scaffold for Bone Tissue Engineering. ACS Applied Materials & Interfaces, 2019, 11, 17184-17192.	4.0	135
49	Comparative effects of controlled release of sodium bicarbonate and doxorubicin on osteoblast and osteosarcoma cell viability. Materials Today Chemistry, 2019, 12, 200-208.	1.7	11
50	<i>In Vitro</i> Characterizations of Si⁴⁺ and Zn²⁺ Doped Plasma Sprayed Hydroxyapatite Coatings Using Osteoblast and Osteoclast Coculture. ACS Biomaterials Science and Engineering, 2019, 5, 1302-1310.	2.6	22
51	Regulation of Osteogenic Markers at Late Stage of Osteoblast Differentiation in Silicon and Zinc Doped Porous TCP. Journal of Functional Biomaterials, 2019, 10, 48.	1.8	15
52	Effects of vitamin D₃ release from 3D printed calcium phosphate scaffolds on osteoblast and osteoclast cell proliferation for bone tissue engineering. RSC Advances, 2019, 9, 34847-34853.	1.7	10
53	Effects of MgO, ZnO, SrO, and SiO2 in tricalcium phosphate scaffolds on in vitro gene expression and in vivo osteogenesis. Materials Science and Engineering C, 2019, 96, 10-19.	3.8	63
54	Compositionally graded doped hydroxyapatite coating on titanium using laser and plasma spray deposition for bone implants. Acta Biomaterialia, 2019, 84, 414-423.	4.1	121

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55	Effects of polycaprolactone on alendronate drug release from Mg-doped hydroxyapatite coating on titanium. Materials Science and Engineering C, 2018, 88, 166-171.	3.8	49
56	Effects of pore distribution and chemistry on physical, mechanical, and biological properties of tricalcium phosphate scaffolds by binder-jet 3D printing. Additive Manufacturing, 2018, 22, 111-117.	1.7	45
57	Effects of PCL, PEG and PLGA polymers on curcumin release from calcium phosphate matrix for inÂvitro and inÂvivo bone regeneration. Materials Today Chemistry, 2018, 8, 110-120.	1.7	90
58	Calcium phosphate coated 3D printed porous titanium with nanoscale surface modification for orthopedic and dental applications. Materials and Design, 2018, 151, 102-112.	3.3	82
59	Silver nanoparticle deposited implants to treat osteomyelitis. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2018, 106, 1073-1083.	1.6	34
60	Additive manufacturing: scientific and technological challenges, market uptake and opportunities. Materials Today, 2018, 21, 22-37.	8.3	1,264
61	Surface modification of biomaterials and biomedical devices using additive manufacturing. Acta Biomaterialia, 2018, 66, 6-22.	4.1	193
62	Additive manufacturing of biomaterials. Progress in Materials Science, 2018, 93, 45-111.	16.0	502
63	Laser processed calcium phosphate reinforced CoCrMo for load-bearing applications: Processing and wear induced damage evaluation. Acta Biomaterialia, 2018, 66, 118-128.	4.1	57
64	Starch-hydroxyapatite composite bone scaffold fabrication utilizing a slurry extrusion-based solid freeform fabricator. Additive Manufacturing, 2018, 24, 47-59.	1.7	55
65	3D-printed Î²-TCP bone tissue engineering scaffolds: Effects of chemistry on in vivo biological properties in a rabbit tibia model. Journal of Materials Research, 2018, 33, 1939-1947.	1.2	47
66	Influence of simultaneous addition of carbon nanotubes and calcium phosphate on wear resistance of 3D-printed Ti6Al4V. Journal of Materials Research, 2018, 33, 2077-2086.	1.2	15
67	Enhanced In Vivo Bone and Blood Vessel Formation by IronÂOxide and Silica Doped 3D Printed Tricalcium Phosphate Scaffolds. Annals of Biomedical Engineering, 2018, 46, 1241-1253.	1.3	58
68	In Vivo Response of Laser Processed Porous Titanium Implants for Load-Bearing Implants. Annals of Biomedical Engineering, 2017, 45, 249-260.	1.3	68
69	Lithiumâ€doped Î²â€tricalcium phosphate: Effects on physical, mechanical and <i>in vitro</i> osteoblast cellâ€“material interactions. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2017, 105, 391-399.	1.6	26
70	Effect of Chemistry on Osteogenesis and Angiogenesis Towards Bone Tissue Engineering Using 3D Printed Scaffolds. Annals of Biomedical Engineering, 2017, 45, 261-272.	1.3	107
