

Peng-yuan Wang

List of Publications by Year in descending order

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Version: 2024-02-01

108
papers

3,366
citations

172386

29
h-index

168321

53
g-index

114
all docs

114
docs citations

114
times ranked

5062
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Muscle fatigue: general understanding and treatment. <i>Experimental and Molecular Medicine</i> , 2017, 49, e384-e384. | 3.2 | 340 |
| 2 | A single-cell transcriptome atlas of the adult human retina. <i>EMBO Journal</i> , 2019, 38, e100811. | 3.5 | 185 |
| 3 | Leaky-Wave Antennas Based on Noncutoff Substrate Integrated Waveguide Supporting Beam Scanning From Backward to Forward. <i>IEEE Transactions on Antennas and Propagation</i> , 2016, 64, 2155-2164. | 3.1 | 172 |
| 4 | Modulation of alignment, elongation and contraction of cardiomyocytes through a combination of nanotopography and rigidity of substrates. <i>Acta Biomaterialia</i> , 2011, 7, 3285-3293. | 4.1 | 158 |
| 5 | Ocular Drug Delivery: Role of Degradable Polymeric Nanocarriers for Ophthalmic Application. <i>International Journal of Molecular Sciences</i> , 2018, 19, 2830. | 1.8 | 154 |
| 6 | Screening of rat mesenchymal stem cell behaviour on polydimethylsiloxane stiffness gradients. <i>Acta Biomaterialia</i> , 2012, 8, 519-530. | 4.1 | 126 |
| 7 | Screening Mesenchymal Stem Cell Attachment and Differentiation on Porous Silicon Gradients. <i>Advanced Functional Materials</i> , 2012, 22, 3414-3423. | 7.8 | 109 |
| 8 | Modulation of alignment and differentiation of skeletal myoblasts by submicron ridges/grooves surface structure. <i>Biotechnology and Bioengineering</i> , 2010, 106, 285-294. | 1.7 | 95 |
| 9 | Modulation of osteogenic, adipogenic and myogenic differentiation of mesenchymal stem cells by submicron grooved topography. <i>Journal of Materials Science: Materials in Medicine</i> , 2012, 23, 3015-3028. | 1.7 | 92 |
| 10 | Modulation of human multipotent and pluripotent stem cells using surface nanotopographies and surface-immobilised bioactive signals: A review. <i>Acta Biomaterialia</i> , 2016, 45, 31-59. | 4.1 | 80 |
| 11 | miRNA-124 in Immune System and Immune Disorders. <i>Frontiers in Immunology</i> , 2016, 7, 406. | 2.2 | 74 |
| 12 | Modulation of human mesenchymal and pluripotent stem cell behavior using biophysical and biochemical cues: A review. <i>Biotechnology and Bioengineering</i> , 2017, 114, 260-280. | 1.7 | 69 |
| 13 | The roles of RGD and grooved topography in the adhesion, morphology, and differentiation of C2C12 skeletal myoblasts. <i>Biotechnology and Bioengineering</i> , 2012, 109, 2104-2115. | 1.7 | 63 |
| 14 | Periodic Leaky-Wave Antenna Based on Complementary Pair of Radiation Elements. <i>IEEE Transactions on Antennas and Propagation</i> , 2018, 66, 4503-4515. | 3.1 | 61 |
| 15 | Modulation of Human Mesenchymal Stem Cell Behavior on Ordered Tantalum Nanotopographies Fabricated Using Colloidal Lithography and Glancing Angle Deposition. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 4979-4989. | 4.0 | 59 |
| 16 | Grooved PLGA films incorporated with RGD/YIGSR peptides for potential application on skeletal muscle tissue engineering. <i>Colloids and Surfaces B: Biointerfaces</i> , 2013, 110, 88-95. | 2.5 | 56 |
| 17 | Protective cerebrovascular effects of hydroxysafflor yellow A (HSYA) on ischemic stroke. <i>European Journal of Pharmacology</i> , 2018, 818, 604-609. | 1.7 | 52 |
