Balaji Sitharaman

List of Publications by Year
in descending order

93	6,882	71102	58581
papers	citations	41 h-index	82 g-index

94	94	94	8391
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Delivery of long chain C₁₆ and C₂₄ ceramide in HeLa cells using oxidized graphene nanoribbons. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2020, 108, 1141-1156.	3.4	6
2	Nanofilm generated nonâ€pharmacological anabolic bone stimulus. Journal of Biomedical Materials Research - Part A, 2020, 108, 178-186.	4.0	5
3	Twoâ€dimensional graphene oxideâ€reinforced porous biodegradable polymeric nanocomposites for bone tissue engineering. Journal of Biomedical Materials Research - Part A, 2019, 107, 1143-1153.	4.0	20
4	Oxidized graphene nanoparticles as a delivery system for the proâ€apoptotic sphingolipid C₆ ceramide. Journal of Biomedical Materials Research - Part A, 2019, 107, 25-37.	4.0	10
5	Osteogenic differentiation of human adipose derived stem cells on chemically crosslinked carbon nanomaterial coatings. Journal of Biomedical Materials Research - Part A, 2018, 106, 1189-1199.	4.0	4
6	In VitroBioactivity of One- and Two-Dimensional Nanoparticle-Incorporated Bone Tissue Engineering Scaffolds. Tissue Engineering - Part A, 2018, 24, 641-652.	3.1	14
7	Boron nitride nanotubes and nanoplatelets as reinforcing agents of polymeric matrices for bone tissue engineering. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2017, 105, 406-419.	3.4	49
8	Layer-by-layer, ultrasonic spray assembled 2D and 3D chemically crosslinked carbon nanotubes and graphene. Journal of Materials Research, 2017, 32, 370-382.	2.6	6
9	Gene delivery to mammalian cells using a graphene nanoribbon platform. Journal of Materials Chemistry B, 2017, 5, 2347-2354.	5.8	32
10	Threeâ€dimensional carbon nanotube scaffolds for longâ€term maintenance and expansion of human mesenchymal stem cells. Journal of Biomedical Materials Research - Part A, 2017, 105, 1927-1939.	4.0	15
11	In Vivo Hard and Soft Tissue Response of Two-Dimensional Nanoparticle Incorporated Biodegradable Polymeric Scaffolds. ACS Biomaterials Science and Engineering, 2017, 3, 2533-2541.	5.2	8
12	Threeâ€dimensional macroporous graphene scaffolds for tissue engineering. Journal of Biomedical Materials Research - Part A, 2017, 105, 73-83.	4.0	19
13	Graphene Nanoribbon-Based Platform for Highly Efficacious Nuclear Gene Delivery. ACS Biomaterials Science and Engineering, 2016, 2, 798-808.	5.2	21
14	Two- and Three-Dimensional All-Carbon Nanomaterial Assemblies for Tissue Engineering and Regenerative Medicine. Annals of Biomedical Engineering, 2016, 44, 2020-2035.	2.5	34
15	Toxicology of graphene-based nanomaterials. Advanced Drug Delivery Reviews, 2016, 105, 109-144.	13.7	235
16	Safety and efficacy of a high-performance graphene-based magnetic resonance imaging contrast agent for renal abnormalities. Graphene Technology, 2016, 1, 17-28.	1.9	2
17	Nanoparticle-Facilitated Membrane Depolarization-Induced Receptor Activation: Implications on Cellular Uptake and Drug Delivery. ACS Biomaterials Science and Engineering, 2016, 2, 2153-2161.	5.2	3
18	Sulfobutyl ether Î²â€cyclodextrin (Captisol^{Â®}) and methyl Î²â€cyclodextrin enhance and stabilize fluorescence of aqueous indocyanine green. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2016, 104, 1457-1464.	3.4	9

