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List of Publications by Year
in descending order

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100	14,325	71097	37202
papers	citations	41 h-index	96 g-index

105	105	105	16690
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Mesoporous silica nanoparticles as controlled release drug delivery and gene transfection carriersâ˜†. Advanced Drug Delivery Reviews, 2008, 60, 1278-1288.	13.7	2,357
2	Mesoporous Silica Nanoparticles for Drug Delivery and Biosensing Applications. Advanced Functional Materials, 2007, 17, 1225-1236.	14.9	1,503
3	Synthesis and Functionalization of a Mesoporous Silica Nanoparticle Based on the Solâ€“Gel Process and Applications in Controlled Release. Accounts of Chemical Research, 2007, 40, 846-853.	15.6	1,027
4	Mesoporous Silica Nanoparticles for Intracellular Controlled Drug Delivery. Small, 2010, 6, 1952-1967.	10.0	907
5	Effect of Surface Functionalization of MCM-41-Type Mesoporous Silica Nanoparticles on the Endocytosis by Human Cancer Cells. Journal of the American Chemical Society, 2006, 128, 14792-14793.	13.7	779
6	Mesoporous Silica Nanoparticles for Intracellular Delivery of Membrane-Impermeable Proteins. Journal of the American Chemical Society, 2007, 129, 8845-8849.	13.7	734
7	Mesoporous Silica Nanoparticle-Based Double Drug Delivery System for Glucose-Responsive Controlled Release of Insulin and Cyclic AMP. Journal of the American Chemical Society, 2009, 131, 8398-8400.	13.7	707
8	Photoinduced Intracellular Controlled Release Drug Delivery in Human Cells by Gold-Capped Mesoporous Silica Nanosphere. Journal of the American Chemical Society, 2009, 131, 3462-3463.	13.7	622
9	Mesoporous silica nanoparticle based controlled release, drug delivery, and biosensor systems. Chemical Communications, 2007, , 3236.	4.1	532
10	Interaction of Mesoporous Silica Nanoparticles with Human Red Blood Cell Membranes: Size and Surface Effects. ACS Nano, 2011, 5, 1366-1375.	14.6	493
11	Mesoporous Silica Nanoparticles for Reducing Hemolytic Activity Towards Mammalian Red Blood Cells. Small, 2009, 5, 57-62.	10.0	465
12	Mesoporous silica nanoparticles: structural design and applications. Journal of Materials Chemistry, 2010, 20, 7924.	6.7	363
13	Catalytic upcycling of high-density polyethylene via a processive mechanism. Nature Catalysis, 2020, 3, 893-901.	34.4	262
14	Structurally Ordered Mesoporous Carbon Nanoparticles as Transmembrane Delivery Vehicle in Human Cancer Cells. Nano Letters, 2008, 8, 3724-3727.	9.1	258
15	Dynamic Nuclear Polarization Solid-State NMR in Heterogeneous Catalysis Research. ACS Catalysis, 2015, 5, 7055-7062.	11.2	160
16	Capped mesoporous silica nanoparticles as stimuli-responsive controlled release systems for intracellular drug/gene delivery. Expert Opinion on Drug Delivery, 2010, 7, 1013-1029.	5.0	157
17	Supported iron nanoparticles for the hydrodeoxygenation of microalgal oil to green diesel. Journal of Catalysis, 2014, 314, 142-148.	6.2	135
18	Mesoporous Silica Nanoparticles Loaded with Surfactant: Low Temperature Magic Angle Spinning ¹³C and ²⁹Si NMR Enhanced by Dynamic Nuclear Polarization. Journal of Physical Chemistry C, 2013, 117, 1375-1382.	3.1	128

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19	Cell-induced intracellular controlled release of membrane impermeable cysteine from a mesoporous silica nanoparticle-based drug delivery system. Chemical Communications, 2009, , 3219.	4.1	125
