

# Lyudmila M Bronstein

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2604480/publications.pdf>

Version: 2024-02-01

109  
papers

5,841  
citations

81743

39  
h-index

76769

74  
g-index

111  
all docs

111  
docs citations

111  
times ranked

6447  
citing authors

#	ARTICLE	IF	CITATIONS
1	Influence of Iron Oleate Complex Structure on Iron Oxide Nanoparticle Formation. <i>Chemistry of Materials</i> , 2007, 19, 3624-3632.	3.2	504
2	Synthesis and characterization of noble metal colloids in block copolymer micelles. <i>Advanced Materials</i> , 1995, 7, 1000-1005.	11.1	357
3	Dendrimers as Encapsulating, Stabilizing, or Directing Agents for Inorganic Nanoparticles. <i>Chemical Reviews</i> , 2011, 111, 5301-5344.	23.0	265
4	Magnetic Drug Delivery: Where the Field Is Going. <i>Frontiers in Chemistry</i> , 2018, 6, 619.	1.8	219
5	Induced Micellization by Interaction of Poly(2-vinylpyridine)-block-poly(ethylene oxide) with Metal Compounds. <i>Micelle Characteristics and Metal Nanoparticle Formation. Langmuir</i> , 1999, 15, 6256-6262.	1.6	208
6	Quantum Dot Encapsulation in Viral Capsids. <i>Nano Letters</i> , 2006, 6, 1993-1999.	4.5	202
7	Preparation of Noble-Metal Colloids in Block Copolymer Micelles and Their Catalytic Properties in Hydrogenation. <i>Chemistry of Materials</i> , 1997, 9, 923-931.	3.2	182
8	Self-Assembled Virus-like Particles with Magnetic Cores. <i>Nano Letters</i> , 2007, 7, 2407-2416.	4.5	164
9	Role of Polymer Structures in Catalysis by Transition Metal and Metal Oxide Nanoparticle Composites. <i>Chemical Reviews</i> , 2020, 120, 1350-1396.	23.0	155
10	Nonclassical Shapes of Noble-Metal Colloids by Synthesis in Microgel Nanoreactors. <i>Angewandte Chemie International Edition in English</i> , 1997, 36, 2080-2083.	4.4	151
11	Influence of Metalation on the Morphologies of Poly(ethylene oxide)-block-poly(4-vinylpyridine) Block Copolymer Micelles. <i>Langmuir</i> , 2004, 20, 3543-3550.	1.6	138
12	Stabilization of Metal Nanoparticles in Aqueous Medium by Polyethyleneoxide-Polyethyleneimine Block Copolymers. <i>Journal of Colloid and Interface Science</i> , 1999, 212, 197-211.	5.0	128
13	Successive Use of Amphiphilic Block Copolymers as Nanoreactors and Templates: Preparation of Porous Silica with Metal Nanoparticles. <i>Chemistry of Materials</i> , 1999, 11, 1402-1405.	3.2	117
14	Structure and Properties of Bimetallic Colloids Formed in Polystyrene-block-Poly-4-vinylpyridine Micelles: Catalytic Behavior in Selective Hydrogenation of Dehydrolinalool. <i>Journal of Catalysis</i> , 2000, 196, 302-314.	3.1	112
15	Design of ruthenium/iron oxide nanoparticle mixtures for hydrogenation of nitrobenzene. <i>Catalysis Science and Technology</i> , 2015, 5, 1902-1910.	2.1	104
16	Multifunctional Nanohybrids by Self-Assembly of Monodisperse Iron Oxide Nanoparticles and Nanolamellar MoS <sub>2</sub> Plates. <i>Chemistry of Materials</i> , 2013, 25, 2434-2440.	3.2	96
17	Poly(Phenylene-pyridyl) Dendrimers: Synthesis and Templating of Metal Nanoparticles. <i>Macromolecules</i> , 2005, 38, 9920-9932.	2.2	86
18	Fabrication of Magnetically Recoverable Catalysts Based on Mixtures of Pd and Iron Oxide Nanoparticles for Hydrogenation of Alkyne Alcohols. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 21652-21660.	4.0	85

