Sanjay Kumar Singh

List of Publications by Year
in descending order

82 papers	4,220 citations	159525 30 h-index	110317 64 g-index
88 all docs	88 docs citations	88 times ranked	4650 citing authors

#	Article	IF	Citations
1	Proton reduction by a bimetallic zinc selenolate electrocatalyst. RSC Advances, 2022, 12, 3801-3808.	1.7	3
2	Hydrogen Production from Formaldehyde and Paraformaldehyde in Water under Additive-Free Conditions: Catalytic Reactions and Mechanistic Insights. Inorganic Chemistry, 2022, 61, 4618-4626.	1.9	7
3	Selective Hydrogen Production from Glycerol over Ruthenium Catalyst. ChemCatChem, 2022, 14, .	1.8	4
4	Low-temperature hydrogen production from methanol over a ruthenium catalyst in water. Catalysis Science and Technology, 2021, 11, 136-142.	2.1	30
5	Shape-Selective Synthesis of Intermetallic Pd₃Pb Nanocrystals and Enhanced Catalytic Properties in the Direct Synthesis of Hydrogen Peroxide. ACS Catalysis, 2021, 11, 2288-2301.	5.5	27
6	Bis-Imidazole Methane Ligated Ruthenium(II) Complexes: Synthesis, Characterization, and Catalytic Activity for Hydrogen Production from Formic Acid in Water. Inorganic Chemistry, 2021, 60, 14275-14285.	1.9	13
7	Ruthenium catalyzed hydrogen production from formaldehydeâ€“water solution. Sustainable Energy and Fuels, 2021, 5, 549-555.	2.5	11
8	Synthesis, structure and catalytic activity of manganese(<scp>ii</scp>) complexes derived from bis(imidazole)methane-based ligands. Dalton Transactions, 2020, 49, 757-763.	1.6	8
9	In situ casting of rice husk ash in metal organic frameworks induces enhanced CO2 capture performance. Scientific Reports, 2020, 10, 20219.	1.6	11
10	Aqueous phase semihydrogenation of alkynes over Niâ€“Fe bimetallic catalysts. Catalysis Science and Technology, 2020, 10, 4968-4980.	2.1	11
11	Hydrogen Production from Formic Acid and Formaldehyde over Ruthenium Catalysts in Water. Inorganic Chemistry, 2020, 59, 4234-4243.	1.9	35
12	Lab Cooked MOF for CO₂ Capture: A Sustainable Solution to Waste Management. Journal of Chemical Education, 2020, 97, 1101-1108.	1.1	27
13	Introducing mesoporosity in zeolite 4A bodies for Rapid CO2 capture. Journal of CO2 Utilization, 2020, 40, 101223.	3.3	30
14	Surface Remodelling of Zeolite 4A Bodies for CO2 Capture: A Case Study. Springer Proceedings in Energy, 2020, , 541-549.	0.2	0
15	Ruthenium Catalyzed Dehydrogenation of Alcohols and Mechanistic Study. Inorganic Chemistry, 2019, 58, 14912-14923.	1.9	21
16	Lithiumâ€Doped Silicaâ€Rich MILâ€101(Cr) for Enhanced Hydrogen Uptake. Chemistry - an Asian Journal, 2019, 14, 3728-3735.	1.7	5
17	Inducing <i>In Situ</i> Hydrothermal Carbonization of Glucose To Synthesize Carbonâ€“MIL-101 Hybrid Composites for Improved Hydrogen Uptake. Energy & Fuels, 2019, 33, 10123-10132.	2.5	7
18	Rutheniumâ€Catalyzed Câ€H Bond Activation/Arylation Accelerated by Biomassâ€Derived Ligands. European Journal of Inorganic Chemistry, 2019, 2019, 2844-2852.	1.0	7

