Muniappan Sankar

List of Publications by Year
in descending order

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		331670	361022
97	1,615	21	35
papers	citations	h-index	g-index

97	97	97	1807
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Co(<scp>ii</scp>)-porphyrin-decorated carbon nanotubes as catalysts for oxygen reduction reactions: an approach for fuel cell improvement. Journal of Materials Chemistry A, 2017, 5, 6263-6276.	10.3	121
2	Mixed Substituted Porphyrins:Â Structural and Electrochemical Redox Properties. Inorganic Chemistry, 2006, 45, 4136-4149.	4.0	102
3	Porphyrin Framework Solids. Synthesis and Structure of Hybrid Coordination Polymers of Tetra(carboxyphenyl)porphyrins and Lanthanide-Bridging Ions. Inorganic Chemistry, 2007, 46, 5544-5554.	4.0	90
4	Antimicrobial photodynamic therapy: Single-walled carbon nanotube (SWCNT)-Porphyrin conjugate for visible light mediated inactivation of Staphylococcus aureus. Colloids and Surfaces B: Biointerfaces, 2018, 162, 108-117.	5.0	77
5	Synthesis, Spectral, and Electrochemical Studies of Electronically Tunable Î²-Substituted Porphyrins with Mixed Substituent Pattern. Inorganic Chemistry, 2014, 53, 12706-12719.	4.0	61
6	Porphyrin chemodosimeters: synthesis, electrochemical redox properties and selective â€˜naked-eyeâ€™ detection of cyanide ions. RSC Advances, 2015, 5, 99028-99036.	3.6	46
7	Electrochemistry and Spectroelectrochemistry of Cobalt Porphyrins with Ï€-Extending and/or Highly Electron-Withdrawing Pyrrole Substituents. In Situ Electrogeneration of Ïƒ-Bonded Complexes. Inorganic Chemistry, 2018, 57, 1490-1503.	4.0	42
8	Robust and electron deficient oxidovanadium(<scp>iv</scp>) porphyrin catalysts for selective epoxidation and oxidative bromination reactions in aqueous media. Green Chemistry, 2019, 21, 1757-1768.	9.0	41
9	Supramolecular Reactivity of Porphyrins with Mixed Iodophenyl and Pyridyl meso-Substituents. Crystal Growth and Design, 2008, 8, 1682-1688.	3.0	40
10	Electron deficient nonplanar Î²-octachlorovanadylporphyrin as a highly efficient and selective epoxidation catalyst for olefins. Dalton Transactions, 2015, 44, 17720-17729.	3.3	36
11	Ratiometric and colorimetric â€œnaked eyeâ€•selective detection of CN^{â^’}ions by electron deficient Ni(<scp>ii</scp>) porphyrins and their reversibility studies. Dalton Transactions, 2015, 44, 9149-9157.	3.3	35
12	Asymmetrically Crowded â€œPushâ€“Pullâ€•Octaphenylporphyrins with Modulated Frontier Orbitals: Syntheses, Photophysical, and Electrochemical Redox Properties. Inorganic Chemistry, 2016, 55, 584-597.	4.0	35
13	Strong enhancement of two-photon absorption properties in synergic â€˜semi-disconnectedâ€™ multiporphyrin assemblies designed for combined imaging and photodynamic therapy. Tetrahedron Letters, 2013, 54, 6474-6478.	1.4	34
14	Unsymmetrical Î²-functionalized â€˜pushâ€“pullâ€™ porphyrins: synthesis and photophysical, electrochemical and nonlinear optical properties. Dalton Transactions, 2020, 49, 3198-3208.	3.3	34
15	1,8-Naphthyridine-based fluorescent receptors for picric acid detection in aqueous media. Analytical Methods, 2015, 7, 10272-10279.	2.7	31