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19	Graphene-based platforms for cancer therapeutics. Therapeutic Delivery, 2016, 7, 101-116.	2.2	66
20	Towards An Advanced Graphene-Based Magnetic Resonance Imaging Contrast Agent: Sub-acute Toxicity and Efficacy Studies in Small Animals. Scientific Reports, 2015, 5, 17182.	3.3	27
21	In vitrocytocompatibility of one-dimensional and two-dimensional nanostructure-reinforced biodegradable polymeric nanocomposites. Journal of Biomedical Materials Research - Part A, 2015, 103, 2309-2321.	4.0	33
22	Porous three-dimensional carbon nanotube scaffolds for tissue engineering. Journal of Biomedical Materials Research - Part A, 2015, 103, 3212-3225.	4.0	61
23	Interaction of graphene nanoribbons with components of the blood vascular system. Future Science OA, 2015, 1, .	1.9	18
24	Fabrication and Cytocompatibility of In Situ Crosslinked Carbon Nanomaterial Films. Scientific Reports, 2015, 5, 10261.	3.3	18
25	Interactions of 1D- and 2D-layered inorganic nanoparticles with fibroblasts and human mesenchymal stem cells. Nanomedicine, 2015, 10, 1693-1706.	3.3	22
26	Graphene nanoribbons as a drug delivery agent for lucanthone mediated therapy of glioblastoma multiforme. Nanomedicine: Nanotechnology, Biology, and Medicine, 2015, 11, 109-118.	3.3	95
27	Functionalized carbon nanotube theranostic agents for microwave diagnostic imaging and thermal therapy of tumors. , 2014, , .		3
28	Multimodal Ultrasound-Photoacoustic Imaging of Tissue Engineering Scaffolds and Blood Oxygen Saturation In and Around the Scaffolds. Tissue Engineering - Part C: Methods, 2014, 20, 440-449.	2.1	41
29	Quantification of single-cell nanoparticle concentrations and the distribution of these concentrations in cell population. Journal of the Royal Society Interface, 2014, 11, 20131152.	3.4	26
30	Clinically Relevant CNT Dispersions With Exceptionally High Dielectric Properties for Microwave Theranostic Applications. IEEE Transactions on Biomedical Engineering, 2014, 61, 2718-2723.	4.2	12
31	Structural disruption increases toxicity of graphene nanoribbons. Journal of Applied Toxicology, 2014, 34, 1235-1246.	2.8	41
32	The effects of graphene nanostructures on mesenchymal stem cells. Biomaterials, 2014, 35, 4863-4877.	11.4	209
33	Degradation of Graphene by Hydrogen Peroxide. Particle and Particle Systems Characterization, 2014, 31, 745-750.	2.3	74
34	Enzymatic degradation of oxidized and reduced graphene nanoribbons by lignin peroxidase. Journal of Materials Chemistry B, 2014, 2, 6354-6362.	5.8	90
35	Synthesis, characterization, in vitro phantom imaging, and cytotoxicity of a novel graphene-based multimodal magnetic resonance imaging-X-ray computed tomography contrast agent. Journal of Materials Chemistry B, 2014, 2, 3519-3530.	5.8	95
36	Graphene nanoribbons elicit cell specific uptake and delivery via activation of epidermal growth factor receptor enhanced by human papillomavirus E5 protein. Acta Biomaterialia, 2014, 10, 4494-4504.	8.3	28

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37	Vasoactive effects of stable aqueous suspensions of single walled carbon nanotubes in hamsters and mice. Nanotoxicology, 2014, 8, 867-875.	3.0	12
38	Dose ranging, expanded acute toxicity and safety pharmacology studies for intravenously administered functionalized graphene nanoparticle formulations. Biomaterials, 2014, 35, 7022-7031.	11.4	115
39	Toward singleâ€walled carbon nanotubeâ€“gadolinium complex as advanced MRI contrast agents: Pharmacodynamics and global genomic response in small animals. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2013, 101B, 1039-1049.	3.4	26
40	Cytotoxicity of Polypropylene Fumarate Nanocomposites used in Bone Tissue Engineering. , 2013, , .		2
41	Graphene-based contrast agents for photoacoustic and thermoacoustic tomography. Photoacoustics, 2013, 1, 62-67.	7.8	104
42	Tungsten disulfide nanotubes reinforced biodegradable polymers for bone tissue engineering. Acta Biomaterialia, 2013, 9, 8365-8373.	8.3	143
43	Effect of synthesis and acid purification methods on the microwave dielectric properties of single-walled carbon nanotube aqueous dispersions. Applied Physics Letters, 2013, 103, 133114.	3.3	11
44	Fabrication and characterization of three-dimensional macroscopic all-carbon scaffolds. Carbon, 2013, 53, 90-100.	10.3	72
45	Two-Dimensional Nanostructure-Reinforced Biodegradable Polymeric Nanocomposites for Bone Tissue Engineering. Biomacromolecules, 2013, 14, 900-909.	5.4	262
46	Cell specific cytotoxicity and uptake of graphene nanoribbons. Biomaterials, 2013, 34, 283-293.	11.4	265
47	MULTIFUNCTIONAL FULLERENE- AND METALLOFULLERENE-BASED NANOBIOMATERIALS. Nano LIFE, 2013, 03, 1342003.	0.9	52
48	In vivo microwave dielectric spectroscopy of breast tumor xenografts with intra-tumoral injections of SWCNT dispersions. , 2013, , .		2
49	The magnetic, relaxometric, and optical properties of gadolinium-catalyzed single walled carbon nanotubes. Journal of Applied Physics, 2013, 113, 134308.	2.5	28
50	Cytotoxicity, cytocompatibility, cellâ€labeling efficiency, and in vitro cellular magnetic resonance imaging of gadoliniumâ€catalyzed singleâ€walled carbon nanotubes. Journal of Biomedical Materials Research - Part A, 2013, 101, 3580-3591.	4.0	31
51	In Vitro Hematological and In Vivo Vasoactivity Assessment of Dextran Functionalized Graphene. Scientific Reports, 2013, 3, 2584.	3.3	61
52	Physicochemical characterization of a novel graphene-based magnetic resonance imaging contrast agent. International Journal of Nanomedicine, 2013, 8, 2821.	6.7	95
53	Multiscale Photoacoustic Microscopy of Single-Walled Carbon Nanotube-Incorporated Tissue Engineering Scaffolds. Tissue Engineering - Part C: Methods, 2012, 18, 310-317.	2.1	48
54	Physicochemical Characterization, and Relaxometry Studies of Micro-Graphite Oxide, Graphene Nanoplatelets, and Nanoribbons. PLoS ONE, 2012, 7, e38185.	2.5	57

