Paolo Decuzzi

List of Publications by Year
in descending order

193 papers	11,939 citations	31902 53 h-index	29081 104 g-index
200 all docs	200 docs citations	200 times ranked	14072 citing authors

#	Article	IF	Citations
1	Size and shape effects in the biodistribution of intravascularly injected particles. Journal of Controlled Release, 2010, 141, 320-327.	4.8	825
2	Mesoporous silicon particles as a multistage delivery system for imaging and therapeutic applications. Nature Nanotechnology, 2008, 3, 151-157.	15.6	637
3	Intravascular Delivery of Particulate Systems: Does Geometry Really Matter?. Pharmaceutical Research, 2009, 26, 235-43.	1.7	541
4	The adhesive strength of non-spherical particles mediated by specific interactions. Biomaterials, 2006, 27, 5307-5314.	5.7	423
5	Geometrical confinement of gadolinium-based contrast agents in nanoporous particles enhances T1 contrast. Nature Nanotechnology, 2010, 5, 815-821.	15.6	379
6	The effect of shape on the margination dynamics of non-neutrally buoyant particles in two-dimensional shear flows. Journal of Biomechanics, 2008, 41, 2312-2318.	0.9	281
7	The Receptor-Mediated Endocytosis of Nonspherical Particles. Biophysical Journal, 2008, 94, 3790-3797.	0.2	258
8	Nanoparticles and innate immunity: new perspectives on host defence. Seminars in Immunology, 2017, 34, 33-51.	2.7	244
9	Cells preferentially grow on rough substrates. Biomaterials, 2010, 31, 7205-7212.	5.7	240
10	The role of specific and non-specific interactions in receptor-mediated endocytosis of nanoparticles. Biomaterials, 2007, 28, 2915-2922.	5.7	237
11	A Theoretical Model for the Margination of Particles within Blood Vessels. Annals of Biomedical Engineering, 2005, 33, 179-190.	1.3	229
12	Shaping nano-/micro-particles for enhanced vascular interaction in laminar flows. Nanotechnology, 2009, 20, 495101.	1.3	217
13	Heat-Generating Iron Oxide Nanocubes: Subtle â€œDestructuratorsâ€•of the Tumoral Microenvironment. ACS Nano, 2014, 8, 4268-4283.	7.3	200
14	Enabling individualized therapy through nanotechnology. Pharmacological Research, 2010, 62, 57-89.	3.1	188
15	Rapid tumoritropic accumulation of systemically injected plateloid particles and their biodistribution. Journal of Controlled Release, 2012, 158, 148-155.	4.8	177
16	Design maps for nanoparticles targeting the diseased microvasculature. Biomaterials, 2008, 29, 377-384.	5.7	172
17	Discoidal Porous Silicon Particles: Fabrication and Biodistribution in Breast Cancer Bearing Mice. Advanced Functional Materials, 2012, 22, 4225-4235.	7.8	170
18	The association of silicon microparticles with endothelial cells in drug delivery to the vasculature. Biomaterials, 2009, 30, 2440-2448.	5.7	169

#	Article	IF	Citations
19	On the near-wall accumulation of injectable particles in the microcirculation: smaller is not better. Scientific Reports, 2013, 3, 2079.	1.6	154
20	The Transport of Nanoparticles in Blood Vessels: The Effect of Vessel Permeability and Blood Rheology. Annals of Biomedical Engineering, 2008, 36, 254-261.	1.3	150
21	Soft Discoidal Polymeric Nanoconstructs Resist Macrophage Uptake and Enhance Vascular Targeting in Tumors. ACS Nano, 2015, 9, 11628-11641.	7.3	148
22	A physical sciences network characterization of non-tumorigenic and metastatic cells. Scientific Reports, 2013, 3, 1449.	1.6	146
23	Cytosolic delivery of nucleic acids: The case of ionizable lipid nanoparticles. Bioengineering and Translational Medicine, 2021, 6, e10213.	3.9	142
24	The preferential targeting of the diseased microvasculature by disk-like particles. Biomaterials, 2012, 33, 5504-5513.	5.7	140
