

Richard D Tilley

List of Publications by Year in descending order

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213
papers

9,932
citations

34016

52
h-index

43802

91
g-index

224
all docs

224
docs citations

224
times ranked

13092
citing authors

#	ARTICLE	IF	CITATIONS
1	Water-Soluble Photoluminescent Silicon Quantum Dots. <i>Angewandte Chemie - International Edition</i> , 2005, 44, 4550-4554.	7.2	483
2	Shape control of platinum and palladium nanoparticles for catalysis. <i>Nanoscale</i> , 2010, 2, 2045.	2.8	305
3	Chemical Insight into the Origin of Red and Blue Photoluminescence Arising from Freestanding Silicon Nanocrystals. <i>ACS Nano</i> , 2013, 7, 2676-2685.	7.3	267
4	Nucleic acid hybridization on an electrically reconfigurable network of gold-coated magnetic nanoparticles enables microRNA detection in blood. <i>Nature Nanotechnology</i> , 2018, 13, 1066-1071.	15.6	244
5	Advances in the Application of Magnetic Nanoparticles for Sensing. <i>Advanced Materials</i> , 2019, 31, e1904385.	11.1	234
6	Chemical Reactions on Surface Molecules Attached to Silicon Quantum Dots. <i>Journal of the American Chemical Society</i> , 2010, 132, 248-253.	6.6	226
7	Preparation, Self-Assembly, and Mechanistic Study of Highly Monodispersed Nanocubes. <i>Journal of the American Chemical Society</i> , 2007, 129, 3287-3291.	6.6	223
8	Challenges and Solutions in Developing Ultrasensitive Biosensors. <i>Journal of the American Chemical Society</i> , 2019, 141, 1162-1170.	6.6	200
9	Ultrafast Growth of Highly Branched Palladium Nanostructures for Catalysis. <i>ACS Nano</i> , 2010, 4, 396-402.	7.3	194
10	Micro-emulsion synthesis of monodisperse surface stabilized silicon nanocrystals. <i>Chemical Communications</i> , 2005, , 1833.	2.2	191
11	Gold coated magnetic nanoparticles: from preparation to surface modification for analytical and biomedical applications. <i>Chemical Communications</i> , 2016, 52, 7528-7540.	2.2	188
12	Solution Synthesis, Optical Properties, and Bioimaging Applications of Silicon Nanocrystals. <i>Accounts of Chemical Research</i> , 2014, 47, 3045-3051.	7.6	187
13	Flexible and efficient perovskite quantum dot solar cells via hybrid interfacial architecture. <i>Nature Communications</i> , 2021, 12, 466.	5.8	176
14	How Nanoparticles Coalesce: An in Situ Study of Au Nanoparticle Aggregation and Grain Growth. <i>Chemistry of Materials</i> , 2011, 23, 3312-3317.	3.2	174
15	In Situ and Ex Situ Studies of Platinum Nanocrystals: Growth and Evolution in Solution. <i>Journal of the American Chemical Society</i> , 2009, 131, 14590-14595.	6.6	157
16	Simple Synthesis and Functionalization of Iron Nanoparticles for Magnetic Resonance Imaging. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 4206-4209.	7.2	148
17	Synthesis of SnS Quantum Dots. <i>Journal of the American Chemical Society</i> , 2009, 131, 15990-15991.	6.6	143
18	The Microemulsion Synthesis of Hydrophobic and Hydrophilic Silicon Nanocrystals. <i>Advanced Materials</i> , 2006, 18, 2053-2056.	11.1	141

