Colm O'Dwyer

List of Publications by Year
in descending order

242	7,179	76294 40	76872 74
papers	citations	h-index	g-index

252	252	252	10483
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	High-Performance Germanium Nanowire-Based Lithium-Ion Battery Anodes Extending over 1000 Cycles Through in Situ Formation of a Continuous Porous Network. Nano Letters, 2014, 14, 716-723.	4.5	317
2	Lightâ€Emitting Diodes with Semiconductor Nanocrystals. Angewandte Chemie - International Edition, 2008, 47, 6538-6549.	7.2	305
3	Evaluating the performance of nanostructured materials as lithium-ion battery electrodes. Nano Research, 2014, 7, 1-62.	5.8	292
4	Artificial opal photonic crystals and inverse opal structures â€“ fundamentals and applications from optics to energy storage. Journal of Materials Chemistry C, 2015, 3, 6109-6143.	2.7	254
5	Recent progress in theoretical and computational investigations of Li-ion battery materials and electrolytes. Physical Chemistry Chemical Physics, 2015, 17, 4799-4844.	1.3	237
6	The optical response of nanostructured surfaces and the composite diffracted evanescent wave model. Nature Physics, 2006, 2, 262-267.	6.5	217
7	Bottom-up growth of fully transparent contact layers of indium tin oxide nanowires for light-emitting devices. Nature Nanotechnology, 2009, 4, 239-244.	15.6	157
8	Structuring materials for lithium-ion batteries: advancements in nanomaterial structure, composition, and defined assembly on cell performance. Journal of Materials Chemistry A, 2014, 2, 9433.	5.2	144
9	Synthesis and electrochemical properties of vanadium oxide materials and structures as Li-ion battery positive electrodes. Journal of Power Sources, 2014, 267, 831-873.	4.0	138
10	Nano-Urchin:Â The Formation and Structure of High-Density Spherical Clusters of Vanadium Oxide Nanotubes. Chemistry of Materials, 2006, 18, 3016-3022.	3.2	134
11	Evolution of 3D Printing Methods and Materials for Electrochemical Energy Storage. Advanced Materials, 2020, 32, e2000556.	11.1	134
12	Key scientific challenges in current rechargeable non-aqueous Liâ€“O2 batteries: experiment and theory. Physical Chemistry Chemical Physics, 2014, 16, 12093.	1.3	120
13	Cobalt-based electrode materials for sodium-ion batteries. Chemical Engineering Journal, 2019, 370, 185-207.	6.6	118
14	The Origin of Shape Sensitivity in Palladiumâ€Catalyzed Suzukiâ€“Miyaura Cross Coupling Reactions. Angewandte Chemie - International Edition, 2014, 53, 4142-4145.	7.2	116
15	Metal-assisted chemical etching of silicon and the behavior of nanoscale silicon materials as Li-ion battery anodes. Nano Research, 2015, 8, 1395-1442.	5.8	106
16	Hierarchical NiOâ€“In₂O₃ microflower (3D)/ nanorod (1D) hetero-architecture as a supercapattery electrode with excellent cyclic stability. Journal of Materials Chemistry A, 2016, 4, 4820-4830.	5.2	102
17	Rutile TiO₂ Inverse Opal Anodes for Liâ€Ion Batteries with Long Cycle Life, Highâ€Rate Capability, and High Structural Stability. Advanced Energy Materials, 2017, 7, 1602291.	10.2	93
18	Enhanced Catalytic Activity of High-Index Faceted Palladium Nanoparticles in Suzukiâ€“Miyaura Coupling Due to Efficient Leaching Mechanism. ACS Catalysis, 2014, 4, 3105-3111.	5.5	83

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19	Electrodeposited Structurally Stable V₂O₅ Inverse Opal Networks as High Performance Thin Film Lithium Batteries. ACS Applied Materials & Interfaces, 2015, 7, 27006-27015.	4.0	81
