

Kulathu Iyer Sathiyarayanan

List of Publications by Year in descending order

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101
papers

1,329
citations

361296

20
h-index

526166

27
g-index

111
all docs

111
docs citations

111
times ranked

1453
citing authors

#	ARTICLE	IF	CITATIONS
1	A sustainable synthesis of green carbon quantum dot (CQD) from <i>Catharanthus roseus</i> (white) Tj ETQq1 1 0.784314 rgBT /Overlock 10 detection and biological applications. <i>Sustainable Materials and Technologies</i> , 2020, 23, e00138.	1.7	54
2	A colorimetric and ratiometric fluorescent sensor for biogenic primary amines based on dicyanovinyl substituted phenanthridine conjugated probe. <i>Dyes and Pigments</i> , 2020, 178, 108346.	2.0	43
3	Rapid one pot synthesis of xanthene derivatives by an efficient and reusable nano-ZnAl ₂ O ₄ " An insight into a new process. <i>Journal of Molecular Catalysis A</i> , 2014, 391, 198-207.	4.8	42
4	Synthesis, spectroscopic characterization and in vitro studies of new heteroleptic copper (II) complexes derived from 2-hydroxy naphthaldehyde Schiffâ€™s bases and N, N donor ligands: Antimicrobial, DNA binding and cytotoxic investigations. <i>Inorganica Chimica Acta</i> , 2015, 433, 26-34.	1.2	42
5	Efficient iodine catalyzed three components domino reaction for the synthesis of 1-((phenylthio)(phenyl)methyl)pyrrolidin-2-one derivatives possessing anticancer activities. <i>Organic and Biomolecular Chemistry</i> , 2012, 10, 5343.	1.5	40
6	(Tetrahydrodibenzo[<i>a</i>][<i>i</i>]phenanthridin-5-yl)phenol as a Fluorescent Probe for the Detection of Aniline. <i>Journal of Organic Chemistry</i> , 2019, 84, 11513-11523.	1.7	32
7	Use of vegetable oil as fuel to improve the efficiency of cooking stove. <i>Renewable Energy</i> , 2008, 33, 2423-2427.	4.3	31
8	Metal-Free, One-Pot, Rapid Synthesis of Tetrahydropyridines Using Acetic Acid as Solvent and Catalyst at Room Temperature. <i>Synthetic Communications</i> , 2014, 44, 943-953.	1.1	28
9	Dual behavior of 2â€™tetralone: A new approach for the synthesis of 5â€™arylaâ€™7,8,13,14â€™tetrahydrodibenzo[<i>a</i>][<i>i</i>]phenanthridine. <i>Journal of Heterocyclic Chemistry</i> , 2009, 46, 1142-1144.	1.4	27
10	Synthesis and Optical Properties of a Series of Greenâ€™Lightâ€™Emitting 2â€™(4â€™Phenylquinolinâ€™2â€™yl)phenolâ€™BF ₂ Complexes (Boroquinols). <i>European Journal of Organic Chemistry</i> , 2015, 2015, 5089-5098.	1.2	26
11	A benzothiazole-based new fluorogenic chemosensor for the detection of CN ^{âˆ’} and its real-time application in environmental water samples and living cells. <i>RSC Advances</i> , 2022, 12, 8570-8577.	1.7	26
12	Cuâ€™CuAl ₂ O ₄ and d-glucose catalyzed synthesis of a family of excited state intramolecular proton transfer imidazo[1,2- <i>a</i>]pyridine analogues and their optical properties. <i>Dyes and Pigments</i> , 2015, 121, 88-98.	2.0	25
13	Development of paper-based chemosensor for the detection of mercury ions using mono- and tetra-sulfur bearing phenanthridines. <i>New Journal of Chemistry</i> , 2018, 42, 8530-8536.	1.4	25
14	Highly sensitive turn-off fluorescent detection of cyanide in aqueous medium using dicyanovinyl-substituted phenanthridine fluorophore. <i>RSC Advances</i> , 2020, 10, 11791-11799.	1.7	25
15	Highly emissive, naked-eye solvatochromic probe based on styryl tetrahydrodibenzo[<i>a</i> , <i>i</i>]phenanthridine for acidochromic applications. <i>RSC Advances</i> , 2016, 6, 58549-58560.	1.7	22
16	Facile synthesis of ZnAl ₂ O ₄ nanoparticles: efficient and reusable porous nano ZnAl ₂ O ₄ and copper supported on ZnAl ₂ O ₄ catalysts for one pot green synthesis of propargylamines and imidazo[1,2- <i>a</i>]pyridines by A ³ C ³ coupling reactions. <i>RSC Advances</i> , 2016, 6, 3117-3125.	1.7	22
17	Iodine catalyzed three component synthesis of 1-((2-hydroxy) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 107 Td (naphthalen-1-yl) anticancer agents. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2017, 27, 2510-2514.	1.0	22
18	Inkjet-printed phosphorescent Iridium(III) complex based paper sensor for highly selective detection of Hg ²⁺ . <i>Dyes and Pigments</i> , 2019, 163, 176-182.	2.0	22

