

# C Mallaiah Nagaraja

## List of Publications by Year in descending order

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87  
papers

3,334  
citations

125106

35  
h-index

182931

54  
g-index

89  
all docs

89  
docs citations

89  
times ranked

3606  
citing authors

#	ARTICLE	IF	CITATIONS
1	Design of noble metal-free CoTiO <sub>3</sub> /Zn <sub>0.5</sub> Cd <sub>0.5</sub> S heterostructure photocatalyst for selective synthesis of furfuraldehyde combined with H <sub>2</sub> production. <i>Journal of Colloid and Interface Science</i> , 2022, 608, 1040-1050.	5.0	40
2	Design of noble metal-free NiTiO <sub>3</sub> /ZnIn <sub>2</sub> S <sub>4</sub> heterojunction photocatalyst for efficient visible-light-assisted production of H <sub>2</sub> and selective synthesis of 2,5-Bis(hydroxymethyl)furan. <i>Journal of Colloid and Interface Science</i> , 2022, 615, 346-356.	5.0	38
3	Design of Bifunctional Zinc(II)-Organic Framework for Efficient Coupling of CO <sub>2</sub> with Terminal/Internal Epoxides under Mild Conditions. <i>Crystal Growth and Design</i> , 2022, 22, 598-607.	1.4	28
4	Strategic design of a bifunctional Ag-grafted NHC-MOF for efficient chemical fixation of CO <sub>2</sub> from a dilute gas under ambient conditions. <i>Inorganic Chemistry Frontiers</i> , 2022, 9, 2583-2593.	3.0	26
5	Strategic Design of Mg-Centered Porphyrin Metal-Organic Framework for Efficient Visible Light-Promoted Fixation of CO <sub>2</sub> under Ambient Conditions: Combined Experimental and Theoretical Investigation. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 33285-33296.	4.0	39
6	Noble metal-free Cu-anchored NHC-based MOF for highly recyclable fixation of CO <sub>2</sub> under RT and atmospheric pressure conditions. <i>Green Chemistry</i> , 2021, 23, 5195-5204.	4.6	57
7	Efficient chemical fixation of CO <sub>2</sub> from direct air under environment-friendly co-catalyst and solvent-free ambient conditions. <i>Journal of Materials Chemistry A</i> , 2021, 9, 23127-23139.	5.2	51
8	Sulfonic acid functionalized graphitic carbon nitride as solid acid-base bifunctional catalyst for Knoevenagel condensation and multicomponent tandem reactions. <i>Materials Chemistry Frontiers</i> , 2021, 5, 6265-6278.	3.2	70
9	Recent Developments in the Design of Cd-Zn-Based Photocatalysts for Sustainable Production of Hydrogen. <i>Solar Rrl</i> , 2021, 5, 2100226.	3.1	23
10	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. <i>Applied Surface Science</i> , 2021, 550, 149367.	3.1	20
11	Influence of Lewis and Brønsted acidic sites on graphitic carbon nitride catalyst for aqueous phase conversion of biomass derived monosaccharides to 5-hydroxymethylfurfural. <i>Carbon</i> , 2021, 183, 984-998.	5.4	32
12	Highly efficient metal/solvent-free chemical fixation of CO <sub>2</sub> at atmospheric pressure conditions using functionalized porous covalent organic frameworks. <i>Journal of CO<sub>2</sub> Utilization</i> , 2021, 53, 101716.	3.3	26
13	Chemical Fixation of CO <sub>2</sub> Under Solvent and Co-Catalyst-free Conditions Using a Highly Porous Two-fold Interpenetrated Cu(II)-Metal-Organic Framework. <i>Crystal Growth and Design</i> , 2021, 21, 1233-1241.	1.4	27
14	Construction of a bifunctional Zn-organic framework containing a basic amine functionality for selective capture and room temperature fixation of CO <sub>2</sub> . <i>Inorganic Chemistry Frontiers</i> , 2020, 7, 72-81.	3.0	46
15	Oxidized graphitic carbon nitride as a sustainable metal-free catalyst for hydrogen transfer reactions under mild conditions. <i>Green Chemistry</i> , 2020, 22, 5084-5095.	4.6	71
16	Rational Design of a Zn-MOF with Multiple Functional Sites for Highly Efficient Fixation of CO <sub>2</sub> under Mild Conditions: Combined Experimental and Theoretical Investigation. <i>Chemistry - A European Journal</i> , 2020, 26, 17445-17454.	1.7	42
17	Highly efficient visible-light-driven reduction of Cr(VI) from water by porphyrin-based metal-organic frameworks: effect of band gap engineering on the photocatalytic activity. <i>Catalysis Science and Technology</i> , 2020, 10, 7724-7733.	2.1	41
18	Porous nitrogen-rich covalent organic framework for capture and conversion of CO <sub>2</sub> at atmospheric pressure conditions. <i>Microporous and Mesoporous Materials</i> , 2020, 308, 110314.	2.2	41