20	Reduced Surfactant Uptake in Three Dimensional Assemblies of VO_x Nanotubes Improves Reversible Li⁺ Intercalation and Charge Capacity. Advanced Functional Materials, 2009, 19, 1736-1745.	7.8	80
21	Covalent Functionalization of Few-Layer Black Phosphorus Using Iodonium Salts and Comparison to Diazonium Modified Black Phosphorus. Chemistry of Materials, 2018, 30, 4667-4674.	3.2	79
22	High capacity binder-free nanocrystalline GeO2 inverse opal anodes for Li-ion batteries with long cycle life and stable cell voltage. Nano Energy, 2018, 43, 11-21.	8.2	78
23	2D and 3D photonic crystal materials for photocatalysis and electrochemical energy storage and conversion. Science and Technology of Advanced Materials, 2016, 17, 563-582.	2.8	77
24	Three-Dimensionally Ordered Hierarchically Porous Tin Dioxide Inverse Opals and Immobilization of Palladium Nanoparticles for Catalytic Applications. Chemistry of Materials, 2013, 25, 4312-4320.	3.2	75
25	Quantifying the Effect of Electronic Conductivity on the Rate Performance of Nanocomposite Battery Electrodes. ACS Applied Energy Materials, 2020, 3, 2966-2974.	2.5	75
26	Reviewâ€"Energy Autonomous Wearable Sensors for Smart Healthcare: A Review. Journal of the Electrochemical Society, 2020, 167, 037516.	1.3	74
27	Life cycle assessment of lithium-air battery cells. Journal of Cleaner Production, 2016, 135, 299-311.	4.6	73
28	Large Block Copolymer Self-Assembly for Fabrication of Subwavelength Nanostructures for Applications in Optics. Nano Letters, 2017, 17, 2973-2978.	4.5	72
29	Solution Processable Metal Oxide Thin Film Deposition and Material Growth for Electronic and Photonic Devices. Advanced Materials Interfaces, 2017, 4, 1600610.	1.9	70
30	Cobalt Phosphate-Based Supercapattery as Alternative Power Source for Implantable Medical Devices. ACS Applied Energy Materials, 2019, 2, 569-578.	2.5	66
31	Vanadate Conformation Variations in Vanadium Pentoxide Nanostructures. Journal of the Electrochemical Society, 2007, 154, K29.	1.3	65
32	Stability, Oxidation, and Shape Evolution of PVP-Capped Pd Nanocrystals. Journal of Physical Chemistry C, 2014, 118, 6522-6530.	1.5	57
33	The Nature of Alkanethiol Self-Assembled Monolayer Adsorption on Sputtered Gold Substrates. Langmuir, 2004, 20, 8172-8182.	1.6	56
34	Ordered 2D Colloidal Photonic Crystals on Gold Substrates by Surfactantâ€Assisted Fastâ€Rate Dip Coating. Small, 2014, 10, 1895-1901.	5.2	55
35	Additive manufacturing for energy storage: Methods, designs and materialÂselection for customizable 3D printed batteries and supercapacitors. Current Opinion in Electrochemistry, 2020, 20, 46-53.	2.5	55
36	Carbon-Coated Honeycomb Ni-Mn-Co-O Inverse Opal: A High Capacity Ternary Transition Metal Oxide Anode for Li-ion Batteries. Scientific Reports, 2017, 7, 42263.	1.6	49

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37	The structural conversion from Î±-AgVO₃to Î²-AgVO₃: Ag nanoparticle decorated nanowires with application as cathode materials for Li-ion batteries. Nanoscale, 2016, 8, 16266-16275.	2.8	47
38	Colorâ€Coded Batteries â€“ Electroâ€Photonic Inverse Opal Materials for Enhanced Electrochemical Energy Storage and Optically Encoded Diagnostics. Advanced Materials, 2016, 28, 5681-5688.	11.1	44
39	Alkane and Alkanethiol Passivation of Halogenated Ge Nanowires. Chemistry of Materials, 2010, 22, 6370-6377.	3.2	42
