Vanessa Trouillet

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Formation of Fluorescent Metal (Au, Ag) Nanoclusters Capped in Bovine Serum Albumin Followed by Fluorescence and Spectroscopy. Journal of Physical Chemistry C, 2011, 115, 10955-10963.	3.1	365
2	Oneâ€Pot Synthesis of Nearâ€Infrared Fluorescent Gold Clusters for Cellular Fluorescence Lifetime Imaging. Small, 2011, 7, 2614-2620.	10.0	334
3	Facile preparation of water-soluble fluorescent gold nanoclusters for cellular imaging applications. Nanoscale, 2011, 3, 2009.	5.6	278
4	Microwave-assisted rapid synthesis of luminescent gold nanoclusters for sensing Hg2+ in living cells using fluorescence imaging. Nanoscale, 2012, 4, 4155.	5.6	211
5	Effect of Protein Adsorption on the Fluorescence of Ultrasmall Gold Nanoclusters. Small, 2012, 8, 661-665.	10.0	159
6	Grafting Efficiency of Synthetic Polymers onto Biomaterials: A Comparative Study of Grafting- <i>from</i> versus Grafting- <i>to</i> . Biomacromolecules, 2013, 14, 64-74.	5.4	137
7	Investigation of binder distribution in graphite anodes for lithium-ion batteries. Journal of Power Sources, 2017, 340, 1-5.	7.8	133
8	Ultrasmall fluorescent silver nanoclusters: Protein adsorption and its effects on cellular responses. Nano Research, 2012, 5, 531-542.	10.4	129
9	Fabrication of Conductive 3D Gold ontaining Microstructures via Direct Laser Writing. Advanced Materials, 2016, 28, 3592-3595.	21.0	127
10	UVâ€Triggered Polymerization, Deposition, and Patterning of Plant Phenolic Compounds. Advanced Functional Materials, 2017, 27, 1700127.	14.9	111
11	High photostability and enhanced fluorescence of gold nanoclusters by silver doping. Nanoscale, 2012, 4, 7624.	5.6	102
12	Pd-complex driven formation of single-chain nanoparticles. Polymer Chemistry, 2015, 6, 4358-4365.	3.9	90
13	Photoâ€Patterning of Nonâ€Fouling Polymers and Biomolecules on Paper. Advanced Materials, 2014, 26, 4087-4092.	21.0	79
14	Temperature Responsive Cellulose- <i>graft</i> Copolymers via Cellulose Functionalization in an Ionic Liquid and RAFT Polymerization. Biomacromolecules, 2014, 15, 2563-2572.	5.4	79
15	Laser- and UV-assisted modification of polystyrene surfaces for control of protein adsorption and cell adhesion. Applied Surface Science, 2009, 255, 5453-5457.	6.1	71
16	Preparation of Reactive Threeâ€Dimensional Microstructures via Direct Laser Writing and Thiolâ€ene Chemistry. Macromolecular Rapid Communications, 2013, 34, 335-340.	3.9	69
17	<i>In Operando</i> Synchrotron Diffraction and <i>in Operando</i> X-ray Absorption Spectroscopy Investigations of Orthorhombic V ₂ O ₅ Nanowires as Cathode Materials for Mg-Ion Batteries. Journal of the American Chemical Society, 2019, 141, 2305-2315.	13.7	69
18	Synthesis of Yellow-Emitting Platinum Nanoclusters by Ligand Etching. Journal of Physical Chemistry C, 2012, 116, 6047-6051.	3.1	64

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19	Photochemical Generation of Light Responsive Surfaces. Advanced Functional Materials, 2013, 23, 4011-4019.	14.9	58
20	Elucidating the energy storage mechanism of ZnMn ₂ O ₄ as promising anode for Li-ion batteries. Journal of Materials Chemistry A, 2018, 6, 19381-19392.	10.3	57
21	Ligand effect on the size, valence state and red/near infrared photoluminescence of bidentate thiol gold nanoclusters. Nanoscale, 2014, 6, 8091-8099.	5.6	56
22	Zwitterion functionalized gold nanoclusters for multimodal near infrared fluorescence and photoacoustic imaging. APL Materials, 2017, 5, .	5.1	52
23	Benzylguanine Thiol Self-Assembled Monolayers for the Immobilization of SNAP-tag Proteins on Microcontact-Printed Surface Structures. Langmuir, 2010, 26, 6097-6101.	3.5	50
