Vivek Polshettiwar

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 6.94

 ext. papers
 ext. citations
 avg, IF
 L-index

#	Paper	IF	Citations
122	Magnetically recoverable nanocatalysts. <i>Chemical Reviews</i> , 2011 , 111, 3036-75	68.1	1386
121	Green chemistry by nano-catalysis. <i>Green Chemistry</i> , 2010 , 12, 743	10	899
120	Nanocatalysts for Suzuki cross-coupling reactions. <i>Chemical Society Reviews</i> , 2011 , 40, 5181-203	58.5	650
119	Microwave-assisted organic synthesis and transformations using benign reaction media. <i>Accounts of Chemical Research</i> , 2008 , 41, 629-39	24.3	543
118	High-surface-area silica nanospheres (KCC-1) with a fibrous morphology. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 9652-6	16.4	518
117	Silica-supported palladium: Sustainable catalysts for cross-coupling reactions. <i>Coordination Chemistry Reviews</i> , 2009 , 253, 2599-2626	23.2	438
116	Aqueous microwave chemistry: a clean and green synthetic tool for rapid drug discovery. <i>Chemical Society Reviews</i> , 2008 , 37, 1546-57	58.5	375
115	Nanoparticle-supported and magnetically recoverable nickel catalyst: a robust and economic hydrogenation and transfer hydrogenation protocol. <i>Green Chemistry</i> , 2009 , 11, 127-131	10	325
114	Suzuki-Miyaura cross-coupling reactions in aqueous media: green and sustainable syntheses of biaryls. <i>ChemSusChem</i> , 2010 , 3, 502-22	8.3	298
113	Self-assembly of metal oxides into three-dimensional nanostructures: synthesis and application in catalysis. <i>ACS Nano</i> , 2009 , 3, 728-36	16.7	285
112	Silica-supported Pd catalysts for Heck coupling reactions. <i>Tetrahedron</i> , 2007 , 63, 6949-6976	2.4	254
111	Nanoparticle-supported and magnetically recoverable palladium (Pd) catalyst: a selective and sustainable oxidation protocol with high turnover number. <i>Organic and Biomolecular Chemistry</i> , 2009 , 7, 37-40	3.9	244
110	Nanoparticle-supported and magnetically recoverable ruthenium hydroxide catalyst: efficient hydration of nitriles to amides in aqueous medium. <i>Chemistry - A European Journal</i> , 2009 , 15, 1582-6	4.8	226
109	Nano-organocatalyst: magnetically retrievable ferrite-anchored glutathione for microwave-assisted Paal K norr reaction, aza-Michael addition, and pyrazole synthesis. <i>Tetrahedron</i> , 2010 , 66, 1091-1097	2.4	203
108	Magnetic nanoparticle-supported glutathione: a conceptually sustainable organocatalyst. <i>Chemical Communications</i> , 2009 , 1837-9	5.8	186
107	Glutathione promoted expeditious green synthesis of silver nanoparticles in water using microwaves. <i>Green Chemistry</i> , 2009 , 11, 926	10	178
106	Facile and sustainable synthesis of shaped iron oxide nanoparticles: effect of iron precursor salts on the shapes of iron oxides. <i>Scientific Reports</i> , 2015 , 5, 9733	4.9	158

105	Fibrous nano-silica (KCC-1)-supported palladium catalyst: Suzuki coupling reactions under sustainable conditions. <i>ChemSusChem</i> , 2012 , 5, 85-9	8.3	155
104	Microwave-Assisted Chemistry: a Rapid and Sustainable Route to Synthesis of Organics and Nanomaterials. <i>Australian Journal of Chemistry</i> , 2009 , 62, 16	1.2	149
103	Fibrous Nano-Silica Supported Ruthenium (KCC-1/Ru): A Sustainable Catalyst for the Hydrogenolysis of Alkanes with Good Catalytic Activity and Lifetime. <i>ACS Catalysis</i> , 2012 , 2, 1425-1431	13.1	142