40	Solid electrolyte interphases at Li-ion battery graphitic anodes in propylene carbonate (PC)-based electrolytes containing FEC, LiBOB, and LiDFOB as additives. Chemical Physics Letters, 2015, 618, 208-213.	1.2	41
41	Evaluating the Surface Chemistry of Black Phosphorus during Ambient Degradation. Langmuir, 2019, 35, 2172-2178.	1.6	41
42	Carbon nanocage supported synthesis of V2O5 nanorods and V2O5/TiO2 nanocomposites for Li-ion batteries. Journal of Materials Chemistry A, 2013, 1, 12568.	5.2	39
43	Long Cycle Life, Highly Ordered SnO₂/GeO₂ Nanocomposite Inverse Opal Anode Materials for Liâ€Ion Batteries. Advanced Functional Materials, 2020, 30, 2005073.	7.8	39
44	Organic Functionalization of Germanium Nanowires using Arenediazonium Salts. Chemistry of Materials, 2011, 23, 1883-1891.	3.2	38
45	Fractal Patterning of Nanoparticles on Polymer Films and Their SERS Capabilities. ACS Applied Materials & Interfaces, 2013, 5, 8655-8662.	4.0	38
46	Germanium Oxide Removal by Citric Acid and Thiol Passivation from Citric Acid-Terminated Ge(100). Langmuir, 2014, 30, 14123-14127.	1.6	37
47	2D and 3D vanadium oxide inverse opals and hollow sphere arrays. CrystEngComm, 2014, 16, 10804-10815.	1.3	37
48	Pseudocapacitance of Î±-CoMoO4 nanoflakes in non-aqueous electrolyte and its bi-functional electro catalytic activity for methanol oxidation. International Journal of Hydrogen Energy, 2015, 40, 16297-16305.	3.8	37
49	Comparing Thermal and Chemical Removal of Nanoparticle Stabilizing Ligands: Effect on Catalytic Activity and Stability. ACS Applied Nano Materials, 2018, 1, 7129-7138.	2.4	37
50	Architected porous metals in electrochemical energy storage. Current Opinion in Electrochemistry, 2020, 21, 201-208.	2.5	37
51	Pattern formation induced by an electric field in a polymerâ€“airâ€“polymer thin film system. Soft Matter, 2012, 8, 6333.	1.2	36
52	Density functional theory calculations for ethylene carbonate-based binary electrolyte mixtures in lithium ion batteries. Current Applied Physics, 2014, 14, 349-354.	1.1	36
53	The Role of Carbonate and Sulfite Additives in Propylene Carbonate-Based Electrolytes on the Formation of SEI Layers at Graphitic Li-Ion Battery Anodes. Journal of the Electrochemical Society, 2014, 161, A1415-A1421.	1.3	36
54	Low-Temperature Ionic Layer Adsorption and Reaction Grown Anatase TiO2 Nanocrystalline Films for Efficient Perovskite Solar Cell and Gas Sensor Applications. Scientific Reports, 2018, 8, 11016.	1.6	36

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55	A facile spin-cast route for cation exchange of multilayer perpendicularly-aligned nanorod assemblies. Nanoscale, 2011, 3, 4580.	2.8	35
56	Self-Seeded Growth of Germanium Nanowires: Coalescence and Ostwald Ripening. Chemistry of Materials, 2013, 25, 215-222.	3.2	34
57	High performance inverse opal Li-ion battery with paired intercalation and conversion mode electrodes. Journal of Materials Chemistry A, 2016, 4, 4448-4456.	5.2	34
58	3D Vanadium Oxide Inverse Opal Growth by Electrodeposition. Journal of the Electrochemical Society, 2015, 162, D605-D612.	1.3	32
59	Gold sensitized sprayed SnO2 nanostructured film for enhanced LPG sensing. Journal of Analytical and Applied Pyrolysis, 2017, 124, 362-368.	2.6	32
60	Natural Carbonized Sugar as a Low-Temperature Ammonia Sensor Material: Experimental, Theoretical, and Computational Studies. ACS Applied Materials & Interfaces, 2017, 9, 43051-43060.	4.0	32