20	Selective Hydrogenation of Phenol Catalyzed by Palladium on High-Surface-Area Ceria at Room Temperature and Ambient Pressure. ACS Catalysis, 2015, 5, 2051-2061.	11.2	120
21	Ordered Mesoporous Polymerâ"Silica Hybrid Nanoparticles as Vehicles for the Intracellular Controlled Release of Macromolecules. ACS Nano, 2011, 5, 360-366.	14.6	95
22	Role Of CO₂ As a Soft Oxidant For Dehydrogenation of Ethylbenzene to Styrene over a High-Surface-Area Ceria Catalyst. ACS Catalysis, 2015, 5, 6426-6435.	11.2	90
23	Mesoporous Silica-Supported Amidozirconium-Catalyzed Carbonyl Hydroboration. ACS Catalysis, 2015, 5, 7399-7414.	11.2	87
24	Luciferase and Luciferin Co-immobilized Mesoporous Silica Nanoparticle Materials for Intracellular Biocatalysis. Journal of the American Chemical Society, 2011, 133, 18554-18557.	13.7	86
25	Exocytosis of Mesoporous Silica Nanoparticles from Mammalian Cells: From Asymmetric Cellâ€toâ€Cell Transfer to Protein Harvesting. Small, 2011, 7, 1526-1532.	10.0	84
26	Selective Alcohol Dehydrogenation and Hydrogenolysis with Semiconductor-Metal Photocatalysts: Toward Solar-to-Chemical Energy Conversion of Biomass-Relevant Substrates. Journal of Physical Chemistry Letters, 2012, 3, 2798-2802.	4.6	76
27	Substrate inhibition in the heterogeneous catalyzed aldol condensation: A mechanistic study of supported organocatalysts. Journal of Catalysis, 2012, 291, 63-68.	6.2	76
28	Analysis of sensitivity enhancement by dynamic nuclear polarization in solid-state NMR: a case study of functionalized mesoporous materials. Physical Chemistry Chemical Physics, 2013, 15, 5553.	2.8	76
29	Endocytosis of a single mesoporous silica nanoparticle into a human lung cancer cell observed by differential interference contrast microscopy. Analytical and Bioanalytical Chemistry, 2008, 391, 2119-2125.	3.7	75
30	Surfactant-assisted controlled release of hydrophobic drugs using anionic surfactant templated mesoporous silica nanoparticles. Biomaterials, 2011, 32, 6234-6244.	11.4	74
31	Tuning the cellular uptake and cytotoxicity properties of oligonucleotide intercalator-functionalized mesoporous silica nanoparticles with human cervical cancer cells HeLa. Biomaterials, 2010, 31, 1325-1333.	11.4	69
32	Probing Surface Hydrogen Bonding and Dynamics by Natural Abundance, Multidimensional, ¹⁷O DNP-NMR Spectroscopy. Journal of Physical Chemistry C, 2016, 120, 11535-11544.	3.1	65
33	Natural Abundance ¹⁷O DNPâ€...NMR Provides Precise Oâ"H Distances and Insights into the BrÃ¸nsted Acidity of Heterogeneous Catalysts. Angewandte Chemie - International Edition, 2017, 56, 9165-9169.	13.8	63
34	{Mo₂₄Fe₁₂} Macrocycles: Anion Templation with Large Polyoxometalate Guests. Angewandte Chemie - International Edition, 2013, 52, 10500-10504.	13.8	54
35	Solvent-Induced Reversal of Activities between Two Closely Related Heterogeneous Catalysts in the Aldol Reaction. ACS Catalysis, 2013, 3, 265-271.	11.2	54
36	Synergistic Interaction between Oxides of Copper and Iron for Production of Fatty Alcohols from Fatty Acids. ACS Catalysis, 2015, 5, 6719-6723.	11.2	51

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37	Direct 3D Printing of Catalytically Active Structures. ACS Catalysis, 2017, 7, 7567-7577.	11.2	51
38	Catalytic carbon-carbon bond cleavage and carbon-element bond formation give new life for polyolefins as biodegradable surfactants. CheM, 2021, 7, 1347-1362.	11.7	50
39	Spatial distribution of organic functional groups supported on mesoporous silica nanoparticles: a study by conventional and DNP-enhanced ²⁹Si solid-state NMR. Physical Chemistry Chemical Physics, 2017, 19, 1781-1789.	2.8	49