16	Colorimetric â€œnaked eyeâ€•detection of CN^{â^’}, F^{â^’}, CH₃COO^{â^’}and H₂PO₄^{â^’}ions by highly nonplanar electron deficient perhaloporphyrins. RSC Advances, 2015, 5, 3269-3275.	3.6	29
17	Tuning the Photovoltaic Performance of DSSCs by Appending Various Donor Groups on trans-Dimesityl Porphyrin Backbone. ACS Applied Energy Materials, 2018, 1, 2793-2801.	5.1	25
18	Synthesis and femtosecond third order nonlinear optical properties of push-pull trans- A 2 B-corroles. Dyes and Pigments, 2017, 143, 324-330.	3.7	24

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19	Versatile Synthetic Route for Î²-Functionalized Chlorins and Porphyrins by Varying the Size of Michael Donors: Syntheses, Photophysical, and Electrochemical Redox Properties. Inorganic Chemistry, 2017, 56, 11532-11545.	4.0	23
20	Facile and Reversible Electrogeneration of Porphyrin Trianions and Tetraanions in Nonaqueous Media. Inorganic Chemistry, 2017, 56, 8527-8537.	4.0	23
21	Trans-A2B2 Zn(II) porphyrin dyes with various donor groups and their Co-sensitization for highly efficient dye-sensitized solar cells. Dyes and Pigments, 2019, 160, 386-394.	3.7	23
22	1,8-Naphthyridinic fluorescent â€˜turn-onâ€™ and â€˜turn-offâ€™ chemosensors for detection of F^{â^'}and Hg²⁺ions mimicking INHIBIT molecular logic behaviour. Analytical Methods, 2015, 7, 4552-4559.	2.7	21
23	Highly reducible Ï€-extended copper corroles. Dalton Transactions, 2017, 46, 10014-10022.	3.3	21
24	Insight into efficient bifunctional catalysis: Oxygen reduction and oxygen evolution reactions using MWCNTs based composites with 5,10,15,20-tetrakis(3â€²,5â€²-dimethoxyphenyl)porphyrinato cobalt(II) and 5,10,15,20-tetrakis(3â€²,5â€²-dihydroxyphenyl)porphyrinato cobalt(II). International Journal of Hydrogen Energy, 2020, 45, 9710-9722.	7.1	21
25	Synthesis, spectroscopic and electrochemical studies of phosphoryl and carbomethoxyphenyl substituted corroles, and their anion detection properties. Dalton Transactions, 2014, 43, 14680-14688.	3.3	20
26	Switching between porphyrin, porphodimethene and porphyrinogen using cyanide and fluoride ions mimicking volatile molecular memory and the â€˜NORâ€™ logic gate. Dalton Transactions, 2016, 45, 16404-16412.	3.3	20
27	Î²-Dicyanovinyl substituted porphyrinogen: synthesis, a reversible sensor for picric acid among explosives and a unique sensor for cyanide and fluoride ions by switching between various porphyrinoid states. Dalton Transactions, 2017, 46, 11669-11678.	3.3	19
28	Synthesis, spectroscopic, electrochemical redox, solvatochromism and anion binding properties of Î²-tetra- and -octaphenylethynyl substitutedmeso-tetraphenylporphyrins. RSC Advances, 2015, 5, 82237-82246.	3.6	18
29	Strong two-photon absorption and ultrafast dynamics of meso-functionalized â€œpushâ€“pullâ€• trans-A₂BC porphyrins. Dalton Transactions, 2021, 50, 6256-6272.	3.3	18
30	Mono- and tri-Î²-substituted unsymmetrical metalloporphyrins: synthesis, structural, spectral and electrochemical properties. RSC Advances, 2015, 5, 66824-66832.	3.6	16
31	Facile synthesis of Î²-functionalized â€œpush-pullâ€•Zn(II) porphyrins for DSSC applications. Dyes and Pigments, 2017, 147, 56-66.	3.7	16