71	Silver doped resorbable tricalcium phosphate scaffolds for bone graft applications. Materials Science and Engineering C, 2017, 79, 763-769.	3.8	45
72	Effects of Iron on Physical and Mechanical Properties, and Osteoblast Cell Interaction in Î²-Tricalcium Phosphate. Annals of Biomedical Engineering, 2017, 45, 819-828.	1.3	36

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73	Understanding long-term silver release from surface modified porous titanium implants. Acta Biomaterialia, 2017, 58, 550-560.	4.1	68
74	Doped tricalcium phosphate bone tissue engineering scaffolds using sucrose as template and microwave sintering: enhancement of mechanical and biological properties. Materials Science and Engineering C, 2017, 78, 398-404.	3.8	20
75	Effects of MgO and SiO₂ on Plasma-Sprayed Hydroxyapatite Coating: An in Vivo Study in Rat Distal Femoral Defects. ACS Applied Materials & Interfaces, 2017, 9, 25731-25737.	4.0	52
76	Surface Modification and Electro-thermal Polarisation for Bone Tissue Engineering. , 2016, , 103-114.		1
77	Electro-thermal Polarisation of Hydroxyapatite Ceramics and Coatings for Bone Tissue Engineering Applications. , 2016, , 115-134.		0
78	Calcium phosphateâ€"titanium composites for articulating surfaces of load-bearing implants. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 57, 280-288.	1.5	40
79	Mechanical degradation of TiO2 nanotubes with and without nanoparticulate silver coating. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 59, 508-518.	1.5	34
80	Three-dimensional printing of biomaterials and soft materials. MRS Bulletin, 2015, 40, 1162-1169.	1.7	20
81	Effects of silicon on osteoclast cell mediated degradation, in vivo osteogenesis and vasculogenesis of brushite cement. Journal of Materials Chemistry B, 2015, 3, 8973-8982.	2.9	56
82	IGF-loaded silicon and zinc doped brushite cement: physico-mechanical characterization and<i>in vivo</i>osteogenesis evaluation. Integrative Biology (United Kingdom), 2015, 7, 1561-1573.	0.6	23
83	Phase stability and biological property evaluation of plasma sprayed hydroxyapatite coatings for orthopedic and dental applications. Acta Biomaterialia, 2015, 17, 47-55.	4.1	156
84	Doped tricalcium phosphate scaffolds by thermal decomposition of naphthalene: Mechanical properties and <i>in vivo</i> osteogenesis in a rabbit femur model. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2015, 103, 1549-1559.	1.6	31
85	3D printing of biomaterials. MRS Bulletin, 2015, 40, 108-115.	1.7	136
86	SrOâ€•and MgOâ€doped microwave sintered 3D printed tricalcium phosphate scaffolds: Mechanical properties and <i>in vivo</i> osteogenesis in a rabbit model. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2015, 103, 679-690.	1.6	98
87	Laser Processing of Tricalicum Phosphate Reinforced Cobalt - Chrome Alloy Coatings. Ceramic Transactions, 2014, , 85-94.	0.1	1
88	Microstructure, mechanical and wear properties of laser surface melted Ti6Al4V alloy. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 32, 335-344.	1.5	135
89	Polycaprolactone-Coated 3D Printed Tricalcium Phosphate Scaffolds for Bone Tissue Engineering: <i>In Vitro</i> Alendronate Release Behavior and Local Delivery Effect on <i>In Vivo</i> Osteogenesis. ACS Applied Materials & Interfaces, 2014, 6, 9955-9965.	4.0	171
90	Effects of SiO₂, SrO, MgO, and ZnO dopants in tricalcium phosphates on osteoblastic Runx2 expression. Journal of Biomedical Materials Research - Part A, 2014, 102, 2417-2426.	2.1	47

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91	Thermal degradation of TiO2 nanotubes on titanium. Applied Surface Science, 2014, 317, 573-580.	3.1	27
92	Microwave-sintered 3D printed tricalcium phosphate scaffolds for bone tissue engineering. Journal of Tissue Engineering and Regenerative Medicine, 2013, 7, 631-641.	1.3	300
93	Mechanical Properties of Bioceramic Coatings on MedicalÂImplants. , 2013, , 311-321.		4
94	Influence of pentavalent dopant addition to polarization and bioactivity of hydroxyapatite. Materials Science and Engineering C, 2013, 33, 3061-3068.	3.8	19