102	Dendritic Fibrous Nanosilica for Catalysis, Energy Harvesting, Carbon Dioxide Mitigation, Drug Delivery, and Sensing. <i>ChemSusChem</i> , 2017 , 10, 3866-3913	8.3	141
101	Atomic Layer Deposited (ALD) TiO2 on Fibrous Nano-Silica (KCC-1) for Photocatalysis: Nanoparticle Formation and Size Quantization Effect. <i>ACS Catalysis</i> , 2016 , 6, 2770-2784	13.1	117
100	"Hydro-metathesis" of olefins: a catalytic reaction using a bifunctional single-site tantalum hydride catalyst supported on fibrous silica (KCC-1) Nanospheres. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 2747-51	16.4	114
99	Size and Fiber Density Controlled Synthesis of Fibrous Nanosilica Spheres (KCC-1). <i>Scientific Reports</i> , 2016 , 6, 24888	4.9	108
98	Self-assembly of palladium nanoparticles: synthesis of nanobelts, nanoplates and nanotrees using vitamin B1, and their application in carbondarbon coupling reactions. <i>Journal of Materials Chemistry</i> , 2009 , 19, 2026		108
97	Greener and rapid access to bio-active heterocycles: room temperature synthesis of pyrazoles and diazepines in aqueous medium. <i>Tetrahedron Letters</i> , 2008 , 49, 397-400	2	102
96	Silicon oxynitrides of KCC-1, SBA-15 and MCM-41 for CO2 capture with excellent stability and regenerability. <i>Chemical Science</i> , 2012 , 3, 2224	9.4	101
95	Greener and expeditious synthesis of bioactive heterocycles using microwave irradiation. <i>Pure and Applied Chemistry</i> , 2008 , 80, 777-790	2.1	101
94	Chemistry by Nanocatalysis: First example of a solid-supported RAPTA complex for organic reactions in aqueous medium. <i>ChemSusChem</i> , 2011 , 4, 104-11	8.3	99
93	The synthesis and applications of a micro-pine-structured nanocatalyst. <i>Chemical Communications</i> , 2008 , 6318-20	5.8	96
92	Palladium containing nanostructured silica functionalized with pyridine sites: a versatile heterogeneous catalyst for Heck, Sonogashira, and cyanation reactions. <i>Tetrahedron</i> , 2007 , 63, 6784-67	904	95
91	Greener and rapid access to bio-active heterocycles: one-pot solvent-free synthesis of 1,3,4-oxadiazoles and 1,3,4-thiadiazoles. <i>Tetrahedron Letters</i> , 2008 , 49, 879-883	2	93
90	Insights into the catalytic activity of nitridated fibrous silica (KCC-1) nanocatalysts from (15) N and (29) Si NMR spectroscopy enhanced by dynamic nuclear polarization. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 2190-3	16.4	90
89	Efficient Synthesis of Monodisperse Metal (Rh, Ru, Pd) Nanoparticles Supported on Fibrous Nanosilica (KCC-1) for Catalysis. <i>ACS Sustainable Chemistry and Engineering</i> , 2015 , 3, 3224-3230	8.3	89
88	Nitridated Fibrous Silica (KCC-1) as a Sustainable Solid Base Nanocatalyst. <i>ACS Sustainable Chemistry and Engineering</i> , 2013 , 1, 1192-1199	8.3	87

87	Revisiting the Meerwein P onndorf V erley reduction: a sustainable protocol for transfer hydrogenation of aldehydes and ketones. <i>Green Chemistry</i> , 2009 , 11, 1313	10	86
86	Design of CO2 sorbents using functionalized fibrous nanosilica (KCC-1): insights into the effect of the silica morphology (KCC-1 vs. MCM-41). <i>Journal of Materials Chemistry A</i> , 2016 , 4, 7005-7019	13	82
85	Suzuki-Miyaura cross-coupling coupling reactions with low catalyst loading: a green and sustainable protocol in pure water. <i>Dalton Transactions</i> , 2011 , 40, 3116-21	4.3	82