32	Synthesis, Spectral, Electrochemical and Photovoltaic Studies of A₃B Porphyrinic Dyes having Peripheral Donors. ChemPhysChem, 2019, 20, 2627-2634.	2.1	16
33	Vanadyl Î²-tetrabromoporphyrin: synthesis, crystal structure and its use as an efficient and selective catalyst for olefin epoxidation in aqueous medium. RSC Advances, 2019, 9, 10405-10413.	3.6	16
34	A dual colorimetric chemosensor for Hg(<scp>ii</scp>) and cyanide ions in aqueous media based on a nitrobenzoxadiazole (NBD)â€“antipyrine conjugate with INHIBIT logic gate behaviour. Analytical Methods, 2020, 12, 4526-4533.	2.7	16
35	Synthesis and characterization of simple cost-effective trans-A₂BC porphyrins with various donor groups for dye-sensitized solar cells. New Journal of Chemistry, 2016, 40, 5704-5713.	2.8	14
36	Nickel-Induced Skeletal Rearrangement of Free Basetrans-Chlorins into Monofused NiII-Porphyrins: Synthesis, Structural, Spectral, and Electrochemical Redox Properties. Inorganic Chemistry, 2018, 57, 11349-11360.	4.0	14

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37	Î²-substituted donor-acceptor porphyrins: Synthesis, energy transfer and electrochemical redox properties. Dyes and Pigments, 2019, 161, 104-112.	3.7	14
38	Synthesis and structural, photophysical, electrochemical redox and axial ligation properties of highly electron deficient perchlorometalloporphyrins and selective CN^{â^'} sensing by Co(<scp>ii</scp>) complexes. New Journal of Chemistry, 2018, 42, 8190-8199.	2.8	13
39	Highly efficient Co(II) porphyrin catalysts for the extractive oxidative desulfurization of dibenzothiophene in fuel oils under mild conditions. Journal of Porphyrins and Phthalocyanines, 2021, 25, 24-30.	0.8	13
40	Selective Bromination of Î²â€Positions of Porphyrin by Selfâ€Catalytic Behaviour of VOTPP: Facile Synthesis, Electrochemical Redox Properties and Catalytic Application. European Journal of Inorganic Chemistry, 2021, 2021, 1685-1694.	2.0	13
41	Unsymmetrically Î²-Functionalized Ï€-Extended Porphyrins: Synthesis, Spectral, Electrochemical Redox Properties, and Their Utilization as Efficient Two-Photon Absorbers. Inorganic Chemistry, 2022, 61, 9968-9982.	4.0	13
42	Structural, Photophysical, and Electrochemical Properties of Doubly Fused Porphyrins and Related Fused Chlorins. Inorganic Chemistry, 2020, 59, 1481-1495.	4.0	12
43	Meso-tetrakis(3',5'-di-substituted-phenyl)porphyrins: structural, electrochemical redox and axial ligation properties. Journal of Porphyrins and Phthalocyanines, 2005, 09, 413-422.	0.8	11
44	Porphyrin nanochannels reinforced by hydrogen bonding. Chemical Communications, 2012, 48, 6481.	4.1	11
45	An insight into the communication between Î²-olefin/phenyl olefin-mediated acceptors and porphyrin Ï€-system: a way to establish porphyrin based chemodosimeters and chemosensors. Physical Chemistry Chemical Physics, 2017, 19, 4530-4540.	2.8	11
46	Nâ€Confused Porphyrin â€“ A Unique â€œTurnâ€Onâ€•Chemosensor for CN^{â^'} and F^{â^'} ions and â€œTurnâ€Offâ€•Sensor for ClO₄^{â^'} ions. Chemistry - an Asian Journal, 2020, 15, 2192-2197.	3.3	11
47	Î²-Tetracyanobutadiene-Appended Porphyrins: Facile Synthesis, Spectral and Electrochemical Redox Properties, and Their Utilization as Excellent Optical Limiters. Inorganic Chemistry, 2022, 61, 1297-1307.	4.0	11