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19	Synthesis, crystal structure, and anticancer properties of cyclic monocarbonyl analogs of curcumin. <i>Medicinal Chemistry Research</i> , 2011, 20, 81-87.	1.1	21
20	Synthesis of green light emitting fused pyrazolinopiperidines - photophysical and electrochemical studies. <i>RSC Advances</i> , 2013, 3, 1243-1254.	1.7	21
21	Synthesis of Bi ₂ Mo ₃ O ₁₂ and Bi ₂ xRE _x Mo ₃ O ₁₂ nanorods (RE=Eu ³⁺ and Pr ³⁺ and x=0.07-0.3): Improved photocatalytic activity towards the degradation of Rhodamine B dye under visible light. <i>Applied Catalysis A: General</i> , 2016, 519, 34-47.	2.2	21
22	Computational Approaches to Develop Isoquinoline Based Antibiotics through DNA Gyrase Inhibition Mechanisms Unveiled through Antibacterial Evaluation and Molecular Docking. <i>Molecular Informatics</i> , 2018, 37, e1800048.	1.4	21
23	Highly sensitive naphthalimide based Schiff base for the fluorimetric detection of Fe ³⁺ . <i>RSC Advances</i> , 2021, 11, 11338-11346.	1.7	21
24	A new furan based fluorescent chemosensor for the recognition of Cr ³⁺ ion and its application in real sample analysis. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2021, 418, 113441.	2.0	21
25	Highly selective chemosensor for the detection of Ru ³⁺ ion by fluorescent turn-on response and its bioimaging recognition in living cells. <i>Sensors and Actuators B: Chemical</i> , 2018, 267, 373-380.	4.0	20
26	Colorimetric Metal Sensing of Fe ³⁺ and Cr ³⁺ and Photophysical and Electrochemical Studies Based on Benzo[4,5]thiazolo[3,2-a]pyrimidine-3-carboxylate and Its Derivatives. <i>Journal of Organic Chemistry</i> , 2020, 85, 1871-1881.	1.7	20
27	A new sensitive turn-on fluorescent probe based on naphthalimide: Application in visual recognition of hydrogen sulfide in environmental samples and living cells. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2021, 420, 113491.	2.0	19
28	Ammonium Acetate: An Efficient Reagent for the One-pot Synthesis of 5-Aryl-7,8,13,14-tetrahydrodibenzo[a,i]phenanthridines, 2,4-Diaryl-6,7-benzo-3-azabicyclo[3.3.1]nonan-9-ones and $\hat{\pm}$ -Bis(substituted benzylidene)cycloalkanones. <i>Bulletin of the Korean Chemical Society</i> , 2009, 30, 2555-2558.	1.0	19
29	A chiral (S)-BINOL based fluorescent sensor for the recognition of Fe(III) and cascade discrimination of $\hat{\pm}$ -amino acids. <i>Tetrahedron: Asymmetry</i> , 2016, 27, 492-497.	1.8	18
30	Synthesis, photophysical and acidochromic properties of a series of tetrahydrodibenzo[a,i]phenanthridine chromophores. <i>Dyes and Pigments</i> , 2016, 130, 233-244.	2.0	18
31	A new fast-responding fluorimetric turn-on sensor based on benzothiazole-phenanthridine for the sensitive, selective, and reversible detection of Cu ²⁺ in real water samples and its use in bio-imaging. <i>Dyes and Pigments</i> , 2022, 205, 110514.	2.0	18
32	Copper catalyzed CN bond formation/C-H activation: synthesis of aryl 4H-3,1-benzoxazin-4-ones. <i>Tetrahedron Letters</i> , 2015, 56, 203-205.	0.7	17
33	Enantioselective fluorescent sensing of chiral carboxylic acid by engaging boronic acid and BINOL. <i>Sensors and Actuators B: Chemical</i> , 2017, 244, 175-181.	4.0	17
34	Iminothiophenol Schiff base-based fluorescent probe for dual detection of Hg ²⁺ and Cr ³⁺ ions and its application in real sample analysis. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2022, 425, 113663.	2.0	17
35	A phenanthridine-based probe for selective detection of hypochlorite ions. <i>New Journal of Chemistry</i> , 2022, 46, 6570-6576.	1.4	17
36	A sensitive and selective BINOL based ratiometric fluorescence sensor for the detection of cyanide ions. <i>RSC Advances</i> , 2021, 11, 15656-15662.	1.7	16

