Amal Cherian Kathalikkattil

List of Publications by Year
in descending order

48 papers	2,574 citations	186209 28 h-index	197736 49 g-index
52 all docs	52 docs citations	52 times ranked	2368 citing authors

#	Article	IF	Citations
1	Dual-porous metal organic framework for room temperature CO₂ fixation via cyclic carbonate synthesis. Green Chemistry, 2016, 18, 232-242.	4.6	220
2	A room temperature synthesizable and environmental friendly heterogeneous ZIF-67 catalyst for the solvent less and co-catalyst free synthesis of cyclic carbonates. Applied Catalysis B: Environmental, 2016, 182, 562-569.	10.8	175
3	Ionic liquid tethered post functionalized ZIF-90 framework for the cycloaddition of propylene oxide and CO₂. Green Chemistry, 2016, 18, 2479-2487.	4.6	174
4	Rapid, Microwave-Assisted Synthesis of Cubic, Three-Dimensional, Highly Porous MOF-205 for Room Temperature CO₂ Fixation via Cyclic Carbonate Synthesis. ACS Applied Materials & Interfaces, 2016, 8, 33723-33731.	4.0	146
5	A sustainable protocol for the facile synthesis of zinc-glutamate MOF: an efficient catalyst for room temperature CO₂fixation reactions under wet conditions. Chemical Communications, 2016, 52, 280-283.	2.2	140
6	Aqueous-microwave synthesized carboxyl functional molecular ribbon coordination framework catalyst for the synthesis of cyclic carbonates from epoxides and CO2. Green Chemistry, 2014, 16, 1607.	4.6	124
7	Amino acid/KI as multi-functional synergistic catalysts for cyclic carbonate synthesis from CO₂under mild reaction conditions: a DFT corroborated study. Dalton Transactions, 2014, 43, 2023-2031.	1.6	114
8	A novel approach of utilizing quaternized chitosan as a catalyst for the eco-friendly cycloaddition of epoxides with CO2. Catalysis Science and Technology, 2012, 2, 1674.	2.1	110
9	Microwave-assisted synthesis of cyclic carbonates by a formic acid/KI catalytic system. Green Chemistry, 2013, 15, 1673.	4.6	109
10	An lcy-topology amino acid MOF as eco-friendly catalyst for cyclic carbonate synthesis from CO₂: Structure-DFT corroborated study. Journal of Materials Chemistry A, 2015, 3, 22636-22647.	5.2	106
11	Advancements in the Conversion of Carbon Dioxide to Cyclic Carbonates Using Metal Organic Frameworks as Catalysts. Catalysis Surveys From Asia, 2015, 19, 223-235.	1.0	101
12	Synthesis, Magnetic Properties, and Structural Investigation of Mixed-Ligand Cu(II) Helical Coordination Polymers with an Amino Acid Backbone and N-Donor Propping: 1-D Helical, 2-D Hexagonal Net (hcb), and 3-D ins Topologies. Crystal Growth and Design, 2011, 11, 1631-1641.	1.4	79
13	The unprecedented catalytic activity of alkanolamine CO₂ scrubbers in the cycloaddition of CO₂ and oxiranes: a DFT endorsed study. Chemical Communications, 2014, 50, 13664-13667.	2.2	71
14	Exploring the Catalytic Potential of ZIFâ€90: Solventless and Coâ€Catalystâ€Free Synthesis of Propylene Carbonate from Propylene Oxide and CO₂. ChemPlusChem, 2015, 80, 715-721.	1.3	62
15	Progress in the synthetic and functional aspects of chiral metalâ€“organic frameworks. CrystEngComm, 2015, 17, 5341-5356.	1.3	61
16	Efficient route for oxazolidinone synthesis using heterogeneous biopolymer catalysts from unactivated alkyl aziridine and CO2 under mild conditions. Applied Catalysis A: General, 2012, 447-448, 107-114.	2.2	60
17	Microwave-assisted one pot-synthesis of amino acid ionic liquids in water: simple catalysts for styrene carbonate synthesis under atmospheric pressure of CO₂. Catalysis Science and Technology, 2014, 4, 963-970.	2.1	56
18	Microwave synthesized quaternized celluloses for cyclic carbonate synthesis from carbon dioxide and epoxides. Applied Catalysis A: General, 2013, 467, 17-25.	2.2	52

