# Barry D Stein

## List of Publications by Citations



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|---|---|---|---|
| 89 papers | 3,765 citations | 33 h-index | 59 g-index |
| 89 ext. papers | 4,100 ext. citations | 6.2 avg, IF | 4.67 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 89 | Influence of Iron Oleate Complex Structure on Iron Oxide Nanoparticle Formation. *Chemistry of Materials*, **2007**, 19, 3624-3632 | 9.6 | 441 |
| 88 | Core-controlled polymorphism in virus-like particles. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 1354-9 | 11.5 | 235 |
| 87 | Nanoparticle-templated assembly of viral protein cages. *Nano Letters*, **2006**, 6, 611-5 | 11.5 | 199 |
| 86 | Quantum dot encapsulation in viral capsids. *Nano Letters*, **2006**, 6, 1993-9 | 11.5 | 184 |
| 85 | Self-assembled virus-like particles with magnetic cores. *Nano Letters*, **2007**, 7, 2407-16 | 11.5 | 153 |
| 84 | Gold nanoparticles as spectroscopic enhancers for in vitro studies on single viruses. *Journal of the American Chemical Society*, **2003**, 125, 6374-5 | 16.4 | 147 |
| 83 | Localization and visualization of a coxiella-type symbiont within the lone star tick, Amblyomma americanum. *Applied and Environmental Microbiology*, **2007**, 73, 6584-94 | 4.8 | 106 |
| 82 | Mediation of Cryptosporidium parvum infection in vitro by mucin-like glycoproteins defined by a neutralizing monoclonal antibody. *Infection and Immunity*, **2000**, 68, 5167-75 | 3.7 | 104 |
| 81 | Multifunctional Nanohybrids by Self-Assembly of Monodisperse Iron Oxide Nanoparticles and Nanolamellar MoS2 Plates. *Chemistry of Materials*, **2013**, 25, 2434-2440 | 9.6 | 88 |
| 80 | Embryo fossilization is a biological process mediated by microbial biofilms. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 19360-5 | 11.5 | 86 |
| 79 | Functionalization of monodisperse iron oxide NPs and their properties as magnetically recoverable catalysts. *Langmuir*, **2013**, 29, 466-73 | 4 | 83 |
| 78 | Structure and magnetic properties of diluted magnetic metal oxides based on Cu-doped CeO2 nanopowders. *Ceramics International*, **2015**, 41, 1115-1119 | 5.1 | 82 |
| 77 | Fabrication of magnetically recoverable catalysts based on mixtures of Pd and iron oxide nanoparticles for hydrogenation of alkyne alcohols. *ACS Applied Materials & Interfaces*, **2014**, 6, 21652-60 | 9.5 | 78 |
| 76 | Solid polymer electrolytes which contain tricoordinate boron for enhanced conductivity and transference numbers. *Journal of Materials Chemistry A*, **2013**, 1, 1108-1116 | 13 | 76 |
| 75 | Magnetic virus-like nanoparticles in N. benthamiana plants: a new paradigm for environmental and agronomic biotechnological research. *ACS Nano*, **2011**, 5, 4037-45 | 16.7 | 75 |
| 74 | Hybrid composite polymer electrolytes: ionic liquids as a magic bullet for the poly(ethylene glycol)–silica network. *Journal of Materials Chemistry A*, **2017**, 5, 3493-3502 | 13 | 72 |
| 73 | Nanoparticles by decomposition of long chain iron carboxylates: from spheres to stars and cubes. *Langmuir*, **2011**, 27, 3044-50 | 4 | 67 |

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| 72 | Structure and Properties of Iron Oxide Nanoparticles Encapsulated by Phospholipids with Poly(ethylene glycol) Tails. *Journal of Physical Chemistry C*, **2007**, 111, 18078-18086 | 3.8 | 66 |