| 18 | Self-assembled binary colloidal crystal monolayers as cell culture substrates. <i>Journal of Materials Chemistry B</i> , 2015, 3, 2545-2552. | 2.9 | 49 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Dynamic compression modulates chondrocyte proliferation and matrix biosynthesis in chitosan/gelatin scaffolds. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2009, 91B, 143-152. | 1.6 | 45 |
| 20 | Screening rat mesenchymal stem cell attachment and differentiation on surface chemistries using plasma polymer gradients. <i>Acta Biomaterialia</i> , 2015, 11, 58-67. | 4.1 | 44 |
| 21 | Nicotine protects against DSS colitis through regulating microRNA-124 and STAT3. <i>Journal of Molecular Medicine</i> , 2017, 95, 221-233. | 1.7 | 43 |
| 22 | Stimulation of Early Osteochondral Differentiation of Human Mesenchymal Stem Cells Using Binary Colloidal Crystals (BCCs). <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 4477-4488. | 4.0 | 41 |
| 23 | MicroRNA-124 negatively regulates LPS-induced TNF- α production in mouse macrophages by decreasing protein stability. <i>Acta Pharmacologica Sinica</i> , 2016, 37, 889-897. | 2.8 | 40 |
| 24 | Gene Therapy Intervention in Neovascular Eye Disease: A Recent Update. <i>Molecular Therapy</i> , 2020, 28, 2120-2138. | 3.7 | 38 |
| 25 | Electrochemistry-enabled fabrication of orthogonal nanotopography and surface chemistry gradients for high-throughput screening. <i>Lab on A Chip</i> , 2012, 12, 1480. | 3.1 | 37 |
| 26 | Mesenchymal stem cell attachment to peptide density gradients on porous silicon generated by electrografting. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2011, 208, 1440-1445. | 0.8 | 33 |
| 27 | Binary colloidal crystals (BCCs): Interactions, fabrication, and applications. <i>Advances in Colloid and Interface Science</i> , 2018, 261, 102-127. | 7.0 | 33 |
| 28 | Binary colloidal crystals (BCCs) as a feeder-free system to generate human induced pluripotent stem cells (hiPSCs). <i>Scientific Reports</i> , 2016, 6, 36845. | 1.6 | 32 |
| 29 | Screening the attachment and spreading of bone marrow-derived and adipose-derived mesenchymal stem cells on porous silicon gradients. <i>RSC Advances</i> , 2012, 2, 12857. | 1.7 | 31 |
| 30 | Modulation of cell attachment and collagen production of anterior cruciate ligament cells via submicron grooves/ridges structures with different cell affinity. <i>Biotechnology and Bioengineering</i> , 2013, 110, 327-337. | 1.7 | 30 |
| 31 | Role of acute-phase protein ORM in a mice model of ischemic stroke. <i>Journal of Cellular Physiology</i> , 2019, 234, 20533-20545. | 2.0 | 30 |
| 32 | Ex Vivo Expansion and Drug Sensitivity Profiling of Circulating Tumor Cells from Patients with Small Cell Lung Cancer. <i>Cancers</i> , 2020, 12, 3394. | 1.7 | 30 |
| 33 | Approach for in vivo delivery of CRISPR/Cas system: a recent update and future prospect. <i>Cellular and Molecular Life Sciences</i> , 2021, 78, 2683-2708. | 2.4 | 29 |
| 34 | Modulation of Gene Expression of Rabbit Chondrocytes by Dynamic Compression in Polyurethane Scaffolds with Collagen Gel Encapsulation. <i>Journal of Biomaterials Applications</i> , 2009, 23, 347-366. | 1.2 | 26 |
| 35 | Binary Colloidal Crystals Drive Spheroid Formation and Accelerate Maturation of Human-Induced Pluripotent Stem Cell-Derived Cardiomyocytes. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 3679-3689. | 4.0 | 25 |
