Vanessa Trouillet

List of Publications by Year
in descending order

131	4,994	116194	120465
papers	citations	36 h-index	65 g-index

134	134	134	8006
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	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.	2.7	2
2	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.	1.6	0
3	Protein Microarray Immobilization via Epoxide Ringâ€Opening by Thiol, Amine, and Azide. Advanced Materials Interfaces, 2021, 8, 2002117.	1.9	17
4	Cucurbit[n]uril-Immobilized Sensor Arrays for Indicator-Displacement Assays of Small Bioactive Metabolites. ACS Applied Nano Materials, 2021, 4, 4676-4687.	2.4	17
5	Reversible Dielsâ€“Alder and Michael Addition Reactions Enable the Facile Postsynthetic Modification of Metalâ€“Organic Frameworks. Inorganic Chemistry, 2021, 60, 4397-4409.	1.9	9
6	Substrateâ€Independent and Reâ€Writable Surface Patterning by Combining Polydopamine Coatings, Silanization, and Thiolâ€Ene Reaction. Advanced Functional Materials, 2021, 31, 2107716.	7.8	7
7	CMOS-Compatible, Flexible, Intracortical Neural Probes. IEEE Transactions on Biomedical Engineering, 2020, 67, 1366-1376.	2.5	11
8	Microplotter-Printed On-Chip Combinatorial Library of Ink-Derived Multiple Metal Oxides as an â€œElectronic Olfactionâ€•Unit. ACS Applied Materials & Interfaces, 2020, 12, 56135-56150.	4.0	32
9	Photo-induced copper-mediated (meth)acrylate polymerization towards graphene oxide and reduced graphene oxide modification. European Polymer Journal, 2020, 134, 109810.	2.6	5
10	Chemical vapor deposited polymer layer for efficient passivation of planar perovskite solar cells. Journal of Materials Chemistry A, 2020, 8, 20122-20132.	5.2	27
11	New Li_{0.8}M_{0.1}Ti₂(PO₄)₃ (M=Co, Mg) Electrode Materials for Lithiumâ€Ion Batteries: Inâ€…Operando Xâ€Ray Diffraction and Ex Situ Xâ€ray Photoelectron Spectroscopy Investigations. ChemElectroChem, 2020, 7, 3637-3645.	1.7	3
12	Thioacetateâ€Based Initiators for the Synthesis of Thiolâ€Endâ€Functionalized Poly(2â€oxazoline)s. Macromolecular Rapid Communications, 2020, 41, 2000320.	2.0	2
13	Two-Step Laser Post-Processing for the Surface Functionalization of Additively Manufactured Ti-6Al-4V Parts. Materials, 2020, 13, 4872.	1.3	6
14	Molecular Changes in Vaporâ€Based Polymer Thin Films Assessed by Characterization of Swelling Properties of Amineâ€Functionalized Polyâ€•p â€xylylene. Macromolecular Chemistry and Physics, 2020, 221, 2000213.	1.1	0
15	Solution-processed amorphous yttrium aluminium oxide YAl_xO_y and aluminum oxide Al_xO_y, and their functional dielectric properties and performance in thin-film transistors. Journal of Materials Chemistry C, 2020, 8, 8521-8530.	2.7	17
16	In Situ X-ray Diffraction and X-ray Absorption Spectroscopic Studies of a Lithium-Rich Layered Positive Electrode Material: Comparison of Composite and Coreâ€“Shell Structures. ACS Applied Materials & Interfaces, 2020, 12, 13852-13868.	4.0	17
17	Understanding the Lithium Storage Mechanism in Coreâ€“Shell Fe₂O₃@C Hollow Nanospheres Derived from Metalâ€“Organic Frameworks: An In operando Synchrotron Radiation Diffraction and in operando X-ray Absorption Spectroscopy Study. Chemistry of Materials, 2019, 31, 5633-5645.	3.2	28
18	Controlling biofilm formation with nitroxide functional surfaces. Polymer Chemistry, 2019, 10, 4252-4258.	1.9	15