24	Surface Grafting via Photoâ€Induced Copperâ€Mediated Radical Polymerization at Extremely Low Catalyst Concentrations. Macromolecular Rapid Communications, 2015, 36, 1681-1686.	3.9	50
25	Modular Ligation of Thioamide Functional Peptides onto Solid Cellulose Substrates. Advanced Functional Materials, 2012, 22, 3853-3864.	14.9	46
26	Spatially Controlled Photochemical Peptide and Polymer Conjugation on Biosurfaces. Biomacromolecules, 2013, 14, 4340-4350.	5.4	46
27	High photoluminescence of shortwave infrared-emitting anisotropic surface charged gold nanoclusters. Nanoscale, 2019, 11, 12092-12096.	5.6	44
28	Wavelength selective polymer network formation of end-functional star polymers. Chemical Communications, 2016, 52, 1975-1978.	4.1	43
29	Dynamic Covalent Chemistry on Surfaces Employing Highly Reactive Cyclopentadienyl Moieties. Advanced Materials, 2011, 23, 4435-4439.	21.0	42
30	Surface analytical approaches to reliably characterize lithium ion battery electrodes. Surface and Interface Analysis, 2018, 50, 43-51.	1.8	42
31	Selective oxidation of propylene to acrolein by hydrothermally synthesized bismuth molybdates. Applied Catalysis A: General, 2014, 482, 145-156.	4.3	41
32	Adaptable bioinspired special wetting surface for multifunctional oil/water separation. Scientific Reports, 2017, 7, 39970.	3.3	40
33	Organocatalyzed Photoâ€Atom Transfer Radical Polymerization of Methacrylic Acid in Continuous Flow and Surface Grafting. Macromolecular Rapid Communications, 2017, 38, 1700423.	3.9	39
34	Bismuth Molybdate Catalysts Prepared by Mild Hydrothermal Synthesis: Influence of pH on the Selective Oxidation of Propylene. Catalysts, 2015, 5, 1554-1573.	3.5	38
35	Controlled radical polymerization and in-depth mass-spectrometric characterization of poly(ionic) Tj ETQq1 1 0.7	84314 rgB 3.9	ST /Qverlock
36	Photo-Sensitive RAFT-Agents for Advanced Microparticle Design. Macromolecules, 2013, 46, 6858-6872.	4.8	37

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37	Reversible Li ⁺ Storage in a LiMnTiO ₄ Spinel and Its Structural Transition Mechanisms. Journal of Physical Chemistry C, 2014, 118, 12608-12616.	3.1	37
38	Macromolecular Surface Design: Photopatterning of Functional Stable Nitrile Oxides. Angewandte Chemie - International Edition, 2015, 54, 5777-5783.	13.8	37
39	One-step synthesis of bismuth molybdate catalysts via flame spray pyrolysis for the selective oxidation of propylene to acrolein. Chemical Communications, 2014, 50, 15404-15406.	4.1	36
40	Are Functional Groups Beneficial or Harmful on the Electrochemical Performance of Activated Carbon Electrodes?. Journal of the Electrochemical Society, 2019, 166, A1004-A1014.	2.9	36
41	Electrochemical and structural investigations of different polymorphs of TiO2 in magnesium and hybrid lithium/magnesium batteries. Electrochimica Acta, 2018, 277, 20-29.	5.2	35
42	Control of wettability of hydrogenated amorphous carbon thin films by laser-assisted micro- and nanostructuring. Applied Surface Science, 2011, 257, 7907-7912.	6.1	34
43	New Approaches for Bottom-Up Assembly of Tobacco Mosaic Virus-Derived Nucleoprotein Tubes on Defined Patterns on Silica- and Polymer-Based Substrates. Langmuir, 2012, 28, 14867-14877.	3.5	34
44	The Multisensor Array Based on Grown-On-Chip Zinc Oxide Nanorod Network for Selective Discrimination of Alcohol Vapors at Sub-ppm Range. Sensors, 2019, 19, 4265.	3.8	34
45	A facile avenue to conductive polymer brushes via cyclopentadiene–maleimide Diels–Alder ligation. Chemical Communications, 2013, 49, 8623.	4.1	33
46	Biomimetic Dopamineâ€Diels–Alder Switches. Macromolecular Rapid Communications, 2013, 34, 640-644.	3.9	33