48	Unusual solvent dependent electronic absorption spectral properties of nickel(II) and copper(II) perhaloporphyrins. Journal of Porphyrins and Phthalocyanines, 2004, 08, 1343-1355.	0.8	10
49	Î²â€Trisubstituted â€œPushâ€“Pullâ€•Porphyrins â€“ Synthesis and Structural, Photophysical, and Electrochemical Redox Properties. European Journal of Inorganic Chemistry, 2017, 2017, 3269-3274.	2.0	10
50	Facile Conversion of Ni(II) Cyclopropylchlorins into Novel Î²-Substituted Porphyrins through Acid-Catalyzed Ring-Opening Reaction. Inorganic Chemistry, 2017, 56, 424-437.	4.0	10
51	Facile Synthesis of Nitrovanillinâ€•Appended Porphyrin and Its Utilization as Potent, Recyclable, Nakedâ€Eye CN^{â^'} and F^{â^'} Ion Sensor. ChemistrySelect, 2017, 2, 6778-6783.	1.5	10
52	Selective Conversion of Planar trans-Chlorins into Highly Twisted Doubly Fused Porphyrins or Chlorins via Oxidative Fusion. Inorganic Chemistry, 2018, 57, 6658-6668.	4.0	10
53	Effect of functional groups on sensitization of dye-sensitized solar cells (DSSCs) using free base porphyrins. Journal of Porphyrins and Phthalocyanines, 2017, 21, 222-230.	0.8	9
54	Facile synthesis of functionalized urea, imidazolium salt, azide, and triazole from a 2-amino-5,7-dimethyl-1,8-naphthyridine scaffold and their utilization in fluoride ion sensing. New Journal of Chemistry, 2018, 42, 10059-10066.	2.8	9

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55	Electrochemical sensing of rifampicin in pharmaceutical samples using meso-tetrakis(4-hydroxyphenyl)porphyrinato cobalt(II) anchored carbon nanotubes. Journal of Applied Electrochemistry, 2018, 48, 937-946.	2.9	9
56	Unsymmetrical nonplanar â€˜pushâ€“pullâ€™ Î²-octasubstituted porphyrins: facile synthesis, structural, photophysical and electrochemical redox properties. Dalton Transactions, 2019, 48, 15002-15011.	3.3	9
57	Synthesis and Electrochemical Characterization of Acetylacetone (acac) and Ethyl Acetate (EA) Appended Î²-Trisubstituted Pushâ€“Pull Porphyrins: Formation of Electronically Communicating Porphyrin Dimers. Inorganic Chemistry, 2018, 57, 13213-13224.	4.0	8
58	Fused Nickel(II) Porphyrinsâ€”Sensing of Toxic Anions and Selected Metal Ions Through Supramolecular Interactions. Frontiers in Chemistry, 2020, 8, 595177.	3.6	8
59	Facile Heterogeneous and Homogeneous Anion Induced Electrosynthesis: An Efficient Method for Obtaining Ï€-Extended Porphyrins. Inorganic Chemistry, 2020, 59, 16737-16746.	4.0	8
60	Nanobiosensors for biomedical, environmental, and food monitoring applications. Materials Letters, 2022, 311, 131540.	2.6	8
61	Î²-Functionalized Dibenzoporphyrins with Mixed Substituents Pattern: Facile Synthesis, Structural, Spectral, and Electrochemical Redox Properties. Inorganic Chemistry, 2019, 58, 2514-2522.	4.0	7
62	Î²-Disubstituted silver(III) corroles: Facile synthesis, photophysical and electrochemical redox properties. Journal of Porphyrins and Phthalocyanines, 2021, 25, 547-554.	0.8	7
63	Efficient charge transfer from organometal lead halide perovskite nanocrystals to free base meso-tetraphenylporphyrins. Nanoscale Advances, 2022, 4, 1779-1785.	4.6	7