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19	Co-catalyst-Free Chemical Fixation of CO <sub>2</sub> into Cyclic Carbonates by using Metal-Organic Frameworks as Efficient Heterogeneous Catalysts. <i>Chemistry - an Asian Journal</i> , 2020, 15, 2403-2427.	1.7	68
20	Visible-Light-Driven Selective Oxidation of Biomass-Derived HMF to DFF Coupled with H <sub>2</sub> Generation by Noble Metal-Free Zn <sub>0.5</sub> Cd <sub>0.5</sub> S/MnO <sub>2</sub> Heterostructures. <i>ACS Applied Energy Materials</i> , 2020, 3, 7138-7148.	2.5	60
21	Construction of highly water-stable fluorinated 2D coordination polymers with various N, N <sup>+</sup> -donors: Syntheses, crystal structures and photoluminescence properties. <i>Journal of Solid State Chemistry</i> , 2020, 290, 121560.	1.4	4
22	Highly Efficient Fixation of Carbon Dioxide at RT and Atmospheric Pressure Conditions: Influence of Polar Functionality on Selective Capture and Conversion of CO <sub>2</sub> . <i>Inorganic Chemistry</i> , 2020, 59, 9765-9773.	1.9	49
23	Enhanced visible-light-assisted photocatalytic hydrogen generation by MoS <sub>2</sub> /g-C <sub>3</sub> N <sub>4</sub> nanocomposites. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 8497-8506.	3.8	37
24	Acylation of oxindoles using methyl/phenyl esters via the mixed Claisen condensation an access to 3-allylideneoxindoles. <i>Organic and Biomolecular Chemistry</i> , 2020, 18, 3843-3847.	1.5	7
25	Construction of 3D lanthanide based MOFs with pores decorated with basic imidazole groups for selective capture and chemical fixation of CO <sub>2</sub> . <i>New Journal of Chemistry</i> , 2020, 44, 9090-9096.	1.4	15
26	Ruthenium(II)-arene complexes containing ferrocenamide ligands: Synthesis, characterisation and antiproliferative activity against cancer cell lines. <i>Journal of Organometallic Chemistry</i> , 2020, 916, 121247.	0.8	8
27	Photochemical oxidation of water catalysed by cyclometalated Ir(III) complexes bearing Schiff-base ligands. <i>New Journal of Chemistry</i> , 2019, 43, 13662-13669.	1.4	4
28	Environment-friendly, co-catalyst- and solvent-free fixation of CO <sub>2</sub> using an ionic zinc-porphyrin complex immobilized in porous metal-organic frameworks. <i>Sustainable Energy and Fuels</i> , 2019, 3, 2977-2982.	2.5	57
29	Construction of a 3D porous Co metal-organic framework (MOF) with Lewis acidic metal sites exhibiting selective CO <sub>2</sub> capture and conversion under mild conditions. <i>New Journal of Chemistry</i> , 2019, 43, 2163-2170.	1.4	35
30	Molecular Basis of Water Sorption Behavior of Rivaroxaban-Malonic Acid Cocrystal. <i>Molecular Pharmaceutics</i> , 2019, 16, 2980-2991.	2.3	30
31	Construction of bifunctional 2-fold interpenetrated Zn MOFs exhibiting selective CO <sub>2</sub> adsorption and aqueous-phase sensing of 2,4,6-trinitrophenol. <i>Inorganic Chemistry Frontiers</i> , 2019, 6, 1058-1067.	3.0	48
32	A Mn(II)-porphyrin based metal-organic framework (MOF) for visible-light-assisted cycloaddition of carbon dioxide with epoxides. <i>Microporous and Mesoporous Materials</i> , 2019, 280, 372-378.	2.2	69
33	Environmentally Friendly, Co-catalyst-Free Chemical Fixation of CO <sub>2</sub> at Mild Conditions Using Dual-Walled Nitrogen-Rich Three-Dimensional Porous Metal-Organic Frameworks. <i>Inorganic Chemistry</i> , 2019, 58, 3925-3936.	1.9	111
34	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. <i>Green Chemistry</i> , 2019, 21, 6012-6026.	4.6	107
35	A Self-Healing Metal-Organic Gel (MOG) Exhibiting pH-Responsive Release of a Chemotherapeutic Agent, Doxorubicin: Modulation of Release Kinetics by Partial Dehydration of Matrix. <i>ACS Omega</i> , 2019, 4, 1354-1363.	1.6	14
36	Substrate-Independent Epitaxial Growth of the Metal-Organic Framework MOF-508a. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 4057-4065.	4.0	29