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19	Synthesis, Alignment, and Magnetic Properties of Monodisperse Nickel Nanocubes. <i>Journal of the American Chemical Society</i> , 2012, 134, 855-858.	6.6	141
20	Cascade Reactions in Nanozymes: Spatially Separated Active Sites inside Ag-Core/Porous-Cu-Shell Nanoparticles for Multistep Carbon Dioxide Reduction to Higher Organic Molecules. <i>Journal of the American Chemical Society</i> , 2019, 141, 14093-14097.	6.6	139
21	A single-Pt-atom-on-Ru-nanoparticle electrocatalyst for CO-resilient methanol oxidation. <i>Nature Catalysis</i> , 2022, 5, 231-237.	16.1	133
22	Luminescent passive-oxidized silicon quantum dots as biological staining labels and their cytotoxicity effects at high concentration. <i>Nanotechnology</i> , 2008, 19, 415102.	1.3	126
23	Synthesis and Structural Characterization of Branched Palladium Nanostructures. <i>Advanced Materials</i> , 2009, 21, 2288-2293.	11.1	124
24	Real-Time TEM and Kinetic Monte Carlo Studies of the Coalescence of Decahedral Gold Nanoparticles. <i>ACS Nano</i> , 2009, 3, 3809-3813.	7.3	113
25	Sized controlled synthesis, purification, and cell studies with silicon quantum dots. <i>Nanoscale</i> , 2011, 3, 3364.	2.8	113
26	Direct Growth of Highly Strained Pt Islands on Branched Ni Nanoparticles for Improved Hydrogen Evolution Reaction Activity. <i>Journal of the American Chemical Society</i> , 2019, 141, 16202-16207.	6.6	113
27	Shape-Controlled Growth of Platinum Nanoparticles. <i>Small</i> , 2007, 3, 1508-1512.	5.2	110
28	Synthesis of low- and high-index faceted metal (Pt, Pd, Ru, Ir, Rh) nanoparticles for improved activity and stability in electrocatalysis. <i>Nanoscale</i> , 2019, 11, 18995-19011.	2.8	110
29	Gold/Palladium Core/Shell Nanocrystals with Size and Shape Control Optimized for Catalytic Performance. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 1477-1480.	7.2	104
30	Gold over Branched Palladium Nanostructures for Photothermal Cancer Therapy. <i>ACS Nano</i> , 2015, 9, 12283-12291.	7.3	102
31	Surface Morphology Dependent Photoluminescence from Colloidal Silicon Nanocrystals. <i>Journal of Physical Chemistry B</i> , 2005, 109, 19064-19067.	1.2	101
32	Synthesis of CdSeS Nanocrystals in Coordinating and Noncoordinating Solvents: Solvent's Role in Evolution of the Optical and Structural Properties. <i>Chemistry of Materials</i> , 2007, 19, 5185-5193.	3.2	100
33	Size Controlled Synthesis of Germanium Nanocrystals by Hydride Reducing Agents and Their Biological Applications. <i>Chemistry of Materials</i> , 2010, 22, 482-486.	3.2	98
34	The impact of nanoparticle shape on cellular internalisation and transport: what do the different analysis methods tell us?. <i>Materials Horizons</i> , 2019, 6, 1538-1547.	6.4	97
35	How to control the shape of metal nanostructures in organic solution phase synthesis for plasmonics and catalysis. <i>Nano Today</i> , 2013, 8, 198-215.	6.2	94
36	Synthesis and Self-Assembly of Triangular and Hexagonal CdS Nanocrystals. <i>Advanced Materials</i> , 2005, 17, 2997-3001.	11.1	91

