## Peter C Searson

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	The physics of cancer: the role of physical interactions and mechanical forces in metastasis. Nature Reviews Cancer, 2011, 11, 512-522.	28.4	1,038
2	Multifunctional nanorods for gene delivery. Nature Materials, 2003, 2, 668-671.	27.5	700
3	In Vitro Tumor Models: Advantages, Disadvantages, Variables, and Selecting the Right Platform. Frontiers in Bioengineering and Biotechnology, 2016, 4, 12.	4.1	531
4	A perinuclear actin cap regulates nuclear shape. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 19017-19022.	7.1	511
5	Large Magnetoresistance of Electrodeposited Single-Crystal Bismuth Thin Films. Science, 1999, 284, 1335-1337.	12.6	484
6	ZnO quantum particle thin films fabricated by electrophoretic deposition. Applied Physics Letters, 1999, 74, 2939-2941.	3.3	461
7	The blood-brain barrier: an engineering perspective. Frontiers in Neuroengineering, 2013, 6, 7.	4.8	458
8	State-of-the-art in design rules for drug delivery platforms: Lessons learned from FDA-approved nanomedicines. Journal of Controlled Release, 2014, 187, 133-144.	9.9	434
9	Electron Transport in Porous Nanocrystalline TiO2Photoelectrochemical Cells. The Journal of Physical Chemistry, 1996, 100, 17021-17027.	2.9	394
10	Pseudohalogens for Dye-Sensitized TiO2 Photoelectrochemical Cells. Journal of Physical Chemistry B, 2001, 105, 6867-6873.	2.6	356
11	Electrochemical deposition of metals onto silicon. Journal Physics D: Applied Physics, 1998, 31, 1927-1949.	2.8	352
12	Growth Kinetics of Nanocrystalline ZnO Particles from Colloidal Suspensions. Journal of Physical Chemistry B, 1998, 102, 7770-7775.	2.6	339
13	SiHxexcitation: An alternate mechanism for porous Si photoluminescence. Physical Review B, 1992, 45, 13788-13791.	3.2	333
14	The Growth Kinetics of TiO2Nanoparticles from Titanium(IV) Alkoxide at High Water/Titanium Ratio. Journal of Physical Chemistry B, 2003, 107, 1734-1738.	2.6	308
15	Influence of solvent on the growth of ZnO nanoparticles. Journal of Colloid and Interface Science, 2003, 263, 454-460.	9.4	302
16	Perpendicular giant magnetoresistance of multilayered Co/Cu nanowires. Physical Review B, 1995, 51, 7381-7384.	3.2	285
17	Magnetic Alignment of Fluorescent Nanowires. Nano Letters, 2001, 1, 155-158.	9.1	279
18	Quantifying Electrochemical Nucleation and Growth of Nanoscale Clusters Using Real-Time Kinetic Data. Nano Letters, 2006, 6, 238-242.	9.1	248

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19	Epitaxial Assembly in Aged Colloids. Journal of Physical Chemistry B, 2001, 105, 2177-2182.	2.6	244
20	Single Nanoporous Gold Nanowire Sensors. Journal of Physical Chemistry B, 2006, 110, 4318-4322.	2.6	237
21	Fabrication of Nanoporous Nickel by Electrochemical Dealloying. Chemistry of Materials, 2004, 16, 3125-3129.	6.7	222
22	Quenching of Growth of ZnO Nanoparticles by Adsorption of Octanethiol. Journal of Physical Chemistry B, 2002, 106, 6985-6990.	2.6	213
23	Relationship between Absorbance Spectra and Particle Size Distributions for Quantum-Sized Nanocrystals. Journal of Physical Chemistry B, 2003, 107, 10412-10415.	2.6	212
24	Synthesis and Characterization of Nanoporous Gold Nanowires. Journal of Physical Chemistry B, 2003, 107, 4494-4499.	2.6	205
25	Structural and magneto-transport properties of electrodeposited bismuth nanowires. Applied Physics Letters, 1998, 73, 1436-1438.	3.3	195
26	Magnetic trapping and self-assembly of multicomponent nanowires. Journal of Applied Physics, 2002, 91, 8549.	2.5	163
27	Influence of Organic Capping Ligands on the Growth Kinetics of ZnO Nanoparticles. Langmuir, 2001, 17, 8362-8367.	3.5	152
28	In Situ Study of the Growth Kinetics of Individual Island Electrodeposition of Copper. Journal of Physical Chemistry B, 2006, 110, 7862-7868.	2.6	147
29	Determination of the Particle Size Distribution of Quantum Nanocrystals from Absorbance Spectra. Advanced Materials, 2003, 15, 1289-1291.	21.0	141
30	Human iPSC-derived blood-brain barrier microvessels: validation of barrier function and endothelial cell behavior. Biomaterials, 2019, 190-191, 24-37.	11.4	141
31	The Influence of Anion on the Coarsening Kinetics of ZnO Nanoparticles. Journal of Physical Chemistry B, 2003, 107, 3124-3130.	2.6	135
32	Multi-component nanorods for vaccination applications. Nanotechnology, 2005, 16, 484-487.	2.6	135