| 71 | Optical Trapping with Integrated Near-Field Apertures. *Journal of Physical Chemistry B*, **2004**, 108, 13607-13612 | 3.4 | 64 |
| 70 | The motility of a human parasite, Toxoplasma gondii, is regulated by a novel lysine methyltransferase. *PLoS Pathogens*, **2011**, 7, e1002201 | 7.6 | 63 |
| 69 | TgMORN1 is a key organizer for the basal complex of Toxoplasma gondii. *PLoS Pathogens*, **2010**, 6, e1000754 | 7.6 | 61 |
| 68 | Selective dehydrolinalool hydrogenation with poly(ethylene oxide)-block-poly-2-vinylpyridine micelles filled with Pd nanoparticles. *Journal of Molecular Catalysis A*, **2004**, 208, 273-284 | | 59 |
| 67 | Induced Microphase Separation in Hybrid Composite Polymer Electrolytes Based on Poly(acrylonitrile-r-butadienes) and Ionic Liquids. *Macromolecular Chemistry and Physics*, **2016**, 217, 794-803 | 2.6 | 52 |
| 66 | Synergistic effects of mutations and nanoparticle templating in the self-assembly of cowpea chlorotic mottle virus capsids. *Nano Letters*, **2009**, 9, 393-8 | 11.5 | 52 |
| 65 | Packaging of gold particles in viral capsids. *Journal of Nanoscience and Nanotechnology*, **2005**, 5, 2029-33 | 1.3 | 52 |
| 64 | Hydrophilic Monodisperse Magnetic Nanoparticles Protected by an Amphiphilic Alternating Copolymer. *Journal of Physical Chemistry C*, **2008**, 112, 16809-16817 | 3.8 | 49 |
| 63 | Design of organic□inorganic solid polymer electrolytes: synthesis, structure, and properties. *Journal of Materials Chemistry*, **2004**, 14, 1812-1820 | | 49 |
| 62 | Metalated diblock and triblock poly(ethylene oxide)-block-poly(4-vinylpyridine) copolymers: understanding of micelle and bulk structure. *Journal of Physical Chemistry B*, **2005**, 109, 18786-98 | 3.4 | 43 |
| 61 | Magnetic nanoparticles with functional silanes: evolution of well-defined shells from anhydride containing silane. *Journal of Materials Chemistry*, **2009**, 19, 4231-4239 | | 42 |
| 60 | Occurrence and genotypic characteristics of Enterocytozoon bieneusi in pigs with diarrhea. *Parasitology Research*, **2007**, 102, 123-8 | 2.4 | 42 |
| 59 | Ru-Containing Magnetically Recoverable Catalysts: A Sustainable Pathway from Cellulose to Ethylene and Propylene Glycols. *ACS Applied Materials & Interfaces*, **2016**, 8, 21285-93 | 9.5 | 41 |
| 58 | Solid Polymer Single-Ion Conductors:□Synthesis and Properties. *Chemistry of Materials*, **2006**, 18, 708-715 | 9.6 | 36 |
| 57 | Hydrophilization of Magnetic Nanoparticles with Modified Alternating Copolymers. Part 1: The Influence of the Grafting. *Journal of Physical Chemistry C*, **2010**, 114, 21900-21907 | 3.8 | 35 |
| 56 | Viruslike Nanoparticles with Maghemite Cores Allow for Enhanced MRI Contrast Agents. *Chemistry of Materials*, **2015**, 27, 327-335 | 9.6 | 31 |
| 55 | Diel infection of a cyanobacterium by a contractile bacteriophage. *Applied and Environmental Microbiology*, **2005**, 71, 4276-9 | 4.8 | 31 |

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| 54 | Palladium Containing Catalysts Based on Hypercrosslinked Polystyrene for Selective Hydrogenation of Acetylene Alcohols. *Topics in Catalysis*, **2012**, 55, 492-497 | 2.3 | 30 |
