Bikaramjit Basu

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327 papers	6,777 citations	45 h-index	67 g-index
344 ext. papers	7,867 ext. citations	5.3 avg, IF	6.58 L-index

#	Paper	IF	Citations
327	Poly(lactic-co-glycolic acid): carbon nanofiber composites for myocardial tissue engineering applications. *Acta Biomaterialia*, **2011**, 7, 3101-12	10.8	164
326	A porous hydroxyapatite scaffold for bone tissue engineering: Physico-mechanical and biological evaluations. *Ceramics International*, **2012**, 38, 341-349	5.1	156
325	Unraveling the mechanistic effects of electric field stimulation towards directing stem cell fate and function: A tissue engineering perspective. *Biomaterials*, **2018**, 150, 60-86	15.6	147
324	Low temperature additive manufacturing of three dimensional scaffolds for bone-tissue engineering applications: Processing related challenges and property assessment. *Materials Science and Engineering Reports*, **2016**, 103, 1-39	30.9	142
323	Is Weibull distribution the most appropriate statistical strength distribution for brittle materials?. *Ceramics International*, **2009**, 35, 237-246	5.1	136
322	Conformal cytocompatible ferrite coatings facilitate the realization of a nanovoyager in human blood. *Nano Letters*, **2014**, 14, 1968-75	11.5	126
321	High Antibacterial Activity of Functionalized Chemically Exfoliated MoS. *ACS Applied Materials & Interfaces*, **2016**, 8, 31567-31573	9.5	111
320	Understanding phase stability, microstructure development and biocompatibility in calcium phosphate□titania composites, synthesized from hydroxyapatite and titanium powder mix. *Materials Science and Engineering C*, **2009**, 29, 97-107	8.3	107
319	Simultaneous Exfoliation and Functionalization of 2H-MoS by Thiolated Surfactants: Applications in Enhanced Antibacterial Activity. *Journal of the American Chemical Society*, **2018**, 140, 12634-12644	16.4	107
318	Intermittent electrical stimuli for guidance of human mesenchymal stem cell lineage commitment towards neural-like cells on electroconductive substrates. *Biomaterials*, **2014**, 35, 6219-35	15.6	105
317	In vitro biocompatibility and antimicrobial activity of wet chemically prepared Ca10□Agx(PO4)6(OH)2 (0.0□□0.5) hydroxyapatites. *Materials Science and Engineering C*, **2011**, 31, 1320-1329	8.3	98
316	Review on ultra-high temperature boride ceramics. *Progress in Materials Science*, **2020**, 111, 100651	42.2	96
315	Simulation of thermal and electric field evolution during spark plasma sintering. *Ceramics International*, **2009**, 35, 699-708	5.1	95
314	Functionally graded hydroxyapatite-alumina-zirconia biocomposite: Synergy of toughness and biocompatibility. *Materials Science and Engineering C*, **2012**, 32, 1164-1173	8.3	85
313	Correlation between phase evolution, mechanical properties and instrumented indentation response of TiB2-based ceramics. *Journal of the European Ceramic Society*, **2009**, 29, 505-516	6	83
312	Solar energy absorption mediated by surface plasma polaritons in spectrally selective dielectric-metal-dielectric coatings: A critical review. *Renewable and Sustainable Energy Reviews*, **2017**, 79, 1050-1077	16.2	80
311	High-entropy alloys and metallic nanocomposites: Processing challenges, microstructure development and property enhancement. *Materials Science and Engineering Reports*, **2018**, 131, 1-42	30.9	80

310	Microstructure and compression properties of 3D powder printed Ti-6Al-4V scaffolds with designed porosity: Experimental and computational analysis. *Materials Science and Engineering C*, **2017**, 70, 812-823	8.3	76
309	Scaffolds for bone tissue engineering: role of surface patterning on osteoblast response. *RSC Advances*, **2013**, 3, 11073	3.7	76
308	Densification, phase stability and in vitro biocompatibility property of hydroxyapatite-10 wt% silver composites. *Journal of Materials Science: Materials in Medicine*, **2010**, 21, 1273-87	4.5	75
307	**2011**,		75
306	On the toughness enhancement in hydroxyapatite-based composites. *Acta Materialia*, **2013**, 61, 5198-5205	5.4	70
305	Competent processing techniques for scaffolds in tissue engineering. *Biotechnology Advances*, **2017**, 35, 240-250	17.8	68
304	Densification, Sintering Reactions, and Properties of Titanium Diboride With Titanium Disilicide as a Sintering Aid. *Journal of the American Ceramic Society*, **2007**, 90, 3415-3423	3.8	67
303	Tribological behaviour of Ti-based alloys in simulated body fluid solution at fretting contacts. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2004**, 379, 234-239	5.3	67
302	Substrate conductivity dependent modulation of cell proliferation and differentiation in vitro. *Biomaterials*, **2013**, 34, 7073-85	15.6	64
301	In vitro/In vivo assessment and mechanisms of toxicity of bioceramic materials and its wear particulates. *RSC Advances*, **2014**, 4, 12763	3.7	63
300	Strength reliability and in vitro degradation of three-dimensional powder printed strontium-substituted magnesium phosphate scaffolds. *Acta Biomaterialia*, **2016**, 31, 401-411	10.8	62
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298	The Foreign Body Response Demystified. *ACS Biomaterials Science and Engineering*, **2019**, 5, 19-44	5.5	61
297	Cytotoxicity of Ultrasmall Gold Nanoparticles on Planktonic and Biofilm Encapsulated Gram-Positive Staphylococci. *Small*, **2015**, 11, 3183-93	11	61
296	Interplay of Substrate Conductivity, Cellular Microenvironment, and Pulsatile Electrical Stimulation toward Osteogenesis of Human Mesenchymal Stem Cells in Vitro. *ACS Applied Materials & Interfaces*, **2015**, 7, 23015-28	9.5	60
295	Optimization of electrical stimulation parameters for enhanced cell proliferation on biomaterial surfaces. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2011**, 98, 18-29	3.5	60
294	Pigmented Silk Nanofibrous Composite for Skeletal Muscle Tissue Engineering. *Advanced Healthcare Materials*, **2016**, 5, 1222-32	10.1	60
293	HDPE-Al2O3-HAp composites for biomedical applications: processing and characterizations. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2009**, 88, 1-11	3.5	55