33	Island growth in electrodeposition. Journal Physics D: Applied Physics, 2011, 44, 443001.	2.8	133
34	Use of AC Impedance Technique in Studies on Steel in Concrete in Immersed Conditions. Corrosion Engineering Science and Technology, 1981, 16, 102-106.	0.3	131
35	On the influence of the nucleation overpotential on island growth in electrodeposition. Electrochimica Acta, 2010, 55, 4086-4091.	5.2	131
36	Coarsening of metal oxide nanoparticles. Physical Review E, 2002, 66, 011403.	2.1	130

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37	Human astrocytes develop physiological morphology and remain quiescent in a novel 3D matrix. Biomaterials, 2015, 42, 134-143.	11.4	129
38	Review: in vitro microvessel models. Lab on A Chip, 2015, 15, 4242-4255.	6.0	121
39	Effect of shear stress on iPSC-derived human brain microvascular endothelial cells (dhBMECs). Fluids and Barriers of the CNS, 2017, 14, 20.	5.0	120
40	Fabrication of nanoporous gold nanowires. Applied Physics Letters, 2002, 81, 4437-4439.	3.3	118
41	Electrochemical Deposition of Copper on nâ€Si/TiN. Journal of the Electrochemical Society, 1999, 146, 1436-1441.	2.9	117
42	The morphology and nucleation kinetics of copper islands during electrodeposition. Surface Science, 2006, 600, 1817-1826.	1.9	116
43	Nanomedicines for cancer therapy: state-of-the-art and limitations to pre-clinical studies that hinder future developments. Frontiers in Chemistry, 2014, 2, 69.	3.6	116
44	The Formation, Morphology, and Optical Properties of Porous Silicon Structures. Journal of the Electrochemical Society, 1992, 139, 3373-3377.	2.9	115
45	Nucleation and Growth of Copper on TiN from Pyrophosphate Solution. Journal of the Electrochemical Society, 2001, 148, C41.	2.9	111
46	Pore morphology and the mechanism of pore formation innâ€ŧype silicon. Journal of Applied Physics, 1992, 72, 253-258.	2.5	110
47	Particle Codeposition in Nanocomposite Films. Journal of the Electrochemical Society, 2000, 147, 2572.	2.9	110
48	Human Brain Microvascular Endothelial Cells Derived from the BC1 iPS Cell Line Exhibit a Blood-Brain Barrier Phenotype. PLoS ONE, 2016, 11, e0152105.	2.5	110
49	Live-Cell Imaging of Invasion and Intravasation in an Artificial Microvessel Platform. Cancer Research, 2014, 74, 4937-4945.	0.9	109
50	Analysis of Electrochemical Noise Generated by Corroding Electrodes under Open ircuit Conditions. Journal of the Electrochemical Society, 1988, 135, 1908-1915.	2.9	108
51	Synthesis of ZnO Nanoparticles in 2-Propanol by Reaction with Water. Journal of Physical Chemistry B, 2005, 109, 11209-11214.	2.6	107
52	Batteries and charge storage devices based on electronically conducting polymers. Journal of Materials Research, 2010, 25, 1561-1574.	2.6	107
53	Brain microvascular endothelial cells resist elongation due to curvature and shear stress. Scientific Reports, 2014, 4, 4681.	3.3	106
54	Benchmarking in vitro tissue-engineered blood–brain barrier models. Fluids and Barriers of the CNS, 2018, 15, 32.	5.0	105

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55	Wearable Devices for Precision Medicine and Health State Monitoring. IEEE Transactions on Biomedical Engineering, 2019, 66, 1242-1258.	4.2	102
56	Magnetic Tweezers Measurement of Single Molecule Torque. Nano Letters, 2009, 9, 1720-1725.	9.1	101
57	An all-polymer charge storage device. Applied Physics Letters, 1997, 71, 1582-1584.	3.3	97
58	CuInSe/ZnS Core/Shell NIR Quantum Dots for Biomedical Imaging. Small, 2011, 7, 3148-3152.	10.0	97
59	The role of astrocytes in the progression of brain cancer: complicating the picture of the tumor microenvironment. Tumor Biology, 2016, 37, 61-69.	1.8	97
60	The Anodic Dissolution of Silicon in HF Solutions. Journal of the Electrochemical Society, 1990, 137, 2539-2546.	2.9	96
61	Quantitative Analysis of the Enhanced Permeation and Retention (EPR) Effect. PLoS ONE, 2015, 10, e0123461.	2.5	88
62	High Charge Density Conducting Polymer/Graphite Fiber Composite Electrodes for Battery Applications. Journal of the Electrochemical Society, 1995, 142, 321-325.	2.9	87
63	Human brain microvascular endothelial cells resist elongation due to shear stress. Microvascular Research, 2015, 99, 8-18.	2.5	84
64	Functional brain-specific microvessels from iPSC-derived human brain microvascular endothelial cells: the role of matrix composition on monolayer formation. Fluids and Barriers of the CNS, 2018, 15, 7.	5.0	83