47	Singleâ€Molecule Encapsulation: A Straightforward Route to Highly Stable and Printable Enzymes. Small, 2016, 12, 1716-1722.	10.0	32
48	Impact of particle size, oxidation state and capping agent of different cerium dioxide nanoparticles on the phosphate-induced transformations at different pH and concentration. PLoS ONE, 2019, 14, e0217483.	2.5	32
49	Microplotter-Printed On-Chip Combinatorial Library of Ink-Derived Multiple Metal Oxides as an "Electronic Olfaction―Unit. ACS Applied Materials & Interfaces, 2020, 12, 56135-56150.	8.0	32
50	Structural and optical properties of size controlled Si nanocrystals in Si3N4 matrix: The nature of photoluminescence peak shift. Journal of Applied Physics, 2013, 114, .	2.5	31
51	Soot and hydrocarbon oxidation over vanadia-based SCR catalysts. Catalysis Today, 2015, 258, 461-469.	4.4	31
52	Bioinspired Strategy for Controlled Polymerization and Photopatterning of Plant Polyphenols. Chemistry of Materials, 2018, 30, 1937-1946.	6.7	30
53	Siteâ€5pecific Surface Functionalization via Microchannel Cantilever Spotting (µCS): Comparison between Azide–Alkyne and Thiol–Alkyne Click Chemistry Reactions. Small, 2018, 14, e1800131. 	10.0	29
54	Understanding the Lithium Storage Mechanism in Core–Shell Fe ₂ O ₃ @C Hollow Nanospheres Derived from Metal–Organic Frameworks: An In operando Synchrotron Radiation Diffraction and in operando X-ray Absorption Spectroscopy Study. Chemistry of Materials, 2019, 31, 5633-5645.	6.7	28

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55	Enhancing the gas selectivity of single-crystal SnO2:Pt thin-film chemiresistor microarray by SiO2 membrane coating. Sensors and Actuators B: Chemical, 2013, 185, 59-69.	7.8	27
56	Laser-Grafted Molecularly Imprinted Polymers for the Detection of Histamine from Organocatalyzed Atom Transfer Radical Polymerization. Macromolecules, 2019, 52, 2304-2313.	4.8	27
57	Chemical vapor deposited polymer layer for efficient passivation of planar perovskite solar cells. Journal of Materials Chemistry A, 2020, 8, 20122-20132.	10.3	27
58	Modular design of glyco-microspheres via mild pericyclic reactions and their quantitative analysis. Polymer Chemistry, 2012, 3, 2605.	3.9	26
59	Photoâ€Induced Functionalization of Spherical and Planar Surfaces via Caged Thioaldehyde Endâ€Functional Polymers. Advanced Functional Materials, 2014, 24, 5649-5661.	14.9	25
60	NIRâ€Emitting Gold Nanoclusters–Modified Gelatin Nanoparticles as a Bioimaging Agent in Tissue. Advanced Healthcare Materials, 2019, 8, e1900993.	7.6	24
61	Li–Si thin films for battery applications produced by ion-beam co-sputtering. RSC Advances, 2015, 5, 7192-7195.	3.6	23
62	A detailed surface analytical study of degradation processes in (meth)acrylic polymers. Journal of Polymer Science Part A, 2012, 50, 1801-1811.	2.3	22
63	Polymer Functional Nanodiamonds by Light-Induced Ligation. Macromolecules, 2016, 49, 1712-1721.	4.8	21
64	Understanding the lithiation/delithiation process in SnP2O7 anode material for lithium-ion batteries. Electrochimica Acta, 2017, 252, 446-452.	5.2	21
65	Engineering Nitroxide Functional Surfaces Using Bioinspired Adhesion. Langmuir, 2018, 34, 3264-3274.	3.5	21
66	Activation and degradation of electrospun LiFePO4 battery cathodes. Journal of Power Sources, 2018, 396, 386-394.	7.8	21
67	Ambient Temperature Ligation of Diene Functional Polymer and Peptide Strands onto Cellulose via Photochemical and Thermal Protocols. Macromolecular Rapid Communications, 2014, 35, 1121-1127.	3.9	19
68	Spatial separation of photogenerated electron–hole pairs in solution-grown ZnO tandem n–p core–shell nanowire arrays toward highly sensitive photoelectrochemical detection of hydrogen peroxide. Journal of Materials Chemistry A, 2017, 5, 14397-14405.	10.3	19