84	Biginelli reaction in aqueous medium: a greener and sustainable approach to substituted 3,4-dihydropyrimidin-2(1H)-ones. <i>Tetrahedron Letters</i> , 2007 , 48, 7343-7346	2	82
83	Magnetically recoverable supported ruthenium catalyst for hydrogenation of alkynes and transfer hydrogenation of carbonyl compounds. <i>Tetrahedron Letters</i> , 2009 , 50, 1215-1218	2	80
82	Tandem bis-aldol reaction of ketones: a facile one-pot synthesis of 1,3-dioxanes in aqueous medium. <i>Journal of Organic Chemistry</i> , 2007 , 72, 7420-2	4.2	77
81	KCC-1 supported palladium nanoparticles as an efficient and sustainable nanocatalyst for carbonylative SuzukiMiyaura cross-coupling. <i>Green Chemistry</i> , 2016 , 18, 5890-5899	10	74
80	PdN-heterocyclic carbene (NHC) organic silica: synthesis and application in carbonEarbon coupling reactions. <i>Tetrahedron</i> , 2008 , 64, 4637-4643	2.4	73
79	Dendritic silica nanomaterials (KCC-1) with fibrous pore structure possess high DNA adsorption capacity and effectively deliver genes in vitro. <i>Langmuir</i> , 2014 , 30, 10886-98	4	71
78	Ultrasmall nanoparticles and pseudo-single atoms of platinum supported on fibrous nanosilica (KCC-1/Pt): engineering selectivity of hydrogenation reactions. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 12416-12424	13	70
77	High-Surface-Area Silica Nanospheres (KCC-1) with a Fibrous Morphology. <i>Angewandte Chemie</i> , 2010 , 122, 9846-9850	3.6	65
76	Plasmonic colloidosomes of black gold for solar energy harvesting and hotspots directed catalysis for CO to fuel conversion. <i>Chemical Science</i> , 2019 , 10, 6594-6603	9.4	57
75	Organosilane oxidation with a half million turnover number using fibrous nanosilica supported ultrasmall nanoparticles and pseudo-single atoms of gold. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 19	935 ⁻³ 194	o ⁵⁶
74	Facile synthesis to tune size, textural properties and fiber density of dendritic fibrous nanosilica for applications in catalysis and CO capture. <i>Nature Protocols</i> , 2019 , 14, 2177-2204	18.8	56
73	Nano-ferrites for water splitting: unprecedented high photocatalytic hydrogen production under visible light. <i>Nanoscale</i> , 2012 , 4, 5202-9	7.7	56
72	Nafion -catalyzed microwave-assisted Ritter reaction: an atom-economic solvent-free synthesis of amides. <i>Tetrahedron Letters</i> , 2008 , 49, 2661-2664	2	55
71	Silica hybrid material containing PdNHC complex as heterogeneous catalyst for MizorokiHeck reactions. <i>Tetrahedron Letters</i> , 2007 , 48, 5363-5366	2	52
70	Olefin ring closing metathesis and hydrosilylation reaction in aqueous medium by Grubbs second generation ruthenium catalyst. <i>Journal of Organic Chemistry</i> , 2008 , 73, 7417-9	4.2	49

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69	Dendritic fibrous nano-silica supported gold nanoparticles as an artificial enzyme. <i>Journal of Materials Chemistry B</i> , 2018 , 6, 1600-1604	7.3	47
68	Expeditious oxidation of alcohols to carbonyl compounds using iron(III) nitrate. <i>Tetrahedron Letters</i> , 2007 , 48, 8839-8842	2	47
67	Tandem bis-aza-Michael addition reaction of amines in aqueous medium promoted by polystyrenesulfonic acid. <i>Tetrahedron Letters</i> , 2007 , 48, 8735-8738	2	44
66	Polystyrene sulfonic acid catalyzed greener synthesis of hydrazones in aqueous medium using microwaves. <i>Tetrahedron Letters</i> , 2007 , 48, 5649-5652	2	43
