Simon E Moulton

List of Publications by Year
in descending order

129 papers	6,668 citations	50276 46 h-index	66911 78 g-index
136 all docs	136 docs citations	136 times ranked	8922 citing authors

#	Article	IF	Citations
1	Bio-ink properties and printability for extrusion printing living cells. Biomaterials Science, 2013, 1, 763.	5.4	484
2	High-Performance Multifunctional Graphene Yarns: Toward Wearable All-Carbon Energy Storage Textiles. ACS Nano, 2014, 8, 2456-2466.	14.6	331
3	The effect of polypyrrole with incorporated neurotrophin-3 on the promotion of neurite outgrowth from auditory neurons. Biomaterials, 2007, 28, 513-523.	11.4	236
4	Organic Solvent-Based Graphene Oxide Liquid Crystals: A Facile Route toward the Next Generation of Self-Assembled Layer-by-Layer Multifunctional 3D Architectures. ACS Nano, 2013, 7, 3981-3990.	14.6	219
5	Conducting polymers, dual neurotrophins and pulsed electrical stimulation â€" Dramatic effects on neurite outgrowth. Journal of Controlled Release, 2010, 141, 161-167.	9.9	209
6	Skeletal muscle cell proliferation and differentiation on polypyrrole substrates doped with extracellular matrix components. Biomaterials, 2009, 30, 5292-5304.	11.4	207
7	Optimising the incorporation and release of a neurotrophic factor using conducting polypyrrole. Journal of Controlled Release, 2006, 116, 285-294.	9.9	196
8	Development of polypyrrole-based electromechanical actuators. Synthetic Metals, 2000, 113, 121-127.	3.9	181
9	Electrical Stimulation Using Conductive Polymer Polypyrrole Promotes Differentiation of Human Neural Stem Cells: A Biocompatible Platform for Translational Neural Tissue Engineering. Tissue Engineering - Part C: Methods, 2015, 21, 385-393.	2.1	146
10	Growth factor delivery: Defining the next generation platforms for tissue engineering. Journal of Controlled Release, 2019, 306, 40-58.	9.9	143
11	A Conductingâ€Polymer Platform with Biodegradable Fibers for Stimulation and Guidance of Axonal Growth. Advanced Materials, 2009, 21, 4393-4397.	21.0	136
12	Effect of the dopant anion in polypyrrole on nerve growth and release of a neurotrophic protein. Biomaterials, 2011, 32, 3822-3831.	11.4	124
13	Inkjet Printable Polyaniline Nanoformulations. Langmuir, 2007, 23, 8569-8574.	3.5	116
14	Biofunctionalized anti-corrosive silane coatings for magnesium alloys. Acta Biomaterialia, 2013, 9, 8671-8677.	8.3	116
15	3-dimensional (3D) fabricated polymer based drug delivery systems. Journal of Controlled Release, 2014, 193, 27-34.	9.9	116
16	Formation and processability of liquid crystalline dispersions of graphene oxide. Materials Horizons, 2014, 1, 87-91.	12.2	113
17	Antifouling Strategies for Electrochemical Biosensing: Mechanisms and Performance toward Point of Care Based Diagnostic Applications. ACS Sensors, 2021, 6, 1482-1507.	7.8	113
18	Liquid Crystal Behavior of Single-Walled Carbon Nanotubes Dispersed in Biological Hyaluronic Acid Solutions. Journal of the American Chemical Society, 2007, 129, 9452-9457.	13.7	108

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19	Multifunctional conducting fibres with electrically controlled release of ciprofloxacin. Journal of Controlled Release, 2013, 169, 313-320.	9.9	108
20	Investigation of protein adsorption and electrochemical behavior at a gold electrode. Journal of Colloid and Interface Science, 2003, 261, 312-319.	9.4	105
21	Polymerisation and characterisation of conducting polyaniline nanoparticle dispersions. Current Applied Physics, 2004, 4, 402-406.	2.4	100
