C Mallaiah Nagaraja

List of Publications by Year
in descending order

87	3,334	109311 35	161844 54
papers	citations	h-index	g-index

89	89	89	3218
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Hydrodefluorination and Other Hydrodehalogenation of Aliphatic Carbonâ^'Halogen Bonds Using Silylium Catalysis. Journal of the American Chemical Society, 2010, 132, 4946-4953.	13.7	205
2	Chiral Porous Metalâ€"Organic Frameworks of Co(II) and Ni(II): Synthesis, Structure, Magnetic Properties, and CO₂ Uptake. Crystal Growth and Design, 2012, 12, 975-981.	3.0	137
3	Auxiliary Ligand-Assisted Structural Variation of Cd(II) Metalâ€"Organic Frameworks Showing 2D â†' 3D Polycatenation and Interpenetration: Synthesis, Structure, Luminescence Properties, and Selective Sensing of Trinitrophenol. Crystal Growth and Design, 2015, 15, 3356-3365.	3.0	125
4	Environmentally Friendly, Co-catalyst-Free Chemical Fixation of CO₂ at Mild Conditions Using Dual-Walled Nitrogen-Rich Three-Dimensional Porous Metalâ€"Organic Frameworks. Inorganic Chemistry, 2019, 58, 3925-3936.	4.0	111
5	Sulfonated graphitic carbon nitride as a highly selective and efficient heterogeneous catalyst for the conversion of biomass-derived saccharides to 5-hydroxymethylfurfural in green solvents. Green Chemistry, 2019, 21, 6012-6026.	9.0	107
6	Rational Design of a Bifunctional, Twoâ€Fold Interpenetrated Zn^{II}â€Metalâ€"Organic Framework for Selective Adsorption of CO₂ and Efficient Aqueous Phase Sensing of 2,4,6â€Trinitrophenol. Chemistry - A European Journal, 2017, 23, 16204-16212.	3.3	100
7	Visible-Light-Assisted Photocatalytic Reduction of Nitroaromatics by Recyclable Ni(II)-Porphyrin Metalâ€"Organic Framework (MOF) at RT. Inorganic Chemistry, 2016, 55, 5320-5327.	4.0	95
8	Exceptionally Stable and 20-Connected Lanthanide Metalâ€"Organic Frameworks for Selective CO₂ Capture and Conversion at Atmospheric Pressure. Crystal Growth and Design, 2018, 18, 2432-2440.	3.0	95
9	A luminescent 3D interpenetrating metalâ€"organic framework for highly selective sensing of nitrobenzene. Dalton Transactions, 2014, 43, 17912-17915.	3.3	91
10	Construction of 3-Fold-Interpenetrated Three-Dimensional Metalâ€"Organic Frameworks of Nickel(II) for Highly Efficient Capture and Conversion of Carbon Dioxide. Inorganic Chemistry, 2016, 55, 9757-9766.	4.0	78
11	Oxidized graphitic carbon nitride as a sustainable metal-free catalyst for hydrogen transfer reactions under mild conditions. Green Chemistry, 2020, 22, 5084-5095.	9.0	71
12	Sulfonic acid functionalized graphitic carbon nitride as solid acidâ€"base bifunctional catalyst for Knoevenagel condensation and multicomponent tandem reactions. Materials Chemistry Frontiers, 2021, 5, 6265-6278.	5.9	70
13	A Mn(II)-porphyrin based metal-organic framework (MOF) for visible-light-assisted cycloaddition of carbon dioxide with epoxides. Microporous and Mesoporous Materials, 2019, 280, 372-378.	4.4	69
14	Coâ€Catalystâ€Free Chemical Fixation of CO₂ into Cyclic Carbonates by using Metalâ€Organic Frameworks as Efficient Heterogeneous Catalysts. Chemistry - an Asian Journal, 2020, 15, 2403-2427.	3.3	68
15	Ruthenium(<scp>ii</scp>) arene NSAID complexes: inhibition of cyclooxygenase and antiproliferative activity against cancer cell lines. Dalton Transactions, 2018, 47, 517-527.	3.3	66
16	Rational Design of a 3D Mn^{II}â€Metalâ€"Organic Framework Based on a Nonmetallated Porphyrin Linker for Selective Capture of CO₂ and Oneâ€Pot Synthesis of Styrene Carbonates. Chemistry - A European Journal, 2018, 24, 16662-16669.	3.3	65