65	Shape- and Morphology-Controlled Sustainable Synthesis of Cu, Co, and In Metal Organic Frameworks with High CO2 Capture Capacity. <i>ACS Sustainable Chemistry and Engineering</i> , 2013 , 1, 66-74	8.3	42
64	Recent advances in thionating reagents for the synthesis of organosulfur compounds. <i>Journal of Sulfur Chemistry</i> , 2006 , 27, 353-386	2.3	40
63	Defects in nanosilica catalytically convert CO to methane without any metal and ligand. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 6383-6390	11.5	39
62	Unraveling the Formation Mechanism of Dendritic Fibrous Nanosilica. <i>Langmuir</i> , 2017 , 33, 13774-13782	4	39
61	CsFITelite catalyzed regio- and chemoselective SN2 type ring opening of epoxides with thiol. <i>Catalysis Communications</i> , 2004 , 5, 515-518	3.2	39
60	A new, efficient and simple method for the thionation of ketones to thioketones using P4S10/Al2O3. <i>Tetrahedron Letters</i> , 2004 , 45, 6255-6257	2	36
59	An efficient and chemoselective Cbz-protection of amines using silicaBulfuric acid at room temperature. <i>Tetrahedron Letters</i> , 2007 , 48, 8170-8173	2	34
58	Palladium Nanoparticles Supported on Fibrous Silica (KCC-1-PEI/Pd): A Sustainable Nanocatalyst for Decarbonylation Reactions. <i>ChemPlusChem</i> , 2016 , 81, 1142-1146	2.8	34
57	Negative Photochromism Based on Molecular Diffusion between Hydrophilic and Hydrophobic Particles in the Solid State. <i>Inorganic Chemistry</i> , 2018 , 57, 3671-3674	5.1	32
56	Highly Ordered Functional Organosilicas by Template-Directed Hydrolysis-Polycondensation of Chiral Camphorsulfonamide Precursors. <i>European Journal of Inorganic Chemistry</i> , 2006 , 2006, 3697-3702	2.3	32
55	Scalable and Sustainable Synthesis of Size-Controlled Monodisperse Dendritic Fibrous Nanosilica Quantified by E-Factor. <i>ACS Applied Nano Materials</i> , 2018 , 1, 3636-3643	5.6	31
54	Synthesis of hierarchical anatase TiO2 nanostructures with tunable morphology and enhanced photocatalytic activity. <i>RSC Advances</i> , 2012 , 2, 7048	3.7	31
53	Size- and shape-controlled synthesis of hexagonal bipyramidal crystals and hollow self-assembled Al-MOF spheres. <i>ChemSusChem</i> , 2014 , 7, 529-35	8.3	30
52	Design of a CdS/CdSe Heterostructure for Efficient H2 Generation and Photovoltaic Applications. Journal of Physical Chemistry C, 2018 , 122, 12158-12167	3.8	30

51	Nanostructured Silica-Titania Hybrid using Dendritic Fibrous Nanosilica as a Photocatalyst. <i>ChemSusChem</i> , 2017 , 10, 2182-2191	8.3	29
50	Ring-fused aminals: catalyst and solvent-free microwave-assisted Hamination of nitrogen heterocycles. <i>Tetrahedron Letters</i> , 2008 , 49, 7165-7167	2	28
49	Supported Single Atom and Pseudo-Single Atom of Metals as Sustainable Heterogeneous Nanocatalysts. <i>ChemCatChem</i> , 2018 , 10, 881-906	5.2	27
48	Defective TiO for photocatalytic CO conversion to fuels and chemicals. <i>Chemical Science</i> , 2021 , 12, 4267	7- <u>4</u> .2499	26
47	Nanoroses of nickel oxides: synthesis, electron tomography study, and application in CO oxidation and energy storage. <i>ChemSusChem</i> , 2012 , 5, 1241-8	8.3	25
46	A new reagent for the efficient synthesis of disulfides from alkyl halides. <i>Tetrahedron Letters</i> , 2003 , 44, 887-889	2	25
45	Nano cobalt oxides for photocatalytic hydrogen production. <i>International Journal of Hydrogen Energy</i> , 2012 , 37, 10462-10466	6.7	24