40	Ligand Conformation Dictates Membrane and Endosomal Trafficking of Arginineâ€Glycineâ€Aspartate (RGD)â€Functionalized Mesoporous Silica Nanoparticles. Chemistry - A European Journal, 2012, 18, 7787-7792.	3.3	48
41	Bifunctional Adsorbent-Catalytic Nanoparticles for the Refining of Renewable Feedstocks. ACS Catalysis, 2013, 3, 2750-2758.	11.2	47
42	Optimal sample formulations for DNP SENS: The importance of radical-surface interactions. Current Opinion in Colloid and Interface Science, 2018, 33, 9-18.	7.4	42
43	Poly(lactic acid)-coated mesoporous silica nanosphere for controlled release of venlafaxine. Journal of Colloid and Interface Science, 2011, 360, 488-496.	9.4	41
44	Tuning the Release of Anticancer Drugs from Magnetic Iron Oxide/Mesoporous Silica Core/Shell Nanoparticles. ChemPlusChem, 2012, 77, 48-55.	2.8	41
45	Ionicâ€Liquidâ€Assisted Microwave Synthesis of Solid Solutions of Sr_{1â"x}Ba_xSnO₃ Perovskite for Photocatalytic Applications. ChemSusChem, 2017, 10, 3387-3401.	6.8	40
46	Phosphate modified ceria as a BrÃ¸nsted acidic/redox multifunctional catalyst. Journal of Materials Chemistry A, 2017, 5, 4455-4466.	10.3	39
47	Probing Oâ€"H Bonding through Proton Detected 1Hâ€"17O Double Resonance Solid-State NMR Spectroscopy. Journal of the American Chemical Society, 2019, 141, 441-450.	13.7	37
48	Toward hydrogen economy: Selective guaiacol hydrogenolysis under ambient hydrogen pressure. Applied Catalysis B: Environmental, 2020, 270, 118890.	20.2	37
49	Functional Mesoporous Silica Nanoparticles for the Selective Sequestration of Free Fatty Acids from Microalgal Oil. ACS Applied Materials & Interfaces, 2012, 4, 1003-1009.	8.0	36
50	Studies of minute quantities of natural abundance molecules using 2D heteronuclear correlation spectroscopy under 100 kHz MAS. Solid State Nuclear Magnetic Resonance, 2015, 66-67, 56-61.	2.3	36
51	Effects of biradical deuteration on the performance of DNP: towards better performing polarizing agents. Physical Chemistry Chemical Physics, 2016, 18, 65-69.	2.8	34
52	Mechanistic Insight into Nanoparticle Surface Adsorption by Solution NMR Spectroscopy in an Aqueous Gel. Angewandte Chemie - International Edition, 2017, 56, 9802-9806.	13.8	31
53	Catalytic properties of intermetallic platinum-tin nanoparticles with non-stoichiometric compositions. Journal of Catalysis, 2019, 374, 136-142.	6.2	29
54	Improved strategies for DNP-enhanced 2D 1H-X heteronuclear correlation spectroscopy of surfaces. Solid State Nuclear Magnetic Resonance, 2017, 87, 38-44.	2.3	27

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55	Interfacial Control of Catalytic Activity in the Aldol Condensation: Combining the Effects of Hydrophobic Environments and Water. ACS Catalysis, 2019, 9, 5574-5582.	11.2	27
56	Recycled Sm-Co bonded magnet filaments for 3D printing of magnets. AIP Advances, 2018, 8, .	1.3	26
57	Direct ¹⁷O dynamic nuclear polarization of single-site heterogeneous catalysts. Chemical Communications, 2018, 54, 3472-3475.	4.1	26
58	Vapor-Phase Oxidation of Benzyl Alcohol Using Manganese Oxide Octahedral Molecular Sieves (OMS-2). Industrial & Engineering Chemistry Research, 2014, 53, 19044-19051.	3.7	25
59	Polarity Control at Interfaces: Quantifying Pseudoâ€solvent Effects in Nanoâ€confined Systems. ChemPhysChem, 2016, 17, 2982-2986.	2.1	25
60	Î²-SiH-Containing Tris(silazido) Rare-Earth Complexes as Homogeneous and Grafted Single-Site Catalyst Precursors for Hydroamination. Organometallics, 2017, 36, 1142-1153.	2.3	25
