

# Richard D Tilley

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

194  
papers

7,438  
citations

46  
h-index

80  
g-index

224  
ext. papers

8,679  
ext. citations

9.4  
avg, IF

6.31  
L-index

| #   | Paper  | IF   | Citations |
|-----|--|------|-----------|
| 194 | Optical Nanopore Sensors for Quantitative Analysis.. <i>Nano Letters</i> , <b>2022</b> ,   | 11.5 | 3         |
| 193 | A single-Pt-atom-on-Ru-nanoparticle electrocatalyst for CO-resilient methanol oxidation. <i>Nature Catalysis</i> , <b>2022</b> , 5, 231-237  | 36.5 | 8         |
| 192 | Rapid and ultrasensitive electrochemical detection of DNA methylation for ovarian cancer diagnosis.. <i>Biosensors and Bioelectronics</i> , <b>2022</b> , 206, 114126                                    | 11.8 | 1         |
| 191 | Perovskite Quantum Dot Solar Cells Fabricated from Recycled Lead-Acid Battery Waste <b>2022</b> , 4, 120-127   |      | 2         |
| 190 | Spiers Memorial Lecture. Next generation nanoelectrochemistry: the fundamental advances needed for applications. <i>Faraday Discussions</i> , <b>2021</b> ,  | 3.6  | 2         |
| 189 | Key Parameters That Determine the Magnitude of the Decrease in Current in Nanopore Blockade Sensors. <i>Nano Letters</i> , <b>2021</b> , 21, 9374-9380   | 11.5 | 0         |
| 188 | How to exploit different endocytosis pathways to allow selective delivery of anticancer drugs to cancer cells over healthy cells.. <i>Chemical Science</i> , <b>2021</b> , 12, 15407-15417               | 9.4  | 0         |
| 187 | Quantum Dot Passivation of Halide Perovskite Films with Reduced Defects, Suppressed Phase Segregation, and Enhanced Stability. <i>Advanced Science</i> , <b>2021</b> , e2102258                          | 13.6 | 8         |
| 186 | Zero-valent iron core-iron oxide shell nanoparticles coated with silica and gold with high saturation magnetization. <i>Chemical Communications</i> , <b>2021</b> , 57, 13142-13145                      | 5.8  | 2         |
| 185 | Formation of Si-Rich Interfaces by Radiation-Induced Diffusion and Microsegregation in CrN/ZrN Nanolayer Coating. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 16928-16938          | 9.5  | 9         |
| 184 | Ligand-Promoted Cooperative Electrochemical Oxidation of Bio-Alcohol on Distorted Cobalt Hydroxides for Bio-Hydrogen Extraction. <i>ChemSusChem</i> , <b>2021</b> , 14, 2612-2620                        | 8.3  | 3         |
| 183 | Can the Shape of Nanoparticles Enable the Targeting to Cancer Cells over Healthy Cells?. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2007880  | 15.6 | 7         |
| 182 | Electrocatalysis in confined space. <i>Current Opinion in Electrochemistry</i> , <b>2021</b> , 25, 100644  | 7.2  | 6         |
| 181 | Impact of the Coverage of Aptamers on a Nanoparticle on the Binding Equilibrium and Kinetics between Aptamer and Protein. <i>ACS Sensors</i> , <b>2021</b> , 6, 538-545                                  | 9.2  | 7         |
| 180 | Rapid and ultrasensitive electrochemical detection of circulating tumor DNA by hybridization on the network of gold-coated magnetic nanoparticles. <i>Chemical Science</i> , <b>2021</b> , 12, 5196-5201 | 9.4  | 20        |
| 179 | Flexible and efficient perovskite quantum dot solar cells via hybrid interfacial architecture. <i>Nature Communications</i> , <b>2021</b> , 12, 466  | 17.4 | 73        |
| 178 | Investigating Spatial Heterogeneity of Nanoparticles Movement in Live Cells with Pair-Correlation Microscopy and Phasor Analysis. <i>Analytical Chemistry</i> , <b>2021</b> , 93, 3803-3812              | 7.8  | 1         |