95	Effect of grain size on mechanical, surface and biological properties of microwave sintered hydroxyapatite. Materials Science and Engineering C, 2013, 33, 2846-2854.	3.8	71
96	SiO2 and ZnO dopants in three-dimensionally printed tricalcium phosphate bone tissue engineering scaffolds enhance osteogenesis and angiogenesis in vivo. Acta Biomaterialia, 2013, 9, 9137-9148.	4.1	176
97	Introduction to Biomaterials. , 2013, , 1-9.		25
98	Tricalcium phosphate and tricalcium phosphate/polycaprolactone particulate composite for controlled release of protein. Materials Science and Engineering C, 2013, 33, 3576-3582.	3.8	11
99	Bone tissue engineering using 3D printing. Materials Today, 2013, 16, 496-504.	8.3	1,490
100	Understanding of dopant-induced osteogenesis and angiogenesis in calcium phosphate ceramics. Trends in Biotechnology, 2013, 31, 594-605.	4.9	404
101	Lovastatin release from polycaprolactone coated Î²-tricalcium phosphate: Effects of pH, concentration and drugâ€“polymer interactions. Materials Science and Engineering C, 2013, 33, 3121-3128.	3.8	43
102	3D printed tricalcium phosphate bone tissue engineering scaffolds: effect of SrO and MgO doping on in vivo osteogenesis in a rat distal femoral defect model. Biomaterials Science, 2013, 1, 1250.	2.6	149
103	Effects of zinc and strontium substitution in tricalcium phosphate on osteoclast differentiation and resorption. Biomaterials Science, 2013, 1, 74-82.	2.6	82
104	First demonstration on direct laser fabrication of lunar regolith parts. Rapid Prototyping Journal, 2012, 18, 451-457.	1.6	98
105	Resorbable Tricalcium Phosphates for Bone Tissue Engineering: Influence of <scp><scp>SrO</scp></scp> Doping. Journal of the American Ceramic Society, 2012, 95, 3095-3102.	1.9	12
106	Antibacterial and biological characteristics of silver containing and strontium doped plasma sprayed hydroxyapatite coatings. Acta Biomaterialia, 2012, 8, 3144-3152.	4.1	301
107	ZnO, SiO₂, and SrO doping in resorbable tricalcium phosphates: Influence on strength degradation, mechanical properties, and <i>in vitro</i> boneâ€“cell material interactions. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2012, 100B, 2203-2212.	1.6	40
108	Mechanical, In vitro Antimicrobial, and Biological Properties of Plasma-Sprayed Silver-Doped Hydroxyapatite Coating. ACS Applied Materials & Interfaces, 2012, 4, 1341-1349.	4.0	167

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109	Recent advances in bone tissue engineering scaffolds. Trends in Biotechnology, 2012, 30, 546-554.	4.9	1,763
110	Compression fatigue behavior of laser processed porous NiTi alloy. Journal of the Mechanical Behavior of Biomedical Materials, 2012, 13, 62-68.	1.5	67
111	Mechanical property and in vitro biocompatibility of brushite cement modified by polyethylene glycol. Materials Science and Engineering C, 2012, 32, 2145-2152.	3.8	37
112	MgO-Doped Tantalum Coating on Ti: Microstructural Study and Biocompatibility Evaluation. ACS Applied Materials & Interfaces, 2012, 4, 577-580.	4.0	50
113	Osteoclastogenesis and osteoclastic resorption of tricalcium phosphate: Effect of strontium and magnesium doping. Journal of Biomedical Materials Research - Part A, 2012, 100A, 2450-2461.	2.1	64
114	Understanding bioactivity and polarizability of hydroxyapatite doped with tungsten. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2012, 100B, 1836-1845.	1.6	13
115	Calcium phosphate ceramic systems in growth factor and drug delivery for bone tissue engineering: A review. Acta Biomaterialia, 2012, 8, 1401-1421.	4.1	787
116	Effects of silica and zinc oxide doping on mechanical and biological properties of 3D printed tricalcium phosphate tissue engineering scaffolds. Dental Materials, 2012, 28, 113-122.	1.6	335
117	Antimicrobial particulate silver coatings on stainless steel implants for fracture management. Materials Science and Engineering C, 2012, 32, 1112-1120.	3.8	74
