Colm O'Dwyer

List of Publications by Year
in descending order

242 papers	7,179 citations	87401 40 h-index	87275 74 g-index
252 all docs	252 docs citations	252 times ranked	12050 citing authors

#	Article	IF	Citations
1	Methods to Tune the Optical Response of Porous Photonic Crystal Structures. ECS Meeting Abstracts, 2022, MA2022-01, 1984-1984.	0.0	0
2	Ampero-Coulometry: A New Technique for Understanding Lithium-Sulfur Electrochemistry. ECS Meeting Abstracts, 2022, MA2022-01, 111-111.	0.0	0
3	Operando Photonic Stopband Monitoring of Lithium-Ion Battery Electrodes. ECS Meeting Abstracts, 2022, MA2022-01, 112-112.	0.0	0
4	(Digital Presentation) Water-Soluble Binders That Enhance Electrochemical Sodium-Ion Storage Properties of NaTi₂(PO₄)₃ Nanoparticle Anodes. ECS Meeting Abstracts, 2022, MA2022-01, 100-100.	0.0	0
5	Structural and Electronic Properties of Polycrystalline InAs Thin Films Deposited on Silicon Dioxide and Glass at Temperatures below 500 Â°C. Crystals, 2021, 11, 160.	1.0	3
6	Modulating Conductivity in Paintable Films from Solvent-Exfoliated Inks of 2D MoS2 and Bi2te3. ECS Meeting Abstracts, 2021, MA2021-01, 654-654.	0.0	0
7	A Comparison of Transition Metal Oxide Ordered Macroporous Materials Used in Battery Electrodes. ECS Meeting Abstracts, 2021, MA2021-01, 964-964.	0.0	0
8	(Invited) Metal Assisted Chemical Etching of Silicon Nanowires: Quantum Confinement for Photon Emission and Phonon Transport. ECS Meeting Abstracts, 2021, MA2021-01, 1038-1038.	0.0	0
9	Photonic Stopband Tuning in Metallo-Dielectric Photonic Crystals. ECS Journal of Solid State Science and Technology, 2021, 10, 085001.	0.9	6
10	High Hole Mobility Polycrystalline GaSb Thin Films. Crystals, 2021, 11, 1348.	1.0	3
11	Reviewâ€"Energy Autonomous Wearable Sensors for Smart Healthcare: A Review. Journal of the Electrochemical Society, 2020, 167, 037516.	1.3	74
12	Germanium tin alloy nanowires as anode materials for high performance Li-ion batteries. Nanotechnology, 2020, 31, 165402.	1.3	15
13	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
14	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
15	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
16	Using chronoamperometry to rapidly measure and quantitatively analyse rate-performance in battery electrodes. Journal of Power Sources, 2020, 468, 228220.	4.0	16
17	Evolution of 3D Printing Methods and Materials for Electrochemical Energy Storage. Advanced Materials, 2020, 32, e2000556.	11.1	134
18	Self-Assembly of Porphyrin Nanostructures at the Interface between Two Immiscible Liquids. Journal of Physical Chemistry C, 2020, 124, 6929-6937.	1.5	16