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55	Carbon Nanotechnology in Regenerative Medicine. World Scientific Series on Carbon Nanoscience, 2012, , 107-150.	0.1	2
56	Nanotechnology in Tissue Engineering and Regenerative Medicine. Tissue Engineering - Part B: Reviews, 2012, 18, 76-76.	4.8	1
57	Detection, Mapping, and Quantification of Single Walled Carbon Nanotubes in Histological Specimens with Photoacoustic Microscopy. PLoS ONE, 2012, 7, e35064.	2.5	35
58	Luminescent single-walled carbon nanotube-sensitized europium nanoprobes for cellular imaging. International Journal of Nanomedicine, 2012, 7, 1953.	6.7	22
59	Time-resolved red luminescence from europium-catalyzed single walled carbon nanotubes. Chemical Communications, 2011, 47, 1607-1609.	4.1	27
60	Carbon Nanotubes in Regenerative Medicine. Carbon Nanostructures, 2011, , 27-39.	0.1	9
61	Dual-mode photoacoustic microscopy of carbon nanotube incorporated scaffolds in blood and biological tissues. , 2011, , .		2
62	A Novel Nanoparticle-Enhanced Photoacoustic Stimulus for Bone Tissue Engineering. Tissue Engineering - Part A, 2011, 17, 1851-1858.	3.1	23
63	In VivoMagnetic Resonance Imaging of the Distribution Pattern of Gadonanotubes Released from a Degrading Poly(Lactic-Co-Glycolic Acid) Scaffold. Tissue Engineering - Part C: Methods, 2011, 17, 19-26.	2.1	24
64	Applications of Carbon Nanotubes in Biomedical Studies. Methods in Molecular Biology, 2011, 726, 223-241.	0.9	16
65	Magnetic resonance imaging studies on gadonanotubeâ€reinforced biodegradable polymer nanocomposites. Journal of Biomedical Materials Research - Part A, 2010, 93A, 1454-1462.	4.0	23
66	Toward Carbon-Nanotube-Based Theranostic Agents for Microwave Detection and Treatment of Breast Cancer: Enhanced Dielectric and Heating Response of Tissue-Mimicking Materials. IEEE Transactions on Biomedical Engineering, 2010, 57, 1831-1834.	4.2	129
67	Recent Patents on Single-Walled Carbon Nanotubes for Biomedical Imaging, Drug Delivery and Tissue Regeneration. Recent Patents on Biomedical Engineering, 2010, 3, 86-94.	0.5	9
68	Single-walled carbon nanotube facilitated photoacoustic stimulation of marrow stromal cells towards osteoblasts. , 2009, , .		0
69	Dielectric characterization of carbon nanotube contrast agents for microwave breast cancer detection. Digest / IEEE Antennas and Propagation Society International Symposium, 2009, , .	0.0	10
70	Novel breast cancer detection system combining both thermoacoustic (TA) and photoacoustic (PA) tomography using carbon nanotubes (CNTs) as a dual contrast agent. Proceedings of SPIE, 2009, , .	0.8	2
71	In vivo photoacoustic (PA) mapping of sentinel lymph nodes (SLNs) using carbon nanotubes (CNTs) as a contrast agent. , 2009, , .		2
72	In vivocarbon nanotube-enhanced non-invasive photoacoustic mapping of the sentinel lymph node. Physics in Medicine and Biology, 2009, 54, 3291-3301.	3.0	120