61	Single-crystal micro/nanostructures and thin films of lamellar molybdenum oxide by solid-state pyrolysis of organometallic derivatives of a cyclotriphosphazene. Journal of Solid State Chemistry, 2010, 183, 1595-1603.	1.4	31
62	Growth of Crystalline Copper Silicide Nanowires in High Yield within a High Boiling Point Solvent System. Chemistry of Materials, 2012, 24, 4319-4325.	3.2	31
63	Stability of Ultrathin Nanocomposite Polymer Films Controlled by the Embedding of Gold Nanoparticles. ACS Applied Materials & Interfaces, 2014, 6, 20758-20767.	4.0	31
64	Polycrystalline Vanadium Oxide Nanorods: Growth, Structure and Improved Electrochemical Response as a Li-Ion Battery Cathode Material. Journal of the Electrochemical Society, 2014, 161, A1321-A1329.	1.3	31
65	Synthesis and Characterization of Cyclotriphosphazenes Containing Silicon as Single Solid-State Precursors for the Formation of Silicon/Phosphorus Nanostructured Materials. Inorganic Chemistry, 2008, 47, 11561-11569.	1.9	30
66	One-Step Fabrication of GeSn Branched Nanowires. Chemistry of Materials, 2019, 31, 4016-4024.	3.2	30
67	Anodic Formation and Characterization of Nanoporous InP in Aqueous KOH Electrolytes. Journal of the Electrochemical Society, 2006, 153, G1039.	1.3	28
68	Pore size modulation in electrochemically etched macroporous p-type silicon monitored by FFT impedance spectroscopy and Raman scattering. Physical Chemistry Chemical Physics, 2014, 16, 255-263.	1.3	28
69	Electrochemical investigation of the role of MnO₂nanorod catalysts in water containing and anhydrous electrolytes for Liâ€“O₂battery applications. Physical Chemistry Chemical Physics, 2015, 17, 6748-6759.	1.3	28
70	Examining the Role of Electrolyte and Binders in Determining Discharge Product Morphology and Cycling Performance of Carbon Cathodes in Li-O2Batteries. Journal of the Electrochemical Society, 2016, 163, A43-A49.	1.3	28
71	The formation of nanotubes and nanocoils of molybdenum disulphide. Applied Surface Science, 2007, 253, 5185-5190.	3.1	27
72	Coreâ€“Shell Tin Oxide, Indium Oxide, and Indium Tin Oxide Nanoparticles on Silicon with Tunable Dispersion: Electrochemical and Structural Characteristics as a Hybrid Li-Ion Battery Anode. ACS Applied Materials & Interfaces, 2013, 5, 8195-8202.	4.0	27

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73	Nanoscale Dynamics and Protein Adhesivity of Alkylamine Self-Assembled Monolayers on Graphene. Langmuir, 2013, 29, 7271-7282.	1.6	27
74	Comparative Electrochemical Charge Storage Properties of Bulk and Nanoscale Vanadium Oxide Electrodes. Journal of Solid State Electrochemistry, 2016, 20, 1445-1458.	1.2	27
75	Towards thiol functionalization of vanadium pentoxide nanotubes using gold nanoparticles. Materials Research Bulletin, 2007, 42, 674-685.	2.7	26
76	The influence of carrier density and doping type on lithium insertion and extraction processes at silicon surfaces. Electrochimica Acta, 2014, 135, 356-367.	2.6	26
77	V₂O₃ Polycrystalline Nanorod Cathode Materials for Liâ€Ion Batteries with Long Cycle Life and High Capacity Retention. ChemElectroChem, 2017, 4, 2037-2044.	1.7	26
78	Metal-free heterogeneous and mesoporous biogenic graphene-oxide nanoparticle-catalyzed synthesis of bioactive benzylpyrazolyl coumarin derivatives. RSC Advances, 2018, 8, 17373-17379.	1.7	26