22	Electrode-Cellular Interface. Science, 2009, 324, 185-186.	12.6	99
23	Chondrogenesis of Infrapatellar Fat Pad Derived Adipose Stem Cells in 3D Printed Chitosan Scaffold. PLoS ONE, 2014, 9, e99410.	2.5	99
24	Electrical stimulation promotes nerve cell differentiation on polypyrrole/poly (2-methoxy-5 aniline) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	3.5	94
25	Novel biosensor fabrication methodology based on processable conducting polyaniline nanoparticles. Electrochemistry Communications, 2005, 7, 317-322.	4.7	86
26	Studies of double layer capacitance and electron transfer at a gold electrode exposed to protein solutions. Electrochimica Acta, 2004, 49, 4223-4230.	5.2	81
27	The fabrication and characterization of inkjet-printed polyaniline nanoparticle films. Electrochimica Acta, 2008, 53, 5092-5099.	5.2	79
28	Carbon-Nanotube Biofibers. Advanced Materials, 2007, 19, 1244-1248.	21.0	77
29	Applications of scanning electrochemical microscopy (SECM) for local characterization of AZ31 surface during corrosion in a buffered media. Corrosion Science, 2014, 86, 93-100.	6.6	75
30	Biomolecules as selective dispersants for carbon nanotubes. Carbon, 2005, 43, 1879-1884.	10.3	71
31	Extrusion printed polymer structures: A facile and versatile approach to tailored drug delivery platforms. International Journal of Pharmaceutics, 2012, 422, 254-263.	5.2	71
32	Nanobionics: the impact of nanotechnology on implantable medical bionic devices. Nanoscale, 2012, 4, 4327.	5.6	64
33	Nanostructured carbon electrodes. Journal of Materials Chemistry, 2010, 20, 3553.	6.7	63
34	Creating conductive structures for cell growth: Growth and alignment of myogenic cell types on polythiophenes. Journal of Biomedical Materials Research - Part A, 2010, 95A, 256-268.	4.0	62
35	Liquid Crystallinity and Dimensions of Surfactant-Stabilized Sheets of Reduced Graphene Oxide. Journal of Physical Chemistry Letters, 2012, 3, 2425-2430.	4.6	59
36	Emulsion-coaxial electrospinning: designing novel architectures for sustained release of highly soluble low molecular weight drugs. Journal of Materials Chemistry, 2012, 22, 11347.	6.7	59

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37	Organic Bionics: A New Dimension in Neural Communications. Advanced Functional Materials, 2012, 22, 2003-2014.	14.9	55
38	Incorporation of carbon nanotubes into the biomedical polymer poly(styrene-Î²-isobutylene-Î²-styrene). Carbon, 2007, 45, 402-410.	10.3	54
39	Wetâ€Spun Biodegradable Fibers on Conducting Platforms: Novel Architectures for Muscle Regeneration. Advanced Functional Materials, 2009, 19, 3381-3388.	14.9	53
40	Novel methods of antiepileptic drug delivery â€" Polymer-based implants. Advanced Drug Delivery Reviews, 2012, 64, 953-964.	13.7	52
41	Conductive Tough Hydrogel for Bioapplications. Macromolecular Bioscience, 2018, 18, 1700270.	4.1	52
42	Controlled delivery for neuro-bionic devices. Advanced Drug Delivery Reviews, 2013, 65, 559-569.	13.7	51
43	Carbon nanotube biogels. Carbon, 2009, 47, 1282-1291.	10.3	50
44	Optimisation of a polypyrrole based actuator. Synthetic Metals, 1997, 85, 1419-1420.	3.9	49
45	Novel composite graphene/platinum electro-catalytic electrodes prepared by electrophoretic deposition from colloidal solutions. Electrochimica Acta, 2012, 60, 213-223.	5.2	49
46	Optically Active Polymer Carbon Nanotube Composite. Journal of Physical Chemistry B, 2005, 109, 22725-22729.	2.6	47