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73	Single-walled carbon nanotubes as a multimodal-thermoacoustic and photoacoustic-contrast agent. Journal of Biomedical Optics, 2009, 14, 034018.	2.6	151
74	Gadolinium and europium catalyzed growth of single-walled carbon nanotubes. Carbon, 2009, 47, 3139-3142.	10.3	21
75	The Effect of Nanoparticle-Enhanced Photoacoustic Stimulation on Multipotent Marrow Stromal Cells. ACS Nano, 2009, 3, 2065-2072.	14.6	33
76	In vitro cytotoxicity of singleâ€walled carbon nanotube/biodegradable polymer nanocomposites. Journal of Biomedical Materials Research - Part A, 2008, 86A, 813-823.	4.0	75
77	Synthesis and Conformational Evaluation of a Novel Gene Delivery Vector for Human Mesenchymal Stem Cells. Biomacromolecules, 2008, 9, 818-827.	5.4	51
78	Water-Soluble Fullerene (C₆₀) Derivatives as Nonviral Gene-Delivery Vectors. Molecular Pharmaceutics, 2008, 5, 567-578.	4.6	94
79	In vivo biocompatibility of ultra-short single-walled carbon nanotube/biodegradable polymer nanocomposites for bone tissue engineering. Bone, 2008, 43, 362-370.	2.9	241
80	Gadofullerenes and Gadonanotubes: A New Paradigm for High-Performance Magnetic Resonance Imaging Contrast Agent Probes. Journal of Biomedical Nanotechnology, 2007, 3, 342-352.	1.1	68
81	Injectable in situ cross-linkable nanocomposites of biodegradable polymers and carbon nanostructures for bone tissue engineering. Journal of Biomaterials Science, Polymer Edition, 2007, 18, 655-671.	3.5	68
82	Understanding Paramagnetic Relaxation Phenomena for Water-Soluble Gadofullerenes. Journal of Physical Chemistry C, 2007, 111, 5633-5639.	3.1	63
83	Gadofullerenes as nanoscale magnetic labels for cellular MRI. Contrast Media and Molecular Imaging, 2007, 2, 139-146.	0.8	71
84	Fabrication of porous ultra-short single-walled carbon nanotube nanocomposite scaffolds for bone tissue engineering. Biomaterials, 2007, 28, 4078-4090.	11.4	287
85	Gadonanotubes as new high-performance MRI contrast agents. International Journal of Nanomedicine, 2006, 1, 291-5.	6.7	43
86	Destroying Gadofullerene Aggregates by Salt Addition in Aqueous Solution of Gd@C60(OH)xand Gd@C60[C(COOH2)]10. Journal of the American Chemical Society, 2005, 127, 9368-9369.	13.7	119
87	Water-Soluble Gadofullerenes:Â Toward High-Relaxivity, pH-Responsive MRI Contrast Agents. Journal of the American Chemical Society, 2005, 127, 799-805.	13.7	341
88	A Fullereneâ€'Paclitaxel Chemotherapeutic:â€‰ Synthesis, Characterization, and Study of Biological Activity in Tissue Culture. Journal of the American Chemical Society, 2005, 127, 12508-12509.	13.7	268
89	Superparamagnetic gadonanotubes are high-performance MRI contrast agents. Chemical Communications, 2005, , 3915.	4.1	310
90	The Differential Cytotoxicity of Water-Soluble Fullerenes. Nano Letters, 2004, 4, 1881-1887.	9.1	985

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91	Nanoscale Aggregation Properties of Neuroprotective Carboxyfullerene (C3) in Aqueous Solution. Nano Letters, 2004, 4, 1759-1762.	9.1	42
92	Fullerenols Revisited as Stable Radical Anions. Journal of the American Chemical Society, 2004, 126, 12055-12064.	13.7	120
93	Gd@C60[C(COOH)2]10and Gd@C60(OH)x:Â Nanoscale Aggregation Studies of Two Metallofullerene MRI Contrast Agents in Aqueous Solution. Nano Letters, 2004, 4, 2373-2378.	9.1	135