65	Role of iPSC-derived pericytes on barrier function of iPSC-derived brain microvascular endothelial cells in 2D and 3D. Fluids and Barriers of the CNS, 2019, 16, 15.	5.0	82
66	Microluminescence depth profiles and annealing effects in porous silicon. Applied Physics Letters, 1992, 60, 3295-3297.	3.3	76
67	Oriented assembly of anisotropic particles by capillary interactions. Soft Matter, 2009, 5, 886-890.	2.7	75
68	Kinetics of Particle Codeposition of Nanocomposites. Journal of the Electrochemical Society, 2002, 149, C610.	2.9	73
69	Analysis of the Photoelectrochemical Response of the Passive Film on Iron in Neutral Solutions. Journal of the Electrochemical Society, 1988, 135, 1358-1363.	2.9	72
70	Directed Assembly of Multisegment Au/Pt/Au Nanowires. Nano Letters, 2004, 4, 1163-1165.	9.1	72
71	Influence of stress on the photoluminescence of porous silicon structures. Applied Physics Letters, 1992, 60, 2285-2287.	3.3	71
72	Direct Copper Electrodeposition on TaN Barrier Layers. Journal of the Electrochemical Society, 2003, 150, C362.	2.9	70

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73	Magnetic anisotropy in prismatic nickel nanowires. Applied Physics Letters, 2001, 79, 4429-4431.	3.3	69
74	Potential Modulated Multilayer Deposition of Multisegment Cu/Ni Nanowires with Tunable Magnetic Properties. Chemistry of Materials, 2006, 18, 1595-1601.	6.7	69
75	A Tissue-Engineered 3D Microvessel Model Reveals the Dynamics of Mosaic Vessel Formation in Breast Cancer. Cancer Research, 2020, 80, 4288-4301.	0.9	69
76	Electrochemistry of Gold Deposition on n-Si(100). Journal of the Electrochemical Society, 2000, 147, 2199.	2.9	68
77	Micromagnetic behavior of electrodeposited Ni/Cu multilayer nanowires. Journal of Applied Physics, 2003, 93, 8253-8255.	2.5	68
78	Wearable Potentiometric Chloride Sweat Sensor: The Critical Role of the Salt Bridge. Analytical Chemistry, 2016, 88, 12241-12247.	6.5	68
79	Rotation and Alignment of Anisotropic Particles on Nonplanar Interfaces. Langmuir, 2008, 24, 9302-9307.	3.5	67
80	"Small Blood Vessels: Big Health Problems?â€: Scientific Recommendations of the National Institutes of Health Workshop. Journal of the American Heart Association, 2016, 5, .	3.7	67
81	Tissue-engineered blood-brain barrier models via directed differentiation of human induced pluripotent stem cells. Scientific Reports, 2019, 9, 13957.	3.3	67
82	Fabrication and magnetic properties of fcc CoXPt1â^'X nanowires. Applied Physics Letters, 2004, 84, 3900-3902.	3.3	66
83	Effect of surface treatment on SrTiO3: An xâ€ray photoelectron spectroscopic study. Journal of Applied Physics, 1991, 69, 459-462.	2.5	65
84	Porous silicon membranes. Applied Physics Letters, 1991, 59, 832-833.	3.3	64
85	Influence of Additives on Nucleation and Growth of Copper on n-Si(111) from Acidic Sulfate Solutions. Journal of the Electrochemical Society, 2002, 149, C94.	2.9	64
86	Electronic Cortisol Detection Using an Antibody-Embedded Polymer Coupled to a Field-Effect Transistor. ACS Applied Materials & Interfaces, 2018, 10, 16233-16237.	8.0	62
87	A wearable potentiometric sensor with integrated salt bridge for sweat chloride measurement. Sensors and Actuators B: Chemical, 2017, 250, 673-678.	7.8	60
88	Highly Efficient Macromolecule-Sized Poration of Lipid Bilayers by a Synthetically Evolved Peptide. Journal of the American Chemical Society, 2014, 136, 4724-4731.	13.7	59
89	Leakage kinetics of the liposomal chemotherapeutic agent Doxil: The role of dissolution, protonation, and passive transport, and implications for mechanism of action. Journal of Controlled Release, 2018, 269, 171-176.	9.9	59
90	Electrochemical nucleation and growth of gold on silicon. Surface Science, 2000, 446, 103-111.	1.9	58

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91	Tuning the response of magnetic suspensions. Applied Physics Letters, 2003, 82, 3310-3312.	3.3	57
92	Sweat test for cystic fibrosis: Wearable sweat sensor vs. standard laboratory test. Journal of Cystic Fibrosis, 2018, 17, e35-e38.	0.7	57
93	Electrodeposited magnetic nanowires: arrays, field-induced assembly, and surface functionalization. Journal of Magnetism and Magnetic Materials, 2002, 249, 146-155.	2.3	56
