Reginald M Penner

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167 63 13,329 113 h-index g-index citations papers 6.75 14,800 10.2 195 L-index avg, IF ext. citations ext. papers

| # | Paper | IF | Citations |
|-----|--|-----------------|-----------|
| 167 | Hydrogen sensors and switches from electrodeposited palladium mesowire arrays. <i>Science</i> , 2001 , 293, 2227-31 | 33.3 | 1187 |
| 166 | Energy Storage in Nanomaterials - Capacitive, Pseudocapacitive, or Battery-like?. ACS Nano, 2018 , 12, 2081-2083 | 16.7 | 765 |
| 165 | Diverse Applications of Nanomedicine. ACS Nano, 2017, 11, 2313-2381 | 16.7 | 714 |
| 164 | Molybdenum nanowires by electrodeposition. <i>Science</i> , 2000 , 290, 2120-3 | 33.3 | 549 |
| 163 | Mesoscopic Metal Particles and Wires by Electrodeposition. <i>Journal of Physical Chemistry B</i> , 2002 , 106, 3339-3353 | 3.4 | 341 |
| 162 | Photoluminescence and polarized photodetection of single ZnO nanowires. <i>Applied Physics Letters</i> , 2004 , 85, 6128-6130 | 3.4 | 305 |
| 161 | Lithographically patterned nanowire electrodeposition. <i>Nature Materials</i> , 2006 , 5, 914-9 | 27 | 274 |
| 160 | Preparation and electrochemical characterization of ultramicroelectrode ensembles. <i>Analytical Chemistry</i> , 1987 , 59, 2625-2630 | 7.8 | 250 |
| 159 | Electrochemically Grown Wires for Individually Addressable Sensor Arrays. <i>Nano Letters</i> , 2004 , 4, 419-4 | . 22 1.5 | 213 |
| 158 | Electrode Degradation in Lithium-Ion Batteries. ACS Nano, 2020, 14, 1243-1295 | 16.7 | 209 |
| 157 | Palladium mesowire arrays for fast hydrogen sensors and hydrogen-actuated switches. <i>Analytical Chemistry</i> , 2002 , 74, 1546-53 | 7.8 | 206 |
| 156 | Electrochemical Deposition of Silver Nanocrystallites on the Atomically Smooth Graphite Basal Plane. <i>The Journal of Physical Chemistry</i> , 1996 , 100, 837-844 | | 204 |
| 155 | Fast, sensitive hydrogen gas detection using single palladium nanowires that resist fracture. <i>Nano Letters</i> , 2009 , 9, 2177-82 | 11.5 | 193 |
| 154 | The nature of water on surfaces of laboratory systems and implications for heterogeneous chemistry in the troposphere. <i>Physical Chemistry Chemical Physics</i> , 2004 , 6, 604 | 3.6 | 182 |
| 153 | Smaller is faster and more sensitive: the effect of wire size on the detection of hydrogen by single palladium nanowires. <i>ACS Nano</i> , 2010 , 4, 5233-44 | 16.7 | 181 |
| 152 | Noble and Coinage Metal Nanowires by Electrochemical Step Edge Decoration. <i>Journal of Physical Chemistry B</i> , 2002 , 106, 11407-11411 | 3.4 | 168 |
| 151 | Polycrystalline Molybdenum Disulfide (2HMoS2) Nano- and Microribbons by Electrochemical/Chemical Synthesis. <i>Nano Letters</i> , 2004 , 4, 277-281 | 11.5 | 163 |

(2005-2011)

| 150 | Mesoporous manganese oxide nanowires for high-capacity, high-rate, hybrid electrical energy storage. <i>ACS Nano</i> , 2011 , 5, 8275-87 | 16.7 | 150 |
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| 149 | 20 micros photocurrent response from lithographically patterned nanocrystalline cadmium selenide nanowires. <i>Nano Letters</i> , 2010 , 10, 1481-5 | 11.5 | 148 |
| 148 | Investigation of a single Pd nanowire for use as a hydrogen sensor. Small, 2006, 2, 356-8 | 11 | 143 |