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19	Influence of the Spatial Conformation of Charged Ligands on the Optical Properties of Gold Nanoclusters. Journal of Physical Chemistry C, 2019, 123, 26705-26717.	1.5	15
20	MnO₂ and Reduced Graphene Oxide as Bifunctional Electrocatalysts for Liâ€“O₂ Batteries. ACS Applied Energy Materials, 2019, 2, 7121-7131.	2.5	19
21	Solid-phase combinatorial synthesis using microarrays of microcompartments with light-induced on-chip cell screening. Materials Today Bio, 2019, 3, 100022.	2.6	13
22	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.	2.1	34
23	Reactive block copolymers for patterned surface immobilization with sub-30 nm spacing. Polymer Chemistry, 2019, 10, 1344-1356.	1.9	10
24	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.	1.1	32
25	High photoluminescence of shortwave infrared-emitting anisotropic surface charged gold nanoclusters. Nanoscale, 2019, 11, 12092-12096.	2.8	44
26	In Operando analysis of the charge storage mechanism in a conversion ZnCo₂O₄ anode and the application in flexible Li-ion batteries. Inorganic Chemistry Frontiers, 2019, 6, 1861-1872.	3.0	10
27	Photoiniferter surface grafting of poly(methyl acrylate) using xanthates. Journal of Polymer Science Part A, 2019, 57, 2002-2007.	2.5	4
28	Are Functional Groups Beneficial or Harmful on the Electrochemical Performance of Activated Carbon Electrodes?. Journal of the Electrochemical Society, 2019, 166, A1004-A1014.	1.3	36
29	Laser-Grafted Molecularly Imprinted Polymers for the Detection of Histamine from Organocatalyzed Atom Transfer Radical Polymerization. Macromolecules, 2019, 52, 2304-2313.	2.2	27
30	NIRâ€Emitting Gold Nanoclustersâ€“Modified Gelatin Nanoparticles as a Bioimaging Agent in Tissue. Advanced Healthcare Materials, 2019, 8, e1900993.	3.9	24
31	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.	1.7	13
32	Evaluation of click chemistry microarrays for immunosensing of alpha-fetoprotein (AFP). Beilstein Journal of Nanotechnology, 2019, 10, 2505-2515.	1.5	7
33	In Operando Synchrotron Diffraction and in Operando X-ray Absorption Spectroscopy Investigations of Orthorhombic V₂O₅ Nanowires as Cathode Materials for Mg-Ion Batteries. Journal of the American Chemical Society, 2019, 141, 2305-2315.	6.6	69
34	Reversible Surface Engineering via Nitrone-Mediated Radical Coupling. Langmuir, 2018, 34, 3244-3255.	1.6	3
35	Bioinspired Strategy for Controlled Polymerization and Photopatterning of Plant Polyphenols. Chemistry of Materials, 2018, 30, 1937-1946.	3.2	30
36	Engineering Nitroxide Functional Surfaces Using Bioinspired Adhesion. Langmuir, 2018, 34, 3264-3274.	1.6	21

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37	Siteâ€Specific Surface Functionalization via Microchannel Cantilever Spotting (ÂµCS): Comparison between Azideâ€“Alkyne and Thiolâ€“Alkyne Click Chemistry Reactions. Small, 2018, 14, e1800131.	5.2	29
38	Surface analytical characterization of LiNi_{0.8â€y}Mn_yCo_{0.2}O₂ (0Â‰ÂyÂ‰Â0.4) compounds for lithiumâ€ion battery electrodes. Surface and Interface Analysis, 2018, 50, 1132-1137.	0.4	18
39	2D laser lithography on silicon substrates via photoinduced copper-mediated radical polymerization. Chemical Communications, 2018, 54, 751-754.	2.2	12