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| 177 | Role of the Secondary Metal in Ordered and Disordered Pt <sub>M</sub> Intermetallic Nanoparticles: An Example of Pt <sub>3</sub> Sn Nanocubes for the Electrocatalytic Methanol Oxidation. <i>ACS Catalysis</i> , <b>2021</b> , 11, 2235-2243                                 | 13.1 | 8  |
| 176 | Functionalized Gold Nanorod Probes: A Sophisticated Design of SERS Immunoassay for Biodetection in Complex Media. <i>Analytical Chemistry</i> , <b>2021</b> , 93, 12954-12965   | 7.8  | 2  |
| 175 | Is Cu instability during the CO reduction reaction governed by the applied potential or the local CO concentration?. <i>Chemical Science</i> , <b>2021</b> , 12, 4028-4033  | 9.4  | 12 |
| 174 | Ultrasensitive detection of programmed death-ligand 1 (PD-L1) in whole blood using dispersible electrodes. <i>Chemical Communications</i> , <b>2021</b> , 57, 2559-2562   | 5.8  | 6  |
| 173 | Synthesis of gold-coated magnetic conglomerate nanoparticles with a fast magnetic response for bio-sensing. <i>Journal of Materials Chemistry C</i> , <b>2021</b> , 9, 1034-1043  | 7.1  | 5  |
| 172 | Controlling hydrogen evolution reaction activity on Ni core-Pt island nanoparticles by tuning the size of the Pt islands. <i>Chemical Communications</i> , <b>2021</b> , 57, 2788-2791  | 5.8  | 3  |
| 171 | Magnetic nanoparticles as MRI contrast agents for the diagnosis of Alzheimer's disease. <i>Alzheimer's and Dementia</i> , <b>2020</b> , 16, e041609   | 1.2  | 0  |
| 170 | Surface Patterning of Biomolecules Using Click Chemistry and Light-Activated Electrochemistry to Locally Generate Cu(I). <i>ChemElectroChem</i> , <b>2020</b> , 7, 4245-4250  | 4.3  | 0  |
| 169 | Selectively detecting attomolar concentrations of proteins using gold lined nanopores in a nanopore blockade sensor. <i>Chemical Science</i> , <b>2020</b> , 11, 12570-12579  | 9.4  | 12 |
| 168 | High-resolution light-activated electrochemistry on amorphous silicon-based photoelectrodes. <i>Chemical Communications</i> , <b>2020</b> , 56, 7435-7438   | 5.8  | 4  |
| 167 | Facettierte verzweigte Nickel-Nanopartikel mit variierbarer Verzweigungslänge für die hochaktive elektrokatalytische Oxidation von Biomasse. <i>Angewandte Chemie</i> , <b>2020</b> , 132, 15615-15620  | 3.6  | 13 |
| 166 | Facile synthesis of Ge <sub>1-x</sub> Sn <sub>x</sub> nanowires. <i>Materials Research Express</i> , <b>2020</b> , 7, 064004  | 1.7  | 0  |
| 165 | Nanoparticles as contrast agents for the diagnosis of Alzheimer's disease: a systematic review. <i>Nanomedicine</i> , <b>2020</b> , 15, 725-743   | 5.6  | 13 |
| 164 | Increasing the Formation of Active Sites on Highly Crystalline Co Branched Nanoparticles for Improved Oxygen Evolution Reaction Electrocatalysis. <i>ChemCatChem</i> , <b>2020</b> , 12, 3126-3131  | 5.2  | 4  |
| 163 | Zero valent iron core-iron oxide shell nanoparticles as small magnetic particle imaging tracers. <i>Chemical Communications</i> , <b>2020</b> , 56, 3504-3507   | 5.8  | 12 |
| 162 | Preserving the Exposed Facets of PtSn 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> , <b>2020</b> , 142, 3231-3239 | 16.4 | 29 |
| 161 | Nanoscale architecture of (CrN/ZrN)/(Cr/Zr) nanocomposite coatings: Microstructure, composition, mechanical properties and first-principles calculations. <i>Journal of Alloys and Compounds</i> , <b>2020</b> , 831, 154808  | 5.7  | 19 |
| 160 | Patterned Molecular Films of Alkanethiol and PLL-PEG on Gold-Silicate Interfaces: How to Add Functionalities while Retaining Effective Antifouling. <i>Langmuir</i> , <b>2020</b> , 36, 5243-5250   | 4    | 7  |