| 147 | Nanocrystalline Nickel Nanoparticles. <i>Advanced Materials</i> , 2000 , 12, 878-883 | 24 | 142 |
| 146 | Photoconductive cadmium sulfide hemicylindrical shell nanowire ensembles. <i>Nano Letters</i> , 2005 , 5, 172 | 015 .5 | 137 |
| 145 | Size-selective electrodeposition of meso-scale metal particles: a general method. <i>Electrochimica Acta</i> , 2001 , 47, 671-677 | 6.7 | 136 |
| 144 | Enhanced thermoelectric metrics in ultra-long electrodeposited PEDOT nanowires. <i>Nano Letters</i> , 2011 , 11, 125-31 | 11.5 | 134 |
| 143 | Amine Vapor Sensing with Silver Mesowires. <i>Nano Letters</i> , 2004 , 4, 665-670 | 11.5 | 127 |
| 142 | Controlling the Morphology of Electronically Conductive Polymers. <i>Journal of the Electrochemical Society</i> , 1986 , 133, 2206-2207 | 3.9 | 125 |
| 141 | Lithographically patterned nanowire electrodeposition: a method for patterning electrically continuous metal nanowires on dielectrics. <i>ACS Nano</i> , 2008 , 2, 1939-49 | 16.7 | 124 |
| 140 | Metal nanowire arrays by electrodeposition. <i>ChemPhysChem</i> , 2003 , 4, 131-8 | 3.2 | 124 |
| 139 | Accelerating Palladium Nanowire H Sensors Using Engineered Nanofiltration. ACS Nano, 2017, 11, 9276 | -9885 | 123 |
| 138 | Shape- and size-selective electrochemical synthesis of dispersed silver(I) oxide colloids. <i>Nano Letters</i> , 2005 , 5, 2319-24 | 11.5 | 123 |
| 137 | Virus-PEDOT nanowires for biosensing. <i>Nano Letters</i> , 2010 , 10, 4858-62 | 11.5 | 121 |
| 136 | Lithographically Patterned Gold/Manganese Dioxide Core/Shell Nanowires for High Capacity, High Rate, and High Cyclability Hybrid Electrical Energy Storage. <i>Chemistry of Materials</i> , 2012 , 24, 2382-2390 | 9.6 | 120 |
| 135 | A Hybrid Electrochemical/Chemical Synthesis of Zinc Oxide Nanoparticles and Optically Intrinsic Thin Films. <i>Chemistry of Materials</i> , 1998 , 10, 1120-1129 | 9.6 | 116 |
| 134 | Joule heating a palladium nanowire sensor for accelerated response and recovery to hydrogen gas. <i>Small</i> , 2010 , 6, 1422-9 | 11 | 111 |
| 133 | Molybdenum disulfide nanowires and nanoribbons by electrochemical/chemical synthesis. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 3169-82 | 3.4 | 111 |

| 132 | Synthesis of Molybdenum Nanowires with Millimeter-Scale Lengths Using Electrochemical Step Edge Decoration. <i>Chemistry of Materials</i> , 2002 , 14, 3206-3216 | 9.6 | 109 |
|-----|--|------|-----|
| 131 | Sensors from polymer modified electrodes. <i>Journal of the Chemical Society Faraday Transactions I</i> , 1986 , 82, 1051 | | 109 |
| 130 | Bismuth telluride (Bi2Te3) nanowires: synthesis by cyclic electrodeposition/stripping, thinning by electrooxidation, and electrical power generation. <i>Langmuir</i> , 2006 , 22, 10564-74 | 4 | 104 |
| 129 | Sensors from electrodeposited metal nanowires. Surface and Interface Analysis, 2002, 34, 409-412 | 1.5 | 102 |
| 128 | Bismuth Telluride (Bi2Te3) Nanowires Synthesized by Cyclic Electrodeposition/Stripping Coupled with Step Edge Decoration. <i>Nano Letters</i> , 2004 , 4, 2009-2014 | 11.5 | 102 |
| 127 | Subnanometer Silver Clusters Exhibiting Unexpected Electrochemical Metastability on Graphite. <i>Langmuir</i> , 2000 , 16, 4016-4023 | 4 | 101 |