40	Electrochemical and structural investigations of different polymorphs of TiO2 in magnesium and hybrid lithium/magnesium batteries. Electrochimica Acta, 2018, 277, 20-29.	2.6	35
41	Dual-Gated Microparticles for Switchable Antibody Release. ACS Applied Materials & Interfaces, 2018, 10, 1450-1462.	4.0	10
42	Surface analytical approaches to reliably characterize lithium ion battery electrodes. Surface and Interface Analysis, 2018, 50, 43-51.	0.8	42
43	Spatiallyâ€Resolved Multiple Metallopolymer Surfaces by Photolithography. Chemistry - A European Journal, 2018, 24, 18933-18943.	1.7	10
44	A Comparative Study of Thiolâ€Terminated Surface Modification by Click Reactions: Thiolâ€yne Coupling versus Thiolâ€ene Michael Addition. Advanced Materials Interfaces, 2018, 5, 1801343.	1.9	11
45	Dynamic Nitroxide Functional Materials. Chemistry - A European Journal, 2018, 24, 18873-18879.	1.7	6
46	Surface Functionalization and Patterning by Multifunctional Resorcinarenes. ACS Applied Materials & Interfaces, 2018, 10, 39268-39278.	4.0	14
47	Thermal transformations of manufactured nanomaterials as a proposed proxy for ageing. Environmental Science: Nano, 2018, 5, 1618-1627.	2.2	4
48	Surface-initiated RAFT polymerization from vapor-based polymer coatings. Polymer, 2018, 150, 26-34.	1.8	10
49	Elucidating the energy storage mechanism of ZnMn₂O₄ as promising anode for Li-ion batteries. Journal of Materials Chemistry A, 2018, 6, 19381-19392.	5.2	57
50	Activation and degradation of electrospun LiFePO4 battery cathodes. Journal of Power Sources, 2018, 396, 386-394.	4.0	21
51	Direct light-induced (co-)grafting of photoactive polymers to graphitic nanodiamonds. Polymer Chemistry, 2017, 8, 838-842.	1.9	6
52	pHâ€Responsive Aminomethyl Functionalized Poly(p â€xylylene) Coatings by Chemical Vapor Deposition Polymerization. Macromolecular Chemistry and Physics, 2017, 218, 1600521.	1.1	8
53	Zwitterion functionalized gold nanoclusters for multimodal near infrared fluorescence and photoacoustic imaging. APL Materials, 2017, 5, .	2.2	52
54	UVâ€Triggered Polymerization, Deposition, and Patterning of Plant Phenolic Compounds. Advanced Functional Materials, 2017, 27, 1700127.	7.8	111

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55	Spatial separation of photogenerated electronâ€“hole pairs in solution-grown ZnO tandem nâ€“p coreâ€“shell nanowire arrays toward highly sensitive photoelectrochemical detection of hydrogen peroxide. Journal of Materials Chemistry A, 2017, 5, 14397-14405.	5.2	19
56	Polylutidines: Multifunctional Surfaces through Vaporâ€Based Polymerization of Substituted Pyridinophanes. Chemistry - A European Journal, 2017, 23, 13342-13350.	1.7	12
57	Development of scalable and versatile nanomaterial libraries for nanosafety studies: polyvinylpyrrolidone (PVP) capped metal oxide nanoparticles. RSC Advances, 2017, 7, 3894-3906.	1.7	18
58	Adaptable bioinspired special wetting surface for multifunctional oil/water separation. Scientific Reports, 2017, 7, 39970.	1.6	40
59	Chemically reprogrammable metal organic frameworks (MOFs) based on Dielsâ€“Alder chemistry. Chemical Communications, 2017, 53, 11461-11464.	2.2	18
60	Organocatalyzed Photoâ€Atom Transfer Radical Polymerization of Methacrylic Acid in Continuous Flow and Surface Grafting. Macromolecular Rapid Communications, 2017, 38, 1700423.	2.0	39