47	Liquid Ink Deposition from an Atomic Force Microscope Tip: Deposition Monitoring and Control of Feature Size. Langmuir, 2014, 30, 2712-2721.	3.5	46
48	Electro-stimulated release from a reduced graphene oxide composite hydrogel. Journal of Materials Chemistry B, 2015, 3, 2530-2537.	5.8	46
49	Evaluating the corrosion behaviour of Magnesium alloy in simulated biological fluid by using SECM to detect hydrogen evolution. Electrochimica Acta, 2015, 152, 294-301.	5.2	43
50	Highâ€Performance Multifunctional Grapheneâ€PLGA Fibers: Toward Biomimetic and Conducting 3D Scaffolds. Advanced Functional Materials, 2016, 26, 3105-3117.	14.9	43
51	Self-healing characteristic of praseodymium conversion coating on AZNd Mg alloy studied by scanning electrochemical microscopy. Electrochemistry Communications, 2017, 76, 6-9.	4.7	41
52	Aqueous dispersions of reduced graphene oxide and multi wall carbon nanotubes for enhanced glucose oxidase bioelectrode performance. Carbon, 2013, 61, 467-475.	10.3	38
53	Electrochemical Behavior and Redox-Dependent Disassembly of Gallic Acid/Fe^{III} Metalâ€"Phenolic Networks. ACS Applied Materials & Interfaces, 2018, 10, 5828-5834.	8.0	37
54	Corrosion protection afforded by praseodymium conversion film on Mg alloy AZNd in simulated biological fluid studied by scanning electrochemical microscopy. Journal of Electroanalytical Chemistry, 2015, 739, 211-217.	3.8	35

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55	An HRP based biosensor using sulphonated polyaniline. Synthetic Metals, 2005, 153, 185-188.	3.9	34
56	Carbon Nanotube Based Electronic and Electrochemical Sensors. Sensor Letters, 2005, 3, 183-193.	0.4	34
57	Characterisation of porous freeze dried conducting carbon nanotubeâ€“chitosan scaffolds. Journal of Materials Chemistry, 2008, 18, 5417.	6.7	33
58	Near-infrared light-responsive liposomes for protein delivery: Towards bleeding-free photothermally-assisted thrombolysis. Journal of Controlled Release, 2021, 337, 212-223.	9.9	32
59	Lubricin Antiadhesive Coatings Exhibit Sizeâ€Selective Transport Properties that Inhibit Biofouling of Electrode Surfaces with Minimal Loss in Electrochemical Activity. Advanced Materials Interfaces, 2018, 5, 1701296.	3.7	31
60	Nanostructured aligned CNT platforms enhance the controlled release of a neurotrophic protein from polypyrrole. Nanoscale, 2010, 2, 499.	5.6	30
61	Bioengineering of articular cartilage: past, present and future. Regenerative Medicine, 2013, 8, 333-349.	1.7	30
62	Gellan gum doped polypyrrole neural prosthetic electrode coatings. Soft Matter, 2011, 7, 4690.	2.7	29
63	Enhanced Electroactivity, Mechanical Properties, and Printability through the Addition of Graphene Oxide to Photo-Cross-linkable Gelatin Methacryloyl Hydrogel. ACS Biomaterials Science and Engineering, 2021, 7, 2279-2295.	5.2	29
64	Galvanic coupling conducting polymers to biodegradable Mg initiates autonomously powered drug release. Journal of Materials Chemistry, 2008, 18, 3608.	6.7	28
65	Vapor Phase Polymerization of EDOT from Submicrometer Scale Oxidant Patterned by Dip-Pen Nanolithography. Langmuir, 2012, 28, 9953-9960.	3.5	28
66	A Simple Means to Immobilize Enzyme into Conducting Polymers via Entrapment. Electrochemical and Solid-State Letters, 2006, 9, H68.	2.2	26
67	Polyterthiophene as an electrostimulated controlled drug release material of therapeutic levels of dexamethasone. Synthetic Metals, 2010, 160, 1107-1114.	3.9	26