| 126 | Nanometer-scale electrochemical deposition of silver on graphite using a scanning tunneling microscope. <i>Applied Physics Letters</i> , 1992 , 60, 1181-1183 | 3.4 | 97 |
| 125 | Chemical sensing with nanowires. Annual Review of Analytical Chemistry, 2012, 5, 461-85 | 12.5 | 92 |
| 124 | Hybrid electrochemical/chemical synthesis of quantum dots. <i>Accounts of Chemical Research</i> , 2000 , 33, 78-86 | 24.3 | 90 |
| 123 | Catalytically activated palladium@platinum nanowires for accelerated hydrogen gas detection. <i>ACS Nano</i> , 2015 , 9, 3215-25 | 16.7 | 84 |
| 122 | Synthesis of PbTe nanowire arrays using lithographically patterned nanowire electrodeposition. <i>Nano Letters</i> , 2008 , 8, 2447-51 | 11.5 | 84 |
| 121 | Nanometer-Scale Electropolymerization of Aniline Using the Scanning Tunneling Microscope. <i>The Journal of Physical Chemistry</i> , 1996 , 100, 17041-17049 | | 83 |
| 120 | Preparation and electrochemical characterization of conical and hemispherical ultramicroelectrodes. <i>Analytical Chemistry</i> , 1989 , 61, 1630-1636 | 7.8 | 82 |
| 119 | Electrochemical investigations of electronically conductive polymers. 2. Evaluation of charge-transport rates in polypyrrole using an alternating current impedance method. <i>The Journal of Physical Chemistry</i> , 1989 , 93, 984-989 | | 81 |
| 118 | Hybrid Electrochemical/Chemical Synthesis of Supported, Luminescent Semiconductor Nanocrystallites with Size Selectivity: Copper(I) Iodide. <i>Journal of the American Chemical Society</i> , 1997 , 119, 1439-1448 | 16.4 | 80 |
| 117 | Nanocrystalline ⊞MnO2 Nanowires by Electrochemical Step-Edge Decoration. <i>Chemistry of Materials</i> , 2004 , 16, 3402-3405 | 9.6 | 78 |
| 116 | Electronically Conductive Composite Polymer Membranes. <i>Journal of the Electrochemical Society</i> , 1986 , 133, 310-315 | 3.9 | 76 |
| 115 | Electrochemical evaluation of charge-transport rates in polypyrrole. <i>The Journal of Physical Chemistry</i> , 1988 , 92, 5274-5282 | | 76 |

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| | 114 | Size-Selective and Epitaxial Electrochemical/Chemical Synthesis of Sulfur-Passivated Cadmium Sulfide Nanocrystals on Graphite. <i>Journal of the American Chemical Society</i> , 1998 , 120, 9584-9593 | 16.4 | 75 | |
|---|-----|--|----------------------------------|----|--|
| | 113 | Observations of a circular, triple-helical polysaccharide using noncontact atomic force microscopy. <i>Macromolecules</i> , 1995 , 28, 6375-6377 | 5.5 | 74 | |
| - | 112 | Virus electrodes for universal biodetection. <i>Analytical Chemistry</i> , 2006 , 78, 3265-70 | 7.8 | 73 | |
| | 111 | The surface scattering-based detection of hydrogen in air using a platinum nanowire. <i>Nano Letters</i> , 2012 , 12, 2924-30 | 11.5 | 67 | |
| - | 110 | Electronic devices from electrodeposited metal nanowires. <i>Microelectronic Engineering</i> , 2002 , 61-62, 555-561 | 2.5 | 66 | |
| | 109 | Implementation of Electrochemically Synthesized Silver Nanocrystallites for the Preferential SERS Enhancement of Defect Modes on Thermally Etched Graphite Surfaces. <i>Analytical Chemistry</i> , 1996 , 68, 1585-92 | 7.8 | 64 | |