94	Electrochemical Characterization of Adsorption-Desorption of the Cuprous-Suppressor-Chloride Complex during Electrodeposition of Copper. Journal of the Electrochemical Society, 2006, 153, C258.	2.9	56
95	Engineering the human blood-brain barrier in vitro. Journal of Biological Engineering, 2017, 11, 37.	4.7	56
96	Electrochemical Deposition of Platinum from Aqueous Ammonium Hexachloroplatinate Solution. Journal of the Electrochemical Society, 2005, 152, C738.	2.9	55
97	Electrodeposition of Copper on Silicon from Sulfate Solution. Journal of the Electrochemical Society, 2001, 148, C746.	2.9	52
98	Orientation of a Nanocylinder at a Fluid Interface. Journal of Physical Chemistry B, 2006, 110, 4283-4290.	2.6	52
99	FIB/TEM Characterization of the Composition and Structure of Core/Shell Cuâ^'Ni Nanowires. Nano Letters, 2008, 8, 2166-2170.	9.1	52
100	Molecular Imprinting of Maltose Binding Protein: Tuning Protein Recognition at the Molecular Level. Macromolecules, 2011, 44, 3966-3972.	4.8	51
101	The role of mutations associated with familial neurodegenerative disorders on blood–brain barrier function in an iPSC model. Fluids and Barriers of the CNS, 2019, 16, 20.	5.0	51
102	The electrical response of bilayers to the bee venom toxin melittin: Evidence for transient bilayer permeabilization. Biochimica Et Biophysica Acta - Biomembranes, 2013, 1828, 1357-1364.	2.6	50
103	Electrochemical nucleation and growth of copper on Si(111). Surface Science, 2001, 492, 115-124.	1.9	49
104	In SituMeasurements of Interface States at Silicon Surfaces in Fluoride Solutions. Physical Review Letters, 1996, 76, 1521-1524.	7.8	46
105	Characterization of antimicrobial peptide activity by electrochemical impedance spectroscopy. Biochimica Et Biophysica Acta - Biomembranes, 2008, 1778, 2430-2436.	2.6	46
106	Influence of Oxide Thickness on Nucleation and Growth of Copper on Tantalum. Journal of the Electrochemical Society, 2004, 151, C369.	2.9	45
107	Electrochemical Synthesis of 3D Ordered Ferromagnetic Nickel Replicas Using Self-Assembled Colloidal Crystal Templates. Chemistry of Materials, 2004, 16, 5027-5032.	6.7	44
108	Electrochemical Template Synthesis of Multisegment Nanowires:  Fabrication and Protein Functionalization. Langmuir, 2006, 22, 10528-10534.	3.5	44

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109	Electrochemically Programmed Release of Biomolecules and Nanoparticles. Nano Letters, 2006, 6, 1250-1253.	9.1	44
110	Engineered nanoparticles for systemic siRNA delivery to malignant brain tumours. Nanoscale, 2019, 11, 20045-20057.	5.6	44
111	Direct Numerical Simulation of Nucleation and Three-Dimensional, Diffusion-Controlled Growth. Journal of the Electrochemical Society, 2001, 148, C376.	2.9	43
112	Programmed subcellular release for studying the dynamics of cell detachment. Nature Methods, 2009, 6, 211-213.	19.0	43
113	Zebrafish models for functional and toxicological screening of nanoscale drug delivery systems: promoting preclinical applications. Bioscience Reports, 2017, 37, .	2.4	43
114	Modeling hyperosmotic blood–brain barrier opening within human tissue-engineered in vitro brain microvessels. Journal of Cerebral Blood Flow and Metabolism, 2020, 40, 1517-1532.	4.3	43
115	Growth Kinetics for Copper Deposition on Si(100) from Pyrophosphate Solution. Journal of the Electrochemical Society, 2000, 147, 2576.	2.9	42
116	A Membrane-Translocating Peptide Penetrates into Bilayers without Significant Bilayer Perturbations. Biophysical Journal, 2013, 104, 2419-2428.	0.5	42
117	Cerebrovascular plasticity: Processes that lead to changes in the architecture of brain microvessels. Journal of Cerebral Blood Flow and Metabolism, 2019, 39, 1413-1432.	4.3	42
118	The Potential Distribution at the Semiconductor/Solution Interface. Journal of Physical Chemistry B, 1998, 102, 7793-7799.	2.6	40
119	Stochastic Simulation of the Early Stages of Kinetically Limited Electrodeposition. Journal of the Electrochemical Society, 2006, 153, C434.	2.9	40
120	Fabrication of Complex Architectures Using Electrodeposition into Patterned Self-Assembled Monolayers. Nano Letters, 2006, 6, 1023-1026.	9.1	40
121	Influence of the reactant concentrations on the synthesis of ZnO nanoparticles. Journal of Colloid and Interface Science, 2005, 288, 313-316.	9.4	39