292	Phase stability and microstructure development in hydroxyapatite–mullite system. *Scripta Materialia*, **2008**, 58, 1054-1057	5.6	54
291	Microstructure, mechanical and tribological properties of microwave sintered calcia-doped zirconia for biomedical applications. *Ceramics International*, **2008**, 34, 1509-1520	5.1	54
290	Surface-Functionalized Silk Fibroin Films as a Platform To Guide Neuron-like Differentiation of Human Mesenchymal Stem Cells. *ACS Applied Materials & Interfaces*, **2016**, 8, 22849-59	9.5	52
289	Development of WC–ZrO2 Nanocomposites by Spark Plasma Sintering. *Journal of the American Ceramic Society*, **2004**, 87, 317-319	3.8	51
288	Microstructure, mechanical properties, and in vitro biocompatibility of spark plasma sintered hydroxyapatite–aluminum oxide–carbon nanotube composite. *Materials Science and Engineering C*, **2010**, 30, 1162-1169	8.3	50
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286	Electrically driven intracellular and extracellular nanomanipulators evoke neurogenic/cardiomyogenic differentiation in human mesenchymal stem cells. *Biomaterials*, **2016**, 77, 26-43	15.6	47
285	Sintering, microstructure, mechanical, and antimicrobial properties of HAp-ZnO biocomposites. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2010**, 95, 430-40	3.5	47
284	Tribological properties of Ti-aluminide reinforced Al-based in situ metal matrix composite. *Intermetallics*, **2005**, 13, 733-740	3.5	47
283	Achieving uniform microstructure and superior mechanical properties in ultrafine grained TiB2–TiSi2 composites using innovative multi stage spark plasma sintering. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2010**, 528, 200-207	5.3	45
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279	Magnetic field assisted stem cell differentiation - role of substrate magnetization in osteogenesis. *Journal of Materials Chemistry B*, **2015**, 3, 3150-3168	7.3	42
278	Structural and Magnetic Phase Transformations of Hydroxyapatite-Magnetite Composites under Inert and Ambient Sintering Atmospheres. *Journal of Physical Chemistry C*, **2015**, 119, 6539-6555	3.8	42
277	Hydroxyapatite-titanium bulk composites for bone tissue engineering applications. *Journal of Biomedical Materials Research - Part A*, **2015**, 103, 791-806	5.4	42
276	Sintering, Phase Stability, and Properties of Calcium Phosphate-Mullite Composites. *Journal of the American Ceramic Society*, **2010**, 93, 1639	3.8	42
275	Spark Plasma-Sintered WC–ZrO2–Co Nanocomposites with High Fracture Toughness and Strength. *Journal of the American Ceramic Society*, **2010**, 93, 1754	3.8	42

274	Moderate intensity static magnetic field has bactericidal effect on E. coli and S. epidermidis on sintered hydroxyapatite. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2012**, 100, 1206-17	3.5	41
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272	Bactericidal effect of silver-reinforced carbon nanotube and hydroxyapatite composites. *Journal of Biomaterials Applications*, **2013**, 27, 967-78	2.9	41
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252	Pressureless sintering of ZrO2ZrB2 composites: Microstructure and properties. *International Journal of Refractory Metals and Hard Materials*, **2007**, 25, 179-188	4.1	32
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242	Microstructure, mechanical, and in vitro properties of mica glass-ceramics with varying fluorine content. *Journal of Materials Science: Materials in Medicine*, **2009**, 20, 869-82	4.5	27
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211	Thermal inkjet 3D powder printing of metals and alloys: Current status and challenges. *Current Opinion in Biomedical Engineering*, **2017**, 2, 116-123	4.4	17
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