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|-----|--|------|-------|
| 159 | Controlling Pt Crystal Defects on the Surface of NiPt CoreShell Nanoparticles for Active and Stable Electrocatalysts for Oxygen Reduction. <i>ACS Applied Nano Materials</i> , <b>2020</b> , 3, 5995-6000                          | 5.6  | 7     |
| 158 | Optical tweezers-based characterisation of gold core-satellite plasmonic nano-assemblies incorporating thermo-responsive polymers. <i>Nanoscale</i> , <b>2020</b> , 12, 1680-1687  | 7.7  | 8     |
| 157 | Gold nanoparticles immobilised in a superabsorbent hydrogel matrix: facile synthesis and application for the catalytic reduction of toxic compounds. <i>Chemical Communications</i> , <b>2020</b> , 56, 1263-1266                  | 5.8  | 7     |
| 156 | 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> , <b>2020</b> , 124, 836-844             | 3.8  | 10    |
| 155 | Single particle detection of protein molecules using dark-field microscopy to avoid signals from nonspecific adsorption. <i>Biosensors and Bioelectronics</i> , <b>2020</b> , 169, 112612  | 11.8 | 7     |
| 154 | Tungsten Oxide/Carbide Surface Heterojunction Catalyst with High Hydrogen Evolution Activity. <i>ACS Energy Letters</i> , <b>2020</b> , 5, 3560-3568   | 20.1 | 27    |
| 153 | Photochemical upconversion of near-infrared light from below the silicon bandgap. <i>Nature Photonics</i> , <b>2020</b> , 14, 585-590  | 33.9 | 48    |
| 152 | Porous Graphene Oxide Films Prepared via the Breath-Figure Method: A Simple Strategy for Switching Access of Redox Species to an Electrode Surface. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 55181-55188  | 9.5  | 4     |
| 151 | Synthetic Bilayers on Mica from Self-Assembly of Hydrogen-Bonded Triazines. <i>Langmuir</i> , <b>2020</b> , 36, 13304-13311  | 14   | 13311 |
| 150 | Design guidelines for transition metals as interstitial emitters in silicon nanocrystals to tune photoluminescence properties: zinc as biocompatible example. <i>Nanoscale</i> , <b>2020</b> , 12, 19340-19349                     | 7.7  |       |
| 149 | Controlling the Number of Branches and Surface Facets of Pd-Core Ru-Branched Nanoparticles to Make Highly Active Oxygen Evolution Reaction Electrocatalysts. <i>Chemistry - A European Journal</i> , <b>2020</b> , 26, 15501-15504 | 4.8  | 1     |
| 148 | How Nanoparticles Transform Single Molecule Measurements into Quantitative Sensors. <i>Advanced Materials</i> , <b>2020</b> , 32, e1904339   | 24   | 15    |
| 147 | Spatially localized electrodeposition of multiple metals via light-activated electrochemistry for surface enhanced Raman spectroscopy applications. <i>Chemical Communications</i> , <b>2020</b> , 56, 5831-5834                   | 5.8  | 3     |
| 146 | Functionalized Silicon Electrodes in Electrochemistry. <i>Annual Review of Analytical Chemistry</i> , <b>2020</b> , 13, 135-158  | 12.5 | 15    |
| 145 | Monitoring the heterogeneity in single cell responses to drugs using electrochemical impedance and electrochemical noise. <i>Chemical Science</i> , <b>2020</b> , 12, 2558-2566  | 9.4  | 1     |
| 144 | Faceted Branched Nickel Nanoparticles with Tunable Branch Length for High-Activity Electrocatalytic Oxidation of Biomass. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 15487-15491                         | 16.4 | 41    |
| 143 | Electrochemical Reduction of CO <sub>2</sub> on Nitrogen-Doped Carbon Catalysts With and Without Iron. <i>ChemElectroChem</i> , <b>2019</b> , 6, 4626-4636   | 4.3  | 11    |
| 142 | Controlling Metallic Nanoparticle Redox Properties for Improved Methanol Oxidation Reaction Electrocatalysis. <i>ChemCatChem</i> , <b>2019</b> , 11, 5989-5993   | 5.2  | 3     |

