

Paolo Decuzzi

List of Publications by Citations

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184
papers

9,622
citations

46
h-index

94
g-index

200
ext. papers

10,846
ext. citations

6.9
avg, IF

6.3
L-index

#	Paper	IF	Citations
184	Size and shape effects in the biodistribution of intravascularly injected particles. <i>Journal of Controlled Release</i> , 2010 , 141, 320-7	11.7	720
183	Mesoporous silicon particles as a multistage delivery system for imaging and therapeutic applications. <i>Nature Nanotechnology</i> , 2008 , 3, 151-7	28.7	574
182	Intravascular delivery of particulate systems: does geometry really matter?. <i>Pharmaceutical Research</i> , 2009 , 26, 235-43	4.5	481
181	The adhesive strength of non-spherical particles mediated by specific interactions. <i>Biomaterials</i> , 2006 , 27, 5307-14	15.6	365
180	Geometrical confinement of gadolinium-based contrast agents in nanoporous particles enhances T1 contrast. <i>Nature Nanotechnology</i> , 2010 , 5, 815-21	28.7	335
179	The effect of shape on the margination dynamics of non-neutrally buoyant particles in two-dimensional shear flows. <i>Journal of Biomechanics</i> , 2008 , 41, 2312-8	2.9	245
178	The receptor-mediated endocytosis of nonspherical particles. <i>Biophysical Journal</i> , 2008 , 94, 3790-7	2.9	229
177	The role of specific and non-specific interactions in receptor-mediated endocytosis of nanoparticles. <i>Biomaterials</i> , 2007 , 28, 2915-22	15.6	209
176	A theoretical model for the margination of particles within blood vessels. <i>Annals of Biomedical Engineering</i> , 2005 , 33, 179-90	4.7	203
175	Cells preferentially grow on rough substrates. <i>Biomaterials</i> , 2010 , 31, 7205-12	15.6	201
174	Shaping nano-/micro-particles for enhanced vascular interaction in laminar flows. <i>Nanotechnology</i> , 2009 , 20, 495101	3.4	188
173	Heat-generating iron oxide nanocubes: subtle "destructorators" of the tumoral microenvironment. <i>ACS Nano</i> , 2014 , 8, 4268-83	16.7	166
172	Nanoparticles and innate immunity: new perspectives on host defence. <i>Seminars in Immunology</i> , 2017 , 34, 33-51	10.7	160
171	Discoidal Porous Silicon Particles: Fabrication and Biodistribution in Breast Cancer Bearing Mice. <i>Advanced Functional Materials</i> , 2012 , 22, 4225-4235	15.6	160
170	Rapid tumoritropic accumulation of systemically injected plateloid particles and their biodistribution. <i>Journal of Controlled Release</i> , 2012 , 158, 148-55	11.7	159
169	Enabling individualized therapy through nanotechnology. <i>Pharmacological Research</i> , 2010 , 62, 57-89	10.2	151
168	Design maps for nanoparticles targeting the diseased microvasculature. <i>Biomaterials</i> , 2008 , 29, 377-84	15.6	146