69	MnO ₂ and Reduced Graphene Oxide as Bifunctional Electrocatalysts for Li–O ₂ Batteries. ACS Applied Energy Materials, 2019, 2, 7121-7131.	5.1	19
70	Spatially controlled cell adhesion on three-dimensional substrates. Biomedical Microdevices, 2010, 12, 787-795.	2.8	18
71	Light-induced modification of silver nanoparticles with functional polymers. Chemical Communications, 2014, 50, 4430-4433.	4.1	18
72	ATRP-based polymers with modular ligation points under thermal and thermomechanical stress. Polymer Chemistry, 2015, 6, 2854-2868.	3.9	18

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73	Direct Mapping of RAFT Controlled Macromolecular Growth on Surfaces via Single Molecule Force Spectroscopy. ACS Macro Letters, 2016, 5, 498-503.	4.8	18
74	Development of scalable and versatile nanomaterial libraries for nanosafety studies: polyvinylpyrrolidone (PVP) capped metal oxide nanoparticles. RSC Advances, 2017, 7, 3894-3906.	3.6	18
75	Chemically reprogrammable metal organic frameworks (MOFs) based on Diels–Alder chemistry. Chemical Communications, 2017, 53, 11461-11464.	4.1	18
76	Surface analytical characterization of LiNi _{0.8â€<i>y</i>} Mn _{<i>y</i>} Co _{0.2} O ₂ (0Ââ‰Â <i>y</i> Ââ% compounds for lithiumâ€ion battery electrodes. Surface and Interface Analysis, 2018, 50, 1132-1137.	₀ÂQA)	18
77	A facile one-pot route to poly(carboxybetaine acrylamide) functionalized SWCNTs. Chemical Communications, 2013, 49, 6734.	4.1	17
78	Fusing Catechol-Driven Surface Anchoring with Rapid Hetero Diels–Alder Ligation. ACS Macro Letters, 2014, 3, 1169-1173.	4.8	17
79	Solution-processed amorphous yttrium aluminium oxide YAl _x O _y and aluminum oxide Al _x O _y , and their functional dielectric properties and performance in thin-film transistors. Journal of Materials Chemistry C, 2020, 8, 8521-8530.	5.5	17
80	In Situ X-ray Diffraction and X-ray Absorption Spectroscopic Studies of a Lithium-Rich Layered Positive Electrode Material: Comparison of Composite and Core–Shell Structures. ACS Applied Materials & Interfaces, 2020, 12, 13852-13868.	8.0	17
81	Protein Microarray Immobilization via Epoxide Ringâ€Opening by Thiol, Amine, and Azide. Advanced Materials Interfaces, 2021, 8, 2002117.	3.7	17
82	Cucurbit[<i>n</i>]uril-Immobilized Sensor Arrays for Indicator-Displacement Assays of Small Bioactive Metabolites. ACS Applied Nano Materials, 2021, 4, 4676-4687.	5.0	17
83	Structural and chemical characterization of SnO2-based nanoparticles as electrode material in Li-ion batteries. Journal of Materials Science, 2012, 47, 4383-4391.	3.7	16
84	A Facile Route to Boronic Acid Functional Polymeric Microspheres via Epoxide Ring Opening. Macromolecular Rapid Communications, 2012, 33, 1108-1113.	3.9	15
85	Controlling biofilm formation with nitroxide functional surfaces. Polymer Chemistry, 2019, 10, 4252-4258.	3.9	15
86	Influence of the Spatial Conformation of Charged Ligands on the Optical Properties of Gold Nanoclusters. Journal of Physical Chemistry C, 2019, 123, 26705-26717.	3.1	15
87	Surface Functionalization and Patterning by Multifunctional Resorcinarenes. ACS Applied Materials & Interfaces, 2018, 10, 39268-39278.	8.0	14
88	Solid-phase combinatorial synthesis using microarrays of microcompartments with light-induced on-chip cell screening. Materials Today Bio, 2019, 3, 100022.	5.5	13
89	Synthesis, oxide formation, properties and thin film transistor properties of yttrium and aluminium oxide thin films employing a molecular-based precursor route. RSC Advances, 2019, 9, 31386-31397.	3.6	13