25	Modulating cellular adhesion through nanotopography. Biomaterials, 2010, 31, 173-179.	5.7	135
26	Nanotechnology for breast cancer therapy. Biomedical Microdevices, 2009, 11, 49-63.	1.4	124
27	A multiphase model for three-dimensional tumor growth. New Journal of Physics, 2013, 15, 015005.	1.2	124
28	Scaling behaviour for the water transport in nanoconfined geometries. Nature Communications, 2014, 5, 4565.	5.8	122
29	Harnessing Endogenous Stimuli for Responsive Materials in Theranostics. ACS Nano, 2021, 15, 2068-2098.	7.3	117
30	The margination propensity of spherical particles for vascular targeting in the microcirculation. Journal of Nanobiotechnology, 2008, 6, 9.	4.2	105
31	Design of bio-mimetic particles with enhanced vascular interaction. Journal of Biomechanics, 2009, 42, 1885-1890.	0.9	92
32	The state of stress induced by the plane frictionless cylindrical contact. I. The case of elastic similarity. International Journal of Solids and Structures, 2001, 38, 4507-4523.	1.3	90
33	Gadoliniumâ€Conjugated Gold Nanoshells for Multimodal Diagnostic Imaging and Photothermal Cancer Therapy. Small, 2014, 10, 556-565.	5.2	90
34	Tailoring the degradation kinetics of mesoporous silicon structures through PEGylation. Journal of Biomedical Materials Research - Part A, 2010, 94A, 1236-1243.	2.1	89
35	Modulating Phagocytic Cell Sequestration by Tailoring Nanoconstruct Softness. ACS Nano, 2018, 12, 1433-1444.	7.3	89
36	Design Maps for the Hyperthermic Treatment of Tumors with Superparamagnetic Nanoparticles. PLoS ONE, 2013, 8, e57332.	1.1	89

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37	A Computational Model for Predicting Nanoparticle Accumulation in Tumor Vasculature. PLoS ONE, 2013, 8, e56876.	1.1	88
38	The Effective Dispersion of Nanovectors Within the Tumor Microvasculature. Annals of Biomedical Engineering, 2006, 34, 633-641.	1.3	81
39	Lipidâ€“polymer nanoparticles encapsulating curcumin for modulating the vascular deposition of breast cancer cells. Nanomedicine: Nanotechnology, Biology, and Medicine, 2014, 10, e991-e1002.	1.7	81
40	Injectable thermoresponsive hydrogels as drug delivery system for the treatment of central nervous system disorders: A review. Journal of Controlled Release, 2021, 329, 16-35.	4.8	76
41	Ultra low concentrated molecular detection using super hydrophobic surface based biophotonic devices. Microelectronic Engineering, 2010, 87, 798-801.	1.1	72
42	Gadolinium oxide nanoplates with high longitudinal relaxivity for magnetic resonance imaging. Nanoscale, 2014, 6, 13637-13645.	2.8	72
43	Overcoming Nanoparticle-Mediated Complement Activation by Surface PEG Pairing. Nano Letters, 2020, 20, 4312-4321.	4.5	70
44	Antibiological barrier nanovector technology for cancer applications. Expert Opinion on Drug Delivery, 2007, 4, 359-369.	2.4	67
45	<i>In silico</i>vascular modeling for personalized nanoparticle delivery. Nanomedicine, 2013, 8, 343-357.	1.7	66
46	Erythrocyte-Inspired Discoidal Polymeric Nanoconstructs Carrying Tissue Plasminogen Activator for the Enhanced Lysis of Blood Clots. ACS Nano, 2018, 12, 12224-12237.	7.3	64
47	Differential Cell Adhesion on Mesoporous Silicon Substrates. ACS Applied Materials & Interfaces, 2012, 4, 2903-2911.	4.0	63
48	Predicting the growth of glioblastoma multiforme spheroids using a multiphase porous media model. Biomechanics and Modeling in Mechanobiology, 2016, 15, 1215-1228.	1.4	63
