Rakesh K Sharma

List of Publications by Year
in descending order

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62 papers	2,797 citations	185998 28 h-index	174990 52 g-index
63 all docs	63 docs citations	63 times ranked	3120 citing authors

#	Article	IF	Citations
1	Fe₃O₄(iron oxide)-supported nanocatalysts: synthesis, characterization and applications in coupling reactions. Green Chemistry, 2016, 18, 3184-3209.	4.6	342
2	Recent development of covalent organic frameworks (COFs): synthesis and catalytic (organic-electro-photo) applications. Materials Horizons, 2020, 7, 411-454.	6.4	291
3	Silica-decorated magnetic nanocomposites for catalytic applications. Coordination Chemistry Reviews, 2015, 288, 118-143.	9.5	268
4	Silica-nanosphere-based organicâ€“inorganic hybrid nanomaterials: synthesis, functionalization and applications in catalysis. Green Chemistry, 2015, 17, 3207-3230.	4.6	191
5	Preparation of Gold Nanoparticles Using Tea: A Green Chemistry Experiment. Journal of Chemical Education, 2012, 89, 1316-1318.	1.1	122
6	Magnetically separable silica@Fe3O4 coreâ€“shell supported nano-structured copper(II) composites as a versatile catalyst for the reduction of nitroarenes in aqueous medium at room temperature. Journal of Molecular Catalysis A, 2014, 393, 84-95.	4.8	90
7	Magnetite (Fe3O4) silica based organicâ€“inorganic hybrid copper(ii) nanocatalyst: a platform for aerobic N-alkylation of amines. Green Chemistry, 2013, 15, 2800.	4.6	83
8	Silver nanomaterials: synthesis and (electro/photo) catalytic applications. Chemical Society Reviews, 2021, 50, 11293-11380.	18.7	79
9	Acetoacetanilide-functionalized Fe₃O₄ nanoparticles for selective and cyclic removal of Pb²⁺ ions from different charged wastewaters. Journal of Materials Chemistry A, 2014, 2, 12888-12898.	5.2	66
10	A straightforward one-pot synthesis of bioactive N-aryl oxazolidin-2-ones via a highly efficient Fe₃O₄@SiO₂-supported acetate-based butylimidazolium ionic liquid nanocatalyst under metal- and solvent-free conditions. Green Chemistry, 2017, 19, 3801-3812.	4.6	62
11	Maghemiteâ€Copper Nanocomposites: Applications for Ligandâ€Free Crossâ€Coupling (Câ^'O, Câ^'S, and Câ^'N) Reactions. ChemCatChem, 2015, 7, 3495-3502.	1.8	54
12	Novel, efficient and recyclable silica based organicâ€“inorganic hybrid Nickel catalyst for degradation of dye pollutants in a newly designed chemical reactor. Applied Catalysis B: Environmental, 2012, 125, 247-258.	10.8	53
13	Silica-Based Magnetic Manganese Nanocatalyst â€“ Applications in the Oxidation of Organic Halides and Alcohols. ACS Sustainable Chemistry and Engineering, 2016, 4, 1123-1130.	3.2	52
14	Zirconium(IV)-modified silica@magnetic nanocomposites: Fabrication, characterization and application as efficient, selective and reusable nanocatalysts for Friedelâ€“Crafts, Knoevenagel and Pechmann condensation reactions. Catalysis Communications, 2013, 35, 110-114.	1.6	49
15	Silica nanospheres supported diazafluorene iron complex: an efficient and versatile nanocatalyst for the synthesis of propargylamines from terminal alkynes, dihalomethane and amines. RSC Advances, 2014, 4, 49198-49211.	1.7	45
16	Silica-Coated Magnetic-Nanoparticle-Supported DABCO-Derived Acidic Ionic Liquid for the Efficient Synthesis of Bioactive 3,3-Di(indolyl)indolin-2-ones. ACS Omega, 2019, 4, 21529-21539.	1.6	44
17	Magnetically retrievable silica-based nickel nanocatalyst for Suzukiâ€“Miyaura cross-coupling reaction. Catalysis Science and Technology, 2015, 5, 2728-2740.	2.1	43
18	Sustainable Synthesis of Nanoscale Zerovalent Iron Particles for Environmental Remediation. ChemSusChem, 2020, 13, 3288-3305.	3.6	42