17	Visible-Light-Driven Selective Oxidation of Biomass-Derived HMF to DFF Coupled with H₂ Generation by Noble Metal-Free Zn_{0.5}Cd_{0.5}S/MnO₂ Heterostructures. ACS Applied Energy Materials, 2020, 3, 7138-7148.	5.1	60
18	Construction of 3D homochiral metalâ€"organic frameworks (MOFs) of Cd(<scp>ii</scp>): selective CO₂adsorption and catalytic properties for the Knoevenagel and Henry reaction. Inorganic Chemistry Frontiers, 2017, 4, 348-359.	6.0	57

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19	Environment-friendly, co-catalyst- and solvent-free fixation of CO₂ using an ionic zinc(<scp>ii</scp>)â€“porphyrin complex immobilized in porous metalâ€“organic frameworks. Sustainable Energy and Fuels, 2019, 3, 2977-2982.	4.9	57
20	Noble metal-free Cu(<scp>i</scp>)-anchored NHC-based MOF for highly recyclable fixation of CO₂ under RT and atmospheric pressure conditions. Green Chemistry, 2021, 23, 5195-5204.	9.0	57
21	Interpenetrated Metalâ€“Organic Frameworks of Cobalt(II): Structural Diversity, Selective Capture, and Conversion of CO₂. Crystal Growth and Design, 2017, 17, 3295-3305.	3.0	53
22	Template-Free Synthesis of Zn_{1â€“x}Cd_xS Nanocrystals with Tunable Band Structure for Efficient Water Splitting and Reduction of Nitroaromatics in Water. ACS Sustainable Chemistry and Engineering, 2017, 5, 4293-4303.	6.7	53
23	Heterolytic Activation of Hâ^'X (X = H, Si, B, and C) Bonds:Â An Experimental and Theoretical Investigation. Journal of the American Chemical Society, 2007, 129, 5587-5596.	13.7	51
24	Expedient synthesis of new cinnoline diones by Ru-catalyzed regioselective unexpected deoxygenation-oxidative annulation of propargyl alcohols with phthalazinones and pyridazinones. Chemical Communications, 2016, 52, 2509-2512.	4.1	51
25	Efficient chemical fixation of CO₂ from direct air under environment-friendly co-catalyst and solvent-free ambient conditions. Journal of Materials Chemistry A, 2021, 9, 23127-23139.	10.3	51
26	Highly Efficient Fixation of Carbon Dioxide at RT and Atmospheric Pressure Conditions: Influence of Polar Functionality on Selective Capture and Conversion of CO₂. Inorganic Chemistry, 2020, 59, 9765-9773.	4.0	49
27	Construction of bifunctional 2-fold interpenetrated Zn(<scp>ii</scp>) MOFs exhibiting selective CO₂adsorption and aqueous-phase sensing of 2,4,6-trinitrophenol. Inorganic Chemistry Frontiers, 2019, 6, 1058-1067.	6.0	48
28	Construction of a bifunctional Zn(<scp>ii</scp>)â€“organic framework containing a basic amine functionality for selective capture and room temperature fixation of CO₂. Inorganic Chemistry Frontiers, 2020, 7, 72-81.	6.0	46
29	Construction of 2D interwoven and 3D interpenetrated metalâ€“organic frameworks of Zn(<scp>ii</scp>) by varying N,Nâ€²-donor spacers. CrystEngComm, 2014, 16, 4805-4815.	2.6	44
30	Rational Design of a Zn^{II} MOF with Multiple Functional Sites for Highly Efficient Fixation of CO₂ under Mild Conditions: Combined Experimental and Theoretical Investigation. Chemistry - A European Journal, 2020, 26, 17445-17454.	3.3	42
31	Correlating Single Crystal Structure, Nanomechanical, and Bulk Compaction Behavior of Febuxostat Polymorphs. Molecular Pharmaceutics, 2017, 14, 866-874.	4.6	41
32	Highly efficient visible-light-driven reduction of Cr(<scp>vi</scp>) from water by porphyrin-based metalâ€“organic frameworks: effect of band gap engineering on the photocatalytic activity. Catalysis Science and Technology, 2020, 10, 7724-7733.	4.1	41
33	Porous nitrogen-rich covalent organic framework for capture and conversion of CO2 at atmospheric pressure conditions. Microporous and Mesoporous Materials, 2020, 308, 110314.	4.4	41