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19	Selective Catalysis for Room-Temperature Hydrogenation of Biomass-Derived Compounds over Supported NiPd Catalysts in Water. ACS Sustainable Chemistry and Engineering, 2019, 7, 9352-9359.	3.2	10
20	Amine Modification of Binder-Containing Zeolite 4A Bodies for Post-Combustion CO₂ Capture. Industrial & Engineering Chemistry Research, 2019, 58, 5301-5313.	1.8	38
21	Silica rich MIL-101(Cr) for enhanced hydrogen uptake. Journal of Porous Materials, 2019, 26, 1137-1147.	1.3	11
22	Dehydrogenation of Formic Acid Catalyzed by Waterâ€Soluble Ruthenium Complexes: Xâ€ray Crystal Structure of a Diruthenium Complex. European Journal of Inorganic Chemistry, 2019, 2019, 1046-1053.	1.0	21
23	Room-Temperature Total Hydrogenation of Biomass-Derived Furans and Furan/Acetone Aldol Adducts over a Niâ€“Pd Alloy Catalyst. ACS Sustainable Chemistry and Engineering, 2018, 6, 4793-4800.	3.2	19
24	Cyclopentadienylâ€“Ru(II)â€“Pyridylamine Complexes: Synthesis, X-ray Structure, and Application in Catalytic Transformation of Bio-Derived Furans to Levulinic Acid and Diketones in Water. Inorganic Chemistry, 2018, 57, 4777-4787.	1.9	10
25	Ruthenium Complexes for Catalytic Dehydrogenation of Hydrazine and Transfer Hydrogenation Reactions. Chemistry - an Asian Journal, 2018, 13, 1424-1431.	1.7	10
26	Ligandâ€Tuned Câ€“H Bond Activation/Arylation of 2â€Arylpyridines over Pyridineâ€Based <i>N</i>,<i>O/N</i>,<i>N</i> Ligated Rutheniumâ€“Arene Complexes. European Journal of Inorganic Chemistry, 2018, 2018, 1435-1445.	1.0	14
27	Metal Catalysts for the Efficient Transformation of Biomassâ€derived HMF and Furfural to Value Added Chemicals. ChemCatChem, 2018, 10, 2326-2349.	1.8	167
28	Coreâ€“Shell Zeolitic Imidazolate Frameworks for Enhanced Hydrogen Storage. ACS Omega, 2018, 3, 167-175.	1.6	120
29	Heterogeneous Bimetallic Catalysts for Upgrading Biomassâ€Derived Furans. Asian Journal of Organic Chemistry, 2018, 7, 1901-1923.	1.3	33
30	Catalytic Hydrogenation of Arenes in Water Over Inâ€…Situ Generated Ruthenium Nanoparticles Immobilized on Carbon. ChemCatChem, 2017, 9, 1930-1938.	1.8	23
31	Synthesis and Characterization of MIL-101 incorporated with Darco type Activated Charcoal. Materials Today: Proceedings, 2017, 4, 388-394.	0.9	7
32	Roomâ€Temperature Catalytic Reduction of Aqueous Nitrate to Ammonia with Ni Nanoparticles Immobilized on an Fe₃O₄@nâ€SiO₂@hâ€SiO₂â€“NH₂ Support. European Journal of Inorganic Chemistry, 2017, 2017, 2450-2456.	1.0	12
33	Catalytic aerial oxidation of 5-hydroxymethyl-2-furfural to furan-2,5-dicarboxylic acid over Niâ€“Pd nanoparticles supported on Mg(OH)₂ nanoflakes for the synthesis of furan diesters. Inorganic Chemistry Frontiers, 2017, 4, 871-880.	3.0	25
34	Nâ€Substituted Iminopyridine Areneâ€“Ruthenium Complexes for the Regioselective Catalytic Hydration of Terminal Alkynes. Asian Journal of Organic Chemistry, 2017, 6, 1647-1658.	1.3	12
35	Catalytic Aerial Oxidation of Biomassâ€Derived Furans to Furan Carboxylic Acids in Water over Bimetallic Nickelâ€“Palladium Alloy Nanoparticles. ChemCatChem, 2017, 9, 2760-2767.	1.8	50
36	Access to highly active Niâ€“Pd bimetallic nanoparticle catalysts for Câ€“C coupling reactions. Catalysis Science and Technology, 2016, 6, 5567-5579.	2.1	73