68	High yield, solid exfoliation and liquid dispersion of graphite driven by a donor-acceptor interaction. Carbon, 2017, 123, 695-707.	10.3	26
69	Formation of alginate microspheres prepared by optimized microfluidics parameters for high encapsulation of bioactive molecules. Journal of Colloid and Interface Science, 2021, 587, 240-251.	9.4	25
70	New Insights into the Analysis of the Electrode Kinetics of Flavin Adenine Dinucleotide Redox Center of Glucose Oxidase Immobilized on Carbon Electrodes. Langmuir, 2014, 30, 3264-3273.	3.5	24
71	Nano-bioelectronics via dip-pen nanolithography. Journal of Materials Chemistry C, 2015, 3, 6431-6444.	5.5	23
72	Preparation and inÂvitro assessment of wet-spun gemcitabine-loaded polymeric fibers: Towards localized drug delivery for the treatment of pancreatic cancer. Pancreatology, 2017, 17, 795-804.	1.1	23

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73	Inkâ€onâ€Probe Hydrodynamics in Atomic Force Microscope Deposition of Liquid Inks. Small, 2014, 10, 3717-3728.	10.0	22
74	Lubricin on Platinum Electrodes: A Lowâ€Impedance Proteinâ€Resistant Surface Towards Biomedical Implantation. ChemElectroChem, 2019, 6, 1939-1943.	3.4	22
75	High Energy Density Heteroatom (O, N and S) Enriched Activated Carbon for Rational Design of Symmetric Supercapacitors. Chemistry - A European Journal, 2021, 27, 669-682.	3.3	22
76	A Simple Electrochemical Swab Assay for the Rapid Quantification of Clonazepam in Unprocessed Saliva Enabled by Lubricin Antifouling Coatings. ChemElectroChem, 2020, 7, 2851-2858.	3.4	22
77	Investigation of Ig.G Adsorption and the Effect on Electrochemical Responses at Titanium Dioxide Electrode. Langmuir, 2005, 21, 316-322.	3.5	20
78	Adhesion and Self-Assembly of Lubricin (PRG4) Brush Layers on Different Substrate Surfaces. Langmuir, 2019, 35, 15834-15848.	3.5	19
79	Lubricin (PRG4) reduces fouling susceptibility and improves sensitivity of carbon-based electrodes. Electrochimica Acta, 2020, 333, 135574.	5.2	19
80	The effect of treatment time on the ionic liquid surface film formation: Promising surface coating for Mg alloy AZ31. Surface and Coatings Technology, 2016, 296, 192-202.	4.8	17
81	Controlled release from PCLâ€“alginate microspheres via secondary encapsulation using GelMA/HAMA hydrogel scaffolds. Soft Matter, 2019, 15, 3779-3787.	2.7	17
82	Facile synthesis of reduced graphene oxide/MWNTs nanocomposite supercapacitor materials tested as electrophoretically deposited films on glassy carbon electrodes. Journal of Applied Electrochemistry, 2013, 43, 865-877.	2.9	16
83	Conductive and protein resistant polypyrrole films for dexamethasone delivery. Journal of Materials Chemistry B, 2016, 4, 2570-2577.	5.8	16
84	Evaluation of the Biocompatibility of Polypyrrole Implanted Subdurally in GAERS. Macromolecular Bioscience, 2017, 17, 1600334.	4.1	16
85	Stabilization of Single-Wall Carbon Nanotubes in Fully Sulfonated Polyaniline. Journal of Nanoscience and Nanotechnology, 2004, 4, 976-981.	0.9	15
86	Fabrication of a Biocompatible Liquid Crystal Graphene Oxideâ€“Gold Nanorods Electroâ€and Photoactive Interface for Cell Stimulation. Advanced Healthcare Materials, 2019, 8, 1801321.	7.6	15
87	Carbon Nanotubes Induced Gelation of Unmodified Hyaluronic Acid. Langmuir, 2013, 29, 10247-10253.	3.5	14
88	In vitro growth and differentiation of primary myoblasts on thiophene based conducting polymers. Biomaterials Science, 2013, 1, 983.	5.4	14