49	TPA Immobilization on Iron Oxide Nanocubes and Localized Magnetic Hyperthermia Accelerate Blood Clot Lysis. Advanced Functional Materials, 2015, 25, 1709-1718.	7.8	61
50	Modelling mass and heat transfer in nano-based cancer hyperthermia. Royal Society Open Science, 2015, 2, 150447.	1.1	60
51	A tumor growth model with deformable ECM. Physical Biology, 2014, 11, 065004.	0.8	58
52	Engineered magnetic hybrid nanoparticles with enhanced relaxivity for tumor imaging. Biomaterials, 2013, 34, 7725-7732.	5.7	57
53	Positron Emitting Magnetic Nanoconstructs for PET/MR Imaging. Small, 2014, 10, 2688-2696.	5.2	55
54	A physical sciences network characterization of circulating tumor cell aggregate transport. American Journal of Physiology - Cell Physiology, 2015, 308, C792-C802.	2.1	54

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55	Synthesis of Multifunctional Magnetic NanoFlakes for Magnetic Resonance Imaging, Hyperthermia, and Targeting.. ACS Applied Materials & Interfaces, 2014, 6, 12939-12946.	4.0	53
56	The state of stress induced by the plane frictionless cylindrical contact. II. The general case (elastic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	1.3	52
57	Multiscale modeling and uncertainty quantification in nanoparticle-mediated drug/gene delivery. Computational Mechanics, 2014, 53, 511-537.	2.2	52
58	Assembly of Iron Oxide Nanocubes for Enhanced Cancer Hyperthermia and Magnetic Resonance Imaging. Nanomaterials, 2017, 7, 72.	1.9	52
59	Fractal structure can explain the increased hydrophobicity of nanoporous silicon films. Microelectronic Engineering, 2011, 88, 2537-2540.	1.1	50
60	Hierarchically Structured Magnetic Nanoconstructs with Enhanced Relaxivity and Cooperative Tumor Accumulation. Advanced Functional Materials, 2014, 24, 4584-4594.	7.8	50
61	An Integrated Approach for the Rational Design of Nanovectors for Biomedical Imaging and Therapy. Advances in Genetics, 2010, 69, 31-64.	0.8	48
62	Adhesion of Microfabricated Particles on Vascular Endothelium: A Parametric Analysis. Annals of Biomedical Engineering, 2004, 32, 793-802.	1.3	47
63	Dexamethasone-loaded Polymeric Nanoconstructs for Monitoring and Treating Inflammatory Bowel Disease. Theranostics, 2017, 7, 3653-3666.	4.6	47
64	Enhanced MRI relaxivity of Gd³⁺â€based contrast agents geometrically confined within porous nanoconstructs. Contrast Media and Molecular Imaging, 2012, 7, 501-508.	0.4	46
65	Three phase flow dynamics in tumor growth. Computational Mechanics, 2014, 53, 465-484.	2.2	46
66	Multicomponent, peptide-targeted glycol chitosan nanoparticles containing ferrimagnetic iron oxide nanocubes for bladder cancer multimodal imaging. International Journal of Nanomedicine, 2016, Volume 11, 4141-4155.	3.3	46
67	On Computational Modeling in Tumor Growth. Archives of Computational Methods in Engineering, 2013, 20, 327-352.	6.0	44
68	Enhanced MRI relaxivity of aquated Gd³⁺ ions by carboxyphenylated water-dispersed graphene nanoribbons. Nanoscale, 2014, 6, 3059-3063.	2.8	43
69	Engineered manganese oxide nanocrystals for enhanced uranyl sorption and separation. Environmental Science: Nano, 2015, 2, 500-508.	2.2	43
70	Ameliorating Amyloid-Î² Fibrils Triggered Inflammation via Curcumin-Loaded Polymeric Nanoconstructs. Frontiers in Immunology, 2017, 8, 1411.	2.2	43
71	Computational Modeling of Tumor Response to Drug Release from Vasculature-Bound Nanoparticles. PLoS ONE, 2015, 10, e0144888.	1.1	43
72	Probing the mechanical properties of TNF-α stimulated endothelial cell with atomic force microscopy. International Journal of Nanomedicine, 2011, 6, 179.	3.3	42