79	Semiconducting Metal Oxide Photonic Crystal Plasmonic Photocatalysts. Advanced Materials Interfaces, 2020, 7, 1901805.	1.9	26
80	Fully Porous GaN pâ€“n Junction Diodes Fabricated by Chemical Vapor Deposition. ACS Applied Materials & Interfaces, 2014, 6, 17954-17964.	4.0	25
81	Rapid, Low-Temperature Synthesis of Germanium Nanowires from Oligosilylgermane Precursors. Chemistry of Materials, 2017, 29, 4351-4360.	3.2	25
82	Influence of Binders and Solvents on Stability of Ru/RuO_x Nanoparticles on ITO Nanocrystals as Liâ€“O₂ Battery Cathodes. ChemSusChem, 2017, 10, 575-586.	3.6	25
83	Effect of Au Nanoparticle Spatial Distribution on the Stability of Thin Polymer Films. Langmuir, 2013, 29, 6706-6714.	1.6	24
84	NaV2O5 from Sodium Ion-Exchanged Vanadium Oxide Nanotubes and Its Efficient Reversible Lithiation as a Li-Ion Anode Material. ACS Applied Energy Materials, 2019, 2, 822-832.	2.5	24
85	Atomic Layer Structure of Vanadium Oxide Nanotubes Grown on Nanourchin Structures. Electrochemical and Solid-State Letters, 2007, 10, A111.	2.2	23
86	Chitosan gel film bandages: Correlating structure, composition, and antimicrobial properties. Journal of Applied Polymer Science, 2013, 128, 3939-3948.	1.3	23
87	Solvent-less method for efficient photocatalytic Î±-Fe2O3 nanoparticles using macromolecular polymeric precursors. New Journal of Chemistry, 2016, 40, 6768-6776.	1.4	23
88	Fabrication of MoS₂ Nanowire Arrays and Layered Structures via the Selfâ€Assembly of Block Copolymers. Advanced Materials Interfaces, 2016, 3, 1500596.	1.9	23
89	Nanostructured copper oxides and phosphates from a new solid-state route. Inorganica Chimica Acta, 2011, 377, 5-13.	1.2	22
90	Solid State Pathways to Complex Shape Evolution and Tunable Porosity during Metallic Crystal Growth. Scientific Reports, 2013, 3, 2642.	1.6	22

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91	The effect of particle size, morphology and C-rates on 3D structured Co₃O₄ inverse opal conversion mode anode materials. Materials Research Express, 2017, 4, 025011.	0.8	22
92	The stability of thin polymer films as controlled by changes in uniformly sputtered gold. Soft Matter, 2013, 9, 2695.	1.2	21
93	Optimizing Vanadium Pentoxide Thin Films and Multilayers from Dip-Coated Nanofluid Precursors. ACS Applied Materials & Interfaces, 2014, 6, 2031-2038.	4.0	21
94	3D open-worked inverse opal TiO2 and GeO2 materials for long life, high capacity Li-ion battery anodes. Solid State Ionics, 2018, 314, 195-203.	1.3	21
95	Organometallic Derivatives of Cyclotriphosphazene as Precursors of Nanostructured Metallic Materials: A New Solid State Method. Journal of Inorganic and Organometallic Polymers and Materials, 2009, 19, 507-520.	1.9	20
96	Solution and surfactant-free growth of supported high index facet SERS active nanoparticles of rhenium by phase demixing. Journal of Materials Chemistry A, 2013, 1, 1566-1572.	5.2	20
97	Functionalization of SiO₂ Surfaces for Si Monolayer Doping with Minimal Carbon Contamination. ACS Applied Materials & Interfaces, 2018, 10, 2191-2201.	4.0	20
98	Hybrid composite polyaniline-nickel hydroxide electrode materials for supercapacitor applications. Heliyon, 2018, 4, e00801.	1.4	20
99	The response of nanostructured surfaces in the near field. Nature Physics, 2006, 2, 792-792.	6.5	19
100	Metallophosphazene Precursor Routes to the Solid-State Deposition of Metallic and Dielectric Microstructures and Nanostructures on Si and SiO2. Langmuir, 2010, 26, 10223-10233.	1.6	19