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19	Magnetic metalâ€“organic framework composites: structurally advanced catalytic materials for organic transformations. Materials Advances, 2021, 2, 2153-2187.	2.6	42
20	Silica-supported molybdenum complex: A novel, selective and reusable organicâ€“inorganic hybrid catalyst for eco-friendly oxidation of sulfides and olefins. Polyhedron, 2012, 45, 86-93.	1.0	41
21	Inorganicâ€“organic hybrid silica based tin(II) catalyst: Synthesis, characterization and application in one-pot three-component Mannich reaction. Catalysis Communications, 2012, 19, 31-36.	1.6	39
22	Silica immobilized nickel complex: An efficient and reusable catalyst for microwave-assisted one-pot synthesis of dihydropyrimidinones. Inorganic Chemistry Communication, 2012, 17, 58-63.	1.8	39
23	Cross-dehydrogenative C(sp³)â€“C(sp³) coupling via Câ€“H activation using magnetically retrievable ruthenium-based photoredox nanocatalyst under aerobic conditions. Chemical Communications, 2019, 55, 7402-7405.	2.2	36
24	Synthesis of Magnetic Nanoparticles Using Potato Extract for Dye Degradation: A Green Chemistry Experiment. Journal of Chemical Education, 2019, 96, 3038-3044.	1.1	35
25	Magnetically supported ionic liquids: a sustainable catalytic route for organic transformations. Materials Horizons, 2020, 7, 3097-3130.	6.4	33
26	Silica encapsulated magnetic nanoparticles-supported Zn(II) nanocatalyst: A versatile integration of excellent reactivity and selectivity for the synthesis of azoxyarenes, combined with facile catalyst recovery and recyclability. Applied Catalysis A: General, 2013, 454, 1-10.	2.2	31
27	Synthesis of Iron Oxide Palladium Nanoparticles and Their Catalytic Applications for Direct Coupling of Acyl Chlorides with Alkynes. ChemPlusChem, 2016, 81, 1312-1319.	1.3	30
28	Fabrication of Coreâ€“Shell-Structured Organicâ€“Inorganic Hybrid Nanocatalyst for the Expedient Synthesis of Polysubstituted Oxazoles via Tandem Oxidative Cyclization Pathway. ACS Omega, 2017, 2, 2778-2791.	1.6	29
29	Expanding the Horizon of Multicomponent Oxidative Coupling Reaction via the Design of a Unique, 3D Copper Isophthalate MOF-Based Catalyst Decorated with Mixed Spinel CoFe₂O₄ Nanoparticles. ACS Omega, 2018, 3, 15100-15111.	1.6	29
30	In situ hydroxyl radical generation using the synergism of the Coâ€“Ni bimetallic centres of a developed nanocatalyst with potent efficiency for degrading toxic water pollutants. Materials Chemistry Frontiers, 2020, 4, 605-620.	3.2	26
31	Nickel(<scp>ii</scp>) complex covalently anchored on core shell structured SiO₂@Fe₃O₄ nanoparticles: a robust and magnetically retrievable catalyst for direct one-pot reductive amination of ketones. New Journal of Chemistry, 2016, 40, 2089-2101.	1.4	25
32	Chemically modified silica gel with 1-{4-[(2-hydroxy-benzylidene)amino]phenyl}ethanone: Synthesis, characterization and application as an efficient and reusable solid phase extractant for selective removal of Zn(II) from mycorrhizal treated fly-ash samples. Journal of Environmental Sciences, 2013, 25, 1252-1261.	3.2	24
33	Harnessing the Untapped Catalytic Potential of a CoFe₂O₄/Mn-BDC Hybrid MOF Composite for Obtaining a Multitude of 1,4-Disubstituted 1,2,3-Triazole Scaffolds. Inorganic Chemistry, 2020, 59, 8334-8344.	1.9	23
34	Aerobic Oxidation of Thiols to Disulfides by Silverâ€Based Magnetic Catalyst. ChemistrySelect, 2018, 3, 2502-2508.	0.7	22
35	A highly efficient and magnetically retrievable functionalized nano-adsorbent for ultrasonication assisted rapid and selective extraction of Pd2+ ions from water samples. RSC Advances, 2015, 5, 43371-43380.	1.7	20
36	Polyfluorinatedâ€“zinc(II)phthalocyanine complex immobilized on silica: A novel, highly selective and recyclable inorganicâ€“organic hybrid catalyst for the synthesis of biologically important 1,5-benzodiazepines. Inorganica Chimica Acta, 2013, 397, 21-31.	1.2	19