122	Synthesis of Cadmium Selenide Quantum Dots from a Non-Coordinating Solvent: Growth Kinetics and Particle Size Distribution. Journal of Physical Chemistry C, 2008, 112, 17849-17854.	3.1	39
123	An experimentally validated approach to calculate the blood-brain barrier permeability of small molecules. Scientific Reports, 2019, 9, 6117.	3.3	39
124	Kinetics of Desorption of Alkanethiolates on Gold. Langmuir, 2006, 22, 3474-3476.	3.5	38
125	Influence of Applied Potential on the Impedance of Alkanethiol SAMs. Langmuir, 2007, 23, 9681-9685.	3.5	38
126	Universal Antibody Conjugation to Nanoparticles Using the Fcl̂ <sup>3</sup> Receptor I (Fcl̂ <sup>3</sup> RI): Quantitative Profiling Of Membrane Biomarkers. Bioconjugate Chemistry, 2014, 25, 1893-1901.	3.6	38

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127	Energetics and Kinetics of Surface States at n-Type Silicon Surfaces in Aqueous Fluoride Solutions. The Journal of Physical Chemistry, 1996, 100, 1801-1806.	2.9	37
128	Electrodeposition of Copper on Oxidized Ruthenium. Journal of the Electrochemical Society, 2006, 153, C840.	2.9	37
129	Quantitative molecular profiling of biomarkers for pancreatic cancer with functionalized quantum dots. Nanomedicine: Nanotechnology, Biology, and Medicine, 2012, 8, 1043-1051.	3.3	37
130	Magnetic bead-quantum dot assay for detection of a biomarker for traumatic brain injury. Nanoscale, 2015, 7, 17820-17826.	5.6	37
131	Site-Selective Patterning Using Surfactant-Based Resists. Journal of the American Chemical Society, 2005, 127, 11960-11962.	13.7	36
132	Cellular microenvironment modulates the galvanotaxis of brain tumor initiating cells. Scientific Reports, 2016, 6, 21583.	3.3	36
133	Tissueâ€engineered 3D microvessel and capillary network models for the study of vascular phenomena. Microcirculation, 2017, 24, e12360.	1.8	35
134	Dissemination from a Solid Tumor: Examining the Multiple Parallel Pathways. Trends in Cancer, 2018, 4, 20-37.	7.4	35
135	Optimization of osmotic blood-brain barrier opening to enable intravital microscopy studies on drug delivery in mouse cortex. Journal of Controlled Release, 2020, 317, 312-321.	9.9	35
136	The Influence of Electric Field and Confinement on Cell Motility. PLoS ONE, 2013, 8, e59447.	2.5	35
137	Kinetics of Electrophoretic Deposition of Zinc Oxide Quantum Particle Thin Films. Chemistry of Materials, 1999, 11, 1959-1961.	6.7	33
138	Integrated Magnetic Bead–Quantum Dot Immunoassay for Malaria Detection. ACS Sensors, 2017, 2, 766-772.	7.8	33
139	Exploiting finite size effects in a novel core/shell microstructure. Journal of Applied Physics, 2008, 103, 064313.	2.5	32
140	Effect of a Polymer Cushion on the Electrical Properties and Stability of Surface-Supported Lipid Bilayers. Langmuir, 2010, 26, 3544-3548.	3.5	32
141	A Capacitive Sweat Rate Sensor for Continuous and Real-Time Monitoring of Sweat Loss. ACS Sensors, 2020, 5, 3821-3826.	7.8	32
142	Fabrication and Magnetic Properties of Ordered Macroporous Nickel Structures. Journal of the Electrochemical Society, 2007, 154, D65.	2.9	31
143	Protein imprinting in polyacrylamide-based gels. Biomaterials, 2014, 35, 8659-8668.	11.4	31
144	Precision Rehabilitation: Optimizing Function, Adding Value to Health Care. Archives of Physical Medicine and Rehabilitation, 2022, 103, 1233-1239.	0.9	31

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145	Kinetic Monte Carlo Simulations of Nucleation and Growth in Electrodeposition. Journal of Physical Chemistry B, 2005, 109, 24008-24015.	2.6	30
146	Electrodeposition of bismuth thin films on n-GaAs (110). Applied Physics Letters, 2005, 86, 121916.	3.3	29
147	Tumor accumulation of liposomal doxorubicin in three murine models: Optimizing delivery efficiency. Nanomedicine: Nanotechnology, Biology, and Medicine, 2017, 13, 1637-1644.	3.3	29
148	Real-time quantification of endothelial response to shear stress and vascular modulators. Integrative Biology (United Kingdom), 2017, 9, 362-374.	1.3	29
149	Electrodeposition of Co[sub x]Pt[sub 1â^x] Thin Films. Journal of the Electrochemical Society, 2005, 152, C27.	2.9	28
150	Electrical Measurements of Bilayer Membranes Formed by Langmuirâ `Blodgett Deposition on Single-Crystal Silicon. Langmuir, 2007, 23, 13040-13045.	3.5	28
151	Finite Size Effects in Ordered Macroporous Electrodes Fabricated by Electrodeposition into Colloidal Crystal Templates. Journal of Physical Chemistry C, 2007, 111, 3308-3313.	3.1	27