167	The association of silicon microparticles with endothelial cells in drug delivery to the vasculature. <i>Biomaterials</i> , 2009 , 30, 2440-8	15.6	145
166	On the near-wall accumulation of injectable particles in the microcirculation: smaller is not better. <i>Scientific Reports</i> , 2013 , 3, 2079	4.9	128
165	The transport of nanoparticles in blood vessels: the effect of vessel permeability and blood rheology. <i>Annals of Biomedical Engineering</i> , 2008 , 36, 254-61	4.7	125
164	The preferential targeting of the diseased microvasculature by disk-like particles. <i>Biomaterials</i> , 2012 , 33, 5504-13	15.6	119
163	Soft Discoidal Polymeric Nanoconstructs Resist Macrophage Uptake and Enhance Vascular Targeting in Tumors. <i>ACS Nano</i> , 2015 , 9, 11628-41	16.7	114
162	A physical sciences network characterization of non-tumorigenic and metastatic cells. <i>Scientific Reports</i> , 2013 , 3, 1449	4.9	113
161	Scaling behaviour for the water transport in nanoconfined geometries. <i>Nature Communications</i> , 2014 , 5, 4565	17.4	111
160	Modulating cellular adhesion through nanotopography. <i>Biomaterials</i> , 2010 , 31, 173-9	15.6	110
159	Nanotechnology for breast cancer therapy. <i>Biomedical Microdevices</i> , 2009 , 11, 49-63	3.7	105
158	A multiphase model for three-dimensional tumor growth. <i>New Journal of Physics</i> , 2013 , 15, 015005	2.9	97
157	The margination propensity of spherical particles for vascular targeting in the microcirculation. <i>Journal of Nanobiotechnology</i> , 2008 , 6, 9	9.4	85
156	Gadolinium-conjugated gold nanoshells for multimodal diagnostic imaging and photothermal cancer therapy. <i>Small</i> , 2014 , 10, 556-65	11	83
155	Design of bio-mimetic particles with enhanced vascular interaction. <i>Journal of Biomechanics</i> , 2009 , 42, 1885-90	2.9	81
154	A computational model for predicting nanoparticle accumulation in tumor vasculature. <i>PLoS ONE</i> , 2013 , 8, e56876	3.7	78
153	Design maps for the hyperthermic treatment of tumors with superparamagnetic nanoparticles. <i>PLoS ONE</i> , 2013 , 8, e57332	3.7	76
152	Tailoring the degradation kinetics of mesoporous silicon structures through PEGylation. <i>Journal of Biomedical Materials Research - Part A</i> , 2010 , 94, 1236-43	5.4	72
151	The state of stress induced by the plane frictionless cylindrical contact. I. The case of elastic similarity. <i>International Journal of Solids and Structures</i> , 2001 , 38, 4507-4523	3.1	71
150	The effective dispersion of nanovectors within the tumor microvasculature. <i>Annals of Biomedical Engineering</i> , 2006 , 34, 633-41	4.7	68

149	Lipid-polymer nanoparticles encapsulating curcumin for modulating the vascular deposition of breast cancer cells. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2014 , 10, 991-1002	6	66
148	Ultra low concentrated molecular detection using super hydrophobic surface based biophotonic devices. <i>Microelectronic Engineering</i> , 2010 , 87, 798-801	2.5	62
147	Gadolinium oxide nanoplates with high longitudinal relaxivity for magnetic resonance imaging. <i>Nanoscale</i> , 2014 , 6, 13637-45	7.7	61
146	Differential cell adhesion on mesoporous silicon substrates. <i>ACS Applied Materials & Interfaces</i> , 2012 , 4, 2903-11	9.5	59
145	Antibiological barrier nanovector technology for cancer applications. <i>Expert Opinion on Drug Delivery</i> , 2007 , 4, 359-69	8	58
144	Modulating Phagocytic Cell Sequestration by Tailoring Nanoconstruct Softness. <i>ACS Nano</i> , 2018 , 12, 1433-1444	16.7	54
143	In silico vascular modeling for personalized nanoparticle delivery. <i>Nanomedicine</i> , 2013 , 8, 343-57	5.6	54
142	Erythrocyte-Inspired Discoidal Polymeric Nanoconstructs Carrying Tissue Plasminogen Activator for the Enhanced Lysis of Blood Clots. <i>ACS Nano</i> , 2018 , 12, 12224-12237	16.7	49
141	Engineered magnetic hybrid nanoparticles with enhanced relaxivity for tumor imaging. <i>Biomaterials</i> , 2013 , 34, 7725-32	15.6	48
140	Fractal structure can explain the increased hydrophobicity of nanoporous silicon films. <i>Microelectronic Engineering</i> , 2011 , 88, 2537-2540	2.5	48
139	A tumor growth model with deformable ECM. <i>Physical Biology</i> , 2014 , 11, 065004	3	46
138	TPA Immobilization on Iron Oxide Nanocubes and Localized Magnetic Hyperthermia Accelerate Blood Clot Lysis. <i>Advanced Functional Materials</i> , 2015 , 25, 1709-1718	15.6	45
137	Predicting the growth of glioblastoma multiforme spheroids using a multiphase porous media model. <i>Biomechanics and Modeling in Mechanobiology</i> , 2016 , 15, 1215-28	3.8	45
136	Hierarchically-Structured Magnetic Nanoconstructs with Enhanced Relaxivity and Cooperative Tumor Accumulation. <i>Advanced Functional Materials</i> , 2014 , 24, 4584-4594	15.6	44
135	Positron emitting magnetic nanoconstructs for PET/MR imaging. <i>Small</i> , 2014 , 10, 2688-96	11	44
134	Modelling mass and heat transfer in nano-based cancer hyperthermia. <i>Royal Society Open Science</i> , 2015 , 2, 150447	3.3	43
133	Multiscale modeling and uncertainty quantification in nanoparticle-mediated drug/gene delivery. <i>Computational Mechanics</i> , 2014 , 53, 511-537	4	43
132	An integrated approach for the rational design of nanovectors for biomedical imaging and therapy. <i>Advances in Genetics</i> , 2010 , 69, 31-64	3.3	43