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73	Niosomes as Drug Nanovectors: Multiscale pH-Dependent Structural Response. Langmuir, 2016, 32, 1241-1249.	1.6	42
74	Rosiglitazone-loaded nanospheres for modulating macrophage-specific inflammation in obesity. Journal of Controlled Release, 2013, 170, 460-468.	4.8	41
75	Engineering discoidal polymeric nanoconstructs with enhanced magneto-optical properties for tumor imaging. Biomaterials, 2013, 34, 5402-5410.	5.7	41
76	Enhancing photothermal cancer therapy by clustering gold nanoparticles into spherical polymeric nanoconstructs. Optics and Lasers in Engineering, 2016, 76, 74-81.	2.0	41
77	Frictionally Excited Thermoelastic Instability in Multi-Disk Clutches and Brakes. Journal of Tribology, 2001, 123, 865-871.	1.0	40
78	The dynamic response of resistive microswitches: switching time and bouncing. Journal of Micromechanics and Microengineering, 2006, 16, 1108-1115.	1.5	40
79	Vascular deposition patterns for nanoparticles in an inflamed patient-specific arterial tree. Biomechanics and Modeling in Mechanobiology, 2014, 13, 585-597.	1.4	40
80	Flow chamber analysis of size effects in the adhesion of spherical particles. International Journal of Nanomedicine, 2007, 2, 689-96.	3.3	40
81	Transient analysis of frictionally excited thermoelastic instability in multi-disk clutches and brakes. Wear, 2003, 254, 136-146.	1.5	36
82	Conformable hierarchically engineered polymeric micromeshes enabling combinatorial therapies in brain tumours. Nature Nanotechnology, 2021, 16, 820-829.	15.6	36
83	USNCTAM perspectives on mechanics in medicine. Journal of the Royal Society Interface, 2014, 11, 20140301.	1.5	35
84	Deformable Discoidal Polymeric Nanoconstructs for the Precise Delivery of Therapeutic and Imaging Agents. Molecular Therapy, 2017, 25, 1514-1521.	3.7	35
85	Radiolabeled Polymeric Nanoconstructs Loaded with Docetaxel and Curcumin for Cancer Combinatorial Therapy and Nuclear Imaging. Advanced Functional Materials, 2015, 25, 3371-3379.	7.8	34
86	Mechanical properties of PECVD hydrogenated amorphous carbon coatings via nanoindentation and nanoscratching techniques. Surface and Coatings Technology, 2004, 180-181, 259-264.	2.2	33
87	Facilitating the Clinical Integration of Nanomedicines: The Roles of Theoretical and Computational Scientists. ACS Nano, 2016, 10, 8133-8138.	7.3	33
88	Emerging Nano- and Micro-Technologies Used in the Treatment of Type-1 Diabetes. Nanomaterials, 2020, 10, 789.	1.9	33
89	Selective modulation of cell response on engineered fractal silicon substrates. Scientific Reports, 2013, 3, 1461.	1.6	32
90	Methotraxateâ€Loaded Hybrid Nanoconstructs Target Vascular Lesions and Inhibit Atherosclerosis Progression in ApoE^{âˆ’/âˆ’} Mice. Advanced Healthcare Materials, 2017, 6, 1601286.	3.9	32

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91	Geometrical confinement of Gd(DOTA) molecules within mesoporous silicon nanoconstructs for MR imaging of cancer. Cancer Letters, 2014, 352, 97-101.	3.2	31
92	Optimizing particle size for targeting diseased microvasculature: from experiments to artificial neural networks. International Journal of Nanomedicine, 2011, 6, 1517.	3.3	30
93	Networks of neuroblastoma cells on porous silicon substrates reveal a small world topology. Integrative Biology (United Kingdom), 2015, 7, 184-197.	0.6	28
94	Paramagnetic Gd3+ labeled red blood cells for magnetic resonance angiography. Biomaterials, 2016, 98, 163-170.	5.7	28
