Peter James Murphy

List of Publications by Year
in descending order

73 papers	3,108 citations	218677 26 h-index	161849 54 g-index
74 all docs	74 docs citations	74 times ranked	3907 citing authors

#	Article	IF	Citations
1	Doped and reactive silicon thin film anodes for lithium ion batteries: A review. Journal of Power Sources, 2021, 506, 230194.	7.8	40
2	Compressively Stressed Silicon Nanoclusters as an Antifracture Mechanism for High-Performance Lithium-Ion Battery Anodes. ACS Applied Materials & Interfaces, 2020, 12, 39195-39204.	8.0	11
3	Fabrication of robust solar mirrors on polymeric substrates by physical vapor deposition technique. Solar Energy Materials and Solar Cells, 2020, 209, 110476.	6.2	11
4	Chemically Heterogeneous Nanowrinkling of Polymer Surfaces Induced by Low-Energy Cluster Implantation. Journal of Physical Chemistry C, 2019, 123, 13330-13336.	3.1	3
5	Plasma gas aggregation cluster source: Influence of gas inlet configuration and total surface area on the heterogeneous aggregation of silicon clusters. Surface and Coatings Technology, 2019, 364, 1-6.	4.8	2
6	Pure silicon thin-film anodes for lithium-ion batteries: A review. Journal of Power Sources, 2019, 414, 48-67.	7.8	147
7	Metallic Adhesive Layers for Agâ€Based First Surface Mirrors. Advanced Engineering Materials, 2018, 20, 1800106.	3.5	9
8	Influence of Postsynthesis Heat Treatment on Vapor-Phase-Polymerized Conductive Polymers. ACS Omega, 2018, 3, 12679-12687.	3.5	9
9	Finite Element Analysis of Surface Integrity in Deep Ball-Burnishing of a Biodegradable AZ31B Mg Alloy. Metals, 2018, 8, 136.	2.3	21
10	Manipulation of cluster formation through gas-wall boundary conditions in large area cluster sources. Surface and Coatings Technology, 2017, 314, 125-130.	4.8	8
11	Recent advances in the synthesis of conducting polymers from the vapour phase. Progress in Materials Science, 2017, 86, 127-146.	32.8	115
12	Postâ€polymerization surface segregation in thin PECVD siloxane films leading to a selfâ€regenerative effect. Plasma Processes and Polymers, 2017, 14, 1600233.	3.0	7
13	Degradation and Gelation during Plasma Synthesis of Nanoparticles in Ionic Liquids. Journal of Physical Chemistry C, 2017, 121, 6349-6356.	3.1	2
14	Enhancing the corrosion resistance of biodegradable Mg-based alloy by machining-induced surface integrity: influence of machining parameters on surface roughness and hardness. International Journal of Advanced Manufacturing Technology, 2017, 90, 2095-2108.	3.0	51
15	Cleaning Dirty Surfaces: A Three-Body Problem. ACS Applied Materials & Interfaces, 2016, 8, 18534-18539.	8.0	3
16	Decoupling the effects of confinement and passivation on semiconductor quantum dots. Physical Chemistry Chemical Physics, 2016, 18, 19765-19772.	2.8	5
17	The effect of block copolymer additives for a highly active polymeric metal-free oxygen reduction electrode. RSC Advances, 2016, 6, 28809-28814.	3.6	9
18	Unusual Nature of Fingerprints and the Implications for Easy-to-Clean Coatings. Langmuir, 2016, 32, 619-625.	3.5	10