| 53 | Functionalization of magnetic nanoparticles with amphiphilic block copolymers: self-assembled thermoresponsive submicrometer particles. *Langmuir*, **2012**, 28, 4142-51 | 4 | 24 |
| 52 | The utilization of sodium taurocholate in excystation of Cryptosporidium parvum and infection of tissue culture. *Journal of Parasitology*, **2001**, 87, 997-1000 | 0.9 | 24 |
| 51 | Synthesis of Metal-Loaded Poly(aminohexyl)(aminopropyl)silsesquioxane Colloids and Their Self-Organization into Dendrites. *Nano Letters*, **2002**, 2, 873-876 | 11.5 | 24 |
| 50 | Molybdenum Sulfide Nanoparticles in Block Copolymer Micelles: Synthesis and Tribological Properties. *Chemistry of Materials*, **2004**, 16, 2369-2378 | 9.6 | 23 |
| 49 | Pd(II) nanoparticles in porous polystyrene: factors influencing the nanoparticle size and catalytic properties. *Journal of Materials Chemistry*, **2012**, 22, 6441 | | 21 |
| 48 | Controlled Synthesis of Novel Metalated Poly(aminohexyl)-(aminopropyl)silsesquioxane Colloids. *Langmuir*, **2003**, 19, 7071-7083 | 4 | 21 |
| 47 | Transformations of poly(methoxy hexa(ethylene glycol) methacrylate)-b-(2-(diethylamino)ethyl methacrylate) block copolymer micelles upon metalation. *Langmuir*, **2005**, 21, 9747-55 | 4 | 20 |
| 46 | Zinc-Containing Magnetic Oxides Stabilized by a Polymer: One Phase or Two?. *ACS Applied Materials & Interfaces*, **2016**, 8, 891-9 | 9.5 | 19 |
| 45 | Immobilized glucose oxidase on magnetic silica and alumina: Beyond magnetic separation. *International Journal of Biological Macromolecules*, **2018**, 120, 896-905 | 7.9 | 19 |
| 44 | Hydrophilization of Magnetic Nanoparticles with Modified Alternating Copolymers. Part 2: Behavior in solution. *Journal of Physical Chemistry C*, **2010**, 114, 21908-21913 | 3.8 | 18 |
| 43 | Hydrophobic Periphery Tails of Polyphenylenepyridyl Dendrons Control Nanoparticle Formation and Catalytic Properties. *Chemistry of Materials*, **2014**, 26, 5654-5663 | 9.6 | 17 |
| 42 | Occurrence and characteristics of enterohemorrhagic Escherichia coli O26 and O111 in calves associated with diarrhea. *Veterinary Journal*, **2008**, 176, 205-9 | 2.5 | 16 |
| 41 | Beyond Tryptophan Synthase: Identification of Genes That Contribute to Chlamydia trachomatis Survival during Gamma Interferon-Induced Persistence and Reactivation. *Infection and Immunity*, **2016**, 84, 2791-801 | 3.7 | 16 |
| 40 | Coat Protein-Dependent Behavior of Poly(ethylene glycol) Tails in Iron Oxide Core Virus-like Nanoparticles. *ACS Applied Materials & Interfaces*, **2015**, 7, 12089-98 | 9.5 | 15 |
| 39 | Mixed Co/Fe oxide nanoparticles in block copolymer micelles. *Langmuir*, **2008**, 24, 12618-26 | 4 | 15 |
| 38 | Optical Implications of Crystallite Symmetry and Structure in Potassium Niobate Tellurite Glass Ceramics. *Chemistry of Materials*, **2002**, 14, 4422-4429 | 9.6 | 15 |
| 37 | Facile Synthesis of Magnetically Recoverable Pd and Ru Catalysts for 4-Nitrophenol Reduction: Identifying Key Factors. *ACS Omega*, **2018**, 3, 14717-14725 | 3.9 | 15 |

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| 36 | Hybrid Polymer Particles with a Protective Shell:Synthesis, Structure, and Templating. *Chemistry of Materials*, **2006**, 18, 2418-2430 | 9.6 | 14 |