131	A physical sciences network characterization of circulating tumor cell aggregate transport. <i>American Journal of Physiology - Cell Physiology</i> , 2015 , 308, C792-802	5.4	42
130	Synthesis of multifunctional magnetic nanoflakes for magnetic resonance imaging, hyperthermia, and targeting. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 12939-46	9.5	42
129	Enhanced MRI relaxivity of Gd(3+) -based contrast agents geometrically confined within porous nanoconstructs. <i>Contrast Media and Molecular Imaging</i> , 2012 , 7, 501-8	3.2	42
128	Adhesion of microfabricated particles on vascular endothelium: a parametric analysis. <i>Annals of Biomedical Engineering</i> , 2004 , 32, 793-802	4.7	42
127	Harnessing Endogenous Stimuli for Responsive Materials in Theranostics. <i>ACS Nano</i> , 2021 , 15, 2068-2098	6.7	40
126	Enhancing photothermal cancer therapy by clustering gold nanoparticles into spherical polymeric nanoconstructs. <i>Optics and Lasers in Engineering</i> , 2016 , 76, 74-81	4.6	38
125	Engineered manganese oxide nanocrystals for enhanced uranyl sorption and separation. <i>Environmental Science: Nano</i> , 2015 , 2, 500-508	7.1	38
124	Enhanced MRI relaxivity of aquated Gd ³⁺ ions by carboxyphenylated water-dispersed graphene nanoribbons. <i>Nanoscale</i> , 2014 , 6, 3059-63	7.7	38
123	Assembly of Iron Oxide Nanocubes for Enhanced Cancer Hyperthermia and Magnetic Resonance Imaging. <i>Nanomaterials</i> , 2017 , 7,	5.4	38
122	Cytosolic delivery of nucleic acids: The case of ionizable lipid nanoparticles. <i>Bioengineering and Translational Medicine</i> , 2021 , 6, e10213	14.8	38
121	Niosomes as Drug Nanovectors: Multiscale pH-Dependent Structural Response. <i>Langmuir</i> , 2016 , 32, 12414-9	4.9	37
120	Probing the mechanical properties of TNF- α -stimulated endothelial cell with atomic force microscopy. <i>International Journal of Nanomedicine</i> , 2011 , 6, 179-95	7.3	36
119	The dynamic response of resistive microswitches: switching time and bouncing. <i>Journal of Micromechanics and Microengineering</i> , 2006 , 16, 1108-1115	2	36
118	Flow chamber analysis of size effects in the adhesion of spherical particles. <i>International Journal of Nanomedicine</i> , 2007 , 2, 689-96	7.3	36
117	On Computational Modeling in Tumor Growth. <i>Archives of Computational Methods in Engineering</i> , 2013 , 20, 327-352	7.8	35
116	The state of stress induced by the plane frictionless cylindrical contact. II. The general case (elastic dissimilarity). <i>International Journal of Solids and Structures</i> , 2001 , 38, 4525-4533	3.1	35
115	Frictionally Excited Thermoelastic Instability in Multi-Disk Clutches and Brakes. <i>Journal of Tribology</i> , 2001 , 123, 865-871	1.8	35
114	Multicomponent, peptide-targeted glycol chitosan nanoparticles containing ferrimagnetic iron oxide nanocubes for bladder cancer multimodal imaging. <i>International Journal of Nanomedicine</i> , 2016 , 11, 4141-55	7.3	35