89	Development and validation of a seizure initiated drug delivery system for the treatment of epilepsy. Sensors and Actuators B: Chemical, 2016, 236, 732-740.	7.8	13
90	Photoswitchable Layer-by-Layer Coatings Based on Photochromic Polynorbornenes Bearing Spiropyran Side Groups. Langmuir, 2018, 34, 4210-4216.	3.5	13

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91	Wet-Spun Trojan Horse Cell Constructs for Engineering Muscle. Frontiers in Chemistry, 2020, 8, 18.	3.6	13
92	Boron and nitrogen doped graphene quantum dots on a surface modified Cu mesh for the determination of dopamine and epinephrine. Synthetic Metals, 2021, 278, 116831.	3.9	13
93	Development of drug-loaded polymer microcapsules for treatment of epilepsy. Biomaterials Science, 2017, 5, 2159-2168.	5.4	12
94	Polycaprolactone porous template facilitates modulated release of molecules from alginate hydrogels. Reactive and Functional Polymers, 2018, 133, 29-36.	4.1	12
95	Electrochemical investigation of carbon nanotube nanoweb architecture in biological media. Electrochemistry Communications, 2010, 12, 1471-1474.	4.7	11
96	Fabrication of novel core-shell PLGA and alginate fiber for dual-drug delivery system. Polymers for Advanced Technologies, 2016, 27, 1014-1019.	3.2	11
97	Dual Delivery of Gemcitabine and Paclitaxel by Wetâ€Spun Coaxial Fibers Induces Pancreatic Ductal Adenocarcinoma Cell Death, Reduces Tumor Volume, and Sensitizes Cells to Radiation. Advanced Healthcare Materials, 2020, 9, e2001115.	7.6	11
98	A novel and facile approach to fabricate a conductive and biomimetic fibrous platform with sub-micron and micron features. Journal of Materials Chemistry B, 2016, 4, 1056-1063.	5.8	10
99	Structural Analysis and Protein Functionalization of Electroconductive Polypyrrole Films Modified by Plasma Immersion Ion Implantation. ACS Biomaterials Science and Engineering, 2017, 3, 2247-2258.	5.2	10
100	Poly(2-methoxyaniline-5-sulfonic Acid) - Surfactant Complexes and Their Redox and Solvatochromic Behaviour. Australian Journal of Chemistry, 2007, 60, 159.	0.9	9
101	Self-Assembly of Lubricin (PRG-4) Brushes on Graphene Oxide Affords Stable 2D-Nanosheets in Concentrated Electrolytes and Complex Fluids. ACS Applied Nano Materials, 2020, 3, 11527-11542.	5.0	9
102	Nanoscale platinum printing on insulating substrates. Nanotechnology, 2013, 24, 505301.	2.6	8
103	Lubricin (PRG4) Antiadhesive Coatings Mitigate Electrochemical Impedance Instabilities in Polypyrrole Bionic Electrodes Exposed to Fouling Fluids. ACS Applied Bio Materials, 2020, 3, 8032-8039.	4.6	8
104	A simple and versatile method for microencapsulation of anti-epileptic drugs for focal therapy of epilepsy. Journal of Materials Chemistry B, 2015, 3, 7255-7261.	5.8	7
105	Debundling, Dispersion, and Stability of Multiwalled Carbon Nanotubes Driven by Molecularly Designed Electron Acceptors. Langmuir, 2018, 34, 12137-12144.	3.5	7
106	Lubricin as a tool for controlling adhesion in vivo and ex vivo. Biointerphases, 2021, 16, 020802.	1.6	7
107	Smart Delivery of Plasminogen Activators for Efficient Thrombolysis; Recent Trends and Future Perspectives. Advanced Therapeutics, 2021, 4, 2100047.	3.2	7
108	The effect of dopant pKa and the solubility of corresponding acid on the electropolymerisation of pyrrole. Electrochimica Acta, 2013, 92, 276-284.	5.2	6

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109	Three-dimensional printed drug delivery systems. , 2020, , 147-162.		5