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19	Influence of post-deposition moisture uptake in polycarbonate on thin film's residual stress short term evolution. Surface and Coatings Technology, 2016, 294, 210-214.	4.8	9
20	Organic energy devices from ionic liquids and conducting polymers. Journal of Materials Chemistry C, 2016, 4, 1550-1556.	5.5	15
21	Hydrophilic Organic Electrodes on Flexible Hydrogels. ACS Applied Materials & Interfaces, 2016, 8, 974-982.	8.0	23
22	Packing density/surface morphology relationship in thin sputtered chromium films. Surface and Coatings Technology, 2016, 291, 286-291.	4.8	10
23	Diffuse color patterning using blended electrochromic polymers for proofâ€ofâ€concept adaptive camouflage plaques. Journal of Applied Polymer Science, 2015, 132, .	2.6	19
24	Influence of Tetramethyldisiloxaneâ€Oxygen Mixtures on the Physical Properties of Microwave PECVD Coatings and Subsequent Postâ€Plasma Reactions. Plasma Processes and Polymers, 2015, 12, 555-563.	3.0	7
25	Market evaluation, performance modelling and materials solution addressing short wavelength discomfort glare in rear view automotive mirrors. Translational Materials Research, 2015, 2, 035002.	1.2	6
26	Effect of oxidant on the performance of conductive polymer films prepared by vacuum vapor phase polymerization for smart window applications. Smart Materials and Structures, 2015, 24, 035016.	3.5	24
27	Oneâ€Step Fabrication of Nanocomposite Thin Films of PTFE in SiO<i>_x</i> for Repelling Water. Advanced Engineering Materials, 2015, 17, 474-482.	3.5	13
28	Mesoporous Siloxane Films Through Thermal Oxidation of Siloxaneâ€“Carbon Nanocomposites. Advanced Engineering Materials, 2015, 17, 1547-1555.	3.5	5
29	Flexible Polymer-on-Polymer Architecture for Piezo/Pyroelectric Energy Harvesting. ACS Applied Materials & Interfaces, 2015, 7, 8465-8471.	8.0	41
30	Surface treatments for controlling corrosion rate of biodegradable Mg and Mg-based alloy implants. Science and Technology of Advanced Materials, 2015, 16, 053501.	6.1	129
31	Electroactive Polymers Prepared By Vapour Phase Polymerisation. ECS Meeting Abstracts, 2015, , .	0.0	0
32	Optical coatings for automotive applications: a case study in translating fundamental materials science into commercial reality. Translational Materials Research, 2014, 1, 025001.	1.2	4
33	Semi-metallic polymers. Nature Materials, 2014, 13, 190-194.	27.5	722
34	Enhancing the morphology and electrochromic stability of polypyrrole via PEGâ€“PPGâ€“PEG templating in vapour phase polymerisation. European Polymer Journal, 2014, 51, 28-36.	5.4	18
35	Condensation and freezing of droplets on superhydrophobic surfaces. Advances in Colloid and Interface Science, 2014, 210, 47-57.	14.7	223
36	Direct Imaging of Mechanical and Chemical Gradients Across the Thickness of Graded Organosilicone Microwave PECVD Coatings. ACS Applied Materials & Interfaces, 2014, 6, 1279-1287.	8.0	12

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37	Metal-free oxygen reduction electrodes based on thin PEDOT films with high electrocatalytic activity. RSC Advances, 2014, 4, 9819.	3.6	34
38	Variations in graded organosilicone microwave PECVD coatings modify stress and improve the durability on plastic substrates. Surface and Coatings Technology, 2014, 259, 616-624.	4.8	7
39	Evidence for â€˜bottom upâ€™ growth during vapor phase polymerization of conducting polymers. Polymer, 2014, 55, 3458-3460.	3.8	32
40	Vapor Phase Synthesis of Conducting Polymer Nanocomposites Incorporating 2D Nanoparticles. Chemistry of Materials, 2014, 26, 4207-4213.	6.7	26
41	A Solid-State Nuclear Magnetic Resonance Study of Post-Plasma Reactions in Organosilicone Microwave Plasma-Enhanced Chemical Vapor Deposition (PECVD) Coatings. ACS Applied Materials & Interfaces, 2014, 6, 8353-8362.	8.0	21
42	Nanoporous Glass Films on Liquids. ACS Applied Materials & Interfaces, 2014, 6, 507-512.	8.0	9
43	Corrosion resistance of robust optical and electrical thin film coatings on polymeric substrates. Corrosion Science, 2013, 69, 406-411.	6.6	14
44	Enhanced abrasion resistance of ultrathin reflective coatings on polymeric substrates: An improvement upon glass substrates. Wear, 2013, 297, 986-991.	3.1	11
45	Inkjet printing and vapor phase polymerization: patterned conductive PEDOT for electronic applications. Journal of Materials Chemistry C, 2013, 1, 3353.	5.5	56
46	Ultrathin Polymer Films for Transparent Electrode Applications Prepared by Controlled Nucleation. ACS Applied Materials & Interfaces, 2013, 5, 11654-11660.	8.0	43
47	Large Area Nanostructured Arrays: Optical Properties of Metallic Nanotubes. ACS Applied Materials & Interfaces, 2013, 5, 3937-3942.	8.0	1
48	<scp>G</scp>rowth of Sputtered Nanocomposite Alloys on Polymeric Substrates: The Role of the Substrate's Mechanical Hardness. Advanced Engineering Materials, 2013, 15, 1076-1081.	3.5	5
49	Structure-directed growth of high conductivity PEDOT from liquid-like oxidant layers during vacuum vapor phase polymerization. Journal of Materials Chemistry, 2012, 22, 14889.	6.7	84
50	Polymeric Material with Metal-Like Conductivity for Next Generation Organic Electronic Devices. Chemistry of Materials, 2012, 24, 3998-4003.	6.7	224
51	Anderson-like localization in ultrathin nanocomposite alloy films on polymeric substrates. Scripta Materialia, 2012, 67, 866-869.	5.2	2
52	Hydroxyl Radical Etching Improves Adhesion of Plasmaâ€Deposited aâ€SiO_{<i>x</i>}C_{<i>y</i>}H_{<i>z</i>} Films on Poly(Methylmethacrylate). Plasma Processes and Polymers, 2012, 9, 398-405.	3.0	8
53	Etching and Deposition Mechanism of an Alcohol Plasma on Polycarbonate and Poly(Methyl) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf a:SiO_{<i>x</i>}C_{<i>y</i>}H_{<i>z</i>} Coating. Plasma Processes and Polymers, 2012, 9, 855-865.	3.0	9
54	Orbital hybridization, crystal structure and anomalous resistivity of ultrathin CrZr alloy films on polymeric substrates. Scripta Materialia, 2012, 67, 356-359.	5.2	3

