

# Katherine A Brown

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/507549/publications.pdf>

Version: 2024-02-01

24  
papers

2,232  
citations

471509

17  
h-index

610901

24  
g-index

25  
all docs

25  
docs citations

25  
times ranked

3154  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Light-driven dinitrogen reduction catalyzed by a CdS:nitrogenase MoFe protein biohybrid. <i>Science</i> , 2016, 352, 448-450.  | 12.6 | 676       |
| 2  | Characterization of Photochemical Processes for H <sub>2</sub> Production by CdS Nanorod@[FeFe] Hydrogenase Complexes. <i>Journal of the American Chemical Society</i> , 2012, 134, 5627-5636.                                 | 13.7 | 326       |
| 3  | Controlled Assembly of Hydrogenase-CdTe Nanocrystal Hybrids for Solar Hydrogen Production. <i>Journal of the American Chemical Society</i> , 2010, 132, 9672-9680.   | 13.7 | 246       |
| 4  | Electron Transfer Kinetics in CdS Nanorod@[FeFe]-Hydrogenase Complexes and Implications for Photochemical H <sub>2</sub> Generation. <i>Journal of the American Chemical Society</i> , 2014, 136, 4316-4324.                   | 13.7 | 177       |
| 5  | Catalytic Turnover of [FeFe]-Hydrogenase Based on Single-Molecule Imaging. <i>Journal of the American Chemical Society</i> , 2012, 134, 1577-1582.   | 13.7 | 172       |
| 6  | Changes in Oligonucleotide Conformation on Nanoparticle Surfaces by Modification with Mercaptohexanol. <i>Nano Letters</i> , 2004, 4, 1925-1929.   | 9.1  | 132       |
| 7  | Photocatalytic Regeneration of Nicotinamide Cofactors by Quantum Dot@[Enzyme Biohybrid Complexes. <i>ACS Catalysis</i> , 2016, 6, 2201-2204.   | 11.2 | 80        |
| 8  | Nucleotide[Surface Interactions in DNA-Modified Au[ Nanoparticle Conjugates: Sequence Effects on Reactivity and Hybridization. <i>Journal of Physical Chemistry C</i> , 2008, 112, 7517-7521.                                  | 3.1  | 57        |
| 9  | Role of Surface-Capping Ligands in Photoexcited Electron Transfer between CdS Nanorods and [FeFe] Hydrogenase and the Subsequent H <sub>2</sub> Generation. <i>Journal of Physical Chemistry C</i> , 2018, 122, 741-750.       | 3.1  | 53        |
| 10 | Recombinant and in vitro expression systems for hydrogenases: new frontiers in basic and applied studies for biological and synthetic H <sub>2</sub> production. <i>Dalton Transactions</i> , 2009, , 9970.                    | 3.3  | 48        |
| 11 | Competition between electron transfer, trapping, and recombination in CdS nanorod@[hydrogenase complexes. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 5538-5542.  | 2.8  | 45        |
| 12 | Magnetic field heating study of Fe-doped Au nanoparticles. <i>Journal of Magnetism and Magnetic Materials</i> , 2007, 309, 15-19.  | 2.3  | 41        |
| 13 | Diameter Dependent Electron Transfer Kinetics in Semiconductor@[Enzyme Complexes. <i>ACS Nano</i> , 2014, 8, 10790-10798.  | 14.6 | 32        |
| 14 | Defining Intermediates of Nitrogenase MoFe Protein during N <sub>2</sub> Reduction under Photochemical Electron Delivery from CdS Quantum Dots. <i>Journal of the American Chemical Society</i> , 2020, 142, 14324-14330.      | 13.7 | 32        |
| 15 | Coupling biology to synthetic nanomaterials for semi-artificial photosynthesis. <i>Photosynthesis Research</i> , 2020, 143, 193-203.   | 2.9  | 26        |
| 16 | Activation Thermodynamics and H/D Kinetic Isotope Effect of the H <sub>ox</sub> to H <sub>red</sub> H <sup>+</sup> Transition in [FeFe] Hydrogenase. <i>Journal of the American Chemical Society</i> , 2017, 139, 12879-12882. | 13.7 | 23        |
| 17 | Excitation-Rate Determines Product Stoichiometry in Photochemical Ammonia Production by CdS Quantum Dot-Nitrogenase MoFe Protein Complexes. <i>ACS Catalysis</i> , 2020, 10, 11147-11152.                                      | 11.2 | 23        |
| 18 | The oxygen reduction reaction catalyzed by <i>Synechocystis</i> sp. PCC 6803 flavodiiron proteins. <i>Sustainable Energy and Fuels</i> , 2019, 3, 3191-3200.   | 4.9  | 22        |

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|----|--|------|-----------|
| 19 | Dissecting Electronic-Structural Transitions in the Nitrogenase MoFe Protein P-Cluster during Reduction. <i>Journal of the American Chemical Society</i> , 2022, 144, 5708-5712. | 13.7 | 7         |
| 20 | The Kinetics of Electron Transfer from CdS Nanorods to the MoFe Protein of Nitrogenase. <i>Journal of Physical Chemistry C</i> , 2022, 126, 8425-8435.                           | 3.1  | 7         |
| 21 | Synthesis of water-soluble, magnetic Fe/Au nanoparticles. <i>Materials Research Society Symposia Proceedings</i> , 2005, 900, 1.   | 0.1  | 3         |
| 22 | The influence of electron utilization pathways on photosystem I photochemistry in <i>Synechocystis</i> sp. PCC 6803. <i>RSC Advances</i> , 2022, 12, 14655-14664.                | 3.6  | 2         |
| 23 | Selective Heating of Multiple Nanoparticles. <i>Materials Research Society Symposia Proceedings</i> , 2005, 900, 1.  | 0.1  | 1         |
| 24 | Photobiohybrid Solar Conversion with Metalloenzymes and Photosynthetic Reaction Centers. , 2016, , 473-495.  |      | 0         |