113	Overcoming Nanoparticle-Mediated Complement Activation by Surface PEG Pairing. <i>Nano Letters</i> , 2020 , 20, 4312-4321	11.5	34
112	Rosiglitazone-loaded nanospheres for modulating macrophage-specific inflammation in obesity. <i>Journal of Controlled Release</i> , 2013 , 170, 460-8	11.7	34
111	Transient analysis of frictionally excited thermoelastic instability in multi-disk clutches and brakes. <i>Wear</i> , 2003 , 254, 136-146	3.5	34
110	Computational Modeling of Tumor Response to Drug Release from Vasculature-Bound Nanoparticles. <i>PLoS ONE</i> , 2015 , 10, e0144888	3.7	34
109	Vascular deposition patterns for nanoparticles in an inflamed patient-specific arterial tree. <i>Biomechanics and Modeling in Mechanobiology</i> , 2014 , 13, 585-97	3.8	33
108	Engineering discoidal polymeric nanoconstructs with enhanced magneto-optical properties for tumor imaging. <i>Biomaterials</i> , 2013 , 34, 5402-10	15.6	33
107	Three phase flow dynamics in tumor growth. <i>Computational Mechanics</i> , 2014 , 53, 465-484	4	31
106	Ameliorating Amyloid- β Fibrils Triggered Inflammation Curcumin-Loaded Polymeric Nanoconstructs. <i>Frontiers in Immunology</i> , 2017 , 8, 1411	8.4	31
105	Dexamethasone-loaded Polymeric Nanoconstructs for Monitoring and Treating Inflammatory Bowel Disease. <i>Theranostics</i> , 2017 , 7, 3653-3666	12.1	30
104	Geometrical confinement of Gd(DOTA) molecules within mesoporous silicon nanoconstructs for MR imaging of cancer. <i>Cancer Letters</i> , 2014 , 352, 97-101	9.9	30
103	Selective modulation of cell response on engineered fractal silicon substrates. <i>Scientific Reports</i> , 2013 , 3, 1461	4.9	30
102	Mechanical properties of PECVD hydrogenated amorphous carbon coatings via nanoindentation and nanoscratching techniques. <i>Surface and Coatings Technology</i> , 2004 , 180-181, 259-264	4.4	30
101	USNCTAM perspectives on mechanics in medicine. <i>Journal of the Royal Society Interface</i> , 2014 , 11, 20140301	4.1	28
100	Radiolabeled Polymeric Nanoconstructs Loaded with Docetaxel and Curcumin for Cancer Combinatorial Therapy and Nuclear Imaging. <i>Advanced Functional Materials</i> , 2015 , 25, 3371-3379	15.6	27
99	Facilitating the Clinical Integration of Nanomedicines: The Roles of Theoretical and Computational Scientists. <i>ACS Nano</i> , 2016 , 10, 8133-8	16.7	27
98	Deformable Discoidal Polymeric Nanoconstructs for the Precise Delivery of Therapeutic and Imaging Agents. <i>Molecular Therapy</i> , 2017 , 25, 1514-1521	11.7	26
97	Paramagnetic Gd(3+) labeled red blood cells for magnetic resonance angiography. <i>Biomaterials</i> , 2016 , 98, 163-70	15.6	26
96	Injectable thermoresponsive hydrogels as drug delivery system for the treatment of central nervous system disorders: A review. <i>Journal of Controlled Release</i> , 2021 , 329, 16-35	11.7	25