#	ARTICLE	IF	CITATIONS
19	Magnetic Virus-like Nanoparticles in <i>N. benthamiana</i> Plants: A New Paradigm for Environmental and Agronomic Biotechnological Research. <i>ACS Nano</i> , 2011, 5, 4037-4045.	7.3	84
20	Solid polymer electrolytes which contain tricoordinate boron for enhanced conductivity and transference numbers. <i>Journal of Materials Chemistry A</i> , 2013, 1, 1108-1116.	5.2	84
21	Polyphenylene-pyridyl Dendrons with Functional Periphery and Focal Points: Syntheses and Applications. <i>Macromolecules</i> , 2013, 46, 5890-5898.	2.2	80
22	Hybrid composite polymer electrolytes: ionic liquids as a magic bullet for the poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 622 T	5.2	79
23	Structure and Catalytic Properties of Pt-Modified Hyper-Cross-Linked Polystyrene Exhibiting Hierarchical Porosity. <i>Journal of Physical Chemistry B</i> , 2004, 108, 18234-18242.	1.2	77
24	Synthesis and characterization of electropolymerized molecularly imprinted microporous polyaniline films for solar cell applications. <i>Polymer Composites</i> , 2013, 34, 299-304.	2.3	76
25	Nanoparticles by Decomposition of Long Chain Iron Carboxylates: From Spheres to Stars and Cubes. <i>Langmuir</i> , 2011, 27, 3044-3050.	1.6	72
26	Graphene and graphene-like materials in biomass conversion: paving the way to the future. <i>Journal of Materials Chemistry A</i> , 2017, 5, 25131-25143.	5.2	71
27	Structure and Properties of Iron Oxide Nanoparticles Encapsulated by Phospholipids with Poly(ethylene glycol) Tails. <i>Journal of Physical Chemistry C</i> , 2007, 111, 18078-18086.	1.5	70
28	Nanostructured polymeric systems as nanoreactors for nanoparticle formation. <i>Russian Chemical Reviews</i> , 2004, 73, 501-515.	2.5	68
29	Selective dehydrogenation of hydrogenation with poly(ethylene oxide)-block-poly-2-vinylpyridine micelles filled with Pd nanoparticles. <i>Journal of Molecular Catalysis A</i> , 2004, 208, 273-284.	4.8	66
30	Hydrophilic Monodisperse Magnetic Nanoparticles Protected by an Amphiphilic Alternating Copolymer. <i>Journal of Physical Chemistry C</i> , 2008, 112, 16809-16817.	1.5	59
31	Synthesis and characterization of p-type transparent conducting $\text{Ni}_{1-x}\text{Ru}_x\text{O}$ ( $0 \leq x \leq 0.1$ ) films prepared by pulsed laser deposition. <i>Ceramics International</i> , 2019, 45, 7984-7994.	2.3	58
32	Organized Functionalization of Mesoporous Silica Supports Using Prefabricated Metal-Polymer Modules. <i>Advanced Materials</i> , 1999, 11, 1014-1018.	11.1	56
33	Induced Microphase Separation in Hybrid Composite Polymer Electrolytes Based on Poly(acrylonitrile- <i>r</i> -butadiene) and Ionic Liquids. <i>Macromolecular Chemistry and Physics</i> , 2016, 217, 794-803.	1.1	56
34	The Hybrids of Polystyrene-block-Poly(ethylene Oxide) Micelles and Sodium Dodecyl Sulfate in Aqueous Solutions: Interaction with Rh Ions and Rh Nanoparticle Formation. <i>Journal of Colloid and Interface Science</i> , 2000, 230, 140-149.	5.0	55
35	Mesoporous Alumina and Aluminosilica with Pd and Pt Nanoparticles: Structure and Catalytic Properties. <i>Chemistry of Materials</i> , 2003, 15, 2623-2631.	3.2	55
36	Design of organic-inorganic solid polymer electrolytes: synthesis, structure, and properties. <i>Journal of Materials Chemistry</i> , 2004, 14, 1812-1820.	6.7	51