44	Amphi-functional mesoporous silica nanoparticles for dye separation. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 14914-14921	13	23
43	Hydro-metathesisIbf Olefins: A Catalytic Reaction Using a Bifunctional Single-Site Tantalum Hydride Catalyst Supported on Fibrous Silica (KCC-1) Nanospheres. <i>Angewandte Chemie</i> , 2011 , 123, 279	9 ² 2803	3 23
42	Alumina encapsulated phosphorus pentasulfide (P4S10/Al2O3) mediated efficient thionation of long chain amides. <i>Tetrahedron Letters</i> , 2006 , 47, 2315-2317	2	23
41	Catalytic nanosponges of acidic aluminosilicates for plastic degradation and CO to fuel conversion. <i>Nature Communications</i> , 2020 , 11, 3828	17.4	23
40	Plasmonic Photocatalysis for CO2 Conversion to Chemicals and Fuels 2021 , 3, 574-598		23
39	SBA-15-Oxynitrides as a Solid-Base Catalyst: Effect of Nitridation Temperature on Catalytic Activity. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 5985-9	16.4	21
38	Insights into the Catalytic Activity of Nitridated Fibrous Silica (KCC-1) Nanocatalysts from 15N and 29Si NMR Spectroscopy Enhanced by Dynamic Nuclear Polarization. <i>Angewandte Chemie</i> , 2015 , 127, 22	18:522	1 ²¹
37	Self-Assembled Photonic Crystals of Monodisperse Dendritic Fibrous Nanosilica for Lasing: Role of Fiber Density. <i>ACS Applied Materials & Density (Nature of State of</i>	9.5	16
36	Corrigendum to Bilica-supported Pd catalysts for Heck coupling reactions[[Tetrahedron 63 (2007) 6949]. <i>Tetrahedron</i> , 2007 , 63, 11223	2.4	16
35	Solution-phase synthesis of two-dimensional silica nanosheets using soft templates and their applications in CO capture. <i>Nanoscale</i> , 2019 , 11, 5365-5376	7.7	16
34	Photocatalytic Hydrogen Generation and CO2 Conversion Using g-C3N4 Decorated Dendritic Fibrous Nanosilica: Role of Interfaces between Silica and g-C3N4. <i>ACS Applied Energy Materials</i> , 2020 , 3, 8150-8158	6.1	15

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33	Photochromism of a Spiropyran in the Presence of a Dendritic Fibrous Nanosilica; Simultaneous Photochemical Reaction and Adsorption. <i>Journal of Physical Chemistry A</i> , 2017 , 121, 8080-8085	2.8	14	
32	Microwave enhanced chemistry of CsFITelite: an efficient catalyst for the synthesis of esters, ethers and their thio-analogues. <i>Catalysis Communications</i> , 2005 , 6, 191-194	3.2	14	
31	Phosphorus Pentasulfide (P4S10). <i>Synlett</i> , 2004 , 2004, 2245-2246	2.2	14	
30	Hydrothermal Crystallization of Nano-Titanium Dioxide for Enhanced Photocatalytic Hydrogen Generation. <i>ChemPhotoChem</i> , 2018 , 2, 796-800	3.3	14	
29	Efficient Hydrogenolysis of Alkanes at Low Temperature and Pressure Using Tantalum Hydride on MCM-41, and a Quantum Chemical Study. <i>ChemCatChem</i> , 2012 , 4, 363-369	5.2	13	
28	Boron Nitride and Oxide Supported on Dendritic Fibrous Nanosilica for Catalytic Oxidative Dehydrogenation of Propane. <i>ACS Sustainable Chemistry and Engineering</i> , 2020 , 8, 16124-16135	8.3	13	
27	Synthesis of High Surface Area Carbon Nanospheres with Wrinkled Cages and Their CO2 Capture Studies. <i>ChemistrySelect</i> , 2018 , 3, 10684-10688	1.8	9	
26	Lithium silicate nanosheets with excellent capture capacity and kinetics with unprecedented stability for high-temperature CO capture. <i>Chemical Science</i> , 2021 , 12, 4825-4835	9.4	9	