152	Influence of Basement Membrane Proteins and Endothelial Cell-Derived Factors on the Morphology of Human Fetal-Derived Astrocytes in 2D. PLoS ONE, 2014, 9, e92165.	2.5	27
153	Blinking in quantum dots: The origin of the grey state and power law statistics. Physical Review B, 2011, 84, 125317.	3.2	26
154	Ebola Virus Delta Peptide Is a Viroporin. Journal of Virology, 2017, 91, .	3.4	26
155	Detection of <i>Plasmodium</i> Lactate Dehydrogenase Antigen in Buffer Using Aptamer-Modified Magnetic Microparticles for Capture, Oligonucleotide-Modified Quantum Dots for Detection, and Oligonucleotide-Modified Gold Nanoparticles for Signal Amplification. Bioconjugate Chemistry, 2017, 28, 2230-2234	3.6	25
156	Influence of Bioreceptor Layer Structure on Myelin Basic Protein Detection using Organic Field Effect Transistorâ€Based Biosensors. Advanced Functional Materials, 2018, 28, 1802605.	14.9	25
157	Impedance spectroscopy of bilayer membranes on single crystal silicon. Biointerphases, 2008, 3, FA33-FA40.	1.6	24
158	Interactions of Membrane Active Peptides with Planar Supported Bilayers: An Impedance Spectroscopy Study. Langmuir, 2012, 28, 6088-6096.	3.5	24
159	Quantitative characterization of the lipid encapsulation of quantum dots for biomedical applications. Nanomedicine: Nanotechnology, Biology, and Medicine, 2012, 8, 1190-1199.	3.3	24
160	Mitosis-Mediated Intravasation in a Tissue-Engineered Tumor–Microvessel Platform. Cancer Research, 2017, 77, 6453-6461.	0.9	24
161	Reversible blood-brain barrier opening utilizing the membrane active peptide melittin in vitro and in vivo. Biomaterials, 2021, 275, 120942.	11.4	24
162	Kinetics of Receptor Directed Assembly of Multisegment Nanowires. Journal of Physical Chemistry B, 2006, 110, 211-217.	2.6	23

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163	Recommendations for Benchmarking Preclinical Studies of Nanomedicines. Cancer Research, 2015, 75, 4016-4020.	0.9	23
164	lgM anti-ACE2 autoantibodies in severe COVID-19 activate complement and perturb vascular endothelial function. JCI Insight, 2022, 7, .	5.0	23
165	Deposition of Au[sub x]Ag[sub 1â^'x]/Au[sub y]Ag[sub 1â^'y] Multilayers and Multisegment Nanowires. Journal of the Electrochemical Society, 2003, 150, C523.	2.9	21
166	Analysis of the impedance response due to surface states at the semiconductor/solution interface. Journal of Applied Physics, 1998, 83, 4309-4323.	2.5	20
167	Formation of a Core/Shell Microstructure in Cu–Ni Thin Films. Journal of the Electrochemical Society, 2008, 155, D569.	2.9	20
168	Diagnosis of prostate cancer via nanotechnological approach. International Journal of Nanomedicine, 2015, 10, 6555.	6.7	20
169	Electrochemical formation of GaAs/Bi Schottky barriers. Applied Physics Letters, 1999, 75, 3135-3137.	3.3	19
170	Electrochemical Characterization of Charge Injection at Electrodeposited Platinum Electrodes in Phosphate Buffered Saline. Journal of the Electrochemical Society, 2006, 153, C834.	2.9	19
171	Anisotropic Island Growth: A New Approach to Thin Film Electrocrystallization. Langmuir, 2008, 24, 10557-10559.	3.5	19
172	Real-time imaging and quantitative analysis of doxorubicin transport in a perfusable microvessel platform. Integrative Biology (United Kingdom), 2016, 8, 976-984.	1.3	19
173	In vitro characterization of pralidoxime transport and acetylcholinesterase reactivation across MDCK cells and stem cell-derived human brain microvascular endothelial cells (BC1-hBMECs). Fluids and Barriers of the CNS, 2016, 13, 10.	5.0	19
174	Electrically Addressable, Biologically Relevant Surface-Supported Bilayers. Langmuir, 2010, 26, 12054-12059.	3.5	18
175	Using a Real-Time Location System for Assessment of Patient Ambulation in a Hospital Setting. Archives of Physical Medicine and Rehabilitation, 2017, 98, 1366-1373.e1.	0.9	18
176	Three-dimensional induced pluripotent stem-cell models of human brain angiogenesis. Microvascular Research, 2020, 132, 104042.	2.5	18
177	Electrochemical deposition of novel materials and structures. Solar Energy Materials and Solar Cells, 1992, 27, 377-388.	6.2	17
178	Utility of surface-supported bilayers in studies of transmembrane helix dimerization. Journal of Structural Biology, 2009, 168, 53-60.	2.8	17
179	Triggering cell detachment from patterned electrode arrays by programmed subcellular release. Nature Protocols, 2010, 5, 1273-1280.	12.0	17