#	ARTICLE	IF	CITATIONS
37	Ru-Containing Magnetically Recoverable Catalysts: A Sustainable Pathway from Cellulose to Ethylene and Propylene Glycols. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 21285-21293.	4.0	51
38	Metalated Diblock and Triblock Poly(ethylene oxide)-block-poly(4-vinylpyridine) Copolymers: Understanding of Micelle and Bulk Structure. <i>Journal of Physical Chemistry B</i> , 2005, 109, 18786-18798.	1.2	45
39	Virus-Based Nanoparticles with Inorganic Cargo: What Does the Future Hold?. <i>Small</i> , 2011, 7, 1609-1618.	5.2	44
40	Comicellization of Polystyrene-block-Poly(ethylene oxide) with Cationic and Anionic Surfactants in Aqueous Solutions: Indications and Limits. <i>Journal of Physical Chemistry B</i> , 2001, 105, 9077-9082.	1.2	40
41	Synthesis and Induced Micellization of Pd-Containing Polystyrene-block-poly-m-vinyltriphenylphosphine Diblock Copolymers. <i>Chemistry of Materials</i> , 2000, 12, 114-121.	3.2	39
42	Solid Polymer Single-Ion Conductors: Synthesis and Properties. <i>Chemistry of Materials</i> , 2006, 18, 708-715.	3.2	39
43	Hydrophilization of Magnetic Nanoparticles with Modified Alternating Copolymers. Part 1: The Influence of the Grafting. <i>Journal of Physical Chemistry C</i> , 2010, 114, 21900-21907.	1.5	38
44	Palladium Containing Catalysts Based on Hypercrosslinked Polystyrene for Selective Hydrogenation of Acetylene Alcohols. <i>Topics in Catalysis</i> , 2012, 55, 492-497.	1.3	37
45	Magnetically Recoverable Catalysts: Beyond Magnetic Separation. <i>Frontiers in Chemistry</i> , 2018, 6, 298.	1.8	37
46	Proof of Concept: Magnetic Fixation of Dendron-Functionalized Iron Oxide Nanoparticles Containing Palladium Nanoparticles for Continuous-Flow Suzuki Coupling Reactions. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 27254-27261.	4.0	32
47	Viruslike Nanoparticles with Maghemite Cores Allow for Enhanced MRI Contrast Agents. <i>Chemistry of Materials</i> , 2015, 27, 327-335.	3.2	32
48	Metal Nanoparticles Grown in the Nanostructured Matrix of Poly(octadecylsiloxane). <i>Langmuir</i> , 2000, 16, 8221-8225.	1.6	31
49	Theranostics Based on Magnetic Nanoparticles and Polymers: Intelligent Design for Efficient Diagnostics and Therapy. <i>Frontiers in Chemistry</i> , 2020, 8, 561.	1.8	31
50	Formation of Metal Nanoparticles in Multilayered Poly(octadecylsiloxane) As Revealed by Anomalous Small-Angle X-ray Scattering. <i>Chemistry of Materials</i> , 2000, 12, 3552-3560.	3.2	29
51	Small-Angle X-ray Scattering Study of Platinum-Containing Hydrogel/Surfactant Complexes. <i>Journal of Physical Chemistry B</i> , 2000, 104, 5242-5250.	1.2	29
52	Immobilized glucose oxidase on magnetic silica and alumina: Beyond magnetic separation. <i>International Journal of Biological Macromolecules</i> , 2018, 120, 896-905.	3.6	27
53	Synthesis of Metal-Loaded Poly(aminohexyl)(aminopropyl)silsesquioxane Colloids and Their Self-Organization into Dendrites. <i>Nano Letters</i> , 2002, 2, 873-876.	4.5	26
54	Graphene Derivative in Magnetically Recoverable Catalyst Determines Catalytic Properties in Transfer Hydrogenation of Nitroarenes to Anilines with 2-Propanol. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 21356-21364.	4.0	25