| - | 108 | A nanometer-scale galvanic cell. <i>The Journal of Physical Chemistry</i> , 1992 , 96, 6529-6532 | | 64 | |
| | 107 | Ion Transporting Composite Membranes: I . Nafion-Impregnated Gore-Tex. <i>Journal of the Electrochemical Society</i> , 1985 , 132, 514-515 | 3.9 | 64 | |
| - | 106 | Cheating the diffraction limit: electrodeposited nanowires patterned by photolithography. <i>Chemical Communications</i> , 2009 , 859-73 | 5.8 | 63 | |
| | 105 | Physical vapor deposition of one-dimensional nanoparticle arrays on graphite: seeding the electrodeposition of gold nanowires. <i>Langmuir</i> , 2007 , 23, 10372-9 | 4 | 62 | |
| - | 104 | A Nose for Hydrogen Gas: Fast, Sensitive H Sensors Using Electrodeposited Nanomaterials. <i>Accounts of Chemical Research</i> , 2017 , 50, 1902-1910 | 24.3 | 59 | |
| : | 103 | Hollow Pd-Ag Composite Nanowires for Fast Responding and Transparent Hydrogen Sensors. <i>ACS Applied Materials & Discourt Materials & Di</i> | 9.5 | 58 | |
| - | 102 | Nano Day: Celebrating the Next Decade of Nanoscience and Nanotechnology. ACS Nano, 2016, 10, 9093 | - 9 1. 9 3 | 56 | |
| : | 101 | Phase separation in AlxGa1-xAs nanowhiskers grown by the solution-liquid-solid mechanism. Journal of the American Chemical Society, 2001 , 123, 4502-11 | 16.4 | 55 | |
| | 100 | Electrically Transduced Sensors Based on Nanomaterials (2012-2016). <i>Analytical Chemistry</i> , 2017 , 89, 249-275 | 7.8 | 54 | |
| 9 | 99 | Brownian Dynamics Simulations of the Growth of Metal Nanocrystal Ensembles on Electrode Surfaces in Solution: 2. The Effect of Deposition Rate on Particle Size Dispersion <i>Journal of Physical Chemistry B</i> , 2001 , 105, 8672-8678 | 3.4 | 53 | |
| 9 | 98 | Hierarchical Metal-Organic Framework-Assembled Membrane Filter for Efficient Removal of Particulate Matter. <i>ACS Applied Materials & Description</i> (2018), 10, 19957-19963 | 9.5 | 52 | |
| (| 97 | Sub-nanomolar detection of prostate-specific membrane antigen in synthetic urine by synergistic, dual-ligand phage. <i>Journal of the American Chemical Society</i> , 2013 , 135, 7761-7 | 16.4 | 49 | |

| 96 | Preparation of STM tips for in-situ characterization of electrode surfaces. <i>Journal of Microscopy</i> , 1988 , 152, 651-661 | 1.9 | 48 |
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| 95 | Tunable photoconduction sensitivity and bandwidth for lithographically patterned nanocrystalline cadmium selenide nanowires. <i>ACS Nano</i> , 2011 , 5, 7627-39 | 16.7 | 47 |
| 94 | Virus-polymer hybrid nanowires tailored to detect prostate-specific membrane antigen. <i>Analytical Chemistry</i> , 2012 , 84, 2776-83 | 7.8 | 46 |
| 93 | Pt-Functionalized PdO Nanowires for Room Temperature Hydrogen Gas Sensors. <i>ACS Sensors</i> , 2018 , 3, 2152-2158 | 9.2 | 46 |
| 92 | Sub-6 nm Palladium Nanoparticles for Faster, More Sensitive H Detection Using Carbon Nanotube Ropes. <i>ACS Sensors</i> , 2017 , 2, 282-289 | 9.2 | 44 |
| 91 | Silver Oxide Microwires: Electrodeposition and Observation of Reversible Resistance Modulation upon Exposure to Ammonia Vapor. <i>Chemistry of Materials</i> , 2005 , 17, 6611-6618 | 9.6 | 43 |
| 90 | Chemiresistive Hydrogen Sensors: Fundamentals, Recent Advances, and Challenges. <i>ACS Nano</i> , 2020 , 14, 14284-14322 | 16.7 | 41 |