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37	Azine based fluorescent rapid "off-on" chemosensor for detecting Th ⁴⁺ and Fe ³⁺ ions and its real-time application. <i>Dyes and Pigments</i> , 2021, 196, 109755.	2.0	16
38	A highly sensitive naphthalimide based fluorescent "on-off" sensor for H ₂ S and its bio-imaging applications. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2022, 427, 113802.	2.0	15
39	Statistical descriptors to measure the effectiveness of hydrogen bonding groups and an example of ether oxygen. <i>CrystEngComm</i> , 2011, 13, 5234.	1.3	13
40	Synthesis of benzofused 1,4-azaborinols via [4 + 2] annulation strategy and its application in indole synthesis. <i>RSC Advances</i> , 2015, 5, 37716-37720.	1.7	13
41	A novel, facile, rapid, solvent free protocol for the one pot green synthesis of chromeno[2,3-d]pyrimidines using reusable nano ZnAl ₂ O ₄ a NOSE approach and photophysical studies. <i>RSC Advances</i> , 2015, 5, 6578-6587.	1.7	13
42	Enantioselective recognition of unmodified amino acids by ligand-displacement assays with in situ generated 1:1 Cu(II)- BINOL imidazole complex. <i>Sensors and Actuators B: Chemical</i> , 2017, 250, 244-249.	4.0	13
43	SnCl ₂ -catalyzed synthesis of dihydro-5H-benzo[f]pyrazolo[3,4-b]quinoline and dihydroindeno[2,1-b]pyrazolo[4,3-e]pyridine with high fluorescence and their photophysical properties. <i>New Journal of Chemistry</i> , 2018, 42, 860-871.	1.4	13
44	Study of Microhardness and Its Related Physical Constants of Ferroelectric Glycine Phosphite (GPI) Single Crystals. <i>Ferroelectrics, Letters Section</i> , 2010, 37, 23-29.	0.4	12
45	One-Pot Synthesis and Photophysical Studies of Styryl-Based Benzo[<i>f</i>]pyrazolo[3,4- <i>b</i>]quinoline and Indeno[2,1- <i>b</i>]pyrazolo[4,3- <i>e</i>]pyridines. <i>European Journal of Organic Chemistry</i> , 2018, 2018, 6204-6216.	1.2	12
46	PFOM fillers embedded PVDF/cellulose dual-layered membranes with hydrophobic/hydrophilic channels for desalination via direct contact membrane distillation process. <i>RSC Advances</i> , 2019, 9, 41462-41474.	1.7	12
47	Phenanthridine-Based Donor/Acceptor Fluorescent Dyes: Synthesis, Photophysical Properties and Fluorometric Sensing of Biogenic Primary Amines. <i>ChemistrySelect</i> , 2021, 6, 858-864.	0.7	12
48	Efficient iodine catalyzed chemoselective synthesis of amins an access to N,N-acetals by the addition of lactams to N-acyl imines. <i>Tetrahedron Letters</i> , 2013, 54, 6758-6763.	0.7	11
49	Phenanthridine-based fluorescence sensor for the "off-on" determination of thorium ion and its bio-imaging applications. <i>Dyes and Pigments</i> , 2022, 197, 109826.	2.0	11
50	Synthesis, spectral characterization and crystal structure of a new precursor [(CH ₃ COCHCOCH ₃) ₂ Zr{C ₆ H ₄ (N=CHC ₆ H ₄ O) ₂ }] for nano-zirconia: an investigation on the wettability of polyvinylidene fluoride nano-zirconia composite material. <i>Journal of Sol-Gel Science and Technology</i> , 2015, 76, 195-203.	1.1	10
51	Molecular Substantiation and Drug Efficacy of Relatively High Molecular Weight BINOLs; Appraised as Breast Cancer Medication and PI3Kinase Inhibitors. <i>Journal of Heterocyclic Chemistry</i> , 2018, 55, 1339-1345.	1.4	10
52	Recognition of Hg ²⁺ ion in an organic semi-aqueous medium by a new naphthalimide based fluorescent probe and its bioimaging applications. <i>Inorganic Chemistry Communication</i> , 2022, 143, 109735.	1.8	10
53	Dual Behavior of Ammonium Acetate for the Synthesis of Diverse Symmetrical/Unsymmetrical Bis[1,3]oxazines Possessing Anticancer Activity. <i>Synthetic Communications</i> , 2015, 45, 2227-2239.	1.1	9
54	Synthesis of T-shaped Oxazolophthoimidazo[1,2- <i>a</i>]pyridines using Lactic Acid as Bio-based Green Solvent: An Insight into Photophysical Studies. <i>ChemistrySelect</i> , 2016, 1, 2900-2908.	0.7	9