#	ARTICLE	IF	CITATIONS
55	Utilizing Stimuli Responsive Linkages to Engineer and Enhance Polymer Nanoparticle-Based Drug Delivery Platforms. <i>ACS Applied Bio Materials</i> , 2021, 4, 4720-4736.	2.3	25
56	Pd(ii) nanoparticles in porous polystyrene: factors influencing the nanoparticle size and catalytic properties. <i>Journal of Materials Chemistry</i> , 2012, 22, 6441.	6.7	24
57	Design of biocatalysts for efficient catalytic processes. <i>Current Opinion in Chemical Engineering</i> , 2019, 26, 1-8.	3.8	24
58	Molybdenum Sulfide Nanoparticles in Block Copolymer Micelles: Synthesis and Tribological Properties. <i>Chemistry of Materials</i> , 2004, 16, 2369-2378.	3.2	23
59	Controlled Synthesis of Novel Metalated Poly(aminohexyl)-(aminopropyl)silsesquioxane Colloids. <i>Langmuir</i> , 2003, 19, 7071-7083.	1.6	22
60	Kinetics of Lactose Hydrogenation over Ruthenium Nanoparticles in Hypercrosslinked Polystyrene. <i>Industrial &amp; Engineering Chemistry Research</i> , 2013, 52, 14066-14080.	1.8	22
61	Zinc-Containing Magnetic Oxides Stabilized by a Polymer: One Phase or Two?. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 891-899.	4.0	22
62	Transformations of Poly(methoxy hexa(ethylene glycol) methacrylate)-b-(2-(diethylamino)ethyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 46	1.6	21
63	Hydrophobic Periphery Tails of Polyphenylenepyridyl Dendrons Control Nanoparticle Formation and Catalytic Properties. <i>Chemistry of Materials</i> , 2014, 26, 5654-5663.	3.2	20
64	Facile Synthesis of Magnetically Recoverable Pd and Ru Catalysts for 4-Nitrophenol Reduction: Identifying Key Factors. <i>ACS Omega</i> , 2018, 3, 14717-14725.	1.6	20
65	Hydrophilization of Magnetic Nanoparticles with Modified Alternating Copolymers. Part 2: Behavior in Solution. <i>Journal of Physical Chemistry C</i> , 2010, 114, 21908-21913.	1.5	19
66	Magnetic Nanoparticle-Containing Supports as Carriers of Immobilized Enzymes: Key Factors Influencing the Biocatalyst Performance. <i>Nanomaterials</i> , 2021, 11, 2257.	1.9	18
67	Mixed Co/Fe Oxide Nanoparticles in Block Copolymer Micelles. <i>Langmuir</i> , 2008, 24, 12618-12626.	1.6	17
68	Bioinspired Gradient Materials via Blending of Polymer Electrolytes and Applying Electric Forces. <i>Journal of Physical Chemistry B</i> , 2009, 113, 647-655.	1.2	17
69	Coat Protein-Dependent Behavior of Poly(ethylene glycol) Tails in Iron Oxide Core Virus-like Nanoparticles. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 12089-12098.	4.0	17
70	Enhancing the Catalytic Activity of Zn-Containing Magnetic Oxides in a Methanol Synthesis: Identifying the Key Factors. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 2285-2294.	4.0	17
71	Pyridylphenylene dendrons immobilized on the surface of chemically modified magnetic silica as efficient stabilizing molecules of Pd species. <i>Applied Surface Science</i> , 2019, 488, 865-873.	3.1	17
72	Pd Catalyst Based on Hyperbranched Polypyridylphenylene Formed In Situ on Magnetic Silica Allows for Excellent Performance in Suzuki-Miyaura Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 22170-22178.	4.0	17