| 89 | BeadedIBimetallic Nanowires: Wiring Nanoparticles of Metal 1 Using Nanowires of Metal 2. <i>Advanced Materials</i> , 2003 , 15, 396-399 | 24 | 40 |
| 88 | Multimode detection of hydrogen gas using palladium-covered silicon micro-channels. <i>Analytical Chemistry</i> , 2003 , 75, 4756-65 | 7.8 | 40 |
| 87 | Electrostatic force microscopy of silver nanocrystals with nanometer-scale resolution. <i>Applied Physics Letters</i> , 1997 , 71, 1878-1880 | 3.4 | 39 |
| 86 | Spatial control of coherent anti-stokes emission with height-modulated gold zig-zag nanowires. <i>Nano Letters</i> , 2008 , 8, 2373-7 | 11.5 | 39 |
| 85 | Polarization-Dependent Surface Enhanced Raman Scattering from Silver 1D Nanoparticle Arrays. Journal of Physical Chemistry C, 2008 , 112, 11609-11613 | 3.8 | 39 |
| 84 | Tunable Two-Photon Excited Luminescence in Single Gold Nanowires Fabricated by Lithographically Patterned Nanowire Electrodeposition. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 127 | 72] :927 | 1237 |
| 83 | Covalent virus layer for mass-based biosensing. <i>Analytical Chemistry</i> , 2008 , 80, 933-43 | 7.8 | 37 |
| 82 | Reversible resistance modulation in mesoscopic silver wires induced by exposure to amine vapor. <i>Analytical Chemistry</i> , 2005 , 77, 5205-14 | 7.8 | 37 |
| 81 | Trace detection of dissolved hydrogen gas in oil using a palladium nanowire array. <i>Analytical Chemistry</i> , 2011 , 83, 9472-7 | 7.8 | 36 |
| 80 | Wafer-scale patterning of lead telluride nanowires: structure, characterization, and electrical properties. <i>ACS Nano</i> , 2009 , 3, 4144-54 | 16.7 | 36 |
| 79 | Reconnectable sub-5 nm nanogaps in ultralong gold nanowires. <i>Nano Letters</i> , 2009 , 9, 2133-8 | 11.5 | 36 |

(2012-1991)

| 78 | Mechanistic investigations of nanometer-scale lithography at liquid-covered graphite surfaces. <i>Applied Physics Letters</i> , 1991 , 58, 1389-1391 | 3.4 | 36 |
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| 77 | Virus-poly(3,4-ethylenedioxythiophene) composite films for impedance-based biosensing. Analytical Chemistry, 2011 , 83, 2420-4 | 7.8 | 34 |
| 76 | Direct electrical transduction of antibody binding to a covalent virus layer using electrochemical impedance. <i>Analytical Chemistry</i> , 2008 , 80, 5695-705 | 7.8 | 34 |
| 75 | Luminescent Polycrystalline Cadmium Selenide Nanowires Synthesized by Cyclic Electrodeposition/Stripping Coupled with Step Edge Decoration. <i>Chemistry of Materials</i> , 2006 , 18, 3432 | 2-3441 | 34 |
| 74 | Deposition of metal nanostructures onto Si(111) surfaces by field evaporation in the scanning tunneling microscope. <i>Applied Physics Letters</i> , 1994 , 64, 1350-1352 | 3.4 | 33 |
| 73 | 100k Cycles and Beyond: Extraordinary Cycle Stability for MnO2 Nanowires Imparted by a Gel Electrolyte. <i>ACS Energy Letters</i> , 2016 , 1, 57-63 | 20.1 | 33 |
| 72 | Lithographically Patterned PEDOT Nanowires for the Detection of Iron(III) with Nanomolar Sensitivity. <i>Analytical Chemistry</i> , 2015 , 87, 11492-500 | 7.8 | 32 |
| 71 | Coupled electrooxidation and electrical conduction in a single gold nanowire. <i>Nano Letters</i> , 2008 , 8, 30 | 17:23 | 30 |
