# Matthew R Jones

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/6840289/publications.pdf

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|---|---|---|---|
| 47 papers | 7,360 citations | 147566 31 h-index | 197535 49 g-index |
| 54 all docs | 54 docs citations | 54 times ranked | 9191 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Programmable materials and the nature of the DNA bond. Science, 2015, 347, 1260901. | 6.0 | 1,141 |
| 2 | Templated Techniques for the Synthesis and Assembly of Plasmonic Nanostructures. Chemical Reviews, 2011, 111, 3736-3827. | 23.0 | 1,080 |
| 3 | Nanoparticle Superlattice Engineering with DNA. Science, 2011, 334, 204-208. | 6.0 | 1,013 |
| 4 | DNA-nanoparticle superlattices formed from anisotropic building blocks. Nature Materials, 2010, 9, 913-917. | 13.3 | 596 |
| 5 | Iodide Ions Control Seed-Mediated Growth of Anisotropic Gold Nanoparticles. Nano Letters, 2008, 8, 2526-2529. | 4.5 | 380 |
| 6 | Single-particle mapping of nonequilibrium nanocrystal transformations. Science, 2016, 354, 874-877. | 6.0 | 204 |
| 7 | Universal Noble Metal Nanoparticle Seeds Realized Through Iterative Reductive Growth and Oxidative Dissolution Reactions. Journal of the American Chemical Society, 2014, 136, 7603-7606. | 6.6 | 200 |
| 8 | Structural diversity in binary superlattices self-assembled from polymer-grafted nanocrystals. Nature Communications, 2015, 6, 10052. | 5.8 | 199 |
| 9 | Building superlattices from individual nanoparticles via template-confined DNA-mediated assembly. Science, 2018, 359, 669-672. | 6.0 | 195 |
| 10 | Synthetically programmable nanoparticle superlattices using a hollow three-dimensional spacer approach. Nature Nanotechnology, 2012, 7, 24-28. | 15.6 | 158 |
| 11 | Using DNA to Design Plasmonic Metamaterials with Tunable Optical Properties. Advanced Materials, 2014, 26, 653-659. | 11.1 | 157 |
| 12 | Anisotropic nanoparticle complementarity in DNA-mediated co-crystallization. Nature Materials, 2015, 14, 833-839. | 13.3 | 154 |
| 13 | Transmutable nanoparticles with reconfigurable surface ligands. Science, 2016, 351, 579-582. | 6.0 | 150 |
| 14 | Assembly of reconfigurable one-dimensional colloidal superlattices due to a synergy of fundamental nanoscale forces. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 2240-2245. | 3.3 | 144 |
| 15 | Nanoparticle Shape Anisotropy Dictates the Collective Behavior of Surface-Bound Ligands. Journal of the American Chemical Society, 2011, 133, 18865-18869. | 6.6 | 143 |
| 16 | Establishing the Design Rules for DNAâ€Mediated Programmable Colloidal Crystallization. Angewandte Chemie - International Edition, 2010, 49, 4589-4592. | 7.2 | 139 |
| 17 | Topotactic Interconversion of Nanoparticle Superlattices. Science, 2013, 341, 1222-1225. | 6.0 | 137 |
| 18 | The Use of Graphene and Its Derivatives for Liquid-Phase Transmission Electron Microscopy of Radiation-Sensitive Specimens. Nano Letters, 2017, 17, 414-420. | 4.5 | 120 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Shape-Selective Deposition and Assembly of Anisotropic Nanoparticles. Nano Letters, 2014, 14, 2157-2161. | 4.5 | 101 |
| 20 | Uniform Circular Disks With Synthetically Tailorable Diameters: Two-Dimensional Nanoparticles for Plasmonics. Nano Letters, 2015, 15, 1012-1017. | 4.5 | 90 |
| 21 | What Controls the Hybridization Thermodynamics of Spherical Nucleic Acids?. Journal of the American Chemical Society, 2015, 137, 3486-3489. | 6.6 | 79 |
| 22 | The nature and implications of uniformity in the hierarchical organization of nanomaterials. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 11717-11725. | 3.3 | 75 |
| 23 | Imaging the polymerization of multivalent nanoparticles in solution. Nature Communications, 2017, 8, 761. | 5.8 | 70 |