| 36 | Heterogeneity of mesenchymal and pluripotent stem cell populations grown on nanogrooves and nanopillars. <i>Journal of Materials Chemistry B</i> , 2017, 5, 7927-7938. | 2.9 | 24 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Conformationally tuned antibacterial oligomers target the peptidoglycan of Gram-positive bacteria. <i>Journal of Colloid and Interface Science</i> , 2020, 580, 850-862. | 5.0 | 24 |
| 38 | The role of cellulose nanowhiskers in controlling phase segregation, crystallization and thermal stimuli responsiveness in PCL-PEGx-PCL block copolymer-based PU for human tissue engineering applications. <i>Carbohydrate Polymers</i> , 2021, 252, 117219. | 5.1 | 24 |
| 39 | High-throughput characterisation of osteogenic differentiation of human mesenchymal stem cells using pore size gradients on porous alumina. <i>Biomaterials Science</i> , 2013, 1, 924. | 2.6 | 22 |
| 40 | Ex Vivo Expanded Circulating Tumor Cells for Clinical Anti-Cancer Drug Prediction in Patients with Head and Neck Cancer. <i>Cancers</i> , 2021, 13, 6076. | 1.7 | 22 |
| 41 | Numerical investigation of nematic liquid crystals in the THz band based on EIT sensor. <i>Optics Express</i> , 2018, 26, 12318. | 1.7 | 21 |
| 42 | Albumin-stabilized layered double hydroxide nanoparticles synergized combination chemotherapy for colorectal cancer treatment. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2021, 34, 102369. | 1.7 | 21 |
| 43 | Tuning the Density of Poly(ethylene glycol) Chains to Control Mammalian Cell and Bacterial Attachment. <i>Polymers</i> , 2017, 9, 343. | 2.0 | 20 |
| 44 | Modulation of the proliferation and matrix synthesis of chondrocytes by dynamic compression on genipin-crosslinked chitosan/collagen scaffolds. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2013, 24, 507-519. | 1.9 | 19 |
| 45 | 33 W quasi-continuous-wave narrow-band sodium D 2a laser by sum-frequency generation in LBO. <i>Chinese Physics B</i> , 2014, 23, 094208. | 0.7 | 19 |
| 46 | Comparison of laser induced thermal fracture between polycrystalline ceramic and crystal Nd:YAG. <i>Optics Letters</i> , 2014, 39, 1965. | 1.7 | 19 |
| 47 | Binary Colloidal Crystal Layers as Platforms for Surface Patterning of Puroindoline-Based Antimicrobial Peptides. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 2264-2274. | 4.0 | 19 |
| 48 | Estrogen weakens muscle endurance via estrogen receptor-p38 MAPK-mediated orosomucoid (ORM) suppression. <i>Experimental and Molecular Medicine</i> , 2018, 50, e463-e463. | 3.2 | 19 |
| 49 | Decoration of Material Surfaces with Complex Physicochemical Signals for Biointerface Applications. <i>ACS Biomaterials Science and Engineering</i> , 2020, 6, 1836-1851. | 2.6 | 19 |
| 50 | Stimulation of autophagic activity in human glioma cells by anti-proliferative ardisipuloside I isolated from <i>Ardisia pusilla</i> . <i>Life Sciences</i> , 2014, 110, 15-22. | 2.0 | 18 |
| 51 | The influence of PEG-thiol derivatives on controlling cellular and bacterial interactions with gold surfaces. <i>Applied Surface Science</i> , 2018, 462, 980-990. | 3.1 | 18 |
| 52 | Tunable Chemical and Topographic Patterns Based on Binary Colloidal Crystals (BCCs) to Modulate MG63 Cell Growth. <i>Advanced Functional Materials</i> , 2019, 29, 1904262. | 7.8 | 18 |
| 53 | ORM Promotes Skeletal Muscle Glycogen Accumulation via CCR5-Activated AMPK Pathway in Mice. <i>Frontiers in Pharmacology</i> , 2016, 7, 302. | 1.6 | 17 |
| 54 | Beam Switching Antenna Based on a Reconfigurable Cascaded Feeding Network. <i>IEEE Transactions on Antennas and Propagation</i> , 2018, 66, 627-635. | 3.1 | 17 |