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37	Synthesis, Structure, and Water Oxidation Activity of Ruthenium(II) Complexes: Influence of Intramolecular Redox Process on O <sub>2</sub> Evolution. <i>European Journal of Inorganic Chemistry</i> , 2018, 2018, 2826-2834.	1.0	8
38	Exceptionally Stable and 20-Connected Lanthanide Metal-Organic Frameworks for Selective CO <sub>2</sub> Capture and Conversion at Atmospheric Pressure. <i>Crystal Growth and Design</i> , 2018, 18, 2432-2440.	1.4	95
39	Ruthenium(II) arene NSAID complexes: inhibition of cyclooxygenase and antiproliferative activity against cancer cell lines. <i>Dalton Transactions</i> , 2018, 47, 517-527.	1.6	66
40	RAPTA complexes containing N-substituted Tetrazole scaffolds: Synthesis, characterization and Antiproliferative activity. <i>Applied Organometallic Chemistry</i> , 2018, 32, e4179.	1.7	8
41	Highly efficient visible-light-assisted photocatalytic hydrogen generation from water splitting catalyzed by Zn <sub>0.5</sub> Cd <sub>0.5</sub> /Ni <sub>2</sub> P heterostructures. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 22917-22928.	3.8	26
42	Self-assembled coordination polymers of Zn(II): Syntheses, structural diversity, luminescence properties and base catalysis. <i>Polyhedron</i> , 2018, 155, 433-440.	1.0	4
43	Rational Design of a 3D Mn(II)-Metal-Organic Framework Based on a Nonmetallated Porphyrin Linker for Selective Capture of CO <sub>2</sub> and One-Pot Synthesis of Styrene Carbonates. <i>Chemistry - A European Journal</i> , 2018, 24, 16662-16669.	1.7	65
44	N-(acridin-9-yl)arenesulfonamides: Synthesis, quantum chemical studies and crystal structure analysis to establish the tautomeric preferences. <i>Tetrahedron</i> , 2018, 74, 3634-3641.	1.0	3
45	Design, structures and study of non-covalent interactions of mono-, di-, and tetranuclear complexes of a bifurcated quadridentate tripod ligand, N-(aminopropyl)-diethanolamine. <i>New Journal of Chemistry</i> , 2017, 41, 1959-1972.	1.4	27
46	Effect of differential surface anisotropy on performance of two plate shaped crystals of aspirin form I. <i>European Journal of Pharmaceutical Sciences</i> , 2017, 99, 318-327.	1.9	15
47	Correlating Single Crystal Structure, Nanomechanical, and Bulk Compaction Behavior of Febuxostat Polymorphs. <i>Molecular Pharmaceutics</i> , 2017, 14, 866-874.	2.3	41
48	Analyses of significant features of L-Proline Picrate single crystal: An excellent material for non linear optical applications. <i>Materials Chemistry and Physics</i> , 2017, 194, 90-96.	2.0	12
49	Interpenetrated Metal-Organic Frameworks of Cobalt(II): Structural Diversity, Selective Capture, and Conversion of CO <sub>2</sub> . <i>Crystal Growth and Design</i> , 2017, 17, 3295-3305.	1.4	53
50	Template-Free Synthesis of Zn-Cd-S Nanocrystals with Tunable Band Structure for Efficient Water Splitting and Reduction of Nitroaromatics in Water. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 4293-4303.	3.2	53
51	Construction of 3D homochiral metal-organic frameworks (MOFs) of Cd(II): selective CO <sub>2</sub> adsorption and catalytic properties for the Knoevenagel and Henry reaction. <i>Inorganic Chemistry Frontiers</i> , 2017, 4, 348-359.	3.0	57
52	Rational Design of a Bifunctional, Two-Fold Interpenetrated Zn(II)-Metal-Organic Framework for Selective Adsorption of CO <sub>2</sub> and Efficient Aqueous Phase Sensing of 2,4,6-Trinitrophenol. <i>Chemistry - A European Journal</i> , 2017, 23, 16204-16212.	1.7	100
53	Synthesis, crystal structure and water oxidation activity of [Ru(terpy)(bipy)Cl] <sup>+</sup> complexes: influence of ancillary ligands on O <sub>2</sub> generation. <i>RSC Advances</i> , 2017, 7, 39325-39333.	1.7	6
54	Frontispiece: Rational Design of a Bifunctional, Two-Fold Interpenetrated Zn(II)-Metal-Organic Framework for Selective Adsorption of CO <sub>2</sub> and Efficient Aqueous Phase Sensing of 2,4,6-Trinitrophenol. <i>Chemistry - A European Journal</i> , 2017, 23, .	1.7	1

