Andrew P Michelmore

List of Publications by Year
in descending order

76 papers	3,568 citations	147801 31 h-index	133252 59 g-index
77 all docs	77 docs citations	77 times ranked	4513 citing authors

#	Article	IF	Citations
1	A Facile Approach to Chemically Modified Graphene and its Polymer Nanocomposites. Advanced Functional Materials, 2012, 22, 2735-2743.	14.9	244
2	Surface hydrophilic modification of RO membranes by plasma polymerization for low organic fouling. Journal of Membrane Science, 2011, 369, 420-428.	8.2	241
3	Tailoring the surface functionalities of titania nanotube arrays. Biomaterials, 2010, 31, 532-540.	11.4	184
4	From carbon nanotubes and silicate layers to graphene platelets for polymer nanocomposites. Nanoscale, 2012, 4, 4578.	5.6	181
5	Covalently bonded interfaces for polymer/graphene composites. Journal of Materials Chemistry A, 2013, 1, 4255.	10.3	163
6	Development of polymer composites using modified, high-structural integrity graphene platelets. Composites Science and Technology, 2014, 91, 82-90.	7.8	136
7	Melt compounding with graphene to develop functional, high-performance elastomers. Nanotechnology, 2013, 24, 165601.	2.6	124
8	Processable 3-nm thick graphene platelets of high electrical conductivity and their epoxy composites. Nanotechnology, 2014, 25, 125707.	2.6	119
9	Nanostructured Electrochemical Biosensors for Label-Free Detection of Water- and Food-Borne Pathogens. ACS Applied Materials & Interfaces, 2018, 10, 6055-6072.	8.0	115
10	Substrate influence on the initial growth phase of plasma-deposited polymer films. Chemical Communications, 2009, , 3600.	4.1	101
11	Fine-Tuning the Surface of Forward Osmosis Membranes via Grafting Graphene Oxide: Performance Patterns and Biofouling Propensity. ACS Applied Materials & Interfaces, 2015, 7, 18004-18016.	8.0	101
12	Nanoscale deposition of chemically functionalised films via plasma polymerisation. RSC Advances, 2013, 3, 13540.	3.6	94
13	Effective in-situ chemical surface modification of forward osmosis membranes with polydopamine-induced graphene oxide for biofouling mitigation. Desalination, 2016, 385, 126-137.	8.2	91
14	The influence of substrate stiffness gradients on primary human dermal fibroblasts. Biomaterials, 2013, 34, 5070-5077.	11.4	90
15	Early Stages of Growth of Plasma Polymer Coatings Deposited from Nitrogenâ€•and Oxygenâ€Containing Monomers. Plasma Processes and Polymers, 2010, 7, 824-835.	3.0	84
16	The interaction of linear polyphosphates with titanium dioxide surfaces. Physical Chemistry Chemical Physics, 2000, 2, 2985-2992.	2.8	79
17	Surface Morphology in the Early Stages of Plasma Polymer Film Growth from Amineâ€Containing Monomers. Plasma Processes and Polymers, 2011, 8, 367-372.	3.0	73
18	High conductivity PEDOT resulting from glycol/oxidant complex and glycol/polymer intercalation during vacuum vapour phase polymerisation. Polymer, 2011, 52, 1725-1730.	3.8	73