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|----|--|-----|-----------|
| 55 | A Fibrous Hybrid Patch Couples Cell-Derived Matrix and Poly(ϵ -lactide-co- ϵ -caprolactone) for Endothelial Cells Delivery and Skin Wound Repair. ACS Biomaterials Science and Engineering, 2019, 5, 900-910. | 2.6 | 16 |
| 56 | MicroRNA124-IL6R Mediates the Effect of Nicotine in Inflammatory Bowel Disease by Shifting Th1/Th2 Balance Toward Th1. Frontiers in Immunology, 2020, 11, 235. | 2.2 | 16 |
| 57 | Correlation between drug sensitivity profiles of circulating tumour cell-derived organoids and clinical treatment response in patients with pancreatic ductal adenocarcinoma. European Journal of Cancer, 2022, 166, 208-218. | 1.3 | 16 |
| 58 | Rapid Self-Assembly of Shaped Microtiles into Large, Close-Packed Crystalline Monolayers on Solid Surfaces. Small, 2016, 12, 1309-1314. | 5.2 | 15 |
| 59 | Modulation of PEI-Mediated Gene Transfection through Controlling Cytoskeleton Organization and Nuclear Morphology via Nanogrooved Topographies. ACS Biomaterials Science and Engineering, 2017, 3, 3283-3291. | 2.6 | 15 |
| 60 | Controlled Attachment of <i>Pseudomonas aeruginosa</i> with Binary Colloidal Crystal-Based Topographies. Small, 2018, 14, e1703574. | 5.2 | 15 |
| 61 | c-Jun enhances intestinal epithelial restitution after wounding by increasing phospholipase C- β 1 transcription. American Journal of Physiology - Cell Physiology, 2017, 312, C367-C375. | 2.1 | 14 |
| 62 | Response of MG63 osteoblast-like cells to ordered nanotopographies fabricated using colloidal self-assembly and glancing angle deposition. Biointerphases, 2015, 10, 04A306. | 0.6 | 13 |
| 63 | Enhanced attachment of human mesenchymal stem cells on nanograined titania surfaces. RSC Advances, 2016, 6, 55825-55833. | 1.7 | 13 |
| 64 | Mangrove Inspired Anti-Corrosion Coatings. Coatings, 2019, 9, 725. | 1.2 | 13 |
| 65 | The adipokine orosomucoid alleviates adipose tissue fibrosis via the AMPK pathway. Acta Pharmacologica Sinica, 2022, 43, 367-375. | 2.8 | 13 |
| 66 | Colloidal crystal based plasma polymer patterning to control <i>Pseudomonas aeruginosa</i> attachment to surfaces. Biointerphases, 2015, 10, 04A309. | 0.6 | 12 |
| 67 | Minimal attachment of <i>Pseudomonas aeruginosa</i> to DNA modified surfaces. Biointerphases, 2018, 13, 06E405. | 0.6 | 12 |
| 68 | Methods for in vitro CRISPR/CasRx-Mediated RNA Editing. Frontiers in Cell and Developmental Biology, 2021, 9, 667879. | 1.8 | 12 |
| 69 | An injectable, self-assembled multicellular microsphere with the incorporation of fibroblast-derived extracellular matrix for therapeutic angiogenesis. Materials Science and Engineering C, 2020, 113, 110961. | 3.8 | 11 |
| 70 | Vapor-phased fabrication and modulation of cell-laden scaffolding materials. Nature Communications, 2021, 12, 3413. | 5.8 | 11 |
| 71 | Fibronectin and culture temperature modulate the efficacy of an avidin-biotin binding system for chondrocyte adhesion and growth on biodegradable polymers. Biotechnology and Bioengineering, 2007, 98, 498-507. | 1.7 | 10 |
| 72 | Clicking dendritic peptides onto single walled carbon nanotubes. RSC Advances, 2012, 2, 1289-1291. | 1.7 | 10 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 73 | Facile Route of Fabricating Long-Term Microbicidal Silver Nanoparticle Clusters against Shiga Toxin-Producing <i>Escherichia coli</i> O157:H7 and <i>Candida auris</i> . <i>Coatings</i> , 2020, 10, 28. | 1.2 | 10 |