#	ARTICLE	IF	CITATIONS
73	Metal-Ion Distribution and Oxygen Vacancies That Determine the Activity of Magnetically Recoverable Catalysts in Methanol Synthesis. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 34005-34014.	4.0	16
74	Efficient Furfuryl Alcohol Synthesis from Furfural over Magnetically Recoverable Catalysts: Does the Catalyst Stabilizing Medium Matter?. <i>ChemistrySelect</i> , 2017, 2, 5485-5491.	0.7	16
75	Platinum Nanoparticles Generated in Functionality-Enhanced Reaction Media Based on Polyoctadecylsiloxane with Long-Chain Functional Modifiers. <i>Journal of Physical Chemistry B</i> , 2004, 108, 6175-6185.	1.2	15
76	Magnetic field-induced alignment of nanoparticles in electrospun microfibers. <i>RSC Advances</i> , 2012, 2, 4603.	1.7	15
77	Hybrid Polymer Particles with a Protective Shell: Synthesis, Structure, and Templating. <i>Chemistry of Materials</i> , 2006, 18, 2418-2430.	3.2	14
78	$^{57}\text{Fe}$ -Fe <sub>2</sub> O <sub>3</sub> nanoparticle surface controls Pt/Fe nanoparticle growth and catalytic properties. <i>Nanoscale</i> , 2013, 5, 2921.	2.8	14
79	Metal oxide-zeolite composites in transformation of methanol to hydrocarbons: do iron oxide and nickel oxide matter?. <i>RSC Advances</i> , 2016, 6, 75166-75177.	1.7	14
80	Hydrogenation of bio-oil into higher alcohols over Ru/Fe <sub>3</sub> O <sub>4</sub> -SiO <sub>2</sub> catalysts. <i>Fuel Processing Technology</i> , 2017, 167, 738-746.	3.7	14
81	Magnetically Recoverable Catalysts with Dendritic Ligands for Enhanced Catalysis and Easy Separation. <i>ChemCatChem</i> , 2015, 7, 1058-1060.	1.8	13
82	Zn <sup>2+</sup> Ion Surface Enrichment in Doped Iron Oxide Nanoparticles Leads to Charge Carrier Density Enhancement. <i>ACS Omega</i> , 2018, 3, 16328-16337.	1.6	13
83	Selective Hydrogenation of Biomass-Derived Furfural: Enhanced Catalytic Performance of Pd-Cu Alloy Nanoparticles in Porous Polymer. <i>ChemPlusChem</i> , 2020, 85, 1697-1703.	1.3	13
84	Dependence of Conductivity on the Interplay of Structure and Polymer Dynamics in a Composite Polymer Electrolyte. <i>Journal of Physical Chemistry B</i> , 2004, 108, 918-928.	1.2	12
85	Composite Solid Polymer Electrolytes Based on Pluronics: Does Ordering Matter?. <i>Chemistry of Materials</i> , 2007, 19, 6258-6265.	3.2	12
86	Unusual Structural Morphology of Dendrimer/CdS Nanocomposites Revealed by Synchrotron X-ray Scattering. <i>Journal of Physical Chemistry C</i> , 2012, 116, 8069-8078.	1.5	12
87	Multicore Iron Oxide Mesocrystals Stabilized by a Poly(phenylene-pyridyl) Dendron and Dendrimer: Role of the Dendron/Dendrimer Self-Assembly. <i>Langmuir</i> , 2014, 30, 8543-8550.	1.6	12
88	Core-Shell Nanostructures from Single Poly(N-vinylcaprolactam) Macromolecules: Stabilization and Visualization. <i>Langmuir</i> , 2005, 21, 2652-2655.	1.6	11
89	In situ Growth of Pd Nanoparticles in Crosslinked Polymer Matrices. <i>Macromolecular Rapid Communications</i> , 2008, 29, 1926-1931.	2.0	11
90	Influence of heterogenization on catalytic behavior of mono- and bimetallic nanoparticles formed in poly(styrene)-block-poly(4-vinylpyridine) micelles. <i>Journal of Catalysis</i> , 2009, 262, 150-158.	3.1	11