95	Magnetic resonance imaging-based computational modelling of blood flow and nanomedicine deposition in patients with peripheral arterial disease. Journal of the Royal Society Interface, 2015, 12, 20150001.	1.5	27
96	Spherical polymeric nanoconstructs for combined chemotherapeutic and anti-inflammatory therapies. Nanomedicine: Nanotechnology, Biology, and Medicine, 2016, 12, 2139-2147.	1.7	27
97	Two-Channel Compartmentalized Microfluidic Chip for Real-Time Monitoring of the Metastatic Cascade. ACS Biomaterials Science and Engineering, 2019, 5, 4834-4843.	2.6	27
98	Engineering shape-defined PLGA microPlates for the sustained release of anti-inflammatory molecules. Journal of Controlled Release, 2020, 319, 201-212.	4.8	27
99	Bouncing dynamics of resistive microswitches with an adhesive tip. Journal of Applied Physics, 2006, 100, 024313.	1.1	26
100	Modulating the vascular behavior of metastatic breast cancer cells by curcumin treatment. Frontiers in Oncology, 2012, 2, 161.	1.3	26
101	Targeting Inflammation With Nanosized Drug Delivery Platforms in Cardiovascular Diseases: Immune Cell Modulation in Atherosclerosis. Frontiers in Bioengineering and Biotechnology, 2018, 6, 177.	2.0	26
102	A finite element formulation for the doublet mechanics modeling of microstructural materials. Computer Methods in Applied Mechanics and Engineering, 2011, 200, 1446-1454.	3.4	25
103	Nanoformulated Zoledronic Acid Boosts the VÎ´2 T Cell Immunotherapeutic Potential in Colorectal Cancer. Cancers, 2020, 12, 104.	1.7	24
104	Quantifying uncertainties in the microvascular transport of nanoparticles. Biomechanics and Modeling in Mechanobiology, 2014, 13, 515-526.	1.4	23
105	A combined Lattice Boltzmann and Immersed boundary approach for predicting the vascular transport of differently shaped particles. Computers and Fluids, 2016, 136, 260-271.	1.3	23
106	siRNA-Chitosan Complexes in Poly(lactic-<i>co</i>-glycolic acid) Nanoparticles for the Silencing of Aquaporin-1 in Cancer Cells. Molecular Pharmaceutics, 2013, 10, 3186-3194.	2.3	22
107	Tuning core hydrophobicity of spherical polymeric nanoconstructs for docetaxel delivery. Polymer International, 2016, 65, 741-746.	1.6	22
108	Modulating Lipoprotein Transcellular Transport and Atherosclerotic Plaque Formation in ApoE^{â€“/â€“} Mice via Nanoformulated Lipidâ€“Methotrexate Conjugates. ACS Applied Materials & Interfaces, 2020, 12, 37943-37956.	4.0	21

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109	Predicting the Miscibility and Rigidity of Poly(lactic-<i>co</i>-glycolic acid)/Polyethylene Glycol Blends via Molecular Dynamics Simulations. Macromolecules, 2020, 53, 3643-3654.	2.2	21
110	Top-Down Fabricated microPlates for Prolonged, Intra-articular Matrix Metalloproteinase 13 siRNA Nanocarrier Delivery to Reduce Post-traumatic Osteoarthritis. ACS Nano, 2021, 15, 14475-14491.	7.3	21
111	Scaling Laws for Opening Partially Adhered Contacts in MEMS. Journal of Microelectromechanical Systems, 2004, 13, 377-385.	1.7	20
112	Shaping the micromechanical behavior of multi-phase composites for bone tissue engineering. Acta Biomaterialia, 2010, 6, 3448-3456.	4.1	20
113	Kinematic and dynamic forcing strategies for predicting the transport of inertial capsules via a combined lattice Boltzmann â€“ Immersed Boundary method. Computers and Fluids, 2019, 180, 41-53.	1.3	20
114	Elastic beam over an adhesive wavy foundation. Journal of Applied Physics, 2004, 95, 4476-4482.	1.1	19
115	Nanoporous- micropatterned- superhydrophobic surfaces as harvesting agents for few low molecular weight molecules. Microelectronic Engineering, 2011, 88, 1749-1752.	1.1	19