| 70 | Enhanced photoemission from short-wavelength photochemically etched porous silicon. <i>The Journal of Physical Chemistry</i> , 1993 , 97, 4505-4508 | | 30 |
| 69 | Solid-State Ionic Diodes Demonstrated in Conical Nanopores. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 6170-6176 | 3.8 | 28 |
| 68 | Interactions of gaseous nitric acid with surfaces of environmental interest. <i>Physical Chemistry Chemical Physics</i> , 2004 , 6, 3879 | 3.6 | 28 |
| 67 | Virus-Enabled Biosensor for Human Serum Albumin. <i>Analytical Chemistry</i> , 2017 , 89, 1373-1381 | 7.8 | 27 |
| 66 | Photovoltaic devices based on electrochemical@hemical deposited CdS and poly3-octylthiophene thin films. <i>Solar Energy Materials and Solar Cells</i> , 2009 , 93, 51-54 | 6.4 | 26 |
| 65 | Chemical Vapor Deposition of Silica Micro- and Nanoribbons Using Step-Edge Localized Water. Journal of Physical Chemistry B, 2003 , 107, 5393-5397 | 3.4 | 26 |
| 64 | Self-Assembly of n-Alkanethiolate Monolayers on Silver Nanostructures: Determination of the Apparent Thickness of the Monolayer by Scanning Tunneling Microscopy. <i>The Journal of Physical Chemistry</i> , 1994 , 98, 11751-11755 | | 26 |
| 63 | Gold Nanowire Thermophones. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 29101-29107 | 3.8 | 25 |
| 62 | Size-Selective Growth of Nanoscale Tetrathiafulvalene Bromide Crystallites on Platinum Particles. <i>Advanced Materials</i> , 2001 , 13, 1567 | 24 | 24 |
| 61 | High-throughput fabrication of photoconductors with high detectivity, photosensitivity, and bandwidth. <i>ACS Nano</i> , 2012 , 6, 5627-34 | 16.7 | 21 |

| 60 | High-Throughput Measurement of the Seebeck Coefficient and the Electrical Conductivity of Lithographically Patterned Polycrystalline PbTe Nanowires. <i>Journal of Physical Chemistry Letters</i> , 2010 , 1, 3004-3011 | 6.4 | 20 |
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| 59 | The Promise of Phage Display: Customized Affinity and Specificity. <i>Analytical Chemistry</i> , 2008 , 80, 3082 | -3,089 | 20 |
| 58 | Shrinking nanowires by kinetically controlled electrooxidation. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 36-41 | 3.4 | 20 |
| 57 | Electrodeposition of silverBopper bimetallic particles having two archetypes by facilitated nucleation. <i>Journal of Electroanalytical Chemistry</i> , 2002 , 522, 86-94 | 4.1 | 20 |
| 56 | Self-Assembly of n-Alkanethiolate Monolayers on Silver Nanostructures: Protective Encapsulation. <i>Langmuir</i> , 1995 , 11, 4361-4365 | 4 | 19 |
| 55 | A lithographically patterned capacitor with horizontal nanowires of length 2.5 mm. <i>ACS Applied Materials & Discourt & Discourt Materials & Discourt & D</i> | 9.5 | 18 |
| 54 | A chemically-responsive nanojunction within a silver nanowire. <i>Nano Letters</i> , 2012 , 12, 1729-35 | 11.5 | 18 |
| 53 | Electrodeposition of metal nanostructures by galvanic displacement powered with insoluble crystals of a ferrocene derivative. <i>ChemPhysChem</i> , 2004 , 5, 1879-84 | 3.2 | 18 |
| 52 | Electrodeposited submicron thermocouples with microsecond response times. <i>Nano Letters</i> , 2007 , 7, 3208-13 | 11.5 | 17 |
| 51 | Assembly of fatty acid bilayers on hydrophobic substrates using a horizontal deposition procedure. <i>Langmuir</i> , 1992 , 8, 1243-1246 | 4 | 16 |