64	Control of the spatial arrangements of supramolecular networks based on saddle-distorted porphyrins by intermolecular hydrogen bonding. Dalton Transactions, 2013, 42, 16073.	3.3	6
65	Synthesis, electrochemical and complexation studies of Zn(II) aryloxyporphyrins with fullerene C60. Journal of Porphyrins and Phthalocyanines, 2016, 20, 744-751.	0.8	6
66	Î²-Heptasubstituted Porphyrins: Synthesis, Structural, Spectral, and Electrochemical Properties. European Journal of Inorganic Chemistry, 2018, 2018, 3338-3343.	2.0	6
67	Persubstituted Triphenylamine Bearing Zinc Porphyrin to Host Endohedral Fullerene, Sc₃N@C₈₀: Formation and Excited State Electron Transfer. Journal of Physical Chemistry B, 2020, 124, 5723-5729.	2.6	6
68	Electrochemistry of Triâ€substituted Porphyrins with Î²â€Appended Ethyl Acetoacetate and Acetylacetone in Neutral and Basic Nonaqueous Solvents. ChemElectroChem, 2020, 7, 1723-1732.	3.4	6
69	Zn(II) porphyrin-based polymer facilitated electrochemical synthesis of green hydrogen peroxide. Journal of Electroanalytical Chemistry, 2022, 919, 116536.	3.8	6
70	Mixed Î²-bromo/cyano tetrasubstituted-meso-tetraphenylporphyrin Cu(II) complexes: Synthesis and electrochemical studies. Journal of Porphyrins and Phthalocyanines, 2016, 20, 1420-1425.	0.8	5
71	Highly electron deficient tetrabenzoquinone-appended Ni(<scp>ii</scp>) and Cu(<scp>ii</scp>) porphyrins: spectral, solvatochromatic, electrochemical redox and tuneable F^{â^’}and CN^{â^’}sensing properties. New Journal of Chemistry, 2017, 41, 11962-11968.	2.8	5
72	Borylated porphyrin and its metal complexes: Synthesis, electrochemistry and deprotection-protection strategy for anion sensing. Sensors and Actuators B: Chemical, 2017, 240, 709-717.	7.8	5

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73	Synthesis, Electrochemical and Photochemical Studies on Ï€â€Extended Monoâ€Î²â€Functionalized Porphyrin Dyads. ChemPhotoChem, 2019, 3, 151-165.	3.0	5
74	Synthesis, Electrochemistry, and Reversible Interconversion among Perhalogenated Hydroxyphenyl Ni(II) Porphyrins, Porphodimethenes, and Porpho-5,15-bis-paraquinone Methide. Inorganic Chemistry, 2019, 58, 14361-14376.	4.0	5
75	Selective epoxidation of olefins by vanadylporphyrin [VIVO(TPP)] and electron deficient nonplanar Î²-octabromovanadylporphyrin [VIVO(TPPBr₈)]. Journal of Porphyrins and Phthalocyanines, 2022, 26, 187-194.	0.8	5
76	Efficient Palladium-Catalyzed Synthesis of Aminopyridyl Phosphonates from Bromopyridines and Diethyl Phosphite. Synthesis, 2008, 2008, 1575-1579.	2.3	4
77	Facile Synthesis and Electrochemical Studies of Diethoxyphosphorylphenyl-substituted Porphyrin and Its Metal Complexes. Chemistry Letters, 2015, 44, 914-916.	1.3	4
78	Spectroscopic and theoretical studies of anionic corroles derived from phosphoryl and carbomethoxyphenyl substituted corroles. Chemical Physics Letters, 2017, 677, 107-113.	2.6	4
79	Effect of solvent on the electronic absorption spectral properties of some mixed Î²-octasubstituted Zn(II)-tetraphenylporphyrins. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2018, 189, 80-85.	3.9	4
80	Synthesis, structure and physicochemical properties of a saddle-distorted porphyrin with a peripheral carboxyl group. Journal of Porphyrins and Phthalocyanines, 2011, 15, 421-432.	0.8	3