34	Design of noble metal-free CoTiO3/Zn0.5Cd0.5S heterostructure photocatalyst for selective synthesis of furfuraldehyde combined with H2production. Journal of Colloid and Interface Science, 2022, 608, 1040-1050.	9.4	40
35	Strategic Design of Mg-Centered Porphyrin Metalâ€“Organic Framework for Efficient Visible Light-Promoted Fixation of CO₂ under Ambient Conditions: Combined Experimental and Theoretical Investigation. ACS Applied Materials & Interfaces, 2022, 14, 33285-33296.	8.0	39
36	Design of noble metal-free NiTiO3/ZnIn2S4 heterojunction photocatalyst for efficient visible-light-assisted production of H2 and selective synthesis of 2,5-Bis(hydroxymethyl)furan. Journal of Colloid and Interface Science, 2022, 615, 346-356.	9.4	38

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37	Enhanced visible-light-assisted photocatalytic hydrogen generation by MoS2/g-C3N4 nanocomposites. International Journal of Hydrogen Energy, 2020, 45, 8497-8506.	7.1	37
38	Construction of a 3D porous Co(<scp>ii</scp>) metalâ€“organic framework (MOF) with Lewis acidic metal sites exhibiting selective CO₂ capture and conversion under mild conditions. New Journal of Chemistry, 2019, 43, 2163-2170.	2.8	35
39	Influence of Lewis and BrÃ¸nsted acidic sites on graphitic carbon nitride catalyst for aqueous phase conversion of biomass derived monosaccharides to 5-hydroxymethylfurfural. Carbon, 2021, 183, 984-998.	10.3	32
40	Molecular Basis of Water Sorption Behavior of Rivaroxaban-Malonic Acid Cocrystal. Molecular Pharmaceutics, 2019, 16, 2980-2991.	4.6	30
41	Substrate-Independent Epitaxial Growth of the Metalâ€“Organic Framework MOF-508a. ACS Applied Materials & Interfaces, 2018, 10, 4057-4065.	8.0	29
42	Green Synthesis of a Microporous, Partially Fluorinated Zn^{II} Paddlewheel Metalâ€“Organic Framework: H₂/CO₂ Adsorption Behavior and Solidâ€‘State Conversion to a ZnOâ€“C Nanocomposite. European Journal of Inorganic Chemistry, 2015, 2015, 5669-5676.	2.0	28
43	One-pot, template-free syntheses of spherical ZnS nanocrystals using a new S2â¯source and their photocatalytic study. CrystEngComm, 2015, 17, 2359-2367.	2.6	28
44	Construction of 2D interwoven and 3D metalâ€“organic frameworks (MOFs) of Cd(<scp>ii</scp>): the effect of ancillary ligands on the structure and the catalytic performance for the Knoevenagel reaction. RSC Advances, 2016, 6, 28854-28864.	3.6	28
45	Design of Bifunctional Zinc(II)â€“Organic Framework for Efficient Coupling of CO₂ with Terminal/Internal Epoxides under Mild Conditions. Crystal Growth and Design, 2022, 22, 598-607.	3.0	28
46	Design, structures and study of non-covalent interactions of mono-, di-, and tetranuclear complexes of a bifurcated quadridentate tripod ligand, N-(aminopropyl)-diethanolamine. New Journal of Chemistry, 2017, 41, 1959-1972.	2.8	27
47	Chemical Fixation of CO₂ Under Solvent and Co-Catalyst-free Conditions Using a Highly Porous Two-fold Interpenetrated Cu(II)-Metalâ€“Organic Framework. Crystal Growth and Design, 2021, 21, 1233-1241.	3.0	27
48	Amineâ€Templated Cobalt(II) Coordination Polymer Exhibiting Novel Magnetic Properties: Effect of Dehydration. European Journal of Inorganic Chemistry, 2011, 2011, 2057-2063.	2.0	26
49	Synthesis and photophysics of extended Ï€-conjugated systems of substituted 10-aryl-pyrenoimidazoles. Organic and Biomolecular Chemistry, 2016, 14, 10255-10266.	2.8	26
50	Highly efficient visible-light-assisted photocatalytic hydrogen generation from water splitting catalyzed by Zn0.5Cd0.5S/Ni2P heterostructures. International Journal of Hydrogen Energy, 2018, 43, 22917-22928.	7.1	26