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19	Pillared Cobaltâ€“Amino Acid Framework Catalysis for Styrene Carbonate Synthesis from CO₂ and Epoxide by Metalâ€“Sulfonateâ€“Halide Synergism. ChemCatChem, 2014, 6, 284-292.	1.8	51
20	Catalytic applications of immobilized ionic liquids for synthesis of cyclic carbonates from carbon dioxide and epoxides. Korean Journal of Chemical Engineering, 2013, 30, 1973-1984.	1.2	46
21	Cycloaddition of CO 2 with epoxides by using an amino-acid-based Cu(II)â€“tryptophan MOF catalyst. Chinese Journal of Catalysis, 2018, 39, 63-70.	6.9	45
22	Simple and efficient synthesis of cyclic carbonates using quaternized glycine as a green catalyst. Physical Chemistry Chemical Physics, 2013, 15, 9029.	1.3	44
23	Sulfonic acid functionalized mesoporous SBA-15 as catalyst for styrene carbonate synthesis from CO2 and styrene oxide at moderate reaction conditions. Journal of CO2 Utilization, 2015, 10, 88-94.	3.3	40
24	Aqueous microwave-assisted synthesis of non-interpenetrated metal-organic framework for room temperature cycloaddition of CO 2 and epoxides. Applied Catalysis A: General, 2017, 544, 126-136.	2.2	40
25	A computational study of the mechanistic insights into base catalysed synthesis of cyclic carbonates from CO₂: bicarbonate anion as an active species. Catalysis Science and Technology, 2016, 6, 3997-4004.	2.1	37
26	Natural amino acids/H₂O as a metal- and halide-free catalyst system for the synthesis of propylene carbonate from propylene oxide and CO₂under moderate conditions. RSC Advances, 2014, 4, 41266-41270.	1.7	34
27	Structure modulation, argentophilic interactions and photoluminescence properties of silver(i) coordination polymers with isomeric N-donor ligands. RSC Advances, 2012, 2, 8421.	1.7	30
28	Organic sulphonate salts tethered to mesoporous silicas as catalysts for CO₂ fixation into cyclic carbonates. Catalysis Science and Technology, 2015, 5, 1580-1587.	2.1	30
29	Structural diversity in two dimensional chiral coordination polymers involving 4,4â€²-bipyridine and l-cysteate as bridging ligands with Zn and Cd metal centres: Synthesis, characterization and X-ray crystallographic studies. Inorganica Chimica Acta, 2011, 365, 363-370.	1.2	29
30	Microwave-assisted, rapid cycloaddition of allyl glycidyl ether and CO2 by employing pyridinium-based ionic liquid catalysts. Catalysis Communications, 2014, 54, 31-34.	1.6	26
31	Hydrogen bonded binary molecular adducts derived from exobidentate N-donor ligand with dicarboxylic acids: Acidâ¯imidazole hydrogen-bonding interactions in neutral and ionic heterosynthons. Journal of Molecular Structure, 2011, 985, 361-370.	1.8	23
32	Exploring supramolecular interactions between inorganic tetrachlorometallate and organic pyridinium dication: Synthesis, characterization and structural investigations. Journal of Molecular Structure, 2012, 1013, 102-110.	1.8	23
33	Synthesis, characterization and X-ray crystallographic investigation of 2-D hybrid hydrogen bonded and rectangular grid networks in Cu(II) and Co(II) metal complexes. Polyhedron, 2010, 29, 1801-1809.	1.0	17
34	Hydrogen-Bonded One- and Two-Dimensional Hybrid Water-Chloride Motifs. Crystal Growth and Design, 2012, 12, 556-561.	1.4	15
35	Hybrid Inorganicâ€“Organic Framework as Efficient Heterogeneous Catalyst for the Synthesis of Allyl Glycidyl Carbonate from CO₂ and Allyl Glycidyl Ether. Journal of Nanoscience and Nanotechnology, 2013, 13, 2230-2235.	0.9	15
36	Structural Investigation of Metal-Organic Cu(II) Coordination Frameworks Constructed from N-donor and Î±, Ï‰-Dicarboxylate Ligands by One Pot Synthesis: Zigzag Strands, Layered Networks and Its Interaction with Lattice Water Molecules. Journal of Chemical Crystallography, 2010, 40, 1087-1093.	0.5	11

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37	CO2 Adsorption in SIFSIX-14-Cu-i: High Performance, Inflected Isotherms, and Water-Triggered Release via Reversible Structural Transformation. European Journal of Inorganic Chemistry, 2018, 2018, 1993-1997.	1.0	8
38	Assembly, disassembly and reassembly: a â€œtop-downâ€•synthetic strategy towards hybrid, mixed-metal {Mo₁₀Co₆} POM clusters. Dalton Transactions, 2019, 48, 3018-3027.	1.6	7
39	Bioinspired Water Oxidation Using a Mn-Oxo Cluster Stabilized by Non-Innocent Organic Tyrosine Y161 and Plastoquinone Mimics. ACS Sustainable Chemistry and Engineering, 2020, 8, 13648-13659.	3.2	7
40	A catalytic approach of blending CO2-activating MOF struts for cycloaddition reaction in a helically interlaced Cu(II) amino acid imidazolate framework: DFT-corroborated investigation. Research on Chemical Intermediates, 2021, 47, 3979-3997.	1.3	7
41	Cycloaddition of styrene oxide and CO2 mediated by pyrolysis of urea. RSC Advances, 2013, 3, 14290.	1.7	6
42	A cubane-type manganese complex with H₂O oxidation capabilities. Sustainable Energy and Fuels, 2020, 4, 4464-4468.	2.5	6
43	Modulating Structural and Electronic Properties of Rare Archimedean and Johnson-Type Mn Cages. Inorganic Chemistry, 2021, 60, 8388-8393.	1.9	4
44	Passing it up the ranks: hierarchical ion-size dependent supramolecular response in 1D coordination polymers. CrystEngComm, 2018, 20, 5127-5131.	1.3	3
45	Three-dimensional amino acid backbone Cu-aspartate metalâ€“organic framework as a catalyst for the cycloaddition of propylene oxide and CO2. Reaction Kinetics, Mechanisms and Catalysis, 2021, 133, 425-439.	0.8	3
46	Synthetic Approaches to Metallo-Supramolecular Co^{II} Polygons and Potential Use for H₂O Oxidation. Inorganic Chemistry, 2020, 59, 14432-14438.	1.9	2
47	Tuning the Catalytic Water Oxidation Activity through Structural Modifications of High-Nuclearity Mn-oxo Clusters [Mn18M] (M = Sr2+, Mn2+). Water (Switzerland), 2021, 13, 2042.	1.2	2
48	A Photostable 1D Rutheniumâ”Zinc Coordination Polymer as a Multimetallic Building Block for Light Harvesting Systems. ChemPhotoChem, 2022, 6, e202100299.	1.5	2