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37	Photochemical upconversion of near-infrared light from below the silicon bandgap. <i>Nature Photonics</i> , 2020, 14, 585-590.	15.6	88
38	Three-Dimensional Branched and Faceted Gold-Ruthenium Nanoparticles: Using Nanostructure to Improve Stability in Oxygen Evolution Electrocatalysis. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 10241-10245.	7.2	83
39	Faceted Branched Nickel Nanoparticles with Tunable Branch Length for High-Activity Electrocatalytic Oxidation of Biomass. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 15487-15491.	7.2	83
40	Cubic-Core Hexagonal-Branch Mechanism To Synthesize Bimetallic Branched and Faceted Pd-Ru Nanoparticles for Oxygen Evolution Reaction Electrocatalysis. <i>Journal of the American Chemical Society</i> , 2018, 140, 12760-12764.	6.6	82
41	Advantages of eutectic alloys for creating catalysts in the realm of nanotechnology-enabled metallurgy. <i>Nature Communications</i> , 2019, 10, 4645.	5.8	76
42	The Influence of Nanoconfinement on Electrocatalysis. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	74
43	Can Polymorphism be Used to form Branched Metal Nanostructures?. <i>Advanced Materials</i> , 2013, 25, 1552-1556.	11.1	72
44	Electrocatalytic Nanoparticles That Mimic the Three-Dimensional Geometric Architecture of Enzymes: Nanozymes. <i>Journal of the American Chemical Society</i> , 2018, 140, 13449-13455.	6.6	72
45	Tungsten Oxide/Carbide Surface Heterojunction Catalyst with High Hydrogen Evolution Activity. <i>ACS Energy Letters</i> , 2020, 5, 3560-3568.	8.8	70
46	Effect of annealing temperature on the structural, photoluminescence and magnetic properties of sol-gel derived Magnetoplumbite-type (M-type) hexagonal strontium ferrite. <i>Journal of Magnetism and Magnetic Materials</i> , 2011, 323, 2318-2322.	1.0	69
47	Effect of Surfactant Concentration and Aggregation on the Growth Kinetics of Nickel Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2013, 117, 16709-16718.	1.5	68
48	Shape Control from Thermodynamic Growth Conditions: The Case of hcp Ruthenium Hourglass Nanocrystals. <i>Journal of the American Chemical Society</i> , 2013, 135, 606-609.	6.6	67
49	Size-controlled short nanobells: Growth and formation mechanism. <i>Applied Physics Letters</i> , 2000, 77, 4136-4138.	1.5	58
50	Hot-injection synthesis of iron/iron oxide core/shell nanoparticles for T2 contrast enhancement in magnetic resonance imaging. <i>Chemical Communications</i> , 2011, 47, 9221.	2.2	58
51	Preserving the Exposed Facets of Pt ₃ Sn Intermetallic Nanocubes During an Order to Disorder Transition Allows the Elucidation of the Effect of the Degree of Alloy Ordering on Electrocatalysis. <i>Journal of the American Chemical Society</i> , 2020, 142, 3231-3239.	6.6	57
52	Microwave-assisted synthesis of black phosphorus quantum dots: efficient electrocatalyst for oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2019, 7, 12974-12978.	5.2	56
53	Rod-shaped mesoporous silica nanoparticles for nanomedicine: recent progress and perspectives. <i>Expert Opinion on Drug Delivery</i> , 2018, 15, 881-892.	2.4	55
54	Formation of Branched Ruthenium Nanoparticles for Improved Electrocatalysis of Oxygen Evolution Reaction. <i>Small</i> , 2019, 15, e1804577.	5.2	54

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55	Rapid and ultrasensitive electrochemical detection of circulating tumor DNA by hybridization on the network of gold-coated magnetic nanoparticles. <i>Chemical Science</i> , 2021, 12, 5196-5201.	3.7	53
56	Synthesis of water-soluble photoluminescent germanium nanocrystals. <i>Nanotechnology</i> , 2006, 17, 3745-3749.	1.3	51
57	Liquid-Phase Synthesis of Flower-like and Flake-like Titanium Disulfide Nanostructures. <i>Chemistry of Materials</i> , 2009, 21, 1725-1730.	3.2	50
58	Gecko-inspired chitosan adhesive for tissue repair. <i>NPG Asia Materials</i> , 2016, 8, e280-e280.	3.8	50
59	The Synthesis of Nickel Sulfide Nanoparticles on Graphitized Carbon Supports. <i>Journal of Physical Chemistry B</i> , 2002, 106, 10895-10901.	1.2	48
60	Ostwald's Rule of Stages and Its Role in CdSe Quantum Dot Crystallization. <i>Journal of the American Chemical Society</i> , 2012, 134, 17046-17052.	6.6	48
61	Self-Assembled Hollow Polyaniline/Au Nanospheres Obtained by a One-Step Synthesis. <i>Macromolecular Rapid Communications</i> , 2008, 29, 598-603.	2.0	46
62	Synthesis and Comparison of the Magnetic Properties of Iron Sulfide Spinel and Iron Oxide Spinel Nanocrystals. <i>Chemistry of Materials</i> , 2011, 23, 2514-2517.	3.2	45
63	Mimicking filtration and transport of rotavirus and adenovirus in sand media using DNA-labeled, protein-coated silica nanoparticles. <i>Water Research</i> , 2014, 62, 167-179.	5.3	44
64	Simple Ligand Exchange Reactions Enabling Excellent Dispersibility and Stability of Magnetic Nanoparticles in Polar Organic, Aromatic, and Protic Solvents. <i>Langmuir</i> , 2014, 30, 1514-1521.	1.6	43
65	Solution Synthesis, Surface Passivation, Optical Properties, Biomedical Applications, and Cytotoxicity of Silicon and Germanium Nanocrystals. <i>ChemPlusChem</i> , 2017, 82, 60-73.	1.3	43
66	Understanding the Effect of Au in Au-Pd Bimetallic Nanocrystals on the Electrocatalysis of the Methanol Oxidation Reaction. <i>Journal of Physical Chemistry C</i> , 2018, 122, 21718-21723.	1.5	43
67	Carbon supported Au-Pd core-shell nanoparticles for hydrogen production by alcohol electroreforming. <i>Catalysis Science and Technology</i> , 2016, 6, 6870-6878.	2.1	42
68	Pd-Ru core-shell nanoparticles with tunable shell thickness for active and stable oxygen evolution performance. <i>Nanoscale</i> , 2018, 10, 15173-15177.	2.8	42
69	Role of the Secondary Metal in Ordered and Disordered Pt-M Intermetallic Nanoparticles: An Example of Pt ₃ Sn Nanocubes for the Electrocatalytic Methanol Oxidation. <i>ACS Catalysis</i> , 2021, 11, 2235-2243.	5.5	42
70	Is Cu instability during the CO ₂ reduction reaction governed by the applied potential or the local CO concentration?. <i>Chemical Science</i> , 2021, 12, 4028-4033.	3.7	42
71	Transition Metal Polysulfide Complexes as Single-Source Precursors for Metal Sulfide Nanocrystals. <i>Journal of Physical Chemistry C</i> , 2010, 114, 3817-3821.	1.5	41
72	A rapid readout for many single plasmonic nanoparticles using dark-field microscopy and digital color analysis. <i>Biosensors and Bioelectronics</i> , 2018, 117, 530-536.	5.3	41