| 74 | Electronically controlled beam steering leaky wave antenna in nematic liquid crystal technology. <i>International Journal of RF and Microwave Computer-Aided Engineering</i> , 2020, 30, e22188. | 0.8 | 10 |
| 75 | Combinatorial Approach of Binary Colloidal Crystals and CRISPR Activation to Improve Induced Pluripotent Stem Cell Differentiation into Neurons. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 8669-8679. | 4.0 | 10 |
| 76 | Ardipusilloside-I Metabolites from Human Intestinal Bacteria and Their Antitumor Activity. <i>Molecules</i> , 2015, 20, 20569-20581. | 1.7 | 9 |
| 77 | Mechanical Properties of Strontiumâ€“Hardystoniteâ€“Gahnite Coating Formed by Atmospheric Plasma Spray. <i>Coatings</i> , 2019, 9, 759. | 1.2 | 9 |
| 78 | Topographical Modulation of Pluripotency and Differentiation of Human Embryonic Stem Cells. <i>IEEE Nanotechnology Magazine</i> , 2018, 17, 381-384. | 1.1 | 8 |
| 79 | Programming Colloidal Self-Assembled Patterns (cSAPs) into Thermo-Responsible Hybrid Surfaces for Controlling Human Stem Cells and Macrophages. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 18563-18580. | 4.0 | 8 |
| 80 | Parylene-Based Porous Scaffold with Functionalized Encapsulation of Platelet-Rich Plasma and Living Stem Cells for Tissue Engineering Applications. <i>ACS Applied Bio Materials</i> , 2020, 3, 7193-7201. | 2.3 | 7 |
| 81 | Harnessing Colloidal Self-Assembled Patterns (cSAPs) to Regulate Bacterial and Human Stem Cell Response at Biointerfaces <i><i>In Vitro</i></i> and <i><i>In Vivo</i></i> . <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 20982-20994. | 4.0 | 7 |
| 82 | Topical application of TAK1 inhibitor encapsulated by gelatin particle alleviates corneal neovascularization. <i>Theranostics</i> , 2022, 12, 657-674. | 4.6 | 7 |
| 83 | Harnessing the perinuclear actin cap (pnAC) to influence nanocarrier trafficking and gene transfection efficiency in skeletal myoblasts using nanopillars. <i>Acta Biomaterialia</i> , 2020, 111, 221-231. | 4.1 | 6 |
| 84 | Harnessing Focal Adhesions to Accelerate p53 Accumulation and Anoikis of A549 Cells Using Colloidal Self-Assembled Patterns (cSAPs). <i>ACS Applied Bio Materials</i> , 2022, 5, 322-333. | 2.3 | 6 |
| 85 | Guiding the Dewetting of Thin Polymer Films by Colloidal Imprinting. <i>Advanced Materials Interfaces</i> , 2015, 2, 1500068. | 1.9 | 5 |
| 86 | Fibroblast Responses Toward Colloidal Assemblies and Plasma Polymer Coating. <i>IEEE Nanotechnology Magazine</i> , 2018, 17, 385-388. | 1.1 | 5 |
| 87 | New Combination/Application of Polymer-Based Nanoparticles for Biomedical Engineering. <i>Advances in Experimental Medicine and Biology</i> , 2018, 1078, 271-290. | 0.8 | 4 |
| 88 | A Liquid Crystal Based Dynamic Metasurface for Beam Steering and Computational Imaging. , 2020, , . | | 4 |
| 89 | Colloidal Self-Assembled Patterns Maintain the Pluripotency and Promote the Hemopoietic Potential of Human Embryonic Stem Cells. <i>Frontiers in Cell and Developmental Biology</i> , 2021, 9, 771773. | 1.8 | 4 |
| 90 | A Novel Approach to Quantitatively Assess the Uniformity of Binary Colloidal Crystal Assemblies. <i>Crystals</i> , 2016, 6, 84. | 1.0 | 3 |