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37	Fabrication of Copperâ€based Silicaâ€coated Magnetic Nanocatalyst for Efficient Oneâ€pot Synthesis of Chalcones via A³ Coupling of Aldehydesâ€Alkynesâ€Amines. ChemCatChem, 2020, 12, 2488-2496.	1.8	19
38	Fabrication, functionalization and advanced applications of magnetic hollow materials in confined catalysis and environmental remediation. Nanoscale, 2021, 13, 10967-11003.	2.8	18
39	Heterogenized nickel catalysts for various organic transformations. Current Opinion in Green and Sustainable Chemistry, 2019, 15, 47-59.	3.2	17
40	An Efficient and Recyclable Silica Based Inorganicâ€“Organic Hybrid Zinc Catalyst for Transesterification of Î²-Ketoesters. Journal of Inorganic and Organometallic Polymers and Materials, 2011, 21, 619-626.	1.9	16
41	One pot and solvent-free synthesis of 2,9,16,23-tetrachlorometal(II) phthalocyanines. Green Chemistry Letters and Reviews, 2012, 5, 83-87.	2.1	16
42	Design and Exploration of Catalytic Activity of Two-Dimensional Surface-Engineered Graphene Oxide Nanosheets in the Transannulation of N-Heterocyclic Aldehydes or Ketones with Alkylamines. ACS Omega, 2019, 4, 3146-3158.	1.6	16
43	A Novel and Templateâ€Free Synthesis of Multifunctional Doubleâ€Shelled Fe₃O₄â€C Nanoreactor as an Ideal Support for Confined Catalytic Reactions. ChemistrySelect, 2017, 2, 10871-10879.	0.7	15
44	Zinc(II) complex immobilized on amine functionalized silica gel: a novel, highly efficient and recyclable catalyst for multicomponent click synthesis of 1,4-disubstituted 1,2,3-triazoles. Journal of Coordination Chemistry, 2016, 69, 1152-1165.	0.8	14
45	Unprecedented Esterâ€“Amide Exchange Reaction Using Highly Versatile Two-Dimensional Graphene Oxide Supported Base Metal Nanocatalyst. Industrial & Engineering Chemistry Research, 2018, 57, 3617-3627.	1.8	14
46	Unlocking the catalytic potency of a magnetic responsive CoFe₂O₄/Ni-BTC MOF composite for the sustainable synthesis of tri- and tetra-substituted imidazoles. Materials Chemistry Frontiers, 2021, 5, 7343-7355.	3.2	14
47	Ultrasonically-mediated one-pot synthesis of substituted imidazoles via sulfamic acid functionalized hollow magnetically retrievable solid-acid catalyst. Current Research in Green and Sustainable Chemistry, 2021, 4, 100050.	2.9	11
48	Ingeniously designed Silica nanostructures as an exceptional support: Opportunities, potential challenges and future prospects for viable degradation of pesticides. Journal of Environmental Management, 2022, 301, 113821.	3.8	11
49	A magnetically retrievable copper ionic liquid nanocatalyst for cyclooxidative synthesis of 2-phenylquinazolin-4(3H)-ones. Dalton Transactions, 2021, 50, 890-898.	1.6	10
50	Nanoengineered iron oxide-based sorbents for separation of various water pollutants: current status, opportunities and future outlook. Environmental Science: Water Research and Technology, 2021, 7, 818-860.	1.2	10
51	Unravelling the catalytic potential of a magnetic CoFe₂O₄/Cuâ€“ABDC MOF composite in the sustainable synthesis of 2H-indazole motifs. New Journal of Chemistry, 2022, 46, 10829-10843.	1.4	10
52	Inhibitors of transcription factor nuclear factor-kappa beta (NF-Î²Î²)-DNA binding. RSC Advances, 2013, 3, 1282-1296.	1.7	9
53	A template free protocol for fabrication of a Ni(<scp>ii</scp>)-loaded magnetically separable nanoreactor scaffold for confined synthesis of unsymmetrical diaryl sulfides in water. RSC Advances, 2020, 10, 19390-19396.	1.7	9
54	Efficient and sustainable Co3O4 nanocages based nickel catalyst: A suitable platform for the synthesis of quinoxaline derivatives. Molecular Catalysis, 2021, 504, 111454.	1.0	9

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55	Chemistry of magnetic covalent organic frameworks (MagCOFs): from synthesis to separation applications. Materials Advances, 2022, 3, 1432-1458.	2.6	9
56	Magnetic Boron Nitride Nanosheets Decorated with Cobalt Nanoparticles as Catalyst for the Synthesis of 3,4-Dihydropyrimidin-2(1H)-ones/thiones. ACS Applied Nano Materials, 2022, 5, 4875-4886.	2.4	8
57	An Earth-abundant cobalt based photocatalyst: visible light induced direct (het)arene Câ€“H arylation and CO₂ capture. Dalton Transactions, 2022, 51, 2452-2463.	1.6	5
58	Magnetically separable type-II semiconductor based ZnO/MoO₃ photocatalyst: a proficient system for heteroarenes arylation and rhodamine B degradation under visible light. New Journal of Chemistry, 2022, 46, 8478-8488.	1.4	5
59	Porous silica supported Co2+-tetrachlorophthalocyanine (CoPcCl-APTES@SiO2): a novel and recyclable organicâ€“inorganic hybrid catalyst for eco-friendly oxidation of secondary alcohols. Journal of Porous Materials, 2013, 20, 937-949.	1.3	4
60	A sustainable gateway to access 1,8-dioxo-octahydroxanthene scaffolds via a surface-engineered halloysite-based magnetically responsive catalyst. New Journal of Chemistry, 2022, 46, 5405-5418.	1.4	4
61	Microwave-assisted C-C, C-O, C-N, C-S Bond Formation and Multicomponent Reactions Using Magnetic Retrievable Nanocatalysts. Current Microwave Chemistry, 2021, 8, 96-116.	0.2	3
62	Synthesis of phenol esters by direct C-H activation of aldehydes using highly efficient and reusable copper immobilized polyimide covalent organic framework (Cu@PI-COF). New Journal of Chemistry, 0, , .	1.4	2