| 50 | Hydrogen Sensing with a Single Palladium Nanowire. Sensor Letters, 2010, 8, 534-538 | 0.9 | 16 |
| 49 | Virus-poly(3,4-ethylenedioxythiophene) biocomposite films. <i>Langmuir</i> , 2012 , 28, 12581-7 | 4 | 15 |
| 48 | Scanning tunneling microscopy investigations of the Si(111) topography produced by etching in 40% NH4F: Observation of an optimum etch duration. <i>Applied Physics Letters</i> , 1993 , 63, 1119-1121 | 3.4 | 15 |
| 47 | Sensors Based Upon Nanowires, Nanotubes, and Nanoribbons: 2016-2020. <i>Analytical Chemistry</i> , 2021 , 93, 124-166 | 7.8 | 15 |
| 46 | Fabricating nanoscale DNA patterns with gold nanowires. <i>Analytical Chemistry</i> , 2010 , 82, 3365-70 | 7.8 | 14 |
| 45 | Characterization of electrodeposited gold and palladium nanowire gratings with optical diffraction measurements. <i>Analytical Chemistry</i> , 2009 , 81, 5585-92 | 7.8 | 14 |
| 44 | Ion transport in gel and gel-liquid systems for LiClO-doped PMMA at the meso- and nanoscales. <i>Nanoscale</i> , 2017 , 9, 16232-16243 | 7.7 | 13 |
| 43 | In Situ Electrical Conductivity of LixMnO2 Nanowires as a Function of x and Size. <i>Chemistry of Materials</i> , 2015 , 27, 3494-3504 | 9.6 | 13 |

(2008-2018)

| 42 | The Virus Bioresistor: Wiring Virus Particles for the Direct, Label-Free Detection of Target Proteins. <i>Nano Letters</i> , 2018 , 18, 3623-3629 | 11.5 | 12 |
|----|--|------|----|
| 41 | Electrochemical Quantification of Glycated and Non-glycated Human Serum Albumin in Synthetic Urine. ACS Applied Materials & Interfaces, 2019, 11, 4757-4765 | 9.5 | 11 |
| 40 | An Impedance-Transduced Chemiresistor with a Porous Carbon Channel for Rapid, Nonenzymatic, Glucose Sensing. <i>Analytical Chemistry</i> , 2018 , 90, 9338-9346 | 7.8 | 11 |
| 39 | Electrodeposited Nanophotonics. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 17179-17192 | 3.8 | 11 |
| 38 | Electrodeposition of nanowires for the detection of hydrogen gas. MRS Bulletin, 2010, 35, 771-777 | 3.2 | 11 |
| 37 | Observing Electroluminescence from Yellow Luminescence-Like Defects in GaN High Electron Mobility Transistors. <i>Japanese Journal of Applied Physics</i> , 2008 , 47, 3336-3339 | 1.4 | 11 |
| 36 | Virus Bioresistor (VBR) for Detection of Bladder Cancer Marker DJ-1 in Urine at 10 pM in One Minute. <i>Analytical Chemistry</i> , 2020 , 92, 6654-6666 | 7.8 | 11 |
| 35 | Electrophoretic Deposition of Mesoporous Niobium(V)Oxide Nanoscopic Films. <i>Chemistry of Materials</i> , 2018 , 30, 6549-6558 | 9.6 | 11 |
| 34 | Field-effect transistors from lithographically patterned cadmium selenide nanowire arrays. <i>ACS Applied Materials & Discourse (Materials & Discours)</i> , 1, 4445-52 | 9.5 | 10 |
| 33 | Atomic resolution imaging of electrode surfaces in solutions containing reversible redox species. <i>Applied Physics Letters</i> , 1989 , 54, 1421-1423 | 3.4 | 10 |
| 32 | Collateral Advantages of a Gel Electrolyte for MnO2 Nanowire Capacitors: Higher Voltage and Reduced Volume. <i>ACS Energy Letters</i> , 2017 , 2, 1162-1169 | 20.1 | 9 |
| 31 | Electroluminescent, polycrystalline cadmium selenide nanowire arrays. ACS Nano, 2013, 7, 9469-79 | 16.7 | 9 |