| 24 | Unraveling Kinetically-Driven Mechanisms of Gold Nanocrystal Shape Transformations Using Graphene Liquid Cell Electron Microscopy. Nano Letters, 2018, 18, 5731-5737. | 4.5 | 64 |
| 25 | Plasmonically Controlled Nucleic Acid Dehybridization with Gold Nanoprisms. ChemPhysChem, 2009, 10, 1461-1465. | 1.0 | 60 |
| 26 | Bypassing the Limitations of Classical Chemical Purification with DNAâ€Programmable Nanoparticle Recrystallization. Angewandte Chemie - International Edition, 2013, 52, 2886-2891. | 7.2 | 53 |
| 27 | In Situ Electron Microscopy Imaging and Quantitative Structural Modulation of Nanoparticle Superlattices. ACS Nano, 2016, 10, 9801-9808. | 7.3 | 49 |
| 28 | Langmuir Analysis of Nanoparticle Polyvalency in DNAâ€Mediated Adsorption. Angewandte Chemie - International Edition, 2014, 53, 9532-9538. | 7.2 | 36 |
| 29 | Polycrystallinity of Lithographically Fabricated Plasmonic Nanostructures Dominates Their Acoustic Vibrational Damping. Nano Letters, 2018, 18, 3494-3501. | 4.5 | 35 |
| 30 | Tracking the Effects of Ligands on Oxidative Etching of Gold Nanorods in Graphene Liquid Cell Electron Microscopy. ACS Nano, 2020, 14, 10239-10250. | 7.3 | 35 |
| 31 | New Strategies for Probing Energy Systems with In Situ Liquid-Phase Transmission Electron Microscopy. ACS Energy Letters, 2018, 3, 1269-1278. | 8.8 | 33 |
| 32 | Tip-Enhanced Multipolar Raman Scattering. Journal of Physical Chemistry Letters, 2020, 11, 2464-2469. | 2.1 | 25 |
| 33 | Tip-Enhanced Raman Nanospectroscopy of Smooth Spherical Gold Nanoparticles. Journal of Physical Chemistry Letters, 2020, 11, 1795-1801. | 2.1 | 25 |
| 34 | Hybrid Lithographic and DNA-Directed Assembly of a Configurable Plasmonic Metamaterial That Exhibits Electromagnetically Induced Transparency. Nano Letters, 2018, 18, 859-864. | 4.5 | 24 |
| 35 | The role of trace Ag in the synthesis of Au nanorods. Nanoscale, 2019, 11, 11744-11754. | 2.8 | 24 |
| 36 | Understanding Symmetry Breaking at the Single-Particle Level via the Growth of Tetrahedron-Shaped Nanocrystals from Higher-Symmetry Precursors. ACS Nano, 2021, 15, 15953-15961. | 7.3 | 23 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Dopant Mediated Assembly of Cu<sub>2</sub>ZnSnS<sub>4</sub> Nanorods into Atomically Coupled 2D Sheets in Solution. Nano Letters, 2017, 17, 3421-3428. | 4.5 | 19 |
| 38 | Deterministic Symmetry Breaking of Plasmonic Nanostructures Enabled by DNA-Programmable Assembly. Nano Letters, 2017, 17, 5830-5835. | 4.5 | 19 |
| 39 | Giant Isotope Effect of Thermal Conductivity in Silicon Nanowires. Physical Review Letters, 2022, 128, 085901. | 2.9 | 16 |
| 40 | Uncovering material deformations via machine learning combined with four-dimensional scanning transmission electron microscopy. Npj Computational Materials, 2022, 8, . | 3.5 | 15 |
| 41 | Understanding nanoparticle-mediated nucleation pathways of anisotropic nanoparticles. Chemical Physics Letters, 2017, 683, 389-392. | 1.2 | 14 |
| 42 | Synthesis and Characterization of a Plasmonicâ€“Semiconductor Composite Containing Rationally Designed, Optically Tunable Gold Nanorod Dimers and Anatase TiO<sub>2</sub>. Chemistry of Materials, 2014, 26, 3818-3824. | 3.2 | 12 |
| 43 | Mechanical Reshaping of Inorganic Nanostructures with Weak Nanoscale Forces. Nano Letters, 2021, 21, 130-135. | 4.5 | 9 |
| 44 | Colloidal interactions get patchy and directional. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 15382-15384. | 3.3 | 8 |
| 45 | Measurement Challenges in Dynamic and Nonequilibrium Nanoscale Systems. Analytical Chemistry, 2019, 91, 13324-13336. | 3.2 | 6 |
| 46 | Microscopic mechanisms of deformation transfer in high dynamic range branched nanoparticle deformation sensors. Nature Communications, 2018, 9, 1155. | 5.8 | 4 |
| 47 | Using Graphene Liquid Cell Electron Microscopy to Elucidate Nanocrystal Etching Mechanisms. Microscopy and Microanalysis, 2018, 24, 246-247. | 0.2 | 0 |