| 35 | Genetic Screen in Chlamydia muridarum Reveals Role for an Interferon-Induced Host Cell Death Program in Antimicrobial Inclusion Rupture. *MBio*, **2019**, 10, | 7.8 | 13 |
| 34 | Fe nanoparticle surface controls PtFe nanoparticle growth and catalytic properties. *Nanoscale*, **2013**, 5, 2921-7 | 7.7 | 13 |
| 33 | Enhancing the Catalytic Activity of Zn-Containing Magnetic Oxides in a Methanol Synthesis: Identifying the Key Factors. *ACS Applied Materials & Interfaces*, **2017**, 9, 2285-2294 | 9.5 | 12 |
| 32 | Catalysts of Suzuki Cross-Coupling Based on Functionalized Hyper-cross-linked Polystyrene: Influence of Precursor Nature. *Organic Process Research and Development*, **2016**, 20, 1453-1460 | 3.9 | 12 |
| 31 | Efficient Furfuryl Alcohol Synthesis from Furfural over Magnetically Recoverable Catalysts: Does the Catalyst Stabilizing Medium Matter?. *ChemistrySelect*, **2017**, 2, 5485-5491 | 1.8 | 12 |
| 30 | Antimicrobial activity of a combination of Mume fructus, Schizandrae fructus, and Coptidis rhizoma on enterohemorrhagic Escherichia coli O26, O111, and O157 and its effect on Shiga toxin releases. *Foodborne Pathogens and Disease*, **2011**, 8, 643-6 | 3.8 | 11 |
| 29 | Core-shell nanostructures from single poly(N-vinylcaprolactam) macromolecules: stabilization and visualization. *Langmuir*, **2005**, 21, 2652-5 | 4 | 11 |
| 28 | Multicore iron oxide mesocrystals stabilized by a poly(phenylenepyridyl) dendron and dendrimer: role of the dendron/dendrimer self-assembly. *Langmuir*, **2014**, 30, 8543-50 | 4 | 10 |
| 27 | Influence of heterogenization on catalytic behavior of mono- and bimetallic nanoparticles formed in poly(styrene)-block-poly(4-vinylpyridine) micelles. *Journal of Catalysis*, **2009**, 262, 150-158 | 7.3 | 10 |
| 26 | Antimicrobial resistance of Escherichia coli O157 from cattle in Korea. *International Journal of Food Microbiology*, **2006**, 106, 74-8 | 5.8 | 10 |
| 25 | Metal oxide eolite composites in transformation of methanol to hydrocarbons: do iron oxide and nickel oxide matter?. *RSC Advances*, **2016**, 6, 75166-75177 | 3.7 | 10 |
| 24 | Pyridylphenylene dendrons immobilized on the surface of chemically modified magnetic silica as efficient stabilizing molecules of Pd species. *Applied Surface Science*, **2019**, 488, 865-873 | 6.7 | 9 |
| 23 | Structural Study of Pt e Nanoparticles: New Insights into Pt Bimetallic Nanoparticle Formation with Oxidized Fe Species. *Journal of Physical Chemistry C*, **2014**, 118, 24769-24775 | 3.8 | 9 |
| 22 | Polyphenylenepyridyl dendrimers as stabilizing and controlling agents for CdS nanoparticle formation. *Nanoscale*, **2012**, 4, 2378-86 | 7.7 | 9 |
| 21 | RNA synthesis by the brome mosaic virus RNA-dependent RNA polymerase in human cells reveals requirements for de novo initiation and protein-protein interaction. *Journal of Virology*, **2012**, 86, 4317-27 | 6.6 | 9 |
| 20 | Structure and behavior of nanoparticulate catalysts based on ultrathin chitosan layers. *Journal of Molecular Catalysis A*, **2007**, 276, 116-129 | | 9 |
| 19 | Inflammation-induced DNA methylation of DNA polymerase gamma alters the metabolic profile of colon tumors. *Cancer & Metabolism*, **2018**, 6, 9 | 5.4 | 8 |