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| 141 | 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> , <b>2019</b> , 141, 14093-14097 | 16.4 | 65  |
| 140 | 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> , <b>2019</b> , 141, 16202-16207   | 16.4 | 67  |
| 139 | Stimulation and Repair of Peripheral Nerves Using Bioadhesive Graft-Antenna. <i>Advanced Science</i> , <b>2019</b> , 6, 1801212  | 13.6 | 7   |
| 138 | Intrinsic and well-defined second generation hot spots in gold nanobipyramids versus gold nanorods. <i>Chemical Communications</i> , <b>2019</b> , 55, 7707-7710   | 5.8  | 14  |
| 137 | Microwave-assisted synthesis of black phosphorus quantum dots: efficient electrocatalyst for oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 12974-12978   | 13   | 40  |
| 136 | Electron microscopy and its role in advanced lithium-ion battery research. <i>Sustainable Energy and Fuels</i> , <b>2019</b> , 3, 1623-1646  | 5.8  | 12  |
| 135 | Formation of Branched Ruthenium Nanoparticles for Improved Electrocatalysis of Oxygen Evolution Reaction. <i>Small</i> , <b>2019</b> , 15, e1804577  | 11   | 33  |
| 134 | Raspberry-like small multicore gold nanostructures for efficient photothermal conversion in the first and second near-infrared windows. <i>Chemical Communications</i> , <b>2019</b> , 55, 4055-4058   | 5.8  | 15  |
| 133 | Recent Development in Focused Ion Beam Nanofabrication <b>2019</b> , 327-356   |      | 2   |
| 132 | Synthesis of low- and high-index faceted metal (Pt, Pd, Ru, Ir, Rh) nanoparticles for improved activity and stability in electrocatalysis. <i>Nanoscale</i> , <b>2019</b> , 11, 18995-19011  | 7.7  | 69  |
| 131 | Observing the Reversible Single Molecule Electrochemistry of Alexa Fluor 647 Dyes by Total Internal Reflection Fluorescence Microscopy. <i>Angewandte Chemie - International Edition</i> , <b>2019</b> , 58, 14495-14498   | 16.4 | 7   |
| 130 | High-throughput chemical and chemoenzymatic approaches to saccharide-coated magnetic nanoparticles for MRI. <i>Nanoscale Advances</i> , <b>2019</b> , 1, 3597-3606   | 5.1  | 5   |
| 129 | The impact of nanoparticle shape on cellular internalisation and transport: what do the different analysis methods tell us?. <i>Materials Horizons</i> , <b>2019</b> , 6, 1538-1547  | 14.4 | 58  |
| 128 | Antibacterial Effect of Au Implantation in Ductile Nanocomposite Multilayer (TiAlSiY)N/CrN Coatings. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 48540-48550   | 9.5  | 24  |
| 127 | Advances in the Application of Magnetic Nanoparticles for Sensing. <i>Advanced Materials</i> , <b>2019</b> , 31, e1904385  | 11.5 | 114 |
| 126 | Advantages of eutectic alloys for creating catalysts in the realm of nanotechnology-enabled metallurgy. <i>Nature Communications</i> , <b>2019</b> , 10, 4645  | 17.4 | 39  |
| 125 | Observing the Reversible Single Molecule Electrochemistry of Alexa Fluor 647 Dyes by Total Internal Reflection Fluorescence Microscopy. <i>Angewandte Chemie</i> , <b>2019</b> , 131, 14637-14640  | 3.6  | 0   |
| 124 | The importance of nanoscale confinement to electrocatalytic performance. <i>Chemical Science</i> , <b>2019</b> , 11, 1233-1240   | 9.4  | 23  |