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37	Synergistic Catalysis with MIL-101: Stabilized Highly Active Bimetallic NiPd and CuPd Alloy Nanoparticle Catalysts for C-C Coupling Reactions. ChemistrySelect, 2016, 1, 3223-3227.	0.7	23
38	Câˆ’H Bond Activation/Arylation Catalyzed by Areneâ€“Rutheniumâ€“Aniline Complexes in Water. Chemistry - an Asian Journal, 2016, 11, 3022-3031.	1.7	22
39	Room-temperature synthesis of bimetallic Coâ€“Zn based zeolitic imidazolate frameworks in water for enhanced CO₂ and H₂ uptakes. Journal of Materials Chemistry A, 2016, 4, 14932-14938.	5.2	156
40	Ruthenium-Catalyzed Oxidative Homocoupling of Arylboronic Acids in Water: Ligand Tuned Reactivity and Mechanistic Study. Inorganic Chemistry, 2016, 55, 6332-6343.	1.9	32
41	Troponate/Aminotroponate Rutheniumâ€“Arene Complexes: Synthesis, Structure, and Ligand-Tuned Mechanistic Pathway for Direct Câ€“H Bond Arylation with Aryl Chlorides in Water. Inorganic Chemistry, 2016, 55, 6739-6749.	1.9	18
42	Activated nanostructured bimetallic catalysts for Câ€“C coupling reactions: recent progress. Catalysis Science and Technology, 2016, 6, 3341-3361.	2.1	74
43	Ruthenium and Formic Acid Based Tandem Catalytic Transformation of Bioderived Furans to Levulinic Acid and Diketones in Water. ChemCatChem, 2015, 7, 4050-4058.	1.8	43
44	Highly Active Bimetallic Nickelâ€“Palladium Alloy Nanoparticle Catalyzed Suzukiâ€“Miyaura Reactions. ChemCatChem, 2015, 7, 1806-1812.	1.8	55
45	Catalytic transformation of bio-derived furans to valuable ketoacids and diketones by water-soluble ruthenium catalysts. Green Chemistry, 2015, 17, 4618-4627.	4.6	64
46	Phosphine-free ruthenium-arene complex for low temperature one-pot catalytic conversion of aldehydes to primary amides in water. Inorganic Chemistry Frontiers, 2015, 2, 116-124.	3.0	28
47	Room-Temperature Chemoselective Reduction of Nitro Groups Using Non-noble Metal Nanocatalysts in Water. Inorganic Chemistry, 2014, 53, 2904-2909.	1.9	109
48	Multifaceted half-sandwich areneâ€“ruthenium complexes: interactions with biomolecules, photoactivation, and multinuclearity approach. RSC Advances, 2014, 4, 1819-1840.	1.7	75
49	Direct vs. indirect pathway for nitrobenzene reduction reaction on a Ni catalyst surface: a density functional study. Physical Chemistry Chemical Physics, 2014, 16, 26365-26374.	1.3	103
50	Au-based bimetallic nanoparticles for the intramolecular aminoalkene hydroamination. Dalton Transactions, 2013, 42, 10404.	1.6	16
51	Nanocatalysts for hydrogen generation from hydrazine. Catalysis Science and Technology, 2013, 3, 1889.	2.1	117
52	Noble-Metal-Free Bimetallic Nanoparticle-Catalyzed Selective Hydrogen Generation from Hydrous Hydrazine for Chemical Hydrogen Storage. Journal of the American Chemical Society, 2011, 133, 19638-19641.	6.6	303
53	Fluorescent Zinc(II) Complex Exhibiting â€œ<i>On-Off-On</i>â€•Switching Toward Cu²⁺ and Ag⁺ Ions. Inorganic Chemistry, 2011, 50, 3189-3197.	1.9	118
54	Coordination polymers and monomers based on new aminocarboxylate ligands: A cadmium(II) polymer containing dimeric aqua-bridged cadmium complex governed by polymeric chain. Inorganica Chimica Acta, 2011, 376, 195-206.	1.2	10