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55	Sulfonamide vs. sulfonimide: tautomerism and electronic structure analysis of N-heterocyclic arenesulfonamides. <i>New Journal of Chemistry</i> , 2017, 41, 8118-8129.	1.4	18
56	Molecular association of 2-(n-alkylamino)-1,4-naphthoquinone derivatives: Electrochemical, DFT studies and antiproliferative activity against leukemia cell lines. <i>Journal of Molecular Structure</i> , 2016, 1125, 272-281.	1.8	16
57	Visible-Light-Assisted Photocatalytic Reduction of Nitroaromatics by Recyclable Ni(II)-Porphyrin Metal-Organic Framework (MOF) at RT. <i>Inorganic Chemistry</i> , 2016, 55, 5320-5327.	1.9	95
58	Green synthesis, optical and magnetic properties of a Mn <sup>II</sup> metal-organic framework (MOF) that exhibits high heat of H <sub>2</sub> adsorption. <i>RSC Advances</i> , 2016, 6, 86468-86476.	1.7	18
59	Synthesis and photophysics of extended $\pi$ -conjugated systems of substituted 10-aryl-pyrenoimidazoles. <i>Organic and Biomolecular Chemistry</i> , 2016, 14, 10255-10266.	1.5	26
60	Construction of 3-Fold-Interpenetrated Three-Dimensional Metal-Organic Frameworks of Nickel(II) for Highly Efficient Capture and Conversion of Carbon Dioxide. <i>Inorganic Chemistry</i> , 2016, 55, 9757-9766.	1.9	78
61	Fine tuning through valence bond tautomerization of ancillary ligands in ruthenium(II) arene complexes for better anticancer activity and enzyme inhibition properties. <i>Dalton Transactions</i> , 2016, 45, 19277-19289.	1.6	10
62	Template-free syntheses of hierarchical PbS microstructures using a new sulphur source and their time-dependent morphological evolution and photocatalytic properties. <i>RSC Advances</i> , 2016, 6, 56790-56799.	1.7	6
63	Expedient synthesis of new cinnoline diones by Ru-catalyzed regioselective unexpected deoxygenation-oxidative annulation of propargyl alcohols with phthalazinones and pyridazinones. <i>Chemical Communications</i> , 2016, 52, 2509-2512.	2.2	51
64	Construction of 2D interwoven and 3D metal-organic frameworks (MOFs) of Cd(II): the effect of ancillary ligands on the structure and the catalytic performance for the Knoevenagel reaction. <i>RSC Advances</i> , 2016, 6, 28854-28864.	1.7	28
65	Green Synthesis of a Microporous, Partially Fluorinated Zn <sup>II</sup> Paddlewheel Metal-Organic Framework: H <sub>2</sub> /CO <sub>2</sub> Adsorption Behavior and Solid-State Conversion to a Zn <sup>II</sup> -C Nanocomposite. <i>European Journal of Inorganic Chemistry</i> , 2015, 2015, 5669-5676.	1.0	28
66	Auxiliary Ligand-Assisted Structural Variation of Cd(II) Metal-Organic Frameworks Showing 2D $\rightarrow$ 3D Polycatenation and Interpenetration: Synthesis, Structure, Luminescence Properties, and Selective Sensing of Trinitrophenol. <i>Crystal Growth and Design</i> , 2015, 15, 3356-3365.	1.4	125
67	One-pot, template-free syntheses of spherical ZnS nanocrystals using a new S <sup>2-</sup> source and their photocatalytic study. <i>CrystEngComm</i> , 2015, 17, 2359-2367.	1.3	28
68	Temperature dependent structural variation from 2D supramolecular network to 3D interpenetrated metal-organic framework: In situ cleavage of S-S and C-S bonds. <i>Journal of Solid State Chemistry</i> , 2015, 226, 273-278.	1.4	13
69	Template-free synthesis of ZnS nanocrystals with a new sulfur source and their photocatalytic study. <i>Materials Letters</i> , 2015, 154, 90-93.	1.3	22
70	Regioselective synthesis of a vitamin K3 based dihydrobenzophenazine derivative: its novel crystal structure and DFT studies. <i>RSC Advances</i> , 2015, 5, 76419-76423.	1.7	5
71	Synthesis, Structure and Luminescence Property of a 3D Diamondoid Interpenetrated Zn(II)-Organic Framework. <i>Journal of Inorganic and Organometallic Polymers and Materials</i> , 2014, 24, 1032-1037.	1.9	3
72	A luminescent 3D interpenetrating metal-organic framework for highly selective sensing of nitrobenzene. <i>Dalton Transactions</i> , 2014, 43, 17912-17915.	1.6	91