118	Photoluminescence of Dense Nanocrystalline Titanium Dioxide Thin Films: Effect of Doping and Thickness and Relation to Gas Sensing. ACS Applied Materials & Interfaces, 2011, 3, 2281-2288.	4.0	124
119	Understanding in vivo response and mechanical property variation in MgO, SrO and SiO2 doped Î²-TCP. Bone, 2011, 48, 1282-1290.	1.4	136
120	Densification Study and Mechanical Properties of Microwave-Sintered Mullite and Mullite-Zirconia Composites. Journal of the American Ceramic Society, 2011, 94, 32-41.	1.9	42
121	Influence of MgO, SrO, and ZnO Dopants on Electro-Thermal Polarization Behavior and In Vitro Biological Properties of Hydroxyapatite Ceramics. Journal of the American Ceramic Society, 2011, 94, 1281-1288.	1.9	42
122	Calcium phosphate ceramics in drug delivery. Jom, 2011, 63, 93-98.	0.9	35
123	Laser surface modification of metallic biomaterials. Jom, 2011, 63, 94-99.	0.9	29
124	pH Tunable Fluorescent Calcium Phosphate Nanocomposite for Sensing and Controlled Drug Delivery. Advanced Engineering Materials, 2011, 13, B10-B17.	1.6	22
125	Effect of electrical polarization and composition of biphasic calcium phosphates on early stage osteoblast interactions. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2011, 97B, 306-314.	1.6	52
126	Induction plasma sprayed Sr and Mg doped nano hydroxyapatite coatings on Ti for bone implant. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2011, 99B, 258-265.	1.6	92

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127	Compositionally graded hydroxyapatite/tricalcium phosphate coating on Ti by laser and induction plasma. Acta Biomaterialia, 2011, 7, 866-873.	4.1	77
128	Bone cellâ€“materials interactions and Ni ion release of anodized equiatomic NiTi alloy. Acta Biomaterialia, 2011, 7, 1902-1912.	4.1	89
129	Bone cellâ€“material interactions on metal-ion doped polarized hydroxyapatite. Materials Science and Engineering C, 2011, 31, 755-761.	3.8	49
130	Induction plasma sprayed nano hydroxyapatite coatings on titanium for orthopaedic and dental implants. Surface and Coatings Technology, 2011, 205, 2785-2792.	2.2	216
131	Zn- and Mg-Doped Hydroxyapatite Nanoparticles for Controlled Release of Protein. Langmuir, 2010, 26, 4958-4964.	1.6	184
132	Direct laser processing of a tantalum coating on titanium for bone replacement structures. Acta Biomaterialia, 2010, 6, 2329-2334.	4.1	265
133	Understanding the influence of MgO and SrO binary doping on the mechanical and biological properties of Î²-TCP ceramics. Acta Biomaterialia, 2010, 6, 4167-4174.	4.1	152
134	Tantalumâ€"A bioactive metal for implants. Jom, 2010, 62, 61-64.	0.9	88
135	Comparison of Tantalum and Hydroxyapatite Coatings on Titanium for Applications in Load Bearing Implants. Advanced Engineering Materials, 2010, 12, B637.	1.6	36
136	Biphasic Resorbable Calcium Phosphate Ceramic for Bone Implants and Local Alendronate Delivery. Advanced Engineering Materials, 2010, 12, B148.	1.6	29
137	Design and fabrication of CoCrMo alloy based novel structures for load bearing implants using laser engineered net shaping. Materials Science and Engineering C, 2010, 30, 50-57.	3.8	131
138	Titanium dioxide thin films for high temperature gas sensors. Thin Solid Films, 2010, 519, 434-438.	0.8	39
139	Electrically polarized HAp-coated Ti: In vitro bone cellâ€“material interactions. Acta Biomaterialia, 2010, 6, 641-651.	4.1	76
140	Influence of porosity on mechanical properties and in vivo response of Ti6Al4V implants. Acta Biomaterialia, 2010, 6, 1640-1648.	4.1	361
141	Porous tantalum structures for bone implants: Fabrication, mechanical and in vitro biological properties. Acta Biomaterialia, 2010, 6, 3349-3359.	4.1	394
142	Microwave-processed nanocrystalline hydroxyapatite: Simultaneous enhancement of mechanical and biological properties. Acta Biomaterialia, 2010, 6, 3782-3790.	4.1	172
143	Bulk Processing of Hydroxyapatite Nanopowder Using Radio Frequency Induction Plasma. Journal of the American Ceramic Society, 2010, 93, 3720-3725.	1.9	13
144	Electrically Polarized Biphasic Calcium Phosphates: Adsorption and Release of Bovine Serum Albumin. Langmuir, 2010, 26, 16625-16629.	1.6	86