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| 123 | The use of a personal glucose meter for detecting procalcitonin through glucose encapsulated within liposomes. <i>Analyst, The</i> , <b>2019</b> , 144, 6225-6230  | 5    | 12  |
| 122 | Ultrathin Fe-N-C Nanosheets Coordinated Fe-Doped CoNi Alloy Nanoparticles for Electrochemical Water Splitting. <i>Particle and Particle Systems Characterization</i> , <b>2019</b> , 36, 1800252   | 3.1  | 17  |
| 121 | Challenges and Solutions in Developing Ultrasensitive Biosensors. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 1162-1170   | 16.4 | 131 |
| 120 | Simultaneous Functionalization of Carbon Surfaces with Rhodium and Iridium Organometallic Complexes: Hybrid Bimetallic Catalysts for Hydroamination. <i>Organometallics</i> , <b>2019</b> , 38, 780-787                                  | 3.8  | 14  |
| 119 | Amorphous silicon on indium tin oxide: a transparent electrode for simultaneous light activated electrochemistry and optical microscopy. <i>Chemical Communications</i> , <b>2018</b> , 55, 123-126                                      | 5.8  | 12  |
| 118 | From the inside-out: leached metal impurities in multiwall carbon nanotubes for purification or electrocatalysis. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 4686-4694   | 13   | 17  |
| 117 | Dual Signaling DNA Electrochemistry: An Approach To Understand DNA Interfaces. <i>Langmuir</i> , <b>2018</b> , 34, 1249-1255   | 4    | 13  |
| 116 | Real-Time Synchrotron Small-Angle X-ray Scattering Studies of Collagen Structure during Leather Processing. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2018</b> , 57, 63-69   | 3.9  | 15  |
| 115 | Pd-Ru core-shell nanoparticles with tunable shell thickness for active and stable oxygen evolution performance. <i>Nanoscale</i> , <b>2018</b> , 10, 15173-15177   | 7.7  | 30  |
| 114 | Nucleic acid hybridization on an electrically reconfigurable network of gold-coated magnetic nanoparticles enables microRNA detection in blood. <i>Nature Nanotechnology</i> , <b>2018</b> , 13, 1066-1071                               | 28.7 | 159 |
| 113 | Synthesis, optical properties and theoretical modelling of discrete emitting states in doped silicon nanocrystals for bioimaging. <i>Nanoscale</i> , <b>2018</b> , 10, 15600-15607   | 7.7  | 10  |
| 112 | Three-Dimensional Branched and Faceted GoldRuthenium Nanoparticles: Using Nanostructure to Improve Stability in Oxygen Evolution Electrocatalysis. <i>Angewandte Chemie</i> , <b>2018</b> , 130, 10398-10402                             | 3.6  | 17  |
| 111 | Three-Dimensional Branched and Faceted Gold-Ruthenium Nanoparticles: Using Nanostructure to Improve Stability in Oxygen Evolution Electrocatalysis. <i>Angewandte Chemie - International Edition</i> , <b>2018</b> , 57, 10241-10245     | 16.4 | 57  |
| 110 | Electrocatalytic Nanoparticles That Mimic the Three-Dimensional Geometric Architecture of Enzymes: Nanozymes. <i>Journal of the American Chemical Society</i> , <b>2018</b> , 140, 13449-13455   | 16.4 | 45  |
| 109 | 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> , <b>2018</b> , 140, 12760-12764 | 16.4 | 58  |
| 108 | Understanding the Effect of Au in AuPd Bimetallic Nanocrystals on the Electrocatalysis of the Methanol Oxidation Reaction. <i>Journal of Physical Chemistry C</i> , <b>2018</b> , 122, 21718-21723                                       | 3.8  | 26  |
| 107 | Rod-shaped mesoporous silica nanoparticles for nanomedicine: recent progress and perspectives. <i>Expert Opinion on Drug Delivery</i> , <b>2018</b> , 15, 881-892  | 8    | 35  |
| 106 | Largely Enhanced Mobility in Trilayered LaAlO <sub>3</sub> /SrTiO <sub>3</sub> /LaAlO <sub>3</sub> Heterostructures. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 20950-20958                                       | 9.5  | 2   |