61	Two-step conversion of Kraft lignin to nylon precursors under mild conditions. Green Chemistry, 2020, 22, 4676-4682.	9.0	25
62	Silica-Supported Organolanthanum Catalysts for Câ€“O Bond Cleavage in Epoxides. Journal of the American Chemical Society, 2020, 142, 2935-2947.	13.7	23
63	Homoleptic Trivalent Tris(alkyl) Rare Earth Compounds. Journal of the American Chemical Society, 2017, 139, 16862-16874.	13.7	22
64	Development of a semigraphitic sulfur-doped ordered mesoporous carbon material for electroanalytical applications. Sensors and Actuators B: Chemical, 2018, 257, 347-353.	7.8	22
65	Measuring Long-Range ¹³Câ€“¹³C Correlations on a Surface under Natural Abundance Using Dynamic Nuclear Polarization-Enhanced Solid-State Nuclear Magnetic Resonance. Journal of Physical Chemistry C, 2017, 121, 24687-24691.	3.1	21
66	Silanol-Assisted Carbinolamine Formation in an Amine-Functionalized Mesoporous Silica Surface: Theoretical Investigation by Fragmentation Methods. Journal of Physical Chemistry B, 2016, 120, 1660-1669.	2.6	20
67	Transfer hydrogenation over sodium-modified ceria: Enrichment of redox sites active for alcohol dehydrogenation. Journal of Catalysis, 2017, 346, 180-187.	6.2	20
68	Spatial distribution of organic functional groups supported on mesoporous silica nanoparticles (2): a study by ¹H triple-quantum fast-MAS solid-state NMR. Physical Chemistry Chemical Physics, 2018, 20, 22203-22209.	2.8	20
69	Using a Reactive Force Field To Correlate Mobilities Obtained from Solid-State¹³C NMR on Mesoporous Silica Nanoparticle Systems. Journal of Physical Chemistry C, 2011, 115, 16333-16339.	3.1	19
70	Aerobic Oxidation of Cyclic Amines to Lactams Catalyzed by Ceria-Supported Nanogold. Catalysis Letters, 2016, 146, 2278-2291.	2.6	17
71	Control of interfacial pH in mesoporous silica nanoparticles via surface functionalization. Journal of Chemical Physics, 2020, 152, 034703.	3.0	17
72	Pore diameter dependence of catalytic activity: p-nitrobenzaldehyde conversion to an aldol product in amine-functionalized mesoporous silica. Journal of Chemical Physics, 2018, 149, 024101.	3.0	15

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73	Mechanistic Insight into Nanoparticle Surface Adsorption by Solution NMR Spectroscopy in an Aqueous Gel. Angewandte Chemie, 2017, 129, 9934-9938.	2.0	14
74	High Throughput Screening of 3D Printable Resins: Adjusting the Surface and Catalytic Properties of Multifunctional Architectures. ACS Applied Polymer Materials, 2019, 1, 2890-2896.	4.4	14
75	Interplay between Anomalous Transport and Catalytic Reaction Kinetics in Single-File Nanoporous Systems. ACS Catalysis, 2011, 1, 751-763.	11.2	13
76	Deactivation of Ceria Supported Palladium through Câ€“C Scission during Transfer Hydrogenation of Phenol with Alcohols. Journal of Physical Chemistry C, 2016, 120, 28067-28073.	3.1	13
77	Fine-tuning the release of molecular guests from mesoporous silicas by controlling the orientation and mobility of surface phenyl substituents. Chemical Engineering Journal, 2018, 340, 73-80.	12.7	13
78	â€˜Surface Contrastâ€™ NMR Reveals Nonâ€innocent Role of Support in Pd/CeO₂ Catalyzed Phenol Hydrogenation. ChemCatChem, 2020, 12, 4160-4166.	3.7	13
79	Quantitative atomic-scale structure characterization of ordered mesoporous carbon materials by solid state NMR. Carbon, 2018, 131, 102-110.	10.3	12