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145	Understanding compressive deformation in porous titanium. Philosophical Magazine, 2010, 90, 3081-3094.	0.7	19
146	TiO₂ nanotubes on Ti: Influence of nanoscale morphology on bone cellâ€“materials interaction. Journal of Biomedical Materials Research - Part A, 2009, 90A, 225-237.	2.1	239
147	Fabrication of porous NiTi shape memory alloy structures using laser engineered net shaping. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2009, 89B, 481-490.	1.6	100
148	Polycaprolactone coated porous tricalcium phosphate scaffolds for controlled release of protein for tissue engineering. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2009, 91B, 831-838.	1.6	69
149	Reverse micelle-mediated synthesis of calcium phosphate nanocarriers for controlled release of bovine serum albumin. Acta Biomaterialia, 2009, 5, 3112-3121.	4.1	90
150	Influence of crystallinity on CO gas sensing for TiO2 films. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2009, 164, 38-43.	1.7	34
151	Surface modification of titanium for load-bearing applications. Journal of Materials Science: Materials in Medicine, 2009, 20, 19-24.	1.7	21
152	Application of Laser Engineered Net Shaping (LENS) to manufacture porous and functionally graded structures for load bearing implants. Journal of Materials Science: Materials in Medicine, 2009, 20, 29-34.	1.7	159
153	Synthesis, Processing, Mechanical, and Biological Property Characterization of Hydroxyapatite Whiskerâ€Reinforced Hydroxyapatite Composites. Journal of the American Ceramic Society, 2009, 92, 323-330.	1.9	76
154	Reverse Micelleâ€Mediated Synthesis and Characterization of Tricalcium Phosphate Nanopowder for Bone Graft Applications. Journal of the American Ceramic Society, 2009, 92, 2528-2536.	1.9	11
155	Microwave sintering of calcium phosphate ceramics. Materials Science and Engineering C, 2009, 29, 1144-1149.	3.8	64
156	Bone cellâ€“materials interaction on alumina ceramics with different grain sizes. Materials Science and Engineering C, 2009, 29, 1201-1206.	3.8	12
157	In vitro antimicrobial and biological properties of laser assisted tricalcium phosphate coating on titanium for load bearing implant. Materials Science and Engineering C, 2009, 29, 1965-1968.	3.8	41
158	Fabrication of compositionally and structurally graded Tiâ€“TiO2 structures using laser engineered net shaping (LENS). Acta Biomaterialia, 2009, 5, 1831-1837.	4.1	157
159	Mesoporous calcium silicate for controlled release of bovine serum albumin protein. Acta Biomaterialia, 2009, 5, 1686-1696.	4.1	85
160	Role of surface charge and wettability on early stage mineralization and bone cellâ€“materials interactions of polarized hydroxyapatite. Acta Biomaterialia, 2009, 5, 2178-2188.	4.1	239
161	Laser-assisted Zr/ZrO2 coating on Ti for load-bearing implants. Acta Biomaterialia, 2009, 5, 2800-2809.	4.1	85
162	Double Emulsion Droplets as Microreactors for Synthesis of Mesoporous Hydroxyapatite. Chemistry of Materials, 2009, 21, 5548-5555.	3.2	148

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163	Functionally graded Coâ€“Crâ€“Mo coating on Tiâ€“6Alâ€“4V alloy structures. Acta Biomaterialia, 2008, 4, 697-706.	4.1	170
164	Synthesis and characterization of tricalcium phosphate with Zn and Mg based dopants. Journal of Materials Science: Materials in Medicine, 2008, 19, 2669-2677.	1.7	152
165	Engineered porous metals for implants. Jom, 2008, 60, 45-48.	0.9	80
166	Surface coatings for improvement of bone cell materials and antimicrobial activities of Ti implants. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2008, 87B, 455-460.	1.6	105
167	Laser processing of bioactive tricalcium phosphate coating on titanium for load-bearing implants. Acta Biomaterialia, 2008, 4, 324-333.	4.1	157
168	Tricalcium phosphate based resorbable ceramics: Influence of NaF and CaO addition. Materials Science and Engineering C, 2008, 28, 11-17.	3.8	47
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