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| 18 | The effect of lectins on Cryptosporidium parvum oocyst in vitro attachment to host cells. *Journal of Parasitology*, **2006**, 92, 1-9 | 0.9 | 8 |
| 17 | Pd Catalyst Based on Hyperbranched Polypyridylphenylene Formed In Situ on Magnetic Silica Allows for Excellent Performance in Suzuki-Miyaura Reaction. *ACS Applied Materials & Interfaces*, **2020**, 12, 22170-22178 | 9.5 | 7 |
| 16 | Insights into Sustainable Glucose Oxidation Using Magnetically Recoverable Biocatalysts. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 9845-9853 | 8.3 | 7 |
| 15 | Restricted Localization of Photosynthetic Intracytoplasmic Membranes (ICMs) in Multiple Genera of Purple Nonsulfur Bacteria. *MBio*, **2018**, 9, | 7.8 | 7 |
| 14 | Glucose Oxidase Immobilized on Magnetic Zirconia: Controlling Catalytic Performance and Stability. *ACS Omega*, **2020**, 5, 12329-12338 | 3.9 | 6 |
| 13 | Elastomer based nanocomposites with reduced graphene oxide nanofillers allow for enhanced tensile and electrical properties. *Journal of Polymer Research*, **2020**, 27, 1 | 2.7 | 6 |
| 12 | Pd Nanoparticles Stabilized by Hypercrosslinked Polystyrene Catalyze Selective Triple C-C Bond Hydrogenation and Suzuki Cross-Coupling. *Journal of Nanomaterials*, **2019**, 2019, 1-7 | 3.2 | 5 |
| 11 | Influence of the Mesoporous Polymer Matrix Nature on the Formation of Catalytically Active Ruthenium Nanoparticles. *Bulletin of Chemical Reaction Engineering and Catalysis*, **2015**, 10, | 1.7 | 5 |
| 10 | Morphology of hybrid polystyrene-block-poly(ethylene oxide) micelles: analytical ultracentrifugation and SANS studies. *Journal of Colloid and Interface Science*, **2006**, 299, 944-52 | 9.3 | 5 |
| 9 | Zn Ion Surface Enrichment in Doped Iron Oxide Nanoparticles Leads to Charge Carrier Density Enhancement. *ACS Omega*, **2018**, 3, 16328-16337 | 3.9 | 5 |
| 8 | Functional polymer colloids with ordered interior. *Langmuir*, **2004**, 20, 1100-10 | 4 | 4 |
| 7 | Cr□ontaining Magnetic Oxides in a Methanol Synthesis: Does Cr Ion Distribution Matter?. *ChemistrySelect*, **2017**, 2, 6269-6276 | 1.8 | 3 |
| 6 | Synthesis of 4-Methoxybiphenyl Using Pd-Containing Catalysts Based on Polymeric Matrix of Functionalized Hypercrosslinked Polystyrene. *Bulletin of Chemical Reaction Engineering and Catalysis*, **2015**, 10, | 1.7 | 3 |
| 5 | Genome copy number regulates inclusion expansion, septation, and infectious developmental form conversion in. *Journal of Bacteriology*, **2021**, | 3.5 | 3 |
| 4 | Clustering of Iron Oxide Nanoparticles with Amphiphilic Invertible Polymer Enhances Uptake and Release of Drugs and MRI Properties. *Particle and Particle Systems Characterization*, **2019**, 36, 1900112 | 3.1 | 2 |
| 3 | D-glucose catalytic oxidation over palladium nanoparticles introduced in the hypercrosslinked polystyrene matrix. *Green Processing and Synthesis*, **2013**, 2, | 3.9 | 1 |
| 2 | Solution study of novel diblock copolymers: Morphology and structural transition. *Polymer*, **2013**, 54, 6971-6978 | 3.9 | 1 |
| 1 | Chitosan as capping agent in a robust one-pot procedure for a magnetic catalyst synthesis. *Carbohydrate Polymers*, **2021**, 269, 118267 | 10.3 | |