#	ARTICLE	IF	CITATIONS
91	Oriented Attachment Is a Major Control Mechanism To Form Nail-like Mn-Doped ZnO Nanocrystals. <i>Langmuir</i> , 2017, 33, 14709-14717.	1.6	11
92	Structure and behavior of nanoparticulate catalysts based on ultrathin chitosan layers. <i>Journal of Molecular Catalysis A</i> , 2007, 276, 116-129.	4.8	10
93	Polyphenylene-pyridyl dendrimers as stabilizing and controlling agents for CdS nanoparticle formation. <i>Nanoscale</i> , 2012, 4, 2378.	2.8	10
94	Structural Study of Pt-Fe Nanoparticles: New Insights into Pt Bimetallic Nanoparticle Formation with Oxidized Fe Species. <i>Journal of Physical Chemistry C</i> , 2014, 118, 24769-24775.	1.5	10
95	Glucose Oxidase Immobilized on Magnetic Zirconia: Controlling Catalytic Performance and Stability. <i>ACS Omega</i> , 2020, 5, 12329-12338.	1.6	10
96	Surface interactions with the metal oxide surface control Ru nanoparticle formation and catalytic performance. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2021, 610, 125722.	2.3	9
97	Insights into Sustainable Glucose Oxidation Using Magnetically Recoverable Biocatalysts. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 9845-9853.	3.2	8
98	Elastomer based nanocomposites with reduced graphene oxide nanofillers allow for enhanced tensile and electrical properties. <i>Journal of Polymer Research</i> , 2020, 27, 1.	1.2	8
99	Morphology of hybrid polystyrene-block-poly(ethylene oxide) micelles: Analytical ultracentrifugation and SANS studies. <i>Journal of Colloid and Interface Science</i> , 2006, 299, 944-952.	5.0	7
100	Dendritic effect for immobilized pyridylphenylene dendrons in hosting catalytic Pd species: Positive or negative?. <i>Reactive and Functional Polymers</i> , 2020, 151, 104582.	2.0	5
101	Functional Polymer Colloids with Ordered Interior. <i>Langmuir</i> , 2004, 20, 1100-1110.	1.6	4
102	Cr-Containing Magnetic Oxides in a Methanol Synthesis: Does Cr Ion Distribution Matter?. <i>ChemistrySelect</i> , 2017, 2, 6269-6276.	0.7	4
103	Larger pores dramatically enhance activity of an immobilized enzyme in mesoporous magnetic silica. <i>Microporous and Mesoporous Materials</i> , 2022, 341, 112092.	2.2	4
104	Clustering of Iron Oxide Nanoparticles with Amphiphilic Invertible Polymer Enhances Uptake and Release of Drugs and MRI Properties. <i>Particle and Particle Systems Characterization</i> , 2019, 36, 1900112.	1.2	3
105	Chitosan as capping agent in a robust one-pot procedure for a magnetic catalyst synthesis. <i>Carbohydrate Polymers</i> , 2021, 269, 118267.	5.1	3
106	Magnetically Recoverable Nanoparticulate Catalysts for Cross-Coupling Reactions: The Dendritic Support Influences the Catalytic Performance. <i>Nanomaterials</i> , 2021, 11, 3345.	1.9	3
107	D-glucose catalytic oxidation over palladium nanoparticles introduced in the hypercrosslinked polystyrene matrix. <i>Green Processing and Synthesis</i> , 2013, 2, .	1.3	1
108	Star-like Aromatic Conjugated Polymers and Dendrimers for OLEDs. <i>Materials Research Society Symposia Proceedings</i> , 2003, 785, 1061.	0.1	0

#	ARTICLE	IF	CITATIONS
109	The structure, optical absorption and luminescence properties of the Zn <sub>1-x</sub> Th <sub>x</sub> Se quantum dots prepared via mercaptoethanol assisted colloidal approach. <i>Optik</i> , 2019, 193, 162984.	1.4	0