90 Laser-assisted structuring and modification of LiCoO 2 thin films. , 2009, , .

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91	Structure and chemical composition of mixed benzylguanine―and methoxyâ€ŧerminated selfâ€assembled monolayers for immobilization of biomolecules. Surface and Interface Analysis, 2012, 44, 909-913.	1.8	12
92	Ultra-long zinc oxide nanowires and boron doping based on ionic liquid assisted thermal chemical vapor deposition growth. Nanoscale, 2015, 7, 92-97.	5.6	12
93	Polylutidines: Multifunctional Surfaces through Vaporâ€Based Polymerization of Substituted Pyridinophanes. Chemistry - A European Journal, 2017, 23, 13342-13350.	3.3	12
94	2D laser lithography on silicon substrates <i>via</i> photoinduced copper-mediated radical polymerization. Chemical Communications, 2018, 54, 751-754.	4.1	12
95	Thermoresponsive Agarose Based Microparticles for Antibody Separation. Biomacromolecules, 2016, 17, 280-290.	5.4	11
96	A Comparative Study of Thiolâ€īerminated Surface Modification by Click Reactions: Thiolâ€yne Coupling versus Thiolâ€ene Michael Addition. Advanced Materials Interfaces, 2018, 5, 1801343.	3.7	11
97	CMOS-Compatible, Flexible, Intracortical Neural Probes. IEEE Transactions on Biomedical Engineering, 2020, 67, 1366-1376.	4.2	11
98	Maleimide-functionalized poly(2-ethyl-2-oxazoline): synthesis and reactivity. Polymer Chemistry, 2016, 7, 2419-2426.	3.9	10
99	Dual-Gated Microparticles for Switchable Antibody Release. ACS Applied Materials & Interfaces, 2018, 10, 1450-1462.	8.0	10
100	Spatiallyâ€Resolved Multiple Metallopolymer Surfaces by Photolithography. Chemistry - A European Journal, 2018, 24, 18933-18943.	3.3	10
101	Surface-initiated RAFT polymerization from vapor-based polymer coatings. Polymer, 2018, 150, 26-34.	3.8	10
102	Reactive block copolymers for patterned surface immobilization with sub-30 nm spacing. Polymer Chemistry, 2019, 10, 1344-1356.	3.9	10
103	<i>In Operando</i> analysis of the charge storage mechanism in a conversion ZnCo ₂ O ₄ anode and the application in flexible Li-ion batteries. Inorganic Chemistry Frontiers, 2019, 6, 1861-1872.	6.0	10
104	Reversible Diels–Alder and Michael Addition Reactions Enable the Facile Postsynthetic Modification of Metal–Organic Frameworks. Inorganic Chemistry, 2021, 60, 4397-4409.	4.0	9
105	Tailored stoichiometries of silicon carbonitride thin films prepared by combined radio frequency magnetron sputtering and ion beam synthesis. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2005, 23, 1114-1119.	2.1	8
106	Potential and Limitations of Natural Chabazite for Selective Catalytic Reduction of NOx with NH ₃ . Chemie-Ingenieur-Technik, 2013, 85, 632-641.	0.8	8
107	Effect of Protein Adsorption on the Fluorescence of Ultrasmall Gold Nanoclusters. Small, 2014, 10, 1667-1667.	10.0	8
108	pHâ€Responsive Aminomethyl Functionalized Poly(<i>p</i> â€xylylene) Coatings by Chemical Vapor Deposition Polymerization. Macromolecular Chemistry and Physics, 2017, 218, 1600521.	2.2	8

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109	Synthesis and characterization of nanoscale Al–Si–O gradient membranes. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2007, 25, 927-931.	2.1	7
110	Design of Chemically Activated Polymer Microwells by One-Step UV-Lithography for Stem Cell Adhesion. Langmuir, 2010, 26, 2050-2056.	3.5	7