116	Shape-Defined microPlates for the Sustained Intra-articular Release of Dexamethasone in the Management of Overload-Induced Osteoarthritis. ACS Applied Materials & Interfaces, 2021, 13, 31379-31392.	4.0	19
117	Dynamic response of microcantilever-based sensors in a fluidic chamber. Journal of Applied Physics, 2007, 101, 024303.	1.1	18
118	Predicting different adhesive regimens of circulating particles at blood capillary walls. Microfluidics and Nanofluidics, 2017, 21, 168.	1.0	18
119	Hierarchical Microplates as Drug Depots with Controlled Geometry, Rigidity, and Therapeutic Efficacy. ACS Applied Materials & Interfaces, 2018, 10, 9280-9289.	4.0	18
120	Deciphering the relative contribution of vascular inflammation and blood rheology in metastatic spreading. Biomicrofluidics, 2018, 12, 042205.	1.2	18
121	Management of osteoarthritis: From drug molecules to nano/<scp>micromedicines</scp>. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2022, 14, e1780.	3.3	18
122	Opportunities for nanotheranosis in lung cancer and pulmonary metastasis. Clinical and Translational Imaging, 2014, 2, 427-437.	1.1	17
123	Enhancing islet transplantation using a biocompatible collagen-PDMS bioscaffold enriched with dexamethasone-microplates. Biofabrication, 2021, 13, 035011.	3.7	17
124	2D Gadolinium Oxide Nanoplates as <i>T</i>₁ Magnetic Resonance Imaging Contrast Agents. Advanced Healthcare Materials, 2021, 10, e2001780.	3.9	17
125	Roadmap on nanomedicine. Nanotechnology, 2021, 32, 012001.	1.3	17
126	A doublet mechanics model for the ultrasound characterization of malignant tissues. Journal of Biomedical Science and Engineering, 2011, 04, 362-374.	0.2	17

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127	A 3D pancreatic tumor model to study T cell infiltration. Biomaterials Science, 2021, 9, 7420-7431.	2.6	17
128	The effect of material properties on the thermoelastic stability of sliding systems. Wear, 2002, 252, 311-321.	1.5	16
129	Role of differential adhesion in cell cluster evolution: from vasculogenesis to cancer metastasis. Computer Methods in Biomechanics and Biomedical Engineering, 2015, 18, 282-292.	0.9	16
130	A microfluidic platform with permeable walls for the analysis of vascular and extravascular mass transport. Microfluidics and Nanofluidics, 2016, 20, 1.	1.0	16
131	Targeting central nervous system pathologies with nanomedicines. Journal of Drug Targeting, 2019, 27, 542-554.	2.1	16
132	Drug delivery: Experiments, mathematical modelling and machine learning. Computers in Biology and Medicine, 2020, 123, 103820.	3.9	15
133	Optimizing the Pharmacological Properties of Discoidal Polymeric Nanoconstructs Against Triple-Negative Breast Cancer Cells. Frontiers in Bioengineering and Biotechnology, 2020, 8, 5.	2.0	15
134	Curcumin-Loaded Nanoparticles Impair the Pro-Tumor Activity of Acid-Stressed MSC in an In Vitro Model of Osteosarcoma. International Journal of Molecular Sciences, 2021, 22, 5760.	1.8	15
135	The role of cell lysis and matrix deposition in tumor growth modeling. Advanced Modeling and Simulation in Engineering Sciences, 2015, 2, .	0.7	13
136	Predicting the vascular adhesion of deformable drug carriers in narrow capillaries traversed by blood cells. Journal of Fluids and Structures, 2018, 82, 638-650.	1.5	13
137	Leaf-Inspired Authentically Complex Microvascular Networks for Deciphering Biological Transport Process. ACS Applied Materials & Interfaces, 2019, 11, 31627-31637.	4.0	13
138	Nanoparticle theranostics in cardiovascular inflammation. Seminars in Immunology, 2021, 56, 101536.	2.7	13