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73	The importance of nanoscale confinement to electrocatalytic performance. <i>Chemical Science</i> , 2020, 11, 1233-1240.	3.7	39
74	Synthesis and Stability of Highly Crystalline and Stable Iron/Iron Oxide Core/Shell Nanoparticles for Biomedical Applications. <i>ChemPlusChem</i> , 2012, 77, 135-140.	1.3	37
75	Antibacterial Effect of Au Implantation in Ductile Nanocomposite Multilayer (TiAlSiY)N/CrN Coatings. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 48540-48550.	4.0	36
76	Quantum Dot Passivation of Halide Perovskite Films with Reduced Defects, Suppressed Phase Segregation, and Enhanced Stability. <i>Advanced Science</i> , 2022, 9, e2102258.	5.6	35
77	Size and shape evolution of upconverting nanoparticles using microwave assisted synthesis. <i>CrystEngComm</i> , 2010, 12, 1993.	1.3	34
78	Nanoscale architecture of (CrN/ZrN)/(Cr/Zr) nanocomposite coatings: Microstructure, composition, mechanical properties and first-principles calculations. <i>Journal of Alloys and Compounds</i> , 2020, 831, 154808.	2.8	34
79	Preparation of Large Scale Monolayers of Gold Nanoparticles on Modified Silicon Substrates Using a Controlled Pulling Method. <i>Langmuir</i> , 2003, 19, 5115-5120.	1.6	33
80	Linking Phase Segregation and Photovoltaic Performance of Mixed-Halide Perovskite Films through Grain Size Engineering. <i>ACS Energy Letters</i> , 0, , 1649-1658.	8.8	33
81	How Nanoparticles Transform Single Molecule Measurements into Quantitative Sensors. <i>Advanced Materials</i> , 2020, 32, e1904339.	11.1	30
82	Controlling PbS nanocrystal aggregation in conducting polymers. <i>Nanotechnology</i> , 2005, 16, 2381-2384.	1.3	28
83	Solution Synthesis of Monodisperse Indium Nanoparticles and Highly Faceted Indium Polyhedra. <i>Crystal Growth and Design</i> , 2010, 10, 3854-3858.	1.4	28
84	Introducing Stacking Faults into Three-Dimensional Branched Nickel Nanoparticles for Improved Catalytic Activity. <i>Journal of the American Chemical Society</i> , 2022, 144, 11094-11098.	6.6	27
85	Nanoscale upconversion for oxygen sensing. <i>Materials Science and Engineering C</i> , 2017, 70, 76-84.	3.8	26
86	Nanoparticles as contrast agents for the diagnosis of Alzheimer's disease: a systematic review. <i>Nanomedicine</i> , 2020, 15, 725-743.	1.7	26
87	Solution Synthesis and Optical Properties of Transition-Metal-Doped Silicon Nanocrystals. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 1573-1576.	2.1	25
88	Electron microscopy and its role in advanced lithium-ion battery research. <i>Sustainable Energy and Fuels</i> , 2019, 3, 1623-1646.	2.5	25
89	Selectively detecting attomolar concentrations of proteins using gold lined nanopores in a nanopore blockade sensor. <i>Chemical Science</i> , 2020, 11, 12570-12579.	3.7	25
90	Solution Synthesis and Optical Properties of SnTe Nanocrystals. <i>Crystal Growth and Design</i> , 2011, 11, 2721-2723.	1.4	24