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55	Direct oxidative cascade cyclisation of 2-aminobenzoic acid and arylaldehydes to aryl 4H-3,1-benzoxazin-4-ones with oxone. <i>Tetrahedron Letters</i> , 2017, 58, 520-523.	0.7	9
56	Naphthalimide-based Chiral Fluorescence Sensor Employing (S)-BINOL Unit for Highly Enantioselective Recognition of \pm -Amino Alcohols with Opposite Chiral Selectivity. <i>ChemistrySelect</i> , 2018, 3, 3111-3117.	0.7	9
57	A multisensing ratiometric fluorescent sensor for recognition of Al ³⁺ , Th ⁴⁺ and picric acid. <i>Inorganic Chemistry Communication</i> , 2021, 132, 108825.	1.8	9
58	Direct anti and regio-specific aldol reactions of cyclododecanone catalyzed by alkali metal hydroxides: implications for supramolecular helical design. <i>New Journal of Chemistry</i> , 2012, 36, 2292.	1.4	8
59	Photophysical studies of donor, acceptor substituted tetrahydrodibenzo[a,i]phenanthridines. <i>Dyes and Pigments</i> , 2016, 134, 409-418.	2.0	8
60	(borophenanthridines). <i>Dyes and Pigments</i> , 2017, 137, 182-190.	2.0	8
61	A new imidazole based phenanthridine probe for ratiometric fluorescence monitoring of methanol in biodiesel. <i>New Journal of Chemistry</i> , 2021, 45, 6033-6041.	1.4	8
62	Green Trends in Mannich Reaction. <i>Mini-Reviews in Organic Chemistry</i> , 2014, 11, 97-115.	0.6	8
63	A Pyrazolo Imine-based Colorimetric and Turn-on Fluorescent Sensor Probe for Determination of Hg ²⁺ Ion and its Application in Test Paper Strips. <i>Photochemistry and Photobiology</i> , 2022, 98, 843-855.	1.3	8
64	A mild and efficient one-pot three-component synthesis of anti- β -amino-carbonyl compounds catalyzed by NH ₄ OAc and their anticancer activities. <i>Medicinal Chemistry Research</i> , 2014, 23, 5086-5101.	1.1	7
65	Twisted pyrene with perfect hetero atomic cavity optical sensor for Hg ²⁺ and Pb ²⁺ . <i>Inorganic Chemistry Communication</i> , 2020, 121, 108187.	1.8	7
66	Cooperative C-H...N and C-H... π bonded molecular dimers of 5-aryl-7,8,13,14-tetrahydro-dibenzo[a,i]phenanthridine. <i>Journal of Molecular Structure</i> , 2010, 963, 45-49.	1.8	6
67	Synthesis, Crystal Growth, Structural, Dielectric and Ferroelectric Properties of N-Acetyl Glycine Phosphite (AGPI) Single Crystals. <i>Ferroelectrics</i> , 2011, 413, 291-300.	0.3	6
68	Fused pyrazole-phenanthridine based dyads: synthesis, photo-physical and theoretical studies, and live cell pH imaging. <i>RSC Advances</i> , 2019, 9, 38687-38696.	1.7	6
69	A simple quinazolinone-isophorone based colorimetric chemosensor for the reversible detection of copper (II) and its application in real samples. <i>Journal of Molecular Structure</i> , 2022, 1257, 132633.	1.8	6
70	Azabicyclo[3.3.1]nonanone: a case when weak interactions are preferred over strong hydrogen bonds. <i>Structural Chemistry</i> , 2010, 21, 909-914.	1.0	5
71	Synthesis and Molecular Structure of New Macro Acyclic Mannich Derivatives: Symmetrical and Unsymmetrical 2-[(E)-(Benzylideneamino)(aryl)methyl]cyclododecanone. <i>Synthetic Communications</i> , 2012, 42, 3429-3440.	1.1	5
72	A green approach for the one-pot multi-component synthesis of N-substituted β , γ and μ -lactams involving C-N bond formation catalyzed by FeCl ₃ . <i>RSC Advances</i> , 2013, 3, 23035.	1.7	5