139	Stress distribution retrieval in granular materials: A multi-scale model and digital image correlation measurements. Optics and Lasers in Engineering, 2016, 76, 17-26.	2.0	12
140	Ultrasound-induced deformation of PLGA-microPlates for on-command drug release. Microelectronic Engineering, 2020, 229, 111360.	1.1	12
141	Multistage Mesoporous Silicon-based Nanocarriers: Biocompatibility with Immune Cells and Controlled Degradation in Physiological Fluids. , 2008, 25, 9-11.		12
142	The Photophysics of Polythiophene Nanoparticles for Biological Applications. ChemBioChem, 2019, 20, 532-536.	1.3	11
143	Unraveling the Vascular Fate of Deformable Circulating Tumor Cells Via a Hierarchical Computational Model. Cellular and Molecular Bioengineering, 2019, 12, 543-558.	1.0	11
144	The effect of shape and size in micro-/nanodimples adhesion. Journal of Applied Physics, 2005, 98, 014310.	1.1	10

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145	Boosting nanomedicine performance by conditioning macrophages with methyl palmitate nanoparticles. Materials Horizons, 2021, 8, 2726-2741.	6.4	10
146	Thermoelastic instability in a thin layer sliding between two half-planes: transient behaviour. Tribology International, 2003, 36, 205-212.	3.0	9
147	Patient-specific flow descriptors and normalised wall index in peripheral artery disease: a preliminary study. Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization, 2018, 6, 119-127.	1.3	9
148	The effect of engagement laws on the thermomechanical damage of multidisk clutches and brakes. Wear, 2004, 257, 66-72.	1.5	8
149	Modulating the Distant Spreading of Patient-Derived Colorectal Cancer Cells via Aspirin and Metformin. Translational Oncology, 2020, 13, 100760.	1.7	8
150	Tumor growth modeling from the perspective of multiphase porous media mechanics. MCB Molecular and Cellular Biomechanics, 2012, 9, 193-212.	0.3	8
151	Shape-specific microfabricated particles for biomedical applications: a review. Drug Delivery and Translational Research, 2022, 12, 2019-2037.	3.0	8
152	Stress-driven morphological instability and catastrophic failure of microdevices. International Journal of Solids and Structures, 2003, 40, 729-745.	1.3	7
153	Predicting the role of microstructural and biomechanical cues in tumor growth and spreading. International Journal for Numerical Methods in Biomedical Engineering, 2018, 34, e2935.	1.0	7
154	Frictionally-excited thermoelastic contact of rough surfaces. International Journal of Mechanical Sciences, 2000, 42, 1307-1325.	3.6	6
155	Drug Delivery: Discoidal Porous Silicon Particles: Fabrication and Biodistribution in Breast Cancer Bearing Mice (Adv. Funct. Mater. 20/2012). Advanced Functional Materials, 2012, 22, 4186-4186.	7.8	6
156	Design maps for scaffold constructs in bone regeneration. Biomedical Microdevices, 2013, 15, 1005-1013.	1.4	6
157	Nano-Particles for Biomedical Applications. Springer Handbooks, 2017, , 643-691.	0.3	6
158	A permeable on-chip microvasculature for assessing the transport of macromolecules and polymeric nanoconstructs. Journal of Colloid and Interface Science, 2021, 594, 409-423.	5.0	6
159	Electro-stress migration induced instability at heterogenous interfaces. Thin Solid Films, 2003, 437, 188-196.	0.8	5
160	SIMPLE FORMULAS FOR THERMOELASTIC STRESSES IN TBC COATINGS. Journal of Thermal Stresses, 2003, 26, 409-422.	1.1	5
161	Introduction to special issue on â€œNanoparticles in Medicine: Targeting, Optimization and Clinical Applicationsâ€• Bioengineering and Translational Medicine, 2016, 1, 8-9.	3.9	5