180	Electrochemical Release of Fluorescently Labeled Thiols from Patterned Gold Surfaces. Langmuir, 2010, 26, 1420-1423.	3.5	17

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181	Out-of-clinic measurement of sweat chloride using a wearable sensor during low-intensity exercise. Npj Digital Medicine, 2020, 3, 49.	10.9	17
182	Next-generation in vitro blood–brain barrier models: benchmarking and improving model accuracy. Fluids and Barriers of the CNS, 2021, 18, 56.	5.0	17
183	Frequency Domain Analysis of Photoprocesses at Illuminated Semiconductor Electrodes by Transient Transformation. Journal of the Electrochemical Society, 1992, 139, 2538-2543.	2.9	16
184	Electrophoresis of cell membrane heparan sulfate regulates galvanotaxis in glial cells. Journal of Cell Science, 2017, 130, 2459-2467.	2.0	16
185	NIH workshop report on the trans-agency blood–brain interface workshop 2016: exploring key challenges and opportunities associated with the blood, brain and their interface. Fluids and Barriers of the CNS, 2017, 14, 12.	5.0	16
186	The Dynamic Response of Sweat Chloride to Changes in Exercise Load Measured by a Wearable Sweat Sensor. Scientific Reports, 2020, 10, 7699.	3.3	16
187	Tunnel barrier photoelectrodes for solar water splitting. Applied Physics Letters, 2010, 97, 063111.	3.3	15
188	Interplay of RhoA and Motility in the Programmed Spreading of Daughter Cells Postmitosis. Biophysical Journal, 2010, 99, 3526-3534.	0.5	15
189	Predicting drug delivery efficiency into tumor tissues through molecular simulation of transport in complex vascular networks. Journal of Controlled Release, 2018, 292, 221-234.	9.9	15
190	Characterization of silicon surfaces in HF solution using microwave reflectivity. Journal of Applied Physics, 1998, 83, 2112-2120.	2.5	14
191	Long-Term Cryopreservation Preserves Blood–Brain Barrier Phenotype of iPSC-Derived Brain Microvascular Endothelial Cells and Three-Dimensional Microvessels. Molecular Pharmaceutics, 2020, 17, 3425-3434.	4.6	14
192	A peptide for transcellular cargo delivery: Structure-function relationship and mechanism of action. Journal of Controlled Release, 2020, 324, 633-643.	9.9	14
193	Electrochemical Etching of n-Type Silicon in Fluoride Solutions. Journal of the Electrochemical Society, 2000, 147, 2999.	2.9	13
194	Simulations of Island Growth and Island Spatial Distribution during Electrodeposition. Electrochemical and Solid-State Letters, 2007, 10, D76.	2.2	13
195	Octadecanethiol SAMs as Molecular Resists for Electrodeposition of Cobalt. Journal of Physical Chemistry C, 2007, 111, 8686-8691.	3.1	13
196	Effect of modifying quantum dot surface charge on airway epithelial cell uptake <i>in vitro</i> . Nanotoxicology, 2013, 7, 1143-1151.	3.0	13
197	Mathematical models of the steps involved in the systemic delivery of a chemotherapeutic to a solid tumor: From circulation to survival. Journal of Controlled Release, 2015, 212, 78-84.	9.9	13
198	Nanoparticle-Based Histidine-Rich Protein-2 Assay for the Detection of the Malaria Parasite Plasmodium falciparum. American Journal of Tropical Medicine and Hygiene, 2016, 95, 354-357.	1.4	13

#	Article	IF	CITATIONS
199	Engineering the Human Blood–Brain Barrier at the Capillary Scale using a Doubleâ€Templating Technique. Advanced Functional Materials, 2022, 32, .	14.9	13
200	Assessment of Patient Ambulation Profiles to Predict Hospital Readmission, Discharge Location, and Length of Stay in a Cardiac Surgery Progressive Care Unit. JAMA Network Open, 2020, 3, e201074.	5.9	12
201	Human IPSC 3D brain model as a tool to study chemical-induced dopaminergic neuronal toxicity. Neurobiology of Disease, 2022, 169, 105719.	4.4	12
202	Analysis of Hydrogen Trapping in Palladium by Modulated Permeation Spectroscopy. Journal of the Electrochemical Society, 2000, 147, 3456.	2.9	11
203	The kinetics of copper island growth on ruthenium oxide in perchlorate solution. Electrochimica Acta, 2010, 55, 8416-8421.	5.2	11
204	High throughput differential identification of TMPRSS2-ERG fusion genes in prostate cancer patient urine. Biomaterials, 2017, 135, 23-29.	11.4	11
205	Optical coding of fusion genes using multicolor quantum dots for prostate cancer diagnosis. International Journal of Nanomedicine, 2017, Volume 12, 4397-4407.	6.7	11