101	Layered Graphitic Carbon Host Formation during Liquid-free Solid State Growth of Metal Pyrophosphates. Inorganic Chemistry, 2012, 51, 6228-6236.	1.9	19
102	Large directional conductivity change in chemically stable layered thin films of vanadium oxide and a 1D metal complex. Journal of Materials Chemistry C, 2013, 1, 5675.	2.7	19
103	NiO hybrid nanoarchitecture-based pseudocapacitor in organic electrolyte with high rate capability and cycle life. Ionics, 2015, 21, 2623-2631.	1.2	19
104	Scientific and Technical Challenges in Thermal Transport and Thermoelectric Materials and Devices. ECS Journal of Solid State Science and Technology, 2017, 6, N3058-N3064.	0.9	19
105	Polysulfide Binding to Several Nanoscale MagnÃ©li Phases Synthesized in Carbon for Longâ€Life Lithiumâ€“Sulfur Battery Cathodes. ChemSusChem, 2018, 11, 1838-1848.	3.6	19
106	NiF₂ Nanorod Arrays for Supercapattery Applications. ACS Omega, 2020, 5, 9768-9774.	1.6	19
107	Surface quality and surface waves on subwavelength-structured silver films. Physical Review E, 2007, 75, 016612.	0.8	18
108	Interdigitating Organic Bilayers Direct the Short Interlayer Spacing in Hybrid Organicâ€“Inorganic Layered Vanadium Oxide Nanostructures. Journal of Physical Chemistry B, 2011, 115, 14518-14525.	1.2	18

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109	Epitaxial growth of visible to infra-red transparent conducting In₂O₃nanodot dispersions and reversible charge storage as a Li-ion battery anode. Nanotechnology, 2013, 24, 065401.	1.3	18
110	On the Use of Gas Diffusion Layers as Current Collectors in Li-O₂Battery Cathodes. Journal of the Electrochemical Society, 2014, 161, A1964-A1968.	1.3	18
111	Optimizing the structure and yield of vanadium oxide nanotubes by periodic 2D layer scrolling. RSC Advances, 2016, 6, 40932-40944.	1.7	18
112	Raman thermometry analysis: Modelling assumptions revisited. Applied Thermal Engineering, 2018, 130, 1175-1181.	3.0	18
113	Doping controlled roughness and defined mesoporosity in chemically etched silicon nanowires with tunable conductivity. Journal of Applied Physics, 2013, 114, 034309.	1.1	17
114	Tetrahedral framework of inverse opal photonic crystals defines the optical response and photonic band gap. Journal of Applied Physics, 2018, 124, .	1.1	17
115	2D Nanosheet Paint from Solvent-Exfoliated Bi₂Te₃ Ink. Chemistry of Materials, 2017, 29, 7390-7400.	3.2	16
116	Using chronoamperometry to rapidly measure and quantitatively analyse rate-performance in battery electrodes. Journal of Power Sources, 2020, 468, 228220.	4.0	16
117	Self-Assembly of Porphyrin Nanostructures at the Interface between Two Immiscible Liquids. Journal of Physical Chemistry C, 2020, 124, 6929-6937.	1.5	16
118	Atomic nanolithography patterning of submicron features: writing an organic self-assembled monolayer with cold, bright Cs atom beams. Nanotechnology, 2005, 16, 1536-1541.	1.3	15
119	Pressure induced anisotropy of electrical conductivity in polycrystalline molybdenum disulfide. Applied Surface Science, 2006, 252, 7941-7947.	3.1	15
120	An Investigation by AFM and TEM of the Mechanism of Anodic Formation of Nanoporosity in n-InP in KOH. Journal of the Electrochemical Society, 2007, 154, H78.	1.3	15