51	Highly efficient metal/solvent-free chemical fixation of CO2 at atmospheric pressure conditions using functionalized porous covalent organic frameworks. Journal of CO2 Utilization, 2021, 53, 101716.	6.8	26
52	Strategic design of a bifunctional Ag(<scp>i</scp>)-grafted NHC-MOF for efficient chemical fixation of CO₂ from a dilute gas under ambient conditions. Inorganic Chemistry Frontiers, 2022, 9, 2583-2593.	6.0	26
53	Recent Developments in the Design of Cd_xZn_{1â¯x}Sâ€Based Photocatalysts for Sustainable Production of Hydrogen. Solar Rrl, 2021, 5, 2100226.	5.8	23
54	Template-free syntheses of CdS microspheres composed of ultrasmall nanocrystals and their photocatalytic study. RSC Advances, 2014, 4, 18257-18263.	3.6	22

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55	Template-free synthesis of ZnS nanocrystals with a new sulfur source and their photocatalytic study. Materials Letters, 2015, 154, 90-93.	2.6	22
56	Highly Electrophilic, 16-Electron [Ru(P(OMe)(OH)2)(dppe)2]2+Complex Turns H2(g) into a Strong Acid and Splits a Siâˆ'H Bond Heterolytically. Synthesis and Structure of the Novel Phosphorous Acid Complex [Ru(P(OH)3)(dppe)2]2+. Inorganic Chemistry, 2005, 44, 4145-4147.	4.0	20
57	Efficient photocatalytic generation of hydrogen by twin Zn Cd S nanorods decorated with noble metal-free co-catalyst and reduction of 4-nitrophenol in water. Applied Surface Science, 2021, 550, 149367.	6.1	20
58	Green synthesis, optical and magnetic properties of a Mn^{II}metalâ€“organic framework (MOF) that exhibits high heat of H₂adsorption. RSC Advances, 2016, 6, 86468-86476.	3.6	18
59	Sulfonamide vs. sulfonimide: tautomerism and electronic structure analysis of N-heterocyclic arenesulfonamides. New Journal of Chemistry, 2017, 41, 8118-8129.	2.8	18
60	Molecular association of 2-(n -alkylamino)-1,4-naphthoquinone derivatives: Electrochemical, DFT studies and antiproliferative activity against leukemia cell lines. Journal of Molecular Structure, 2016, 1125, 272-281.	3.6	16
61	Effect of differential surface anisotropy on performance of two plate shaped crystals of aspirin form I. European Journal of Pharmaceutical Sciences, 2017, 99, 318-327.	4.0	15
62	Construction of 3D lanthanide based MOFs with pores decorated with basic imidazole groups for selective capture and chemical fixation of CO₂. New Journal of Chemistry, 2020, 44, 9090-9096.	2.8	15
63	A Self-Healing Metalâ€“Organic Gel (MOG) Exhibiting pH-Responsive Release of a Chemotherapeutic Agent, Doxorubicin: Modulation of Release Kinetics by Partial Dehydration of Matrix. ACS Omega, 2019, 4, 1354-1363.	3.5	14
64	Temperature dependent structural variation from 2D supramolecular network to 3D interpenetrated metalâ€“organic framework: In situ cleavage of Sâ€“S and Câ€“S bonds. Journal of Solid State Chemistry, 2015, 226, 273-278.	2.9	13
65	Tris(pyrazolyl)methane Sulfonate Complexes of Iridium:â€‰ Catalytic Hydrogenation of 3,3-Dimethyl-1-butene. Organometallics, 2007, 26, 6307-6311.	2.3	12
66	Template-free synthesis of CdS microspheres composed of nanocrystals with a new sulfur source. Materials Letters, 2013, 111, 230-233.	2.6	12
67	Analyses of significant features of l -Prolinium Picrate single crystal: An excellent material for non linear optical applications. Materials Chemistry and Physics, 2017, 194, 90-96.	4.0	12
68	Novel double dealkylation of trialkylphosphite in the presence of an acid: synthesis and characterization of a 16-electron ruthenium complex bearing P(OH) 2 (OMe) ligand. Inorganic Chemistry Communication, 2004, 7, 654-656.	3.9	11
69	Organically-templated KagomÃ© compounds containing two transition metal ions. Dalton Transactions, 2010, 39, 6947.	3.3	10