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19	NiF₂ Nanorod Arrays for Supercapattery Applications. ACS Omega, 2020, 5, 9768-9774.	1.6	19
20	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
21	Semiconducting Metal Oxide Photonic Crystal Plasmonic Photocatalysts. Advanced Materials Interfaces, 2020, 7, 1901805.	1.9	26
22	Tracking Compression Changes in an Aqueous Electrolyte for Real-Time H₂ and O₂ Gas Evolution Quantification during Total Water Splitting Using BARDS. ACS Applied Energy Materials, 2020, 3, 2000-2009.	2.5	1
23	Architected porous metals in electrochemical energy storage. Current Opinion in Electrochemistry, 2020, 21, 201-208.	2.5	37
24	Filling in the gaps: The nature of light transmission through solvent-filled inverse opal photonic crystals. Physical Review Materials, 2020, 4, .	0.9	13
25	Communicationâ€"Conductive Paintable 2D Layered MoS2 Inks. ECS Journal of Solid State Science and Technology, 2020, 9, 093015.	0.9	2
26	High Charge and Discharge Rate Limitations in Ordered Macroporous Li-ion Battery Materials. Journal of the Electrochemical Society, 2020, 167, 140532.	1.3	3
27	(Invited) Development of Nanoporous Structures and Oscillatory Behavior During Anodization of n-InP in Alkaline Electrolytes. ECS Transactions, 2020, 98, 89-106.	0.3	0
28	Ordered Macroporous Photonic Crystal Hot Electron Plasmonic Photocatalysts. ECS Transactions, 2020, 98, 53-62.	0.3	1
29	How Light Passes Through Ordered Macroporous Photonic Crystals Immersed in Solvents. ECS Transactions, 2020, 98, 75-85.	0.3	0
30	Photoconductive Solution Processed ZnO Quasi-superlattice Films. ECS Transactions, 2020, 98, 151-158.	0.3	0
31	Prefaceâ€"Focus Issue on 2D Layered Materials: From Fundamental Science to Applications. ECS Journal of Solid State Science and Technology, 2020, 9, 090001.	0.9	0
32	Prefaceâ€"Focus Issue on 2D Layered Materials: From Fundamental Science to Applications. Journal of the Electrochemical Society, 2020, 167, 140001.	1.3	0
33	Ordered Macroporous Photonic Crystal Hot Electron Plasmonic Photocatalysts. ECS Meeting Abstracts, 2020, MA2020-02, 1211-1211.	0.0	0
34	Solution Deposition and Patterning of Compound Semiconductor Metal Oxide Thin Films and Nanowire Networks. ECS Meeting Abstracts, 2020, MA2020-02, 1968-1968.	0.0	0
35	(Invited) Development of Nanoporous Structures and Oscillatory Behavior During Anodization of n-InP in Alkaline Electrolytes. ECS Meeting Abstracts, 2020, MA2020-02, 1214-1214.	0.0	0
36	How Light Passes Through Ordered Macroporous Photonic Crystals Immersed in Solvents. ECS Meeting Abstracts, 2020, MA2020-02, 1213-1213.	0.0	0

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37	The Response of Fast Discharge and Charge Rates of Electrodeposited V₂O₅ Inverse Opal Networks in Lithium Batteries. ECS Meeting Abstracts, 2020, MA2020-02, 1451-1451.	0.0	0
38	Photoconductive Solution Processed ZnO Quasi-superlattice Films. ECS Meeting Abstracts, 2020, MA2020-02, 1938-1938.	0.0	0
39	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
40	Anodic Formation of Nanoporous Indium Phosphide in KOH Electrolytes: Effects of Temperature and Concentration. Journal of the Electrochemical Society, 2019, 166, H3097-H3106.	1.3	2
41	One-Step Fabrication of GeSn Branched Nanowires. Chemistry of Materials, 2019, 31, 4016-4024.	3.2	30
42	Cobalt-based electrode materials for sodium-ion batteries. Chemical Engineering Journal, 2019, 370, 185-207.	6.6	118
43	Etching Mechanisms in III-V Semiconductors: Electrochemical Etching of Indium Phosphide. ECS Transactions, 2019, 92, 1-17.	0.3	0
44	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
45	Evaluating the Surface Chemistry of Black Phosphorus during Ambient Degradation. Langmuir, 2019, 35, 2172-2178.	1.6	41
46	Cobalt Phosphate-Based Supercapattery as Alternative Power Source for Implantable Medical Devices. ACS Applied Energy Materials, 2019, 2, 569-578.	2.5	66
47	Etching Mechanisms in III-V Semiconductors: Electrochemical Etching of Indium Phosphide. ECS Meeting Abstracts, 2019, , .	0.0	0
48	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
49	Functionalization of SiO₂ Surfaces for Si Monolayer Doping with Minimal Carbon Contamination. ACS Applied Materials & Interfaces, 2018, 10, 2191-2201.	4.0	20
50	Prefaceâ€”Focus Issue on Processes at the Semiconductor-Solution Interface. Journal of the Electrochemical Society, 2018, 165, Y5-Y5.	1.3	0
51	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
52	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
53	Raman thermometry analysis: Modelling assumptions revisited. Applied Thermal Engineering, 2018, 130, 1175-1181.	3.0	18
54	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