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73	Construction of 2D interwoven and 3D interpenetrated metal-organic frameworks of Zn by varying N-donor spacers. <i>CrystEngComm</i> , 2014, 16, 4805-4815.	1.3	44
74	Template-free syntheses of CdS microspheres composed of ultrasmall nanocrystals and their photocatalytic study. <i>RSC Advances</i> , 2014, 4, 18257-18263.	1.7	22
75	Palladium complexes of a new phosphine-amido-siloxide pincer ligand with variable degrees of protonation. <i>Inorganica Chimica Acta</i> , 2014, 422, 70-77.	1.2	4
76	Template-free synthesis of CdS microspheres composed of nanocrystals with a new sulfur source. <i>Materials Letters</i> , 2013, 111, 230-233.	1.3	12
77	Chiral Porous Metal-Organic Frameworks of Co(II) and Ni(II): Synthesis, Structure, Magnetic Properties, and CO <sub>2</sub> Uptake. <i>Crystal Growth and Design</i> , 2012, 12, 975-981.	1.4	137
78	Synthesis, structure and magnetic properties of two organically-templated coordination polymers, {[EDA(H <sub>2</sub> )][M <sub>1</sub> M <sub>2</sub> F <sub>2</sub> (SO <sub>4</sub> ) <sub>2</sub> (H <sub>2</sub> O) <sub>2</sub> ]} <sub>n</sub> (M <sub>1</sub> =M <sub>2</sub> =Ni(II) and M <sub>1</sub> =Co(II), M <sub>2</sub> =Ni(II)). <i>Inorganica Chimica Acta</i> , 2012, 389, 85-89.	1.2	3
79	Amine-Templated Cobalt(II) Coordination Polymer Exhibiting Novel Magnetic Properties: Effect of Dehydration. <i>European Journal of Inorganic Chemistry</i> , 2011, 2011, 2057-2063.	1.0	26
80	Reactivity studies of highly electrophilic ruthenium complexes. <i>Inorganica Chimica Acta</i> , 2010, 363, 3017-3022.	1.2	3
81	Synthesis and structures of Co(II), Ni(II), and Cu(II) coordination frameworks formed by a flexible 1,3-phenylenediacetic acid ligand. <i>Journal of Molecular Structure</i> , 2010, 976, 168-173.	1.8	2
82	Hydrodefluorination and Other Hydrodehalogenation of Aliphatic Carbon-Halogen Bonds Using Silylium Catalysis. <i>Journal of the American Chemical Society</i> , 2010, 132, 4946-4953.	6.6	205
83	Organically-templated KagomÃ© compounds containing two transition metal ions. <i>Dalton Transactions</i> , 2010, 39, 6947.	1.6	10
84	Heterolytic Activation of H-X (X = H, Si, B, and C) Bonds: An Experimental and Theoretical Investigation. <i>Journal of the American Chemical Society</i> , 2007, 129, 5587-5596.	6.6	51
85	Tris(pyrazolyl)methane Sulfonate Complexes of Iridium: Catalytic Hydrogenation of 3,3-Dimethyl-1-butene. <i>Organometallics</i> , 2007, 26, 6307-6311.	1.1	12
86	Highly Electrophilic, 16-Electron [Ru(P(OMe)(OH) <sub>2</sub> (dppe) <sub>2</sub> ] <sub>2</sub> + Complex Turns H <sub>2</sub> (g) into a Strong Acid and Splits a Si-H Bond Heterolytically. Synthesis and Structure of the Novel Phosphorous Acid Complex [Ru(P(OH) <sub>3</sub> (dppe) <sub>2</sub> ] <sub>2</sub> +. <i>Inorganic Chemistry</i> , 2005, 44, 4145-4147.	1.9	20
87	Novel double dealkylation of trialkylphosphite in the presence of an acid: synthesis and characterization of a 16-electron ruthenium complex bearing P(OH) <sub>2</sub> (OMe) ligand. <i>Inorganic Chemistry Communication</i> , 2004, 7, 654-656.	1.8	11