95	Networks of neuroblastoma cells on porous silicon substrates reveal a small world topology. <i>Integrative Biology (United Kingdom)</i> , 2015 , 7, 184-97	3.7	24
94	Optimizing particle size for targeting diseased microvasculature: from experiments to artificial neural networks. <i>International Journal of Nanomedicine</i> , 2011 , 6, 1517-26	7.3	24
93	Methotraxate-Loaded Hybrid Nanoconstructs Target Vascular Lesions and Inhibit Atherosclerosis Progression in ApoE Mice. <i>Advanced Healthcare Materials</i> , 2017 , 6, 1601286	10.1	23
92	Magnetic resonance imaging-based computational modelling of blood flow and nanomedicine deposition in patients with peripheral arterial disease. <i>Journal of the Royal Society Interface</i> , 2015 , 12,	4.1	22
91	Bouncing dynamics of resistive microswitches with an adhesive tip. <i>Journal of Applied Physics</i> , 2006 , 100, 024313	2.5	22
90	Spherical polymeric nanoconstructs for combined chemotherapeutic and anti-inflammatory therapies. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2016 , 12, 2139-2147	6	21
89	Quantifying uncertainties in the microvascular transport of nanoparticles. <i>Biomechanics and Modeling in Mechanobiology</i> , 2014 , 13, 515-26	3.8	21
88	siRNA-chitosan complexes in poly(lactic-co-glycolic acid) nanoparticles for the silencing of aquaporin-1 in cancer cells. <i>Molecular Pharmaceutics</i> , 2013 , 10, 3186-94	5.6	21
87	A finite element formulation for the doublet mechanics modeling of microstructural materials. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2011 , 200, 1446-1454	5.7	21
86	Modulating the vascular behavior of metastatic breast cancer cells by curcumin treatment. <i>Frontiers in Oncology</i> , 2012 , 2, 161	5.3	21
85	A combined Lattice Boltzmann and Immersed boundary approach for predicting the vascular transport of differently shaped particles. <i>Computers and Fluids</i> , 2016 , 136, 260-271	2.8	20
84	Elastic beam over an adhesive wavy foundation. <i>Journal of Applied Physics</i> , 2004 , 95, 4476-4482	2.5	18
83	Scaling laws for opening partially adhered contacts in MEMS. <i>Journal of Microelectromechanical Systems</i> , 2004 , 13, 377-385	2.5	18
82	Engineering shape-defined PLGA microPlates for the sustained release of anti-inflammatory molecules. <i>Journal of Controlled Release</i> , 2020 , 319, 201-212	11.7	17
81	Emerging Nano- and Micro-Technologies Used in the Treatment of Type-1 Diabetes. <i>Nanomaterials</i> , 2020 , 10,	5.4	16
80	Deciphering the relative contribution of vascular inflammation and blood rheology in metastatic spreading. <i>Biomicrofluidics</i> , 2018 , 12, 042205	3.2	16
79	Nanoporous- micropatterned- superhydrophobic surfaces as harvesting agents for few low molecular weight molecules. <i>Microelectronic Engineering</i> , 2011 , 88, 1749-1752	2.5	16
78	Shaping the micromechanical behavior of multi-phase composites for bone tissue engineering. <i>Acta Biomaterialia</i> , 2010 , 6, 3448-56	10.8	16

77	Tuning core hydrophobicity of spherical polymeric nanoconstructs for docetaxel delivery. <i>Polymer International</i> , 2016 , 65, 741-746	3.3	16
76	Kinematic and dynamic forcing strategies for predicting the transport of inertial capsules via a combined lattice Boltzmann Immersed Boundary method. <i>Computers and Fluids</i> , 2019 , 180, 41-53	2.8	16
75	Targeting Inflammation With Nanosized Drug Delivery Platforms in Cardiovascular Diseases: Immune Cell Modulation in Atherosclerosis. <i>Frontiers in Bioengineering and Biotechnology</i> , 2018 , 6, 177	5.8	16
74	Predicting different adhesive regimens of circulating particles at blood capillary walls. <i>Microfluidics and Nanofluidics</i> , 2017 , 21, 168	2.8	15
73	Role of differential adhesion in cell cluster evolution: from vasculogenesis to cancer metastasis. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2015 , 18, 282-92	2.1	15
72	Hierarchical Microplates as Drug Depots with Controlled Geometry, Rigidity, and Therapeutic Efficacy. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 9280-9289	9.5	15
71	Dynamic response of microcantilever-based sensors in a fluidic chamber. <i>Journal of Applied Physics</i> , 2007 , 101, 024303	2.5	15
70	The effect of material properties on the thermoelastic stability of sliding systems. <i>Wear</i> , 2002 , 252, 311-321	3.5	15
69	Opportunities for NanoTheranosis in Lung Cancer and Pulmonary Metastasis. <i>Clinical and Translational Imaging</i> , 2014 , 2, 427-437	2	14
68	A doublet mechanics model for the ultrasound characterization of malignant tissues. <i>Journal of Biomedical Science and Engineering</i> , 2011 , 04, 362-374	0.7	14
67	A microfluidic platform with permeable walls for the analysis of vascular and extravascular mass transport. <i>Microfluidics and Nanofluidics</i> , 2016 , 20, 1	2.8	13
66	Two-Channel Compartmentalized Microfluidic Chip for Real-Time Monitoring of the Metastatic Cascade. <i>ACS Biomaterials Science and Engineering</i> , 2019 , 5, 4834-4843	5.5	13
65	Stress distribution retrieval in granular materials: A multi-scale model and digital image correlation measurements. <i>Optics and Lasers in Engineering</i> , 2016 , 76, 17-26	4.6	12
64	Nanoformulated Zoledronic Acid Boosts the \checkmark T Cell Immunotherapeutic Potential in Colorectal Cancer. <i>Cancers</i> , 2019 , 12,	6.6	12
63	Targeting central nervous system pathologies with nanomedicines. <i>Journal of Drug Targeting</i> , 2019 , 27, 542-554	5.4	12
62	Multistage Mesoporous Silicon-based Nanocarriers: Biocompatibility with Immune Cells and Controlled Degradation in Physiological Fluids 2008 , 25, 9-11		11
61	Ultrasound-induced deformation of PLGA-microPlates for on-command drug release. <i>Microelectronic Engineering</i> , 2020 , 229, 111360	2.5	10
60	Predicting the vascular adhesion of deformable drug carriers in narrow capillaries traversed by blood cells. <i>Journal of Fluids and Structures</i> , 2018 , 82, 638-650	3.1	10