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91	Oxide-based inorganic/organic and nanoporous spherical particles: synthesis and functional properties. <i>Science and Technology of Advanced Materials</i> , 2013, 14, 023002.	2.8	24
92	Preparation, characterization and in vitro biological evaluation of (1:2) phenoxodiol- β -cyclodextrin complex. <i>Carbohydrate Polymers</i> , 2017, 165, 444-454.	5.1	24
93	Intrinsic and well-defined second generation hot spots in gold nanobipyramids versus gold nanorods. <i>Chemical Communications</i> , 2019, 55, 7707-7710.	2.2	24
94	Synthesis and Size Dependent Reflectance Study of Water Soluble SnS Nanoparticles. <i>Nanomaterials</i> , 2012, 2, 54-64.	1.9	23
95	Synthesis and characterisation of magnetic iron sulfide nanocrystals. <i>Journal of Solid State Chemistry</i> , 2012, 189, 57-62.	1.4	23
96	Dynamic evolution of specific catalytic sites on Pt nanoparticles. <i>Catalysis Science and Technology</i> , 2016, 6, 144-151.	2.1	23
97	From the inside-out: leached metal impurities in multiwall carbon nanotubes for purification or electrocatalysis. <i>Journal of Materials Chemistry A</i> , 2018, 6, 4686-4694.	5.2	23
98	The preparation of chromium, nickel and chromium-nickel alloy nanoparticles on supports. <i>Journal of Materials Chemistry</i> , 2002, 12, 3809-3813.	6.7	22
99	How to choose a precursor for decomposition solution-phase synthesis: the case of iron nanoparticles. <i>Nanoscale</i> , 2015, 7, 5951-5954.	2.8	22
100	Size and shape evolution of highly magnetic iron nanoparticles from successive growth reactions. <i>Chemical Communications</i> , 2017, 53, 11548-11551.	2.2	22
101	Zero valent iron core-iron oxide shell nanoparticles as small magnetic particle imaging tracers. <i>Chemical Communications</i> , 2020, 56, 3504-3507.	2.2	22
102	Au-Pd Core-Shell Nanoparticles as Alcohol Oxidation Catalysts: Effect of Shape and Composition. <i>ChemSusChem</i> , 2013, 6, 1858-1862.	3.6	21
103	Synthesis and catalytic properties of highly branched palladium nanostructures using seeded growth. <i>Nanoscale</i> , 2016, 8, 2867-2874.	2.8	21
104	Three-Dimensional Branched and Faceted Gold-Ruthenium Nanoparticles: Using Nanostructure to Improve Stability in Oxygen Evolution Electrocatalysis. <i>Angewandte Chemie</i> , 2018, 130, 10398-10402.	1.6	21
105	Ultrathin Fe-N Nanosheets Coordinated Fe-Doped CoNi Alloy Nanoparticles for Electrochemical Water Splitting. <i>Particle and Particle Systems Characterization</i> , 2019, 36, 1800252.	1.2	21
106	Formation of Si-Rich Interfaces by Radiation-Induced Diffusion and Microsegregation in CrN/ZrN Nanolayer Coating. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 16928-16938.	4.0	21
107	Stimulation and Repair of Peripheral Nerves Using Bioadhesive Craft-Antenna. <i>Advanced Science</i> , 2019, 6, 1801212.	5.6	20
108	Raspberry-like small multicore gold nanostructures for efficient photothermal conversion in the first and second near-infrared windows. <i>Chemical Communications</i> , 2019, 55, 4055-4058.	2.2	20