162	A tissue chamber chip for assessing nanoparticle mobility in the extravascular space. Biomedical Microdevices, 2019, 21, 41.	1.4	5

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163	Insulin Granule-Loaded MicroPlates for Modulating Blood Glucose Levels in Type-1 Diabetes. ACS Applied Materials & Interfaces, 2021, 13, 53618-53629.	4.0	5
164	Long-lasting rescue of schizophrenia-relevant cognitive impairments via risperidone-loaded microPlates. Drug Delivery and Translational Research, 2022, 12, 1829-1842.	3.0	5
165	Size effects of discoidal <scp>PLGA</scp> nanoconstructs in Pickering emulsion stabilization. Journal of Polymer Science, 2022, 60, 1480-1491.	2.0	5
166	Geometrical Anisotropy in Biphase Particle Reinforced Composites. Journal of Applied Mechanics, Transactions ASME, 2010, 77, .	1.1	4
167	Elucidating the Role of Matrix Porosity and Rigidity in Glioblastoma Type IV Progression. Applied Sciences (Switzerland), 2020, 10, 9076.	1.3	4
168	Synthesis of Two Methotrexate Prodrugs for Optimizing Drug Loading into Liposomes. Pharmaceutics, 2021, 13, 332.	2.0	4
169	Preparation of anisotropic multiscale micro-hydrogels via two-photon continuous flow lithography. Journal of Colloid and Interface Science, 2022, 608, 622-633.	5.0	4
170	Boosting the therapeutic efficacy of discoidal nanoconstructs against glioblastoma with rationally designed PEG-Docetaxel conjugates. European Journal of Pharmaceutics and Biopharmaceutics, 2022, 174, 90-100.	2.0	4
171	Frictionally excited thermoelastic instability in viscoelastic and poroelastic media. International Journal of Mechanical Sciences, 2002, 44, 585-600.	3.6	3
172	Transient adhesion mediated by ligand-receptor interaction on surfaces of variable nanotopography. International Journal of Nanotechnology, 2013, 10, 404.	0.1	3
173	The design of hydrodynamically lubricated journal bearings against yield. Journal of Strain Analysis for Engineering Design, 1999, 34, 165-173.	1.0	2
174	On the Synergistic Effects of Ligand-Mediated and Phage-Intrinsic Properties During In Vivo Selection. Advances in Genetics, 2010, 69, 115-133.	0.8	2
175	Nanomedicine Advancing from Bench to Bedside: the Role of Polymeric Materials. Polymer International, 2016, 65, 733-733.	1.6	2
176	Simulating blood rheology across scales: A hybrid LB-particle approach. International Journal of Modern Physics C, 2019, 30, 1941003.	0.8	2
177	Vascular-confined multi-passage discoidal nanoconstructs for the low-dose docetaxel inhibition of triple-negative breast cancer growth. Nano Research, 2022, 15, 482.	5.8	2
178	Patient-Specific Computational Modeling and Magnetic Nanoconstructs: Tools for Maximizing the Efficacy of Stem Cell-Based Therapies. Methodist DeBakey Cardiovascular Journal, 2013, 9, 223-228.	0.5	1
179	Regenerative Medicine in Cardiovascular Disease: Introduction. Methodist DeBakey Cardiovascular Journal, 2021, 9, 186.	0.5	1
180	Nanomedicine. Computational Mechanics, 2014, 53, 401-402.	2.2	1

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181	A Bayesian hierarchical model for maximizing the vascular adhesion of nanoparticles. Computational Mechanics, 2014, 53, 539-547.	2.2	1
182	Smart nanoconstructs for theranostics in cancer and cardiovascular diseases. , 2018, , 297-321.		1
183	Fantastic Voyages. Mechanical Engineering, 2006, 128, 24-27.	0.0	1
184	Nanoporous silicon delivery vectors for breast cancer imaging.. Cancer Research, 2009, 69, 4003.	0.4	1
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