81	Effect of fused indanedione (IND) groups and antipodal Î²-substituents on electrochemical properties of unsymmetrical metalloporphyrins. Journal of Porphyrins and Phthalocyanines, 2020, 24, 1155-1165.	0.8	3
82	Meso-Tetrapyrenylporphyrins: Synthesis, structural, spectral, electrochemical properties and FÃ¶rster energy transfer (FRET) studies. Journal of Porphyrins and Phthalocyanines, 2020, 24, 985-992.	0.8	3
83	Synthesis of porphyrin-bis(polyazamacrocycle) triads via Suzuki coupling reaction. Journal of Porphyrins and Phthalocyanines, 2014, 18, 35-48.	0.8	2
84	Spectral investigations of meso-tetraalkylporphyrin-fullerene hostâ€“guest complexes. Journal of Porphyrins and Phthalocyanines, 2015, 19, 997-1006.	0.8	2
85	Facile synthesis, photophysical and electrochemical redox properties of octa- and tetracarboxamidophenylporphyrins and the first example of amido-imidol tautomerism in porphyrins. Dyes and Pigments, 2017, 139, 651-657.	3.7	2
86	Facile Generation of A₂B Corrole Radical Using Fe(III) Salts and Its Spectroscopic Properties. ACS Omega, 2017, 2, 959-965.	3.5	2
87	Synthesis, spectral and electrochemical redox properties of N-methyl fused nickel(II) porphyrin. Journal of Porphyrins and Phthalocyanines, 2018, 22, 1106-1110.	0.8	2
88	Effect of solvent on the electronic absorption spectral properties of Ni(II) and Cu(II)-complexes of some mixed Î²-octasubstituted-meso-tetraphenylporphyrins. Chemical Physics Letters, 2019, 730, 643-648.	2.6	2
89	Nickel(<scp>ii</scp>) monobenzoporphyrins and chlorins: synthesis, electrochemistry and anion sensing properties. Dalton Transactions, 2021, 50, 17086-17100.	3.3	2
90	Exploring Unusual Electrochemistry and Nlo Properties of Highly Electron-Deficient Î²-Functionalized Porphyrins. ECS Meeting Abstracts, 2021, MA2021-01, 755-755.	0.0	0

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91	Facile Synthesis, Spectral, and Electrochemical Redox Properties of Ï€-Extended â€˜Push-Pullâ€™ Corroles, Porphyrins and Chlorins. ECS Meeting Abstracts, 2021, MA2021-01, 740-740.	0.0	0
92	Facile Synthesis, Spectral and Electrochemical Properties and Catalytic Efficiencies of Î²-Octabromo Vanadyl Porphyrin. ECS Meeting Abstracts, 2021, MA2021-01, 756-756.	0.0	0
93	Synthesis, Spectral and Electrochemical Studies of Î²-Trisubstituted Porphyrins and Monobenzoporphyrins. ECS Meeting Abstracts, 2021, MA2021-01, 754-754.	0.0	0
94	Electrosynthesis of Ï€-Extended Porphyrins Via Reductive Decyanation. ECS Meeting Abstracts, 2021, MA2021-01, 738-738.	0.0	0
95	Synthesis, Spectral and Electrochemical Studies of Phenothiazine Appended â€ŸPush-Pullâ€•a3b Porphyrins and Their Utilization in Nonlinear Optics. ECS Meeting Abstracts, 2021, MA2021-01, 753-753.	0.0	0
96	Synthesis, Photophysical and Electrochemical Studies of Î’-Disubstituted Silver Corroles. ECS Meeting Abstracts, 2021, MA2021-01, 757-757.	0.0	0
97	Facile Synthesis of Antipodal Î²-Arylaminodibromoporphyrins through Buchwald-Hartwig C-N coupling reaction and Exploring Their Spectral and Intriguing Electrochemical Redox Properties. Journal of Organometallic Chemistry, 2021, 956, 122114.	1.8	0