111	Bioinstructive Coatings for Hematopoietic Stem Cell Expansion Based on Chemical Vapor Deposition Copolymerization. Biomacromolecules, 2017, 18, 3089-3098.	5.4	7
112	Evaluation of click chemistry microarrays for immunosensing of alpha-fetoprotein (AFP). Beilstein Journal of Nanotechnology, 2019, 10, 2505-2515.	2.8	7
113	Substrateâ€Independent and Reâ€Writable Surface Patterning by Combining Polydopamine Coatings, Silanization, and Thiolâ€Ene Reaction. Advanced Functional Materials, 2021, 31, 2107716.	14.9	7
114	Direct light-induced (co-)grafting of photoactive polymers to graphitic nanodiamonds. Polymer Chemistry, 2017, 8, 838-842.	3.9	6
115	Dynamic Nitroxide Functional Materials. Chemistry - A European Journal, 2018, 24, 18873-18879.	3.3	6
116	Two-Step Laser Post-Processing for the Surface Functionalization of Additively Manufactured Ti-6Al-4V Parts. Materials, 2020, 13, 4872.	2.9	6
117	Coat formation of surface-active proteins on aqueous surfaces during drying. Colloids and Surfaces B: Biointerfaces, 2014, 123, 53-60.	5.0	5
118	A Photolithographic Approach to Spatially Resolved Cross-Linked Nanolayers. Langmuir, 2015, 31, 3242-3253.	3.5	5
119	Photo-induced copper-mediated (meth)acrylate polymerization towards graphene oxide and reduced graphene oxide modification. European Polymer Journal, 2020, 134, 109810.	5.4	5
120	Surface analytical characterization of SiO2 gradient membrane coatings on gas sensor microarrays. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2003, 21, 1109-1114.	2.1	4
121	Access to Intrinsically Glucosideâ€Based Microspheres with Boron Affinity. Macromolecular Rapid Communications, 2013, 34, 916-921.	3.9	4
122	Thermal transformations of manufactured nanomaterials as a proposed proxy for ageing. Environmental Science: Nano, 2018, 5, 1618-1627.	4.3	4
123	Photoiniferter surface grafting of poly(methyl acrylate) using xanthates. Journal of Polymer Science Part A, 2019, 57, 2002-2007.	2.3	4
124	Replication of Polymerâ€Based Peptide Microarrays by Multiâ€Step Transfer. ChemNanoMat, 2016, 2, 897-903.	2.8	3
125	Reversible Surface Engineering via Nitrone-Mediated Radical Coupling. Langmuir, 2018, 34, 3244-3255.	3.5	3
126	New Li _{0.8} M _{0.1} Ti ₂ (PO ₄) ₃ (M=Co, Mg) Electrode Materials for Lithiumâ€lon Batteries: Inâ€Operando Xâ€Ray Diffraction and Ex Situ Xâ€ray Photoelectron Spectroscopy Investigations. ChemElectroChem, 2020, 7, 3637-3645.	3.4	3

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127	Thioacetateâ€Based Initiators for the Synthesis of Thiolâ€Endâ€Functionalized Poly(2â€oxazoline)s. Macromolecular Rapid Communications, 2020, 41, 2000320.	3.9	2
128	Electronic influence of ultrathin aluminum oxide on the transistor device performance of binary indium/tin oxide films. Journal of Materials Chemistry C, 2022, 10, 5447-5457.	5.5	2
129	Lithium–air battery cathode modification via an unconventional thermal method employing borax. RSC Advances, 2016, 6, 66307-66310.	3.6	1
130	Molecular Changes in Vaporâ€Based Polymer Thin Films Assessed by Characterization of Swelling Properties of Amineâ€Functionalized Poly―p â€xylylene. Macromolecular Chemistry and Physics, 2020, 221, 2000213.	2.2	0
131	Solution synthesis and dielectric properties of alumina thin films: understanding the role of the organic additive in film formation. Dalton Transactions, 2021, 50, 8811-8819.	3.3	0