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| 105 | A rapid readout for many single plasmonic nanoparticles using dark-field microscopy and digital color analysis. <i>Biosensors and Bioelectronics</i> , <b>2018</b> , 117, 530-536                                    | 11.8 | 28 |
| 104 | Solution Synthesis, Surface Passivation, Optical Properties, Biomedical Applications, and Cytotoxicity of Silicon and Germanium Nanocrystals. <i>ChemPlusChem</i> , <b>2017</b> , 82, 60-73                          | 2.8  | 36 |
| 103 | Preparation, characterization and in vitro biological evaluation of (1:2) phenoxodiol- $\beta$ -cyclodextrin complex. <i>Carbohydrate Polymers</i> , <b>2017</b> , 165, 444-454                                      | 10.3 | 15 |
| 102 | Colloidal silicon quantum dots: from preparation to the modification of self-assembled monolayers for bioimaging and sensing applications <b>2017</b> ,  |      | 3  |
| 101 | Stability of polyelectrolyte-coated iron nanoparticles for T2-weighted magnetic resonance imaging. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2017</b> , 439, 251-258                                   | 2.8  | 14 |
| 100 | Role of Surface Capping Molecule Polarity on the Optical Properties of Solution Synthesized Germanium Nanocrystals. <i>Langmuir</i> , <b>2017</b> , 33, 8790-8798  | 4    | 4  |
| 99  | Predicting the role of seed morphology in the evolution of anisotropic nanocatalysts. <i>Nanoscale</i> , <b>2017</b> , 9, 1502-1510  | 7.7  | 8  |
| 98  | Size and shape evolution of highly magnetic iron nanoparticles from successive growth reactions. <i>Chemical Communications</i> , <b>2017</b> , 53, 11548-11551  | 5.8  | 19 |
| 97  | Nanoscale upconversion for oxygen sensing. <i>Materials Science and Engineering C</i> , <b>2017</b> , 70, 76-84  | 8.3  | 21 |
| 96  | Protease sensing using nontoxic silicon quantum dots. <i>Journal of Biomedical Optics</i> , <b>2017</b> , 22, 1-7  | 3.5  | 10 |
| 95  | Synthesis and Characterization of Highly Crystalline Zinc Phosphide Nanoparticles. <i>Key Engineering Materials</i> , <b>2016</b> , 701, 3-7   | 0.4  | 1  |
| 94  | Light-activated electrochemistry on alkyne-terminated Si(100) surfaces towards solution-based redox probes. <i>Electrochimica Acta</i> , <b>2016</b> , 213, 540-546  | 6.7  | 11 |
| 93  | Gecko-inspired chitosan adhesive for tissue repair. <i>NPG Asia Materials</i> , <b>2016</b> , 8, e280-e280   | 10.3 | 32 |
| 92  | Carbon supported AuPd core-shell nanoparticles for hydrogen production by alcohol electroreforming. <i>Catalysis Science and Technology</i> , <b>2016</b> , 6, 6870-6878   | 5.5  | 39 |
| 91  | 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> , <b>2016</b> , 120, 15941-15948 | 3.8  | 12 |
| 90  | Synthesis and catalytic properties of highly branched palladium nanostructures using seeded growth. <i>Nanoscale</i> , <b>2016</b> , 8, 2867-74  | 7.7  | 18 |
| 89  | ZnO/PVP nanoparticles induce gelation in type I collagen. <i>European Polymer Journal</i> , <b>2016</b> , 75, 399-405  | 5.2  | 11 |
| 88  | Structural and magnetic studies of Co <sup>2+</sup> -substituted magnetoplumbite-type (M-type) strontium ferrites by sol-gel method. <i>Journal of Sol-Gel Science and Technology</i> , <b>2016</b> , 77, 306-314    | 2.3  | 3  |