121	Accommodating Curvature in a Highly Ordered Functionalized Metal Oxide Nanofiber: Synthesis, Characterization, and Multiscale Modeling of Layered Nanosheets. Chemistry of Materials, 2012, 24, 3981-3992.	3.2	15
122	Palladium-Catalyzed Coupling Reactions for the Functionalization of Si Surfaces: Superior Stability of Alkenyl Monolayers. Langmuir, 2013, 29, 11950-11958.	1.6	15
123	Luminescent Gold and Silver Complexes with the Monophosphane 1-(PPh₂)-2-Me-C₂B₁₀H₁₀ and Their Conversion to Gold Micro- and Superstructured Materials. Inorganic Chemistry, 2014, 53, 7260-7269.	1.9	15
124	Linking Precursor Alterations to Nanoscale Structure and Optical Transparency in Polymer Assisted Fast-Rate Dip-Coating of Vanadium Oxide Thin Films. Scientific Reports, 2015, 5, 11574.	1.6	15
125	Germanium tin alloy nanowires as anode materials for high performance Li-ion batteries. Nanotechnology, 2020, 31, 165402.	1.3	15
126	Propagation of nanopores during anodic etching of n-InP in KOH. Physical Chemistry Chemical Physics, 2013, 15, 15135.	1.3	14

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127	Crystallizing Vanadium Pentoxide Nanostructures in the Solid-State Using Modified Block Copolymer and Chitosan Complexes. Journal of Nanomaterials, 2015, 2015, 1-13.	1.5	14
128	Formation Mechanism of Metalâ€“Moleculeâ€“Metal Junctions: Molecule-Assisted Migration on Metal Defects. Journal of Physical Chemistry C, 2015, 119, 19438-19451.	1.5	14
129	Assessing Charge Contribution from Thermally Treated Ni Foam as Current Collectors for Li-Ion Batteries. Journal of the Electrochemical Society, 2016, 163, A1805-A1811.	1.3	14
130	Mesoporosity in doped silicon nanowires from metal assisted chemical etching monitored by phonon scattering. Semiconductor Science and Technology, 2016, 31, 014003.	1.0	14
131	NiVO₃ fused oxide nanoparticles â€“ an electrochemically stable intercalation anode material for lithium ion batteries. Journal of Materials Chemistry A, 2018, 6, 18103-18115.	5.2	14
132	Directly Grown Germanium Nanowires from Stainless Steel: High-performing Anodes for Li-Ion Batteries. ACS Applied Energy Materials, 2020, 3, 11811-11819.	2.5	14
133	Simultaneous Observation of Current Oscillations and Porous Film Growth during Anodization of InP. Langmuir, 2005, 21, 8090-8095.	1.6	13
134	Lowâ€Dimensional, Hinged Barâ€code Metal Oxide Layers and Freeâ€Standing, Ordered Organic Nanostructures from Turbostratic Vanadium Oxide. Small, 2008, 4, 990-1000.	5.2	13
135	Filling in the gaps: The nature of light transmission through solvent-filled inverse opal photonic crystals. Physical Review Materials, 2020, 4, .	0.9	13
136	The atom pencil: serial writing in the sub-micrometre domain. Applied Physics B: Lasers and Optics, 2005, 80, 941-944.	1.1	12
137	Standardization of research methods employed in assessing the interaction between metallic-based nanoparticles and the blood-brain barrier: Present and future perspectives. Journal of Controlled Release, 2019, 296, 202-224.	4.8	12
138	Sixâ€fold rotationally symmetric vanadium oxide nanostructures by a morphotropic phase transition. Physica Status Solidi (B): Basic Research, 2007, 244, 4157-4160.	0.7	11
139	Containing the catalyst: diameter controlled Ge nanowire growth. Journal of Materials Chemistry C, 2013, 1, 4450.	2.7	11
140	Compositional characterisation of metallurgical grade silicon and porous silicon nanosponge particles. RSC Advances, 2013, 3, 19393.	1.7	11