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55	(Invited) Electrochemical Formation of Nanoporous Indium Phosphide in KOH Electrolytes. ECS Transactions, 2018, 86, 15-35.	0.3	0
56	Two-Dimensional Materials and Their Role in Emerging Electronic and Photonic Devices. Electrochemical Society Interface, 2018, 27, 53-58.	0.3	5
57	Hybrid composite polyaniline-nickel hydroxide electrode materials for supercapacitor applications. Heliyon, 2018, 4, e00801.	1.4	20
58	Tetrahedral framework of inverse opal photonic crystals defines the optical response and photonic band gap. Journal of Applied Physics, 2018, 124, .	1.1	17
59	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
60	Annealing environment effects on the electrochemical behavior of supercapacitors using Ni foam current collectors. Materials Research Express, 2018, 5, 125004.	0.8	8
61	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
62	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
63	Model of Formation and Propagation of Nanoporous Structures in Indium Phosphide during Anodisation in Aqueous KOH. ECS Transactions, 2018, 85, 1335-1348.	0.3	0
64	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
65	Large Area Growth of MoS2 By Chemical Vapour Deposition. ECS Meeting Abstracts, 2018, , .	0.0	1
66	(Invited) Patterning Transparent and Antireflective Compound Semiconductor Oxide Thin Films and Nanowire Networks from Solution. ECS Meeting Abstracts, 2018, , .	0.0	0
67	Investigating Polycrystalline III-V Thin Films As Channel Materials for â€œAbove ICâ€•Logic and Memory Applications. ECS Meeting Abstracts, 2018, , .	0.0	0
68	(Invited) Electrochemical Formation of Nanoporous Indium Phosphide in KOH Electrolytes. ECS Meeting Abstracts, 2018, , .	0.0	0
69	(Invited) Antireflective and Sub-Band Pumped Photoconductive Solution Processed ZnO and Al:ZnO Quasi-Superlattice Films. ECS Meeting Abstracts, 2018, , .	0.0	0
70	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
71	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
72	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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73	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
74	Rapid, Low-Temperature Synthesis of Germanium Nanowires from Oligosilylgermane Precursors. Chemistry of Materials, 2017, 29, 4351-4360.	3.2	25
75	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
76	Liquid-Phase Monolayer Doping of InGaAs with Si-, S-, and Sn-Containing Organic Molecular Layers. ACS Omega, 2017, 2, 1750-1759.	1.6	9
77	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
78	Optical reflectance of solution processed quasi-superlattice ZnO and Al-doped ZnO (AZO) channel materials. Journal Physics D: Applied Physics, 2017, 50, 16LT01.	1.3	6
79	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
80	Electrochemical Pore Formation in InP: Understanding and Controlling Pore Morphology. ECS Transactions, 2017, 75, 29-43.	0.3	3
81	Process of Formation of Porous Layers in n-InP. ECS Transactions, 2017, 77, 67-96.	0.3	3
82	Large Block Copolymer Self-Assembly for Fabrication of Subwavelength Nanostructures for Applications in Optics. Nano Letters, 2017, 17, 2973-2978.	4.5	72
83	Prefaceâ€”Focus Issue on Thermoelectric Materials & Devices: Phonon Engineering, Advanced Materials and Thermal Transport. ECS Journal of Solid State Science and Technology, 2017, 6, Y3-Y3.	0.9	3
84	Solution Processable Metal Oxide Thin Film Deposition and Material Growth for Electronic and Photonic Devices. Advanced Materials Interfaces, 2017, 4, 1600610.	1.9	70
85	Patterning optically clear films: Coplanar transparent and color-contrasted thin films from interdiffused electrodeposited and solution-processed metal oxides. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2017, 35, 020602.	0.9	1
86	Gold sensitized sprayed SnO2 nanostructured film for enhanced LPG sensing. Journal of Analytical and Applied Pyrolysis, 2017, 124, 362-368.	2.6	32
87	Tailoring Asymmetric Dischargeâ€Charge Rates and Capacity Limits to Extend Liâ€O₂ Battery Cycle Life. ChemElectroChem, 2017, 4, 628-635.	1.7	4
88	Rectifiers, MOS Diodes and LEDs Made of Fully Porous GaN Produced by Chemical Vapor Deposition. ECS Journal of Solid State Science and Technology, 2017, 6, R143-R148.	0.9	1
89	2D Nanosheet Paint from Solvent-Exfoliated Bi₂Te₃ Ink. Chemistry of Materials, 2017, 29, 7390-7400.	3.2	16
90	Solution processed ZnO homogeneous quasisuperlattice materials. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2017, 35, 061517.	0.9	3