25	Thionation of carbonyl compounds using phosphorus pentasulfide and hexamethyldisiloxane under microwave irradiations. <i>Journal of Chemical Research</i> , 2004 , 2004, 474-476	0.6	8	
24	Dendritic Fibrous Nanosilica (DFNS) for RNA Extraction from Cells. <i>Langmuir</i> , 2020 , 36, 12755-12759	4	8	
23	Greener and sustainable approaches to the synthesis of pharmaceutically active heterocycles. <i>Current Opinion in Drug Discovery & Development</i> , 2007 , 10, 723-37		8	
22	SBA-15-Oxynitrides as a Solid-Base Catalyst: Effect of Nitridation Temperature on Catalytic Activity. <i>Angewandte Chemie</i> , 2015 , 127, 6083-6087	3.6	7	
21	Nitrogen doped carbon spheres with wrinkled cages for the selective oxidation of 5-hydroxymethylfurfural to 5-formyl-2-furancarboxylic acid. <i>Chemical Communications</i> , 2021 , 57, 2005-2	2008	6	
20	Direct CO capture and conversion to fuels on magnesium nanoparticles under ambient conditions simply using water <i>Chemical Science</i> , 2021 , 12, 5774-5786	9.4	6	
19	Crystal Structure Directed Catalysis by Aluminum Metal-Organic Framework: Mechanistic Insight into the Role of Coordination of Al Sites and Entrance Size of Catalytic Pocket 2020 , 2, 699-704		5	
18	Probing the Interfaces in Nanosilica-Supported TiO2 Photocatalysts by Solid-State NMR and In Situ FTIR. <i>ChemNanoMat</i> , 2018 , 4, 1231-1239	3.5	5	
17	Introduction to Nanocatalysis 2013 , 1-9		4	
16	Origin of the Hierarchical Structure of Dendritic Fibrous Nanosilica: A Small-Angle X-ray Scattering Perspective. <i>Langmuir</i> , 2021 , 37, 6423-6434	4	4	

15	Visible Light-Driven Highly Selective CO Reduction to CH Using Potassium-Doped g-CN <i>Langmuir</i> , 2022 ,	4	4
14	Chapter 8:Environmentally Benign Chemical Synthesis via Mechanochemical Mixing and Microwave Irradiation. <i>RSC Green Chemistry</i> , 2009 , 275-292	0.9	3
13	Cover Picture: High-Surface-Area Silica Nanospheres (KCC-1) with a Fibrous Morphology (Angew. Chem. Int. Ed. 50/2010). <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 9539-9539	16.4	3
12	Nanocatalysts for Hydrogenation Reactions 2013 , 405-441		2
11	Nitridated Fibrous Silica/Tetrabutylammonium Iodide (N-DFNS/TBAI): Robust and Efficient Catalytic System for Chemical Fixation of Carbon Dioxide to Cyclic Carbonates. <i>ChemCatChem</i> , 2021 , 13, 2907-29	1 ⁵ 4 ²	2
10	Gold cluster-loaded dendritic nanosilica: single particle luminescence and catalytic properties in the bulk. <i>Nanoscale</i> , 2021 , 13, 9788-9797	7.7	2
9	Nanocatalysts for the Suzuki Coupling Reactions 2013 , 51-88		1
8	Nanocatalysts for the Heck Coupling Reactions 2013 , 11-50		1
7	Sonogashira Reactions Using Nanocatalysts 2013 , 89-131		1
6	Nanocatalysts for Rearrangement Reactions 2013 , 251-285		1
5	Nanomaterials in Catalysis. Herausgegeben von Philippe Serp und Karine Philippot <i>Angewandte Chemie</i> , 2013 , 125, 11407-11407	3.6	1
4	Silica-Supported Nanoparticles as Heterogeneous Catalysts 2021 , 215-238		1
3	Non-conventional Energy Sources for Green Synthesis in Water (Microwave, Ultrasound, and Photo) 2010 , 273		0
2	Unravelling the structural hierarchy in microemulsion droplet templated dendritic fibrous nano silica. <i>Microporous and Mesoporous Materials</i> , 2021 , 323, 111234	5.3	O

Sustainable Synthesis of Metal Oxide Nanostructures **2016**, 1-10