61	Understanding the lithiation/delithiation process in SnP2O7 anode material for lithium-ion batteries. Electrochimica Acta, 2017, 252, 446-452.	2.6	21
62	Bioinstructive Coatings for Hematopoietic Stem Cell Expansion Based on Chemical Vapor Deposition Copolymerization. Biomacromolecules, 2017, 18, 3089-3098.	2.6	7
63	Investigation of binder distribution in graphite anodes for lithium-ion batteries. Journal of Power Sources, 2017, 340, 1-5.	4.0	133
64	Lithiumâ€“air battery cathode modification via an unconventional thermal method employing borax. RSC Advances, 2016, 6, 66307-66310.	1.7	1
65	Singleâ€Molecule Encapsulation: A Straightforward Route to Highly Stable and Printable Enzymes. Small, 2016, 12, 1716-1722.	5.2	32
66	Fabrication of Conductive 3D Goldâ€Containing Microstructures via Direct Laser Writing. Advanced Materials, 2016, 28, 3592-3595.	11.1	127
67	Replication of Polymerâ€Based Peptide Microarrays by Multiâ€Step Transfer. ChemNanoMat, 2016, 2, 897-903.	1.5	3
68	Direct Mapping of RAFT Controlled Macromolecular Growth on Surfaces via Single Molecule Force Spectroscopy. ACS Macro Letters, 2016, 5, 498-503.	2.3	18
69	Thermoresponsive Agarose Based Microparticles for Antibody Separation. Biomacromolecules, 2016, 17, 280-290.	2.6	11
70	Wavelength selective polymer network formation of end-functional star polymers. Chemical Communications, 2016, 52, 1975-1978.	2.2	43
71	Polymer Functional Nanodiamonds by Light-Induced Ligation. Macromolecules, 2016, 49, 1712-1721.	2.2	21
72	Maleimide-functionalized poly(2-ethyl-2-oxazoline): synthesis and reactivity. Polymer Chemistry, 2016, 7, 2419-2426.	1.9	10

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73	Controlled radical polymerization and in-depth mass-spectrometric characterization of poly(ionic) Tj ETQq1 1 0.784314 rgBT /Overloc	1.9	38
74	Surface Grafting via Photoâ€Induced Copperâ€Mediated Radical Polymerization at Extremely Low Catalyst Concentrations. Macromolecular Rapid Communications, 2015, 36, 1681-1686.	2.0	50
75	Bismuth Molybdate Catalysts Prepared by Mild Hydrothermal Synthesis: Influence of pH on the Selective Oxidation of Propylene. Catalysts, 2015, 5, 1554-1573.	1.6	38
76	ATRP-based polymers with modular ligation points under thermal and thermomechanical stress. Polymer Chemistry, 2015, 6, 2854-2868.	1.9	18
77	A Photolithographic Approach to Spatially Resolved Cross-Linked Nanolayers. Langmuir, 2015, 31, 3242-3253.	1.6	5
78	Pd-complex driven formation of single-chain nanoparticles. Polymer Chemistry, 2015, 6, 4358-4365.	1.9	90
79	Macromolecular Surface Design: Photopatterning of Functional Stable Nitrile Oxides. Angewandte Chemie - International Edition, 2015, 54, 5777-5783.	7.2	37
80	Soot and hydrocarbon oxidation over vanadia-based SCR catalysts. Catalysis Today, 2015, 258, 461-469.	2.2	31
81	Liâ€“Si thin films for battery applications produced by ion-beam co-sputtering. RSC Advances, 2015, 5, 7192-7195.	1.7	23
82	Ultra-long zinc oxide nanowires and boron doping based on ionic liquid assisted thermal chemical vapor deposition growth. Nanoscale, 2015, 7, 92-97.	2.8	12
83	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.	2.2	36
84	Coat formation of surface-active proteins on aqueous surfaces during drying. Colloids and Surfaces B: Biointerfaces, 2014, 123, 53-60.	2.5	5