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55	Atomic structure studies of chrome alloy coatings and their abrasion resistance. Surface and Coatings Technology, 2012, 206, 3645-3649.	4.8	10
56	Ultrathin films of co-sputtered CrZrx alloys on polymeric substrates. Surface and Coatings Technology, 2012, 206, 3733-3738.	4.8	12
57	Vacuum vapour phase polymerization of high conductivity PEDOT: Role of PEG-PPG-PEG, the origin of water, and choice of oxidant. Polymer, 2012, 53, 2146-2151.	3.8	88
58	Abrasion resistance of thin film coatings as measured by diffuse optical scattering. Surface and Coatings Technology, 2011, 206, 312-317.	4.8	14
59	Measurement Protocols for Reporting PEDOT Thin Film Conductivity and Optical Transmission: A Critical Survey. Macromolecular Chemistry and Physics, 2011, 212, 2173-2180.	2.2	26
60	Gel electrolytes with ionic liquid plasticiser for electrochromic devices. Electrochimica Acta, 2011, 56, 4408-4413.	5.2	33
61	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
62	Vacuum vapour phase polymerised poly(3,4-ethyelendioxythiophene) thin films for use in large-scale electrochromic devices. Thin Solid Films, 2011, 519, 2544-2549.	1.8	47
63	In-situ QCM-D analysis reveals four distinct stages during vapour phase polymerisation of PEDOT thin films. Polymer, 2010, 51, 1737-1743.	3.8	34
64	Influence of PEGâ€<i>ran</i>â€PPG Surfactant on Vapour Phase Polymerised PEDOT Thin Films. Macromolecular Rapid Communications, 2009, 30, 1846-1851.	3.9	51
65	The role of water in the synthesis and performance of vapour phase polymerised PEDOT electrochromic devices. Journal of Materials Chemistry, 2009, 19, 7871.	6.7	95
66	The mechanism of conductivity enhancement in poly(3,4-ethylenedioxythiophene)â€“poly(styrenesulfonic) acid using linear-diol additives: Its effect on electrochromic performance. Thin Solid Films, 2008, 516, 7828-7835.	1.8	29
67	High Conductivity PEDOT Using Humidity Facilitated Vacuum Vapour Phase Polymerisation. Macromolecular Rapid Communications, 2008, 29, 1403-1409.	3.9	72
68	Improved PEDOT Conductivity via Suppression of Crystallite Formation in Fe(III) Tosylate During Vapor Phase Polymerization. Macromolecular Rapid Communications, 2008, 29, 1503-1508.	3.9	82
69	Faradaic charge corrected colouration efficiency measurements for electrochromic devices. Electrochimica Acta, 2008, 53, 2250-2257.	5.2	18
70	Colouration efficiency measurements in electrochromic polymers: The importance of charge density. Electrochemistry Communications, 2007, 9, 2032-2036.	4.7	34
71	Factors affecting the adhesion of microwave plasma deposited siloxane films on polycarbonate. Thin Solid Films, 2006, 500, 34-40.	1.8	34
72	First synthesis of 3- O -methyl-scyllo-inosamine, a natural product which favors the Rhizobiumâ€“Leguminosae symbiosis. Tetrahedron Letters, 2004, 45, 1461-1463.	1.4	11

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73	Clustered Outbreak of Adverse Reactions to a Salsa Containing High Levels of Sulfites. Journal of Food Protection, 1995, 58, 95-97.	1.7	4