206	Chemotherapeutic Drug Delivery and Quantitative Analysis of Proliferation, Apoptosis, and Migration in a Tissue-Engineered Three-Dimensional Microvessel Model of the Tumor Microenvironment. ACS Biomaterials Science and Engineering, 2019, 5, 633-643.	5.2	11
207	Growth kinetics of disk-shaped copper islands in electrochemical deposition. Physical Review E, 2009, 79, 051601.	2.1	10
208	Utility of microfluidic devices to study the platelet–endothelium interface. Platelets, 2017, 28, 449-456.	2.3	10
209	Effects of acute and chronic oxidative stress on the blood–brain barrier in 2D and 3D in vitro models. Fluids and Barriers of the CNS, 2022, 19, 33.	5.0	10
210	Design and synthesis of a series of substituted polyphenylene-thiophenes. Synthetic Metals, 2000, 108, 33-38.	3.9	9
211	The temperature dependence of the impedance of alkanethiol self-assembled monolayers. Applied Physics Letters, 2010, 97, 043110.	3.3	9
212	Development and Application of a Novel Model System to Study "Active―and "Passive―Tumor Targeting. Molecular Cancer Therapeutics, 2016, 15, 2541-2550.	4.1	9
213	Quantitative Evaluation of the Enhanced Permeability and Retention (EPR) Effect. Methods in Molecular Biology, 2017, 1530, 247-254.	0.9	9
214	Two Distinct Types of Sweat Profile in Healthy Subjects While Exercising at Constant Power Output Measured by a Wearable Sweat Sensor. Scientific Reports, 2019, 9, 17877.	3.3	9
215	Exploiting Nucleation and Growth in the Synthesis and Electrical Passivation of CdSe Quantum Dots. Science of Advanced Materials, 2009, 1, 93-100.	0.7	9
216	Bias-Dependent Admittance in Hybrid Bilayer Membranes. Langmuir, 2006, 22, 7156-7158.	3.5	8

#	Article	IF	CITATIONS
217	Evolution of surface width in electrochemical nucleation and growth. Electrochemistry Communications, 2010, 12, 431-434.	4.7	8
218	Electrochemical Deposition of Metals on Semiconductors. Materials Research Society Symposia Proceedings, 1996, 451, 257.	0.1	8
219	Brain microvascular endothelial cell dysfunction in an isogenic juvenile iPSC model of Huntington's disease. Fluids and Barriers of the CNS, 2022, 19, .	5.0	8
220	Electrodeposition of Nanometer-Sized Ferric Oxide Materials in Colloidal Templates for Conversion of Light to Chemical Energy. Journal of Nanomaterials, 2011, 2011, 1-8.	2.7	7
221	Electrochemical activation of engineered protein switches. Biotechnology and Bioengineering, 2016, 113, 453-456.	3.3	7
222	On Chip Bioelectric Impedance Spectroscopy Reveals the Effect of P-Glycoprotein Efflux Pumps on the Paracellular Impedance of Tight Junctions at the Blood–Brain Barrier. IEEE Transactions on Nanobioscience, 2016, 15, 697-703.	3.3	7
223	Atomistic Model of Solute Transport across the Blood–Brain Barrier. ACS Omega, 2022, 7, 1100-1112.	3.5	7
224	Surface-tethered protein switches. Chemical Communications, 2011, 47, 3398.	4.1	6
225	Automatic cell segmentation in fluorescence images of confluent cell monolayers using multi-object geometric deformable model. , 2013, 8669, .		6
226	Photoluminescence of substituted phenylene–thienyl based polymers. Synthetic Metals, 2000, 113, 151-154.	3.9	5
227	Influence of anion on the kinetics of copper island growth. Nanoscale, 2010, 2, 2431.	5.6	5
228	Hypoxiaâ€induced bloodâ€brain barrier dysfunction is prevented by pericyteâ€conditioned media via attenuated actomyosin contractility and claudinâ€5 stabilization. FASEB Journal, 2022, 36, e22331.	0.5	5
229	Electrodeposition of Ni/SiC contacts. Journal of Applied Physics, 2003, 93, 10104-10109.	2.5	4
230	Measurement of the frequency dependent quantum efficiency by transient excitation. Electrochimica Acta, 1993, 38, 1913-1917.	5.2	2
231	Characterization of the Silicon / Fluoride Solution Interface by In-Situ Microwave Reflectivity. Materials Research Society Symposia Proceedings, 1996, 451, 197.	0.1	1
232	Imaging: CuInSe/ZnS Core/Shell NIR Quantum Dots for Biomedical Imaging (Small 22/2011). Small, 2011, 7, 3106-3106.	10.0	1
233	In Situ Observation of an Electrochemical Etching Reaction in Silicon. Materials Research Society Symposia Proceedings, 1995, 404, 69.	0.1	0
234	Focal Adhesion Disassembly Using Electrochemically Programmed Sub-Cellular Release. ECS Meeting Abstracts, 2007, , .	0.0	0

#	Article	IF	CITATIONS
235	Synthesis and Characterization of Metal Oxide Nanoparticles. , 2003, , 149-156.		0