85	Ambient Temperature Ligation of Diene Functional Polymer and Peptide Strands onto Cellulose via Photochemical and Thermal Protocols. Macromolecular Rapid Communications, 2014, 35, 1121-1127.	2.0	19
86	Photoâ€Patterning of Nonâ€Fouling Polymers and Biomolecules on Paper. Advanced Materials, 2014, 26, 4087-4092.	11.1	79
87	Effect of Protein Adsorption on the Fluorescence of Ultrasmall Gold Nanoclusters. Small, 2014, 10, 1667-1667.	5.2	8
88	Fusing Catechol-Driven Surface Anchoring with Rapid Hetero Dielsâ€“Alder Ligation. ACS Macro Letters, 2014, 3, 1169-1173.	2.3	17
89	Photoâ€Induced Functionalization of Spherical and Planar Surfaces via Caged Thioaldehyde Endâ€Functional Polymers. Advanced Functional Materials, 2014, 24, 5649-5661.	7.8	25
90	Temperature Responsive Cellulose-graft-Copolymers via Cellulose Functionalization in an Ionic Liquid and RAFT Polymerization. Biomacromolecules, 2014, 15, 2563-2572.	2.6	79

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91	Light-induced modification of silver nanoparticles with functional polymers. Chemical Communications, 2014, 50, 4430-4433.	2.2	18
92	Ligand effect on the size, valence state and red/near infrared photoluminescence of bidentate thiol gold nanoclusters. Nanoscale, 2014, 6, 8091-8099.	2.8	56
93	Reversible Li⁺ Storage in a LiMnTiO₄ Spinel and Its Structural Transition Mechanisms. Journal of Physical Chemistry C, 2014, 118, 12608-12616.	1.5	37
94	Selective oxidation of propylene to acrolein by hydrothermally synthesized bismuth molybdates. Applied Catalysis A: General, 2014, 482, 145-156.	2.2	41
95	A facile avenue to conductive polymer brushes via cyclopentadieneâ€“maleimide Dielsâ€“Alder ligation. Chemical Communications, 2013, 49, 8623.	2.2	33
96	Potential and Limitations of Natural Chabazite for Selective Catalytic Reduction of NOx with NH₃. Chemie-Ingenieur-Technik, 2013, 85, 632-641.	0.4	8
97	Spatially Controlled Photochemical Peptide and Polymer Conjugation on Biosurfaces. Biomacromolecules, 2013, 14, 4340-4350.	2.6	46
98	Access to Intrinsically Glucosideâ€Based Microspheres with Boron Affinity. Macromolecular Rapid Communications, 2013, 34, 916-921.	2.0	4
99	Preparation of Reactive Threeâ€Dimensional Microstructures via Direct Laser Writing and Thiolâ€ene Chemistry. Macromolecular Rapid Communications, 2013, 34, 335-340.	2.0	69
100	A facile one-pot route to poly(carboxybetaine acrylamide) functionalized SWCNTs. Chemical Communications, 2013, 49, 6734.	2.2	17
101	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.	4.0	27
102	Grafting Efficiency of Synthetic Polymers onto Biomaterials: A Comparative Study of Grafting-from versus Grafting-to. Biomacromolecules, 2013, 14, 64-74.	2.6	137
103	Photo-Sensitive RAFT-Agents for Advanced Microparticle Design. Macromolecules, 2013, 46, 6858-6872.	2.2	37
104	Structural and optical properties of size controlled Si nanocrystals in Si3N4 matrix: The nature of photoluminescence peak shift. Journal of Applied Physics, 2013, 114, .	1.1	31
105	Biomimetic Dopamineâ€Dielsâ€“Alder Switches. Macromolecular Rapid Communications, 2013, 34, 640-644.	2.0	33
106	Photochemical Generation of Light Responsive Surfaces. Advanced Functional Materials, 2013, 23, 4011-4019.	7.8	58
107	Synthesis of Yellow-Emitting Platinum Nanoclusters by Ligand Etching. Journal of Physical Chemistry C, 2012, 116, 6047-6051.	1.5	64