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73	Domino condensation-heterocyclisation reactions: iodine catalyzed four component synthesis of 1,3-thiazine. RSC Advances, 2014, 4, 8808.	1.7	5
74	Synthesis and biological evaluation of adamantane-based aminophenols as a novel class of antiplasmodial agents. Bioorganic and Medicinal Chemistry Letters, 2015, 25, 952-955.	1.0	5
75	Tuning the Electronic Properties of 2-Cyano-3-phenylacrylamide Derivatives. Journal of Organic Chemistry, 2015, 80, 12351-12358.	1.7	5
76	Design, synthesis and cholinesterase inhibitory evaluation study of fluorescent N-benzylpiperidine-4-one derivatives. Medicinal Chemistry Research, 2016, 25, 1705-1715.	1.1	5
77	Fluorescent aluminum chelate complexes as modified precursors for nano-structured alumina. Journal of Coordination Chemistry, 2017, 70, 983-996.	0.8	5
78	Human-eyes-friendly white electroluminescence from solution-processable hybrid OLEDs exploiting new iridium (III) complex containing benzoimidazophenanthridine ligand. Dyes and Pigments, 2020, 174, 108068.	2.0	5
79	A simple and optically responsive chemosensor for the detection of Al ³⁺ and Cr ³⁺ : In live cells and real sample analysis. Inorganic Chemistry Communication, 2020, 122, 108289.	1.8	5
80	A Highly Selective and Sensitive Colorimetric Chemosensor for the Detection of Hydrogen Sulfide: A Real-time Application in Multiple platforms. Photochemistry and Photobiology, 2022, 98, 141-149.	1.3	5
81	Fluorescent chemosensors for Hg ²⁺ ions based on a pyridine-attached phenanthridine probe. New Journal of Chemistry, 2021, 45, 17667-17673.	1.4	5
82	Kinetics and mechanism of oxidation of S-phenylthioacetic acids by Ce(IV). Tetrahedron, 1994, 50, 13731-13738.	1.0	4
83	Structural and Mechanical Studies of Semi-Organic NLO Material: Zinc Thiourea Chloride. Materials and Manufacturing Processes, 2012, 27, 53-57.	2.7	4
84	Synthesis, structural, and μ -caprolactone polymerization studies of heteroleptic derivatives of aluminum(III). Journal of Coordination Chemistry, 2015, 68, 2480-2491.	0.8	4
85	Hepta-coordinated heteroleptic derivatives of zirconium(IV): Synthesis, structural characterization and ring opening polymerization of μ -caprolactone. Polyhedron, 2016, 107, 163-171.	1.0	4
86	Electroluminescence of iridium(III) complexes containing F or CF ₃ substituents. Synthetic Metals, 2021, 273, 116673.	2.1	4
87	Eco-efficient, Chemoselective, and Rapid Access to Aminals from Lactams Using Recyclable Silica-supported FeCl ₃ Catalyst in Green Solvent. Chemistry Letters, 2014, 43, 1631-1633.	0.7	3
88	Temperature-controlled Mukaiyama aldol reaction of cyclododecanone (CDD) with aromatic aldehydes promoted by TMSCl via the (TMS) ₃ Si intermediate generated in situ. New Journal of Chemistry, 2016, 40, 3833-3842.	1.4	3
89	Phenanthridine based rapid α -fluorescent sensor for selective detection of Th ⁴⁺ ion and its real-time application. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2022, 265, 120403.	2.0	3
90	(3E,5E)-1-Benzyl-3,5-dibenzylidenepiperidin-4-one. Acta Crystallographica Section E: Structure Reports Online, 2009, 65, o2775-o2775.	0.2	3