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|-----|--|-----|-----------|
| 91 | Electrically controlled leaky wave antenna with wide-angle scanning based on liquid crystal. , 2016, , . | | 3 |
| 92 | Vapor-Deposited Reactive Coating with Chemically and Topographically Erasable Properties. <i>Polymers</i> , 2019, 11, 1595. | 2.0 | 3 |
| 93 | Binary Colloidal Crystal (BCC) Substrates for Controlling the Fate of Mouse Embryonic Stem Cells. <i>Colloids and Surfaces B: Biointerfaces</i> , 2020, 194, 111133. | 2.5 | 3 |
| 94 | Expansion of Rare Cancer Cells into Tumoroids for Therapeutic Regimen and Cancer Therapy. <i>Advanced Therapeutics</i> , 2021, 4, 2100017. | 1.6 | 3 |
| 95 | Computational and in vitro validation of cardiogenic induction of quercetin on adipose-derived mesenchymal stromal cells through the inhibition of Wnt and non-Smad-dependent TGF β ² pathways. <i>Journal of Cellular Biochemistry</i> , 2021, , . | 1.2 | 3 |
| 96 | An S-band left-handed tunable phase shifter based on BST thin film. , 2014, , . | | 2 |
| 97 | A Method of Side-lobe Suppression for Reactance Modulated Antennas. , 2020, , . | | 2 |
| 98 | Vapor-Stripping and Encapsulating to Construct Particles with Time-Controlled Asymmetry and Anisotropy. <i>Coatings</i> , 2020, 10, 1248. | 1.2 | 2 |
| 99 | Design of a 1-to-4 Subarray Element for Wireless Subharmonic Injection in the THz Band. , 2021, , . | | 2 |
| 100 | Human platelet lysate (hPL) alters the lineage commitment and paracrine functions of human mesenchymal stem cells via mitochondrial metabolism. <i>Applied Materials Today</i> , 2022, 26, 101264. | 2.3 | 2 |
| 101 | Hybrid Surface Nanostructures Using Chemical Vapor Deposition and Colloidal Self-Assembled Patterns for Human Mesenchymal Stem Cell Culture—A Preliminary Study. <i>Coatings</i> , 2022, 12, 311. | 1.2 | 2 |
| 102 | Human Platelet Lysate Supports Mouse Skeletal Myoblast Growth but Suppresses Cell Fusion on Nanogrooves. <i>ACS Applied Bio Materials</i> , 2020, 3, 3594-3604. | 2.3 | 1 |
| 103 | Manufacture of Chemically Modified Antibacterial Surfaces. , 2015, , 61-88. | | 1 |
| 104 | An S-band differential power divider based on Defected Ground Structure. , 2014, , . | | 0 |
| 105 | A 2.45GHz high-power and high-efficiency rectifier based on a power-dividing network. , 2014, , . | | 0 |
| 106 | Colloidal Crystals: Guiding the Dewetting of Thin Polymer Films by Colloidal Imprinting (<i>Adv. Mater.</i>) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 | 2.9 | 0 |
| 107 | Chemoradiotherapy for Inoperable Carotid Body Leiomyosarcoma: A Case Report and Review of Literature. <i>Frontiers in Oncology</i> , 2020, 10, 599403. | 1.3 | 0 |
| 108 | Guiding Stem Cell Differentiation and Proliferation Activities Based on Nanometer-Thick Functionalized Poly-p-xylylene Coatings. <i>Coatings</i> , 2021, 11, 582. | 1.2 | 0 |