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91	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
92	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
93	Transparent Antireflective Layers of Oxide Nanowires Grown from Thin Films by Pressurized Contact Interdiffusion Processes. ECS Journal of Solid State Science and Technology, 2017, 6, N227-N235.	0.9	0
94	Life cycle assessment of lithium-air battery cells. Journal of Cleaner Production, 2016, 135, 299-311.	4.6	73
95	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
96	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
97	Optimizing the structure and yield of vanadium oxide nanotubes by periodic 2D layer scrolling. RSC Advances, 2016, 6, 40932-40944.	1.7	18
98	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
99	Nanopatterning by large block copolymers for application in photonic devices (Conference) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T		0
100	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
101	Growing Oxide Nanowires and Nanowire Networks by Solid State Contact Diffusion into Solution-Processed Thin Films. Small, 2016, 12, 5954-5962.	5.2	3
102	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
103	Self-Healing Thermal Annealing: Surface Morphological Restructuring Control of GaN Nanorods. Crystal Growth and Design, 2016, 16, 6769-6775.	1.4	10
104	Solvent-less method for efficient photocatalytic Î±-Fe2O3 nanoparticles using macromolecular polymeric precursors. New Journal of Chemistry, 2016, 40, 6768-6776.	1.4	23
105	Fabrication of MoS₂ Nanowire Arrays and Layered Structures via the Selfâ€Assembly of Block Copolymers. Advanced Materials Interfaces, 2016, 3, 1500596.	1.9	23
106	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
107	Comparative Electrochemical Charge Storage Properties of Bulk and Nanoscale Vanadium Oxide Electrodes. Journal of Solid State Electrochemistry, 2016, 20, 1445-1458.	1.2	27
108	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

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109	Mesoporosity in doped silicon nanowires from metal assisted chemical etching monitored by phonon scattering. Semiconductor Science and Technology, 2016, 31, 014003.	1.0	14
110	Effect of Annealing on the Development of Fully Transparent Ternary V-O-Na-Si Mixed Metal Oxide Thin Films from Polymer-Assisted Dip-Coated V₂O₅. ECS Journal of Solid State Science and Technology, 2016, 5, R3100-R3106.	0.9	6
111	Quantum Confined Intense Red Luminescence from Large Area Monolithic Arrays of Mesoporous and Nanocrystal-Decorated Silicon Nanowires for Luminescent Devices. ECS Journal of Solid State Science and Technology, 2016, 5, R3059-R3066.	0.9	2
112	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
113	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
114	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
115	Solution processable broadband transparent mixed metal oxide nanofilm optical coatings via substrate diffusion doping. Nanoscale, 2015, 7, 20227-20237.	2.8	11
116	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
117	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
118	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
119	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
120	NiO hybrid nanoarchitecture-based pseudocapacitor in organic electrolyte with high rate capability and cycle life. Ionics, 2015, 21, 2623-2631.	1.2	19
121	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
122	3D Vanadium Oxide Inverse Opal Growth by Electrodeposition. Journal of the Electrochemical Society, 2015, 162, D605-D612.	1.3	32
123	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
124	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
125	Epitaxial growth of (0001) oriented porous GaN layers by chemical vapour deposition. CrystEngComm, 2014, 16, 10255-10261.	1.3	9
126	Light Scattering Investigation of 2D and 3D Opal Template Formation on Hydrophilized Surfaces. ECS Transactions, 2014, 58, 9-18.	0.3	6