70	Fine tuning through valence bond tautomerization of ancillary ligands in ruthenium(<scp>ii</scp>) arene complexes for better anticancer activity and enzyme inhibition properties. Dalton Transactions, 2016, 45, 19277-19289.	3.3	10
71	Synthesis, Structure, and Water Oxidation Activity of Ruthenium(II) Complexes: Influence of Intramolecular Redox Process on O2 Evolution. European Journal of Inorganic Chemistry, 2018, 2018, 2826-2834.	2.0	8
72	RAPTA complexes containing Nâ€substituted Tetrazole scaffolds: Synthesis, characterization and Antiproliferative activity. Applied Organometallic Chemistry, 2018, 32, e4179.	3.5	8

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73	Ruthenium(II)-arene complexes containing ferrocenamide ligands: Synthesis, characterisation and antiproliferative activity against cancer cell lines. Journal of Organometallic Chemistry, 2020, 916, 121247.	1.8	8
74	Acylation of oxindoles using methyl/phenyl estersviathe mixed Claisen condensation â€“ an access to 3-alkylideneoxindoles. Organic and Biomolecular Chemistry, 2020, 18, 3843-3847.	2.8	7
75	Template-free syntheses of hierarchical PbS microstructures using a new sulphur source and their time-dependent morphological evolution and photocatalytic properties. RSC Advances, 2016, 6, 56790-56799.	3.6	6
76	Synthesis, crystal structure and water oxidation activity of [Ru(terpy)(bipy)Cl]⁺ complexes: influence of ancillary ligands on O₂ generation. RSC Advances, 2017, 7, 39325-39333.	3.6	6
77	Regioselective synthesis of a vitamin K3 based dihydrobenzophenazine derivative: its novel crystal structure and DFT studies. RSC Advances, 2015, 5, 76419-76423.	3.6	5
78	Palladium complexes of a new phosphine-amido-siloxide pincer ligand with variable degrees of protonation. Inorganica Chimica Acta, 2014, 422, 70-77.	2.4	4
79	Self-assembled coordination polymers of Zn(II): Syntheses, structural diversity, luminescence properties and base catalysis. Polyhedron, 2018, 155, 433-440.	2.2	4
80	Photochemical oxidation of water catalysed by cyclometalated Ir(iii) complexes bearing Schiff-base ligands. New Journal of Chemistry, 2019, 43, 13662-13669.	2.8	4
81	Construction of highly water-stable fluorinated 2D coordination polymers with various N, Nâ€™-donors: Syntheses, crystal structures and photoluminescence properties. Journal of Solid State Chemistry, 2020, 290, 121560.	2.9	4
82	Reactivity studies of highly electrophilic ruthenium complexes. Inorganica Chimica Acta, 2010, 363, 3017-3022.	2.4	3
83	Synthesis, structure and magnetic properties of two organically-templated coordination polymers, {[EDAH2][M1M2F2(SO4)2(H2O)2]}n (M1=M2=NiII and M1=CoII, M2=NiII). Inorganica Chimica Acta, 2012, 389, 85-89.	2.4	3
84	Synthesis, Structure and Luminescence Property of a 3D Diamondoid Interpenetrated Zn(II)-Organic Framework. Journal of Inorganic and Organometallic Polymers and Materials, 2014, 24, 1032-1037.	3.7	3
85	N-(acridin-9-yl)arenesulfonamides: Synthesis, quantum chemical studies and crystal structure analysis to establish the tautomeric preferences. Tetrahedron, 2018, 74, 3634-3641.	1.9	3
86	Synthesis and structures of CoII, NiII, and CuII coordination frameworks formed by a flexible 1,3-phenylenediacetic acid ligand. Journal of Molecular Structure, 2010, 976, 168-173.	3.6	2
87	Frontispiece: Rational Design of a Bifunctional, Twoâ€Fold Interpenetrated Zn^{II}â€Metalâ€“Organic Framework for Selective Adsorption of CO₂ and Efficient Aqueous Phase Sensing of 2,4,6â€Trinitrophenol. Chemistry - A European Journal, 2017, 23, .	3.3	1