110	Cellular Interactions with Lubricin and Hyaluronic Acidâ€“Lubricin Composite Coatings on Gold Electrodes in Passive and Electrically Stimulated Environments. ACS Biomaterials Science and Engineering, 2021, 7, 3696-3708.	5.2	5
111	Microencapsulation of growth factors by microfluidic system. MethodsX, 2021, 8, 101324.	1.6	5
112	Use of inherently conducting polymers and pulsed amperometry in flow injection analysis to detect oligonucleotides. Analyst, The, 2004, 129, 585.	3.5	4
113	Electroâ€oxidation and reduction of H₂ on platinum studied by scanning electrochemical microscopy for the purpose of local detection of H₂ evolution. Surface and Interface Analysis, 2015, 47, 1187-1191.	1.8	4
114	Towards bioengineered skeletal muscle: recent developments in vitro and in vivo. Essays in Biochemistry, 2021, 65, 555-567.	4.7	4
115	Incorporation of dye into conducting polyaniline nanoparticles. Reactive and Functional Polymers, 2007, 67, 173-183.	4.1	3
116	Nerve Repair: A Conductingâ€Polymer Platform with Biodegradable Fibers for Stimulation and Guidance of Axonal Growth (Adv. Mater. 43/2009). Advanced Materials, 2009, 21, .	21.0	3
117	Injectable phenytoin loaded polymeric microspheres for the control of temporal lobe epilepsy in rats. Restorative Neurology and Neuroscience, 2015, 33, 823-834.	0.7	3
118	Antiepileptic Effects of Lacosamide Loaded Polymers Implanted Subdurally in GAERS. International Journal of Polymer Science, 2016, 2016, 1-10.	2.7	3
119	Ionic interactions to tune mechanical and electrical properties of hydrated liquid crystal graphene oxide films. Materials Chemistry and Physics, 2017, 186, 90-97.	4.0	3
120	Molecular Design of Core Substituted Naphthalene Diimides for the Exfoliation of Graphite to Graphene in Chloroform. ChemNanoMat, 2019, 5, 1303-1310.	2.8	3
121	Biodegradable Conducting Polymer Coating to Mitigate Early Stage Degradation of Magnesium in Simulated Biological Fluid: An Electrochemical Mechanistic Study. ChemElectroChem, 2019, 6, 4893-4901.	3.4	3
122	A simple technique for development of fibres with programmable microsphere concentration gradients for local protein delivery. Journal of Materials Chemistry B, 2019, 7, 556-565.	5.8	3
123	Anti-Adhesive Coatings: Lubricin Antiadhesive Coatings Exhibit Size-Selective Transport Properties that Inhibit Biofouling of Electrode Surfaces with Minimal Loss in Electrochemical Activity (Adv. Mater.) Tj ETQq1 1 0.784314 rgBT /Overlock	43	
124	Photothermal release and recovery of mesenchymal stem cells from substrates functionalized with gold nanorods. Acta Biomaterialia, 2021, 129, 110-121.	8.3	2
125	Potential Pulse-Facilitated Active Adsorption of Lubricin Polymer Brushes Can Both Accelerate Self-Assembly and Control Grafting Density. Langmuir, 2021, 37, 11188-11193.	3.5	2
126	Novel Boundary Lubrication Mechanisms from Molecular Pillows of Lubricin Brush-Coated Graphene Oxide Nanosheets. Langmuir, 2022, 38, 5351-5360.	3.5	2

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127	Organic bionics. , 2010, , .		1
128	Electrical Cell Stimulation: Fabrication of a Biocompatible Liquid Crystal Graphene Oxideâ€“Gold Nanorods Electroâ€•and Photoactive Interface for Cell Stimulation (Adv. Healthcare Mater. 9/2019). Advanced Healthcare Materials, 2019, 8, 1970036.	7.6	0
129	Tuning drug dosing through matching optically active polymer composition and NIR stimulation parameters. International Journal of Pharmaceutics, 2020, 575, 118976.	5.2	0