80	Kinetics of the functionalization of mesoporous silica nanoparticles: Implications on surface group distributions, adsorption and catalysis. Microporous and Mesoporous Materials, 2020, 305, 110276.	4.4	12
81	Heterogeneous Multicatalytic System for Single-Pot Oxidation and Câ€“C Coupling Reaction Sequences. Topics in Catalysis, 2014, 57, 1000-1006.	2.8	11
82	Natural Abundance 17 O DNPâ€…NMR Provides Precise Oâ‹¯H Distances and Insights into the BrÃ¸nsted Acidity of Heterogeneous Catalysts. Angewandte Chemie, 2017, 129, 9293-9297.	2.0	10
83	Substrateâ€“Support Interactions Mediate Hydrogenation of Phenolic Compounds by Pd/CeO₂ Nanorods. ACS Applied Nano Materials, 2020, 3, 11282-11288.	5.0	10
84	Non-Innocent Role of the Ceria Support in Pd-Catalyzed Halophenol Hydrodehalogenation. ACS Catalysis, 2021, 11, 10553-10564.	11.2	10
85	Surface ligands enhance the catalytic activity of supported Au nanoparticles for the aerobic Î±-oxidation of amines to amides. Catalysis Science and Technology, 2022, 12, 1922-1933.	4.1	10
86	Regulating the Catalytic Activity of Pd Nanoparticles by Confinement in Ordered Mesoporous Supports. ChemCatChem, 2021, 13, 539-542.	3.7	9
87	Determining the Three-Dimensional Structures of Silica-Supported Metal Complexes from the Ground Up. Inorganic Chemistry, 2022, 61, 1067-1078.	4.0	8
88	Langevin and Fokker-Planck Analyses of Inhibited Molecular Passing Processes Controlling Transport and Reactivity in Nanoporous Materials. Physical Review Letters, 2014, 113, 038301.	7.8	6
89	In Situ 29Si solid-state NMR study of grafting of organoalkoxysilanes to mesoporous silica nanoparticles. Microporous and Mesoporous Materials, 2022, 339, 112019.	4.4	6
90	Macroscale Control of Reactivity using 3D Printed Materials with Intrinsic Catalytic Properties. Applied Catalysis A: General, 2020, 605, 117794.	4.3	5

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91	Supported Hybrid Enzyme-Organocatalysts for Upgrading the Carbon Content of Alcohols. ACS Symposium Series, 2013, , 261-271.	0.5	4
92	Surface structure of linear nanopores in amorphous silica: Comparison of properties for different pore generation algorithms. Journal of Chemical Physics, 2020, 153, 124708.	3.0	4
93	An organogel library for solution NMR analysis of nanoparticle suspensions in non-aqueous samples. Journal of Magnetic Resonance, 2020, 321, 106874.	2.1	3
94	Virtual Special Issue on Catalysis at the U.S. Department of Energyâ€™s National Laboratories. ACS Catalysis, 2016, 6, 3227-3235.	11.2	2
95	Conversion Reactions in Surface-Functionalized Mesoporous Materials: Effect of Restricted Transport and Catalytic Site Distribution. Materials Research Society Symposia Proceedings, 2012, 1423, 19.	0.1	1
96	The anomalous solidification of concrete grindings from acid treatment. Cement and Concrete Research, 2019, 116, 65-69.	11.0	1
97	Drug Delivery: Exocytosis of Mesoporous Silica Nanoparticles from Mammalian Cells: From Asymmetric Cell-to-Cell Transfer to Protein Harvesting (Small 11/2011). Small, 2011, 7, 1498-1498.	10.0	0
98	Innentitelbild: Natural Abundance ¹⁷O DNPâ€…NMR Provides Precise Oâ‹¯H Distances and Insights into the BrÃ¸nsted Acidity of Heterogeneous Catalysts (Angew. Chem. 31/2017). Angewandte Chemie, 2017, 129, 9032-9032.	2.0	0
99	Anomalous Kinetics of Catalytic Conversion Reactions in Linear Nanopores Mediated by Inhibited Transport: Multiscale Modeling. , 2019, , 173-190.		0
100	Modeling of linear nanopores in a-SiO2 tuning pore surface structure. Microporous and Mesoporous Materials, 2022, , 112077.	4.4	0