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109	Can the Shape of Nanoparticles Enable the Targeting to Cancer Cells over Healthy Cells?. <i>Advanced Functional Materials</i> , 2021, 31, 2007880.	7.8	20
110	Optical tweezers-based characterisation of gold coreâ€“satellite plasmonic nano-assemblies incorporating thermo-responsive polymers. <i>Nanoscale</i> , 2020, 12, 1680-1687.	2.8	19
111	Impact of the Coverage of Aptamers on a Nanoparticle on the Binding Equilibrium and Kinetics between Aptamer and Protein. <i>ACS Sensors</i> , 2021, 6, 538-545.	4.0	19
112	Functionalized Gold Nanorod Probes: A Sophisticated Design of SERS Immunoassay for Biodetection in Complex Media. <i>Analytical Chemistry</i> , 2021, 93, 12954-12965.	3.2	19
113	Combining Nanoconfinement in Ag Core/Porous Cu Shell Nanoparticles with Gas Diffusion Electrodes for Improved Electrocatalytic Carbon Dioxide Reduction. <i>ChemElectroChem</i> , 2021, 8, 4848-4853.	1.7	19
114	Optical Nanopore Sensors for Quantitative Analysis. <i>Nano Letters</i> , 2022, 22, 869-880.	4.5	19
115	How hollow structures form from crystalline ironâ€“iron oxide coreâ€“shell nanoparticles in the electron beam. <i>Chemical Communications</i> , 2013, 49, 6203.	2.2	18
116	Stability of polyelectrolyte-coated iron nanoparticles for T2-weighted magnetic resonance imaging. <i>Journal of Magnetism and Magnetic Materials</i> , 2017, 439, 251-258.	1.0	18
117	Real-Time Synchrotron Small-Angle X-ray Scattering Studies of Collagen Structure during Leather Processing. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 63-69.	1.8	18
118	The use of a personal glucose meter for detecting procalcitonin through glucose encapsulated within liposomes. <i>Analyst</i> , 2019, 144, 6225-6230.	1.7	18
119	Facettierte verzweigte Nickelâ€“Nanopartikel mit variierbarer Verzweigungsweite fÃ¼r die hochaktive elektrokatalytische Oxidation von Biomasse. <i>Angewandte Chemie</i> , 2020, 132, 15615-15620.	1.6	18
120	Rapid and ultrasensitive electrochemical detection of DNA methylation for ovarian cancer diagnosis. <i>Biosensors and Bioelectronics</i> , 2022, 206, 114126.	5.3	18
121	CdSe Quantum Dot Growth on Magnetic Nickel Nanoparticles. <i>Crystal Growth and Design</i> , 2013, 13, 2486-2492.	1.4	17
122	Using Magnetic Resonance Imaging to Evaluate Dendritic Cell-Based Vaccination. <i>PLoS ONE</i> , 2013, 8, e65318.	1.1	17
123	Electrochemical Reduction of CO2 on Nitrogenâ€“Doped Carbon Catalysts With and Without Iron. <i>ChemElectroChem</i> , 2019, 6, 4626-4636.	1.7	17
124	Simultaneous Functionalization of Carbon Surfaces with Rhodium and Iridium Organometallic Complexes: Hybrid Bimetallic Catalysts for Hydroamination. <i>Organometallics</i> , 2019, 38, 780-787.	1.1	17
125	Functionalized Silicon Electrodes in Electrochemistry. <i>Annual Review of Analytical Chemistry</i> , 2020, 13, 135-158.	2.8	17
126	Dual Signaling DNA Electrochemistry: An Approach To Understand DNA Interfaces. <i>Langmuir</i> , 2018, 34, 1249-1255.	1.6	16