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19	Free-standing composite hydrogel films for superior volumetric capacitance. Journal of Materials Chemistry A, 2015, 3, 15668-15674.	10.3	69
20	Single-Step Assembly of Multifunctional Poly(tannic acid)â€“Graphene Oxide Coating To Reduce Biofouling of Forward Osmosis Membranes. ACS Applied Materials & Interfaces, 2016, 8, 17519-17528.	8.0	66
21	Electrically and thermally conductive elastomer by using MXene nanosheets with interface modification. Chemical Engineering Journal, 2020, 397, 125439.	12.7	61
22	Combined effect of protein and oxygen on reactive oxygen and nitrogen species in the plasma treatment of tissue. Applied Physics Letters, 2015, 107, .	3.3	58
23	pH-tunable gradients of wettability and surface potential. Soft Matter, 2012, 8, 8399.	2.7	57
24	The link between mechanisms of deposition and the physico-chemical properties of plasma polymer films. Soft Matter, 2013, 9, 6167.	2.7	43
25	Role of Positive Ions in Determining the Deposition Rate and Film Chemistry of Continuous Wave Hexamethyl Disiloxane Plasmas. Langmuir, 2011, 27, 11943-11950.	3.5	42
26	On the Effect of Monomer Chemistry on Growth Mechanisms of Nonfouling PEG-like Plasma Polymers. Langmuir, 2013, 29, 2595-2601.	3.5	41
27	A new method for preparation of functionalized graphene and its epoxy nanocomposites. Composites Part B: Engineering, 2020, 196, 108096.	12.0	41
28	Variability in Plasma Polymerization Processes â€“ An International Roundâ€<scp>R</scp>obin Study. Plasma Processes and Polymers, 2013, 10, 767-778.	3.0	40
29	Label-Free Bacterial Toxin Detection in Water Supplies Using Porous Silicon Nanochannel Sensors. ACS Sensors, 2019, 4, 1515-1523.	7.8	40
30	Facile Fabrication of Graphene Membranes with Readily Tunable Structures. ACS Applied Materials & Interfaces, 2015, 7, 13745-13757.	8.0	39
31	Porous silicon membrane-modified electrodes for label-free voltammetric detection of MS2 bacteriophage. Biosensors and Bioelectronics, 2016, 80, 47-53.	10.1	37
32	Control of slime coatings by the use of anionic phosphates: A fundamental study. Minerals Engineering, 2000, 13, 1059-1069.	4.3	32
33	Elastomer nanocomposites containing MXene for mechanical robustness and electrical and thermal conductivity. Nanotechnology, 2020, 31, 315715.	2.6	31
34	Defining Plasma Polymerization: New Insight Into What We Should Be Measuring. ACS Applied Materials & Interfaces, 2013, 5, 5387-5391.	8.0	30
35	Approaches to Quantify Amine Groups in the Presence of Hydroxyl Functional Groups in Plasma Polymerized Thin Films. Plasma Processes and Polymers, 2014, 11, 888-896.	3.0	27
36	Structural Characterization of Î³â€Terpinene Thin Films Using Mass Spectroscopy and Xâ€Ray Photoelectron Spectroscopy. Plasma Processes and Polymers, 2015, 12, 1085-1094.	3.0	26

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37	An Experimental and Analytical Study of an Asymmetric Capacitively Coupled Plasma Used for Plasma Polymerization. Plasma Processes and Polymers, 2014, 11, 833-841.	3.0	25
38	Secrets of Plasma-Deposited Polyoxazoline Functionality Lie in the Plasma Phase. Chemistry of Materials, 2017, 29, 8047-8051.	6.7	25
39	Epoxy/graphene nanocomposites prepared by in-situ microwaving. Carbon, 2021, 177, 271-281.	10.3	25
40	On the effects of atmospheric-pressure microplasma array treatment on polymer and biological materials. RSC Advances, 2013, 3, 13437.	3.6	24
41	Chemical and physical processes in the retention of functional groups in plasma polymers studied by plasma phase mass spectroscopy. Physical Chemistry Chemical Physics, 2016, 18, 4496-4504.	2.8	24
42	Plasma Parameter Aspects in the Fabrication of Stable Amine Functionalized Plasma Polymer Films. Plasma Processes and Polymers, 2015, 12, 817-826.	3.0	23
43	The importance of ions in low pressure PECVD plasmas. Frontiers in Physics, 2015, 3, .	2.1	23
44	Advancement in liquid exfoliation of graphite through simultaneously oxidizing and ultrasonicating. Journal of Materials Chemistry A, 2014, 2, 20382-20392.	10.3	22
45	A Novel Fabrication Approach for Multifunctional Graphene-based Thin Film Nano-composite Membranes with Enhanced Desalination and Antibacterial Characteristics. Scientific Reports, 2017, 7, 7490.	3.3	22
46	Cell sheets in cell therapies. Cytotherapy, 2018, 20, 169-180.	0.7	22
47	Gradient Technology for High-Throughput Screening of Interactions between Cells and Nanostructured Materials. Journal of Nanomaterials, 2012, 2012, 1-7.	2.7	20
48	Comparison of Plasma Polymerization under Collisional and Collision-Less Pressure Regimes. Journal of Physical Chemistry B, 2015, 119, 15359-15369.	2.6	20
49	Plasma Polymer and Biomolecule Modification of 3D Scaffolds for Tissue Engineering. Plasma Processes and Polymers, 2016, 13, 678-689.	3.0	20
50	Where physics meets chemistry: Thin film deposition from reactive plasmas. Frontiers of Chemical Science and Engineering, 2016, 10, 441-458.	4.4	20
51	Atmospheric Pressure Dielectric Barrier Discharges for the Deposition of Organic Plasma Polymer Coatings for Biomedical Application. Plasma Chemistry and Plasma Processing, 2021, 41, 47-83.	2.4	18
52	The interaction of linear polyphosphates with zincite surfaces. International Journal of Mineral Processing, 2003, 68, 1-16.	2.6	16
53	Hyperthermal Intact Molecular Ions Play Key Role in Retention of ATRP Surface Initiation Capability of Plasma Polymer Films from Ethyl Î±-Bromoisobutyrate. ACS Applied Materials & Interfaces, 2016, 8, 16493-16502.	8.0	16
54	Synthesis of highly functionalised plasma polymer films from protonated precursor ions <i>via</i> the plasma Î±â€“Î³ transition. Physical Chemistry Chemical Physics, 2017, 19, 5637-5646.	2.8	13