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127	Novel Solid-State Route to Nanostructured Tin, Zinc and Cerium Oxides as Potential Materials for Sensors. Journal of Nanoscience and Nanotechnology, 2014, 14, 6748-6753.	0.9	5
128	Germanium Oxide Removal by Citric Acid and Thiol Passivation from Citric Acid-Terminated Ge(100). Langmuir, 2014, 30, 14123-14127.	1.6	37
129	Stability of Ultrathin Nanocomposite Polymer Films Controlled by the Embedding of Gold Nanoparticles. ACS Applied Materials & Interfaces, 2014, 6, 20758-20767.	4.0	31
130	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
131	Palladium Nanoparticles as Catalysts for Li-O₂Battery Cathodes. ECS Transactions, 2014, 58, 21-29.	0.3	7
132	The Origin of Shape Sensitivity in Palladiumâ€Catalyzed Suzukiâ€“Miyaura Cross Coupling Reactions. Angewandte Chemie - International Edition, 2014, 53, 4142-4145.	7.2	116
133	Ordered 2D Colloidal Photonic Crystals on Gold Substrates by Surfactantâ€Assisted Fastâ€Rate Dip Coating. Small, 2014, 10, 1895-1901.	5.2	55
134	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
135	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
136	Optimizing Vanadium Pentoxide Thin Films and Multilayers from Dip-Coated Nanofluid Precursors. ACS Applied Materials & Interfaces, 2014, 6, 2031-2038.	4.0	21
137	Evaluating the performance of nanostructured materials as lithium-ion battery electrodes. Nano Research, 2014, 7, 1-62.	5.8	292
138	Investigations into Structure and Chemistry of 1D, 2D and 3D Structured Vanadium Oxide Nanomaterials for Li-Ion Batteries. ECS Transactions, 2014, 58, 3-12.	0.3	4
139	2D and 3D vanadium oxide inverse opals and hollow sphere arrays. CrystEngComm, 2014, 16, 10804-10815.	1.3	37
140	Photonic Crystals: Ordered 2D Colloidal Photonic Crystals on Gold Substrates by Surfactantâ€Assisted Fastâ€Rate Dip Coating (Small 10/2014). Small, 2014, 10, 1894-1894.	5.2	0
141	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
142	Stability, Oxidation, and Shape Evolution of PVP-Capped Pd Nanocrystals. Journal of Physical Chemistry C, 2014, 118, 6522-6530.	1.5	57
143	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
144	Fully Porous GaN pâ€“n Junction Diodes Fabricated by Chemical Vapor Deposition. ACS Applied Materials & Interfaces, 2014, 6, 17954-17964.	4.0	25

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145	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
146	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
147	Key scientific challenges in current rechargeable non-aqueous Liâ€“O2 batteries: experiment and theory. Physical Chemistry Chemical Physics, 2014, 16, 12093.	1.3	120
148	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
149	Porous GaN and High-Î² MgOâ€“GaN MOS Diode Layers Grown in a Single Step on Silicon. Chemistry of Materials, 2014, 26, 1243-1249.	3.2	6
150	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
151	Synthetic Routes for the Preparation of Ordered Vanadium Oxide Inverted Opal Electrodes for Li-Ion Batteries. ECS Transactions, 2014, 58, 7-14.	0.3	2
152	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
153	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
154	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
155	Chitosan gel film bandages: Correlating structure, composition, and antimicrobial properties. Journal of Applied Polymer Science, 2013, 128, 3939-3948.	1.3	23
156	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
157	Nanoscale Dynamics and Protein Adhesivity of Alkylamine Self-Assembled Monolayers on Graphene. Langmuir, 2013, 29, 7271-7282.	1.6	27
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