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127	Controlled formation of 3D CdS nanocrystal superlattices in solution. <i>Nanotechnology</i> , 2006, 17, 3035-3038.	1.3	15
128	Stability of Chemically Passivated Silicon Electrodes in Aqueous Solutions: Interplay between Bias Voltage and Hydration of the Electrolyte. <i>Journal of Physical Chemistry C</i> , 2016, 120, 15941-15948.	1.5	15
129	Observing the Reversible Single Molecule Electrochemistry of Alexa Fluor 647 Dyes by Total Internal Reflection Fluorescence Microscopy. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 14495-14498.	7.2	15
130	Amorphous silicon on indium tin oxide: a transparent electrode for simultaneous light activated electrochemistry and optical microscopy. <i>Chemical Communications</i> , 2019, 55, 123-126.	2.2	15
131	Gold nanoparticles immobilised in a superabsorbent hydrogel matrix: facile synthesis and application for the catalytic reduction of toxic compounds. <i>Chemical Communications</i> , 2020, 56, 1263-1266.	2.2	15
132	Heterojunctions Based on Amorphous Silicon: A Versatile Surface Engineering Strategy To Tune Peak Position of Redox Monolayers on Photoelectrodes. <i>Journal of Physical Chemistry C</i> , 2020, 124, 836-844.	1.5	15
133	Controlling Pt Crystal Defects on the Surface of Ni@Pt Core-Shell Nanoparticles for Active and Stable Electrocatalysts for Oxygen Reduction. <i>ACS Applied Nano Materials</i> , 2020, 3, 5995-6000.	2.4	15
134	Application of Lanczos-based time-dependent density-functional theory approach to semiconductor nanoparticle quantum dots. <i>European Physical Journal B</i> , 2008, 66, 7-15.	0.6	14
135	Performance enhancement in silicon solar cell by inverted nanopyramid texturing and silicon quantum dots coating. <i>Journal of Renewable and Sustainable Energy</i> , 2014, 6, 011204.	0.8	14
136	Understanding and modelling the magnitude of the change in current of nanopore sensors. <i>Chemical Society Reviews</i> , 2022, 51, 5757-5776.	18.7	14
137	Light-activated electrochemistry on alkyne-terminated Si(100) surfaces towards solution-based redox probes. <i>Electrochimica Acta</i> , 2016, 213, 540-546.	2.6	13
138	ZnO/PVP nanoparticles induce gelation in type I collagen. <i>European Polymer Journal</i> , 2016, 75, 399-405.	2.6	13
139	Synthesis, optical properties and theoretical modelling of discrete emitting states in doped silicon nanocrystals for bioimaging. <i>Nanoscale</i> , 2018, 10, 15600-15607.	2.8	13
140	Single particle detection of protein molecules using dark-field microscopy to avoid signals from nonspecific adsorption. <i>Biosensors and Bioelectronics</i> , 2020, 169, 112612.	5.3	13
141	Ultrasensitive detection of programmed death-ligand 1 (PD-L1) in whole blood using dispersible electrodes. <i>Chemical Communications</i> , 2021, 57, 2559-2562.	2.2	13
142	Protease sensing using nontoxic silicon quantum dots. <i>Journal of Biomedical Optics</i> , 2017, 22, 1.	1.4	13
143	Earthworms lit with quantum dots. <i>Nature Nanotechnology</i> , 2013, 8, 6-7.	15.6	12
144	Strongly Magnetic Iron Nanoparticles Improve the Diagnosis of Small Tumours in the Reticuloendothelial System by Magnetic Resonance Imaging. <i>PLoS ONE</i> , 2013, 8, e56572.	1.1	12

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145	Spiers Memorial Lecture. Next generation nanoelectrochemistry: the fundamental advances needed for applications. <i>Faraday Discussions</i> , 2021, 233, 10-32.	1.6	12
146	Synthetic Strategies to Enhance the Electrocatalytic Properties of Branched Metal Nanoparticles. <i>Accounts of Chemical Research</i> , 2022, 55, 1693-1702.	7.6	12
147	Synthesis, characterization and photoconductivity of highly crystalline InP nanowires prepared from solid hydrogen phosphide. <i>Journal of Materials Chemistry</i> , 2009, 19, 4852.	6.7	11
148	Colloidal synthesis of inorganic fullerenenanoarticles and hollow spheres of titanium disulfide. <i>Chemical Communications</i> , 2011, 47, 439-441.	2.2	11
149	One-pot synthesis of water soluble iron nanoparticles using rationally-designed peptides and ligand release. <i>Chemical Communications</i> , 2013, 49, 4540.	2.2	11
150	Cell-targeted platinum nanoparticles and nanoparticle clusters. <i>Organic and Biomolecular Chemistry</i> , 2015, 13, 6567-6572.	1.5	11
151	Electrocatalysis: Understanding platinum migration. <i>Nature Energy</i> , 2016, 1, .	19.8	11
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