| 30 | Lithographically patterned nanowire electrodeposition. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2008 , 5, 3503-3505 | | 9 |
| 29 | Transient photocurrent spectroscopy: Electrical detection of optical absorption for supported semiconductor nanocrystals in a simple device geometry. <i>Applied Physics Letters</i> , 1998 , 72, 2301-2303 | 3.4 | 9 |
| 28 | Rapid, wafer-scale laser nanoprinting of polymer surfaces. ACS Nano, 2011, 5, 690-2 | 16.7 | 8 |
| 27 | Wafer-scale fabrication of nanofluidic arrays and networks using nanoimprint lithography and lithographically patterned nanowire electrodeposition gold nanowire masters. <i>Analytical Chemistry</i> , 2012 , 84, 5053-8 | 7.8 | 7 |
| 26 | Water oxidation using a cobalt monolayer prepared by underpotential deposition. <i>Langmuir</i> , 2013 , 29, 14728-32 | 4 | 7 |
| 25 | Thermocouples from Electrodeposited Submicrometer Wires Prepared by Electrochemical Step Edge Decoration. <i>Chemistry of Materials</i> , 2008 , 20, 5464-5474 | 9.6 | 7 |

| 24 | Synthesis of a virus electrode for measurement of prostate specific membrane antigen. <i>Methods in Molecular Biology</i> , 2009 , 504, 255-74 | 1.4 | 7 |
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| 23 | Electrodeposited, Transverse Nanowire Electroluminescent Junctions. ACS Nano, 2016, 10, 8233-42 | 16.7 | 7 |
| 22 | Laser annealing of nanocrystalline gold nanowires. ACS Applied Materials & Laser annealing of nanocrystalline gold nanowires. | 891 4 | 6 |
| 21 | Electrodeposited Light-Emitting Nanojunctions. <i>Chemistry of Materials</i> , 2013 , 25, 623-631 | 9.6 | 5 |
| 20 | Applications of Scanning Tunneling Microscopy to Electrochemistry. ACS Symposium Series, 1988, 174-20 | 01.4 | 5 |
| 19 | A 30 fb Coaxial Nanowire Photoconductor Enabling Orthogonal Carrier Collection. <i>Nano Letters</i> , 2015 , 15, 5861-7 | 11.5 | 4 |
| 18 | Nanoscience and Nanotechnology Cross Borders. ACS Nano, 2017, 11, 1123-1126 | 16.7 | 3 |
| 17 | Measurement of the Localized Viscosity of Molecular Assemblies Using Nanoscopic Defects Induced with the Scanning Tunneling Microscope. <i>The Journal of Physical Chemistry</i> , 1994 , 98, 2663-266 | 7 | 3 |
| 16 | Investigating the Degradation of Nb2O5 Thin Films Across 10,000 Lithiation/Delithiation Cycles. <i>ACS Applied Energy Materials</i> , 2021 , 4, 6542-6552 | 6.1 | 3 |
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| 15 | Coherent anti-Stokes generation from single nanostructures 2009 , | | 2 |
| 15 14 | Coherent anti-Stokes generation from single nanostructures 2009, Electrodeposition of portable, metal nanowire arrays 2002, 4807, 83 | | 2 |
| | | 9 ^{6.6} | |
| 14 | Electrodeposition of portable, metal nanowire arrays 2002 , 4807, 83 Scanning tunneling microscopic observations of commensurate crystalline structures for | 3.2 | 2 |
| 14 | Electrodeposition of portable, metal nanowire arrays 2002 , 4807, 83 Scanning tunneling microscopic observations of commensurate crystalline structures for horizontally deposited cadmium stearate bilayers on graphite. <i>Analytica Chimica Acta</i> , 1995 , 307, 377-39. Rational design approaches of two-dimensional metal oxides for chemiresistive gas sensors: A | | 2 |
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