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55	Nickel-palladium nanoparticle catalyzed hydrogen generation from hydrous hydrazine for chemical hydrogen storage. International Journal of Hydrogen Energy, 2011, 36, 11794-11801.	3.8	143
56	Synthesis and characterization of ruthenium(II) complexes based on diphenyl-2-pyridylphosphine and their applications in transfer hydrogenation of ketones. Inorganica Chimica Acta, 2011, 368, 124-131.	1.2	27
57	Temperatureâ€Induced Enhancement of Catalytic Performance in Selective Hydrogen Generation from Hydrous Hydrazine with Niâ€Based Nanocatalysts for Chemical Hydrogen Storage. European Journal of Inorganic Chemistry, 2011, 2011, 2232-2237.	1.0	87
58	Liquidâ€Phase Chemical Hydrogen Storage: Catalytic Hydrogen Generation under Ambient Conditions. ChemSusChem, 2010, 3, 541-549.	3.6	396
59	Synthesis and characterization of Ru(IV) and Rh(I) complexes containing phenylimidazole ligands. Journal of Organometallic Chemistry, 2010, 695, 1924-1931.	0.8	6
60	Synthesis, characterization and reactivity of arene ruthenium compounds based on 2,2â€²-dipyridylamine and di-2-pyridylbenzylamine and their applications in catalytic hydrogen transfer of ketones. Journal of Organometallic Chemistry, 2010, 695, 2205-2212.	0.8	26
61	Extended molecular networks based on Zn and Cd imparting N-substituted imidazole. Inorganica Chimica Acta, 2010, 363, 995-1000.	1.2	8
62	Bimetallic Niâ˜'Pt Nanocatalysts for Selective Decomposition of Hydrazine in Aqueous Solution to Hydrogen at Room Temperature for Chemical Hydrogen Storage. Inorganic Chemistry, 2010, 49, 6148-6152.	1.9	155
63	Bimetallic nickel-iridium nanocatalysts for hydrogen generation by decomposition of hydrous hydrazine. Chemical Communications, 2010, 46, 6545.	2.2	181
64	Novel structures based on 1-(4-cyanophenyl)-imidazole resulting from weak bonding interactions. Journal of Molecular Structure, 2009, 935, 1-7.	1.8	4
65	Synthesis and reactivity of homo-bimetallic Rh and Ir complexes containing a N,O-donor Schiff base. Journal of Organometallic Chemistry, 2009, 694, 3084-3090.	0.8	12
66	Room-Temperature Hydrogen Generation from Hydrous Hydrazine for Chemical Hydrogen Storage. Journal of the American Chemical Society, 2009, 131, 9894-9895.	6.6	278
67	Complete Conversion of Hydrous Hydrazine to Hydrogen at Room Temperature for Chemical Hydrogen Storage. Journal of the American Chemical Society, 2009, 131, 18032-18033.	6.6	240
68	Ruthenium Complexes Containing Pyridine-2-carbaldehyde Azine as a Synthon in the Synthesis of Bi-/Trimetallic Complexes. European Journal of Inorganic Chemistry, 2008, 2008, 5666-5673.	1.0	10
69	Ruthenium(II), rhodium(III) and iridium(III) based effective catalysts for hydrogenation under aerobic conditions. Polyhedron, 2008, 27, 2877-2882.	1.0	15
70	Synthetic, spectral and structural studies of ruthenium(II) compounds based on 2,6-diacetylpyridinemonoxime. Journal of Molecular Structure, 2008, 886, 136-143.	1.8	4
71	Reactivity of the Oxime/Oximato Group in Ruthenium(II) Complexes. Inorganic Chemistry, 2008, 47, 11942-11949.	1.9	16
72	Ruthenium(II) Polypyridyl Complexes:â€‰ Potential Precursors, Metalloligands, and Topo II Inhibitors. Inorganic Chemistry, 2008, 47, 1179-1189.	1.9	33

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73	DNA Binding and Topoisomerase II Inhibitory Activity of Water-Soluble Ruthenium(II) and Rhodium(III) Complexes. Inorganic Chemistry, 2007, 46, 10869-10876.	1.9	73
74	Tuned Helical Array of RhIII/IrIII Cp* Complexes with Polypyridyl Ligands. European Journal of Inorganic Chemistry, 2006, 2006, 3954-3961.	1.0	17
75	Rhodium(III) pentamethyl cyclopentadienyl complexes incorporating 1-(4-cyanophenyl)-imidazole: role of solvent in ligand substitution reactions. Journal of Organometallic Chemistry, 2005, 690, 647-652.	0.8	15
76	Helical racemate architecture based on osmium(II)-polypyridyl complexes: Synthesis and structural characterisation. Journal of Organometallic Chemistry, 2005, 690, 3105-3110.	0.8	10
77	Synthetic, spectral and structural studies of some homo and hetero binuclear arene ruthenium (II) polypyridyl complexes. Journal of Organometallic Chemistry, 2005, 690, 4243-4251.	0.8	16
78	DNA-binding behavior of ruthenium(II) complexes containing both group 15 donors and 2,2â€²:6â€²,2â€³-terpyridine. Journal of Inorganic Biochemistry, 2005, 99, 458-466.	1.5	90
79	Effect of the Counter Anion and Solvate on the Structure, Stability and Spectral Properties of a Ruthenium(II) Complex Containing Group 15 Donors and 2,2â€² :6â€²,2â€²â€²-terpyridine. Transition Metal Chemistry, 2005, 30, 861-868.	0.7	2
80	Ru(II) complexes imparting N2O2 donor bis chelating ligand N,Nâ€²-bis(salicylidine)-hydrazine in unusual coordination mode. Journal of Organometallic Chemistry, 2004, 689, 2073-2079.	0.8	12
81	Helices of ruthenium complexes involving pyridylâ€“azine ligands: synthesis, spectral and structural aspects. Journal of Organometallic Chemistry, 2004, 689, 3612-3620.	0.8	23
82	Luminescent Piano-Stool Complexes Incorporating 1-(4-Cyanophenyl)imidazole: Synthesis, Spectral, and Structural Studies. Inorganic Chemistry, 2004, 43, 8600-8608.	1.9	43