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55	Development of Advanced Dressings for the Delivery of Progenitor Cells. ACS Applied Materials & Interfaces, 2017, 9, 3445-3454.	8.0	12
56	Multidentate polyzwitterion attachment to polydopamine modified ultrafiltration membranes for dairy processing: Characterization, performance and durability. Journal of Industrial and Engineering Chemistry, 2018, 61, 356-367.	5.8	12
57	Deposition of 2â€oxazolineâ€based plasma polymer coatings using atmospheric pressure helium plasma jet. Plasma Processes and Polymers, 2019, 16, 1900104.	3.0	12
58	Versatile gradients of chemistry, bound ligands and nanoparticles on alumina nanopore arrays. Nanotechnology, 2011, 22, 415601.	2.6	10
59	Promiscuous hydrogen in polymerising plasmas. Physical Chemistry Chemical Physics, 2018, 20, 7033-7042.	2.8	10
60	The effect of deposition of negatively charged particles on the electrokinetic behaviour of oppositely charged surfaces. PhysChemComm, 2000, 3, 24.	0.8	9
61	Continuous-Wave RF Plasma Polymerization of Furfuryl Methacrylate: Correlation Between Plasma and Surface Chemistry. Plasma Processes and Polymers, 2017, 14, 1600054.	3.0	9
62	Binding of Nanoparticles to Aminated Plasma Polymer Surfaces is Controlled by Primary Amine Density and Solution pH. Journal of Physical Chemistry C, 2018, 122, 14986-14995.	3.1	9
63	The chemistry of organophosphate thin film coatings from low pressure plasma and the effect of the substrate on adhesion. Plasma Processes and Polymers, 2017, 14, 1700037.	3.0	6
64	COLLECTION AND CHARACTERIZATION OF FREE GOLD PARTICLES FROM LOW GRADE COPPER CONCENTRATOR STREAMS AND METHODS TO IMPROVE THEIR RECOVERY. Canadian Metallurgical Quarterly, 2003, 42, 261-270.	1.2	5
65	Comparative Study of Natural Terpenoid Precursors in Reactive Plasmas for Thin Film Deposition. Molecules, 2021, 26, 4762.	3.8	4
66	Deposition of nonfouling plasma polymers to a thermoplastic silicone elastomer for microfluidic and biomedical applications. Journal of Applied Polymer Science, 2014, 131, .	2.6	3
67	Furfuryl methacrylate plasma polymers for biomedical applications. Biointerphases, 2016, 11, 031014.	1.6	3
68	The Physics of Plasma Ion Chemistry: A Case Study of Plasma Polymerization of Ethyl Acetate. Journal of Physical Chemistry Letters, 2019, 10, 7306-7310.	4.6	3
69	Rational approaches for optimizing chemical functionality of plasma polymers: A case study with ethyl trimethylacetate. Plasma Processes and Polymers, 2021, 18, 2000195.	3.0	3
70	A surface dielectric barrier discharge for deposition of allylamine polymer costings. Applied Surface Science, 2021, 544, 148826.	6.1	3
71	Delivering a cell therapy. Cytotherapy, 2015, 17, S14.	0.7	1
72	Particle aggregates formed during furfuryl methacrylate plasma polymerization affect human mesenchymal stem cell behaviour. Colloids and Surfaces B: Biointerfaces, 2018, 161, 261-268.	5.0	1

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73	Fabrication and characterization of biorenewable plasma polymer films using sandalwood oil precursor. Journal of Applied Polymer Science, 2020, 137, 49288.	2.6	1
74	Improved recovery of cryopreserved cell monolayers with a hyaluronic acid surface treatment. Biointerphases, 2020, 15, 061015.	1.6	1
75	Gradient technologies for optimising biomaterials for cell screening. Cytotherapy, 2015, 17, S72.	0.7	0
76	Plasma Polymerisation of Amine Thin Coatings with a Surface Barrier Discharge at Atmospheric Pressure. , 2020, , .		0