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| 87 | Dynamic evolution of specific catalytic sites on Pt nanoparticles. <i>Catalysis Science and Technology</i> , <b>2016</b> , 6, 144-151   | 5.5  | 19  |
| 86 | Upconverter-powered oxygen sensing in electrospun polymeric bilayers. <i>Sensors and Actuators B: Chemical</i> , <b>2016</b> , 235, 197-205   | 8.5  | 5   |
| 85 | Gold coated magnetic nanoparticles: from preparation to surface modification for analytical and biomedical applications. <i>Chemical Communications</i> , <b>2016</b> , 52, 7528-40                     | 5.8  | 141 |
| 84 | How to choose a precursor for decomposition solution-phase synthesis: the case of iron nanoparticles. <i>Nanoscale</i> , <b>2015</b> , 7, 5951-4  | 7.7  | 20  |
| 83 | Solution Synthesis and Optical Properties of Transition-Metal-Doped Silicon Nanocrystals. <i>Journal of Physical Chemistry Letters</i> , <b>2015</b> , 6, 1573-6  | 6.4  | 24  |
| 82 | Cell-targeted platinum nanoparticles and nanoparticle clusters. <i>Organic and Biomolecular Chemistry</i> , <b>2015</b> , 13, 6567-72   | 3.9  | 10  |
| 81 | Gold over Branched Palladium Nanostructures for Photothermal Cancer Therapy. <i>ACS Nano</i> , <b>2015</b> , 9, 12283-91  | 16.7 | 86  |
| 80 | Simple ligand exchange reactions enabling excellent dispersibility and stability of magnetic nanoparticles in polar organic, aromatic, and protic solvents. <i>Langmuir</i> , <b>2014</b> , 30, 1514-21 | 4    | 38  |
| 79 | Solution synthesis, optical properties, and bioimaging applications of silicon nanocrystals. <i>Accounts of Chemical Research</i> , <b>2014</b> , 47, 3045-51   | 24.3 | 163 |
| 78 | Mimicking filtration and transport of rotavirus and adenovirus in sand media using DNA-labeled, protein-coated silica nanoparticles. <i>Water Research</i> , <b>2014</b> , 62, 167-79                   | 12.5 | 31  |
| 77 | Performance enhancement in silicon solar cell by inverted nanopyramid texturing and silicon quantum dots coating. <i>Journal of Renewable and Sustainable Energy</i> , <b>2014</b> , 6, 011204          | 2.5  | 11  |
| 76 | One-Pot Synthesis of Functionalized Noble Metal Nanoparticles Using a Rationally Designed Phosphopeptide. <i>Particle and Particle Systems Characterization</i> , <b>2014</b> , 31, 971-975             | 3.1  | 3   |
| 75 | How hollow structures form from crystalline iron-iron oxide core-shell nanoparticles in the electron beam. <i>Chemical Communications</i> , <b>2013</b> , 49, 6203-5                                    | 5.8  | 13  |
| 74 | Effect of Surfactant Concentration and Aggregation on the Growth Kinetics of Nickel Nanoparticles. <i>Journal of Physical Chemistry C</i> , <b>2013</b> , 117, 16709-16718                              | 3.8  | 58  |
| 73 | Silicon and germanium nanoparticles with tailored surface chemistry as novel inorganic fiber brightening agents. <i>Journal of Agricultural and Food Chemistry</i> , <b>2013</b> , 61, 7188-94          | 5.7  | 6   |
| 72 | Au-Pd core-shell nanoparticles as alcohol oxidation catalysts: effect of shape and composition. <i>ChemSusChem</i> , <b>2013</b> , 6, 1858-62   | 8.3  | 19  |
| 71 | Gold-Palladium Core-Shell Nanocrystals with Size and Shape Control Optimized for Catalytic Performance. <i>Angewandte Chemie</i> , <b>2013</b> , 125, 1517-1520   | 3.6  | 26  |
| 70 | Gold-palladium core-shell nanocrystals with size and shape control optimized for catalytic performance. <i>Angewandte Chemie - International Edition</i> , <b>2013</b> , 52, 1477-80                    | 16.4 | 98  |



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| 50 | Toxicity test: Fluorescent silicon nanoparticles. <i>Journal of Physics: Conference Series</i> , <b>2011</b> , 304, 012042   | 0.3  | 5   |
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