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91	{2-Methylidene-3-[(phenylsulfanyl)methyl]but-3-en-1-ylsulfanyl}benzene: flip-flop disorder. Acta Crystallographica Section E: Structure Reports Online, 2007, 63, o2504-o2505.	0.2	2
92	(3E,5E)-1-Benzyl-3,5-bis(2-fluorobenzylidene)piperidin-4-one. Acta Crystallographica Section E: Structure Reports Online, 2009, 65, o2667-o2667.	0.2	2
93	Cyclododecanone as a recyclable protecting group for the synthesis of highly functionalized 3-amino-2-thiohydantoins from conventional starting materials. RSC Advances, 2014, 4, 8498.	1.7	2
94	Phenanthridine based fluorescent probe for Th ⁴⁺ ion chemosensor. Journal of Photochemistry and Photobiology A: Chemistry, 2022, , 113952.	2.0	2
95	Kinetics and mechanism of oxidation of some para-, meta-, and ortho-substituted ethyl S-phenylmercaptoacetates by chloramine-B(CAB). International Journal of Chemical Kinetics, 1992, 24, 953-961.	1.0	1
96	Domino Reaction for the Synthesis of Highly Functionalized Triazatricyclo[6.2.2.0 _{1,6}]dodecane. Synthetic Communications, 2015, 45, 750-757.	1.1	1
97	Synthesis of highly functionalized strained bicyclic dilactam derivatives. Synthetic Communications, 2018, 48, 1671-1677.	1.1	1
98	Rational Synthesis of Tetrahydrodibenzophenanthridine and Phenanthroimidazole as Efficient Blue Emitters and their Applications. European Journal of Organic Chemistry, 2020, 2020, 834-844.	1.2	1
99	(3E,5E)-3,5-Bis(4-allyloxybenzylidene)-1-benzylpiperidin-4-one. Acta Crystallographica Section E: Structure Reports Online, 2009, 65, o3062-o3062.	0.2	1
100	(7E)-5-Benzyl-7-(2-chlorobenzylidene)-3-(2-chlorophenyl)-2-phenyl-3,3a,4,5,6,7-hexahydro-2H-pyrazolo[4,3-c]pyridine. Acta Crystallographica Section E: Structure Reports Online, 2010, 66, o1734-o1734.	0.2	0
101	3-(7,8,13,14-Tetrahydrodibenzo[a,i]phenanthridin-5-yl)benzene-1,2-diol. Acta Crystallographica Section E: Structure Reports Online, 2010, 66, o1753-o1753.	0.2	0