141	Pore Propagation Directions and Nanoporous Domain Shape in n-InP Anodized in KOH. Journal of the Electrochemical Society, 2013, 160, D260-D270.	1.3	11
142	Fabrication of p-type porous GaN on silicon and epitaxial GaN. Applied Physics Letters, 2013, 103, .	1.5	11
143	Solution processable broadband transparent mixed metal oxide nanofilm optical coatings via substrate diffusion doping. Nanoscale, 2015, 7, 20227-20237.	2.8	11
144	Structural and Electrochemical Characterization of Thermally Treated Vanadium Oxide Nanotubes for Li-Ion Batteries. ECS Transactions, 2013, 50, 165-174.	0.3	10

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145	Self-Healing Thermal Annealing: Surface Morphological Restructuring Control of GaN Nanorods. Crystal Growth and Design, 2016, 16, 6769-6775.	1.4	10
146	The Nature of Silicon Nanowire Roughness and Thermal Conductivity Suppression by Phonon Scattering Mechanisms. ECS Journal of Solid State Science and Technology, 2017, 6, N3029-N3035.	0.9	10
147	Electrochemical Formation of Ordered Pore Arrays in InP in KCl. ECS Transactions, 2013, 50, 377-392.	0.3	9
148	Epitaxial growth of (0001) oriented porous GaN layers by chemical vapour deposition. CrystEngComm, 2014, 16, 10255-10261.	1.3	9
149	Liquid-Phase Monolayer Doping of InGaAs with Si-, S-, and Sn-Containing Organic Molecular Layers. ACS Omega, 2017, 2, 1750-1759.	1.6	9
150	Solid-state synthesis of embedded single-crystal metal oxide and phosphate nanoparticles and in situ crystallization. Journal of Colloid and Interface Science, 2011, 362, 21-32.	5.0	8
151	Reduced Workfunction Intermetallic Seed Layers Allow Growth of Porous n-GaN and Low Resistivity, Ohmic Electron Transport. ACS Applied Materials & Interfaces, 2012, 4, 6927-6934.	4.0	8
152	Annealing environment effects on the electrochemical behavior of supercapacitors using Ni foam current collectors. Materials Research Express, 2018, 5, 125004.	0.8	8
153	Nanostructured Silicon Containing Materials Derived from Solid State Pyrolysis of Sililated Polyphosphazene Derivatives. Journal of Nanoscience and Nanotechnology, 2009, 9, 1825-1831.	0.9	7
154	Fabrication and Characterization of Single-Crystal Metal-Assisted Chemically Etched Rough Si Nanowires for Lithium-Ion Battery Anodes. ECS Transactions, 2011, 35, 25-34.	0.3	7
155	Synthesis and Characterization of Layered Vanadium Oxide Nanotubes for Rechargeable Lithium Batteries. ECS Transactions, 2011, 35, 237-245.	0.3	7
156	Palladium Nanoparticles as Catalysts for Li-O₂Battery Cathodes. ECS Transactions, 2014, 58, 21-29.	0.3	7
157	The Influence of Colloidal Opal Template and Substrate Type on 3D Macroporous Single and Binary Vanadium Oxide Inverse Opal Electrodeposition. Journal of the Electrochemical Society, 2017, 164, D111-D119.	1.3	7
158	Writing self-assembled monolayers with Cs: Optimization of atomic nanolithography imaging using self-assembled monolayers on gold substrates. Journal of Applied Physics, 2005, 97, 114309.	1.1	6
159	Nanoporous Domains in n-InP Anodized in KOH. ECS Transactions, 2007, 6, 355-366.	0.3	6
160	Functionalization of lamellar molybdenum disulphide nanocomposite with gold nanoparticles. Applied Surface Science, 2007, 253, 3444-3449.	3.1	6
161	Solvent and stabilizer free growth of Ag and Pd nanoparticles using metallic salts/cyclotriphosphazenes mixtures. Materials Chemistry and Physics, 2013, 143, 124-132.	2.0	6
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