59	The role of cell lysis and matrix deposition in tumor growth modeling. <i>Advanced Modeling and Simulation in Engineering Sciences</i> , 2015 , 2,	2.7	9
58	The effect of shape and size in micro-/nanodimples adhesion. <i>Journal of Applied Physics</i> , 2005 , 98, 014310.5	10.5	9
57	Thermoelastic instability in a thin layer sliding between two half-planes: transient behaviour. <i>Tribology International</i> , 2003 , 36, 205-212	4.9	9
56	Conformable hierarchically engineered polymeric micromeshes enabling combinatorial therapies in brain tumours. <i>Nature Nanotechnology</i> , 2021 , 16, 820-829	28.7	9
55	Shape-Defined microPlates for the Sustained Intra-articular Release of Dexamethasone in the Management of Overload-Induced Osteoarthritis. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 31379-31392	29.5	9
54	Optimizing the Pharmacological Properties of Discoidal Polymeric Nanoconstructs Against Triple-Negative Breast Cancer Cells. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020 , 8, 5	5.8	8
53	The Photophysics of Polythiophene Nanoparticles for Biological Applications. <i>ChemBioChem</i> , 2019 , 20, 532-536	3.8	8
52	Unraveling the Vascular Fate of Deformable Circulating Tumor Cells Via a Hierarchical Computational Model. <i>Cellular and Molecular Bioengineering</i> , 2019 , 12, 543-558	3.9	8
51	Tumor growth modeling from the perspective of multiphase porous media mechanics. <i>MCB Molecular and Cellular Biomechanics</i> , 2012 , 9, 193-212	1.2	7
50	Modulating Lipoprotein Transcellular Transport and Atherosclerotic Plaque Formation in ApoE Mice via Nanoformulated Lipid-Methotrexate Conjugates. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 37943-37956	9.5	7
49	2D Gadolinium Oxide Nanoplates as T Magnetic Resonance Imaging Contrast Agents. <i>Advanced Healthcare Materials</i> , 2021 , 10, e2001780	10.1	7
48	Predicting the Miscibility and Rigidity of Poly(lactic--glycolic acid)/Polyethylene Glycol Blends via Molecular Dynamics Simulations. <i>Macromolecules</i> , 2020 , 53, 3643-3654	5.5	6
47	Patient-Specific Flow Descriptors and Normalized wall index in Peripheral Artery Disease: a Preliminary Study. <i>Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization</i> , 2018 , 6, 119-127	0.9	6
46	Predicting the role of microstructural and biomechanical cues in tumor growth and spreading. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2018 , 34, e2935	2.6	6
45	Leaf-Inspired Authentically Complex Microvascular Networks for Deciphering Biological Transport Process. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 31627-31637	9.5	6
44	Design maps for scaffold constructs in bone regeneration. <i>Biomedical Microdevices</i> , 2013 , 15, 1005-13	3.7	6
43	Drug Delivery: Discoidal Porous Silicon Particles: Fabrication and Biodistribution in Breast Cancer Bearing Mice (Adv. Funct. Mater. 20/2012). <i>Advanced Functional Materials</i> , 2012 , 22, 4186-4186	15.6	6
42	Drug delivery: Experiments, mathematical modelling and machine learning. <i>Computers in Biology and Medicine</i> , 2020 , 123, 103820	7	5