108	High photostability and enhanced fluorescence of gold nanoclusters by silver doping. Nanoscale, 2012, 4, 7624.	2.8	102

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109	Modular design of glyco-microspheres via mild pericyclic reactions and their quantitative analysis. Polymer Chemistry, 2012, 3, 2605.	1.9	26
110	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.	1.6	34
111	Ultrasmall fluorescent silver nanoclusters: Protein adsorption and its effects on cellular responses. Nano Research, 2012, 5, 531-542.	5.8	129
112	Structure and chemical composition of mixed benzylguanineâ€•and methoxyâ€terminated selfâ€assembled monolayers for immobilization of biomolecules. Surface and Interface Analysis, 2012, 44, 909-913.	0.8	12
113	Effect of Protein Adsorption on the Fluorescence of Ultrasmall Gold Nanoclusters. Small, 2012, 8, 661-665.	5.2	159
114	A detailed surface analytical study of degradation processes in (meth)acrylic polymers. Journal of Polymer Science Part A, 2012, 50, 1801-1811.	2.5	22
115	A Facile Route to Boronic Acid Functional Polymeric Microspheres via Epoxide Ring Opening. Macromolecular Rapid Communications, 2012, 33, 1108-1113.	2.0	15
116	Modular Ligation of Thioamide Functional Peptides onto Solid Cellulose Substrates. Advanced Functional Materials, 2012, 22, 3853-3864.	7.8	46
117	Microwave-assisted rapid synthesis of luminescent gold nanoclusters for sensing Hg2+ in living cells using fluorescence imaging. Nanoscale, 2012, 4, 4155.	2.8	211
118	Structural and chemical characterization of SnO2-based nanoparticles as electrode material in Li-ion batteries. Journal of Materials Science, 2012, 47, 4383-4391.	1.7	16
119	Facile preparation of water-soluble fluorescent gold nanoclusters for cellular imaging applications. Nanoscale, 2011, 3, 2009.	2.8	278
120	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.	1.5	365
121	Oneâ€Pot Synthesis of Nearâ€Infrared Fluorescent Gold Clusters for Cellular Fluorescence Lifetime Imaging. Small, 2011, 7, 2614-2620.	5.2	334
122	Dynamic Covalent Chemistry on Surfaces Employing Highly Reactive Cyclopentadienyl Moieties. Advanced Materials, 2011, 23, 4435-4439.	11.1	42
123	Control of wettability of hydrogenated amorphous carbon thin films by laser-assisted micro- and nanostructuring. Applied Surface Science, 2011, 257, 7907-7912.	3.1	34
124	Design of Chemically Activated Polymer Microwells by One-Step UV-Lithography for Stem Cell Adhesion. Langmuir, 2010, 26, 2050-2056.	1.6	7
125	Spatially controlled cell adhesion on three-dimensional substrates. Biomedical Microdevices, 2010, 12, 787-795.	1.4	18
126	Benzylguanine Thiol Self-Assembled Monolayers for the Immobilization of SNAP-tag Proteins on Microcontact-Printed Surface Structures. Langmuir, 2010, 26, 6097-6101.	1.6	50

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127	Laser-assisted structuring and modification of LiCoO 2 thin films. , 2009, , .		12
128	Laser- and UV-assisted modification of polystyrene surfaces for control of protein adsorption and cell adhesion. Applied Surface Science, 2009, 255, 5453-5457.	3.1	71
129	Synthesis and characterization of nanoscale Alâ€“Siâ€“O gradient membranes. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2007, 25, 927-931.	0.9	7
130	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.	0.9	8
131	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.	0.9	4