41	Nanoparticles for Cancer Detection and Therapy 2010 , 51		5
40	The effect of engagement laws on the thermomechanical damage of multidisk clutches and brakes. <i>Wear</i> , 2004 , 257, 66-72	3.5	5
39	Stress-driven morphological instability and catastrophic failure of microdevices. <i>International Journal of Solids and Structures</i> , 2003 , 40, 729-745	3.1	5
38	Electro-stress migration induced instability at heterogenous interfaces. <i>Thin Solid Films</i> , 2003 , 437, 188-196		5
37	Roadmap on nanomedicine. <i>Nanotechnology</i> , 2021 , 32, 012001	3.4	5
36	Enhancing islet transplantation using a biocompatible collagen-PDMS bioscaffold enriched with dexamethasone-microplates. <i>Biofabrication</i> , 2021 ,	10.5	5
35	Modulating the Distant Spreading of Patient-Derived Colorectal Cancer Cells via Aspirin and Metformin. <i>Translational Oncology</i> , 2020 , 13, 100760	4.9	4
34	Nano-Particles for Biomedical Applications. <i>Springer Handbooks</i> , 2017 , 643-691	1.3	4
33	Frictionally-excited thermoelastic contact of rough surfaces. <i>International Journal of Mechanical Sciences</i> , 2000 , 42, 1307-1325	5.5	4
32	Boosting nanomedicine performance by conditioning macrophages with methyl palmitate nanoparticles. <i>Materials Horizons</i> , 2021 , 8, 2726-2741	14.4	4
31	Top-Down Fabricated microPlates for Prolonged, Intra-articular Matrix Metalloproteinase 13 siRNA Nanocarrier Delivery to Reduce Post-traumatic Osteoarthritis. <i>ACS Nano</i> , 2021 , 15, 14475-14491	16.7	4
30	A tissue chamber chip for assessing nanoparticle mobility in the extravascular space. <i>Biomedical Microdevices</i> , 2019 , 21, 41	3.7	3
29	Transient adhesion mediated by ligand-receptor interaction on surfaces of variable nanotopography. <i>International Journal of Nanotechnology</i> , 2013 , 10, 404	1.5	3
28	SIMPLE FORMULAS FOR THERMOELASTIC STRESSES IN TBC COATINGS. <i>Journal of Thermal Stresses</i> , 2003 , 26, 409-422	2.2	3
27	A 3D pancreatic tumor model to study T cell infiltration. <i>Biomaterials Science</i> , 2021 , 9, 7420-7431	7.4	3
26	Curcumin-Loaded Nanoparticles Impair the Pro-Tumor Activity of Acid-Stressed MSC in an In Vitro Model of Osteosarcoma. <i>International Journal of Molecular Sciences</i> , 2021 , 22,	6.3	3
25	Management of osteoarthritis: From drug molecules to nano/micromedicines.. <i>Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology</i> , 2022 , e1780	9.2	3
24	Immersed Molecular Electrokinetic Finite Element Method for Nano-devices in Biotechnology and Gene Delivery. <i>Lecture Notes in Computational Science and Engineering</i> , 2013 , 67-74	0.3	2

23	Multiscale Modeling for the Vascular Transport of Nanoparticles 2012 , 437-459		2
22	Geometrical Anisotropy in Biphasic Particle Reinforced Composites. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2010 , 77,	2.7	2
21	On the synergistic effects of ligand-mediated and phage-intrinsic properties during in vivo selection. <i>Advances in Genetics</i> , 2010 , 69, 115-33	3.3	2
20	Frictionally excited thermoelastic instability in viscoelastic and poroelastic media. <i>International Journal of Mechanical Sciences</i> , 2002 , 44, 585-600	5.5	2
19	The design of hydrodynamically lubricated journal bearings against yield. <i>Journal of Strain Analysis for Engineering Design</i> , 1999 , 34, 165-173	1.3	2
18	Preparation of anisotropic multiscale micro-hydrogels via two-photon continuous flow lithography. <i>Journal of Colloid and Interface Science</i> , 2022 , 608, 622-633	9.3	2
17	Simulating blood rheology across scales: A hybrid LB-particle approach. <i>International Journal of Modern Physics C</i> , 2019 , 30, 1941003	1.1	1
16	A Bayesian hierarchical model for maximizing the vascular adhesion of nanoparticles. <i>Computational Mechanics</i> , 2014 , 53, 539-547	4	1
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