

Thangarasu Pandiyan

List of Publications by Year in descending order

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73
papers

2,124
citations

257450

24
h-index

254184

43
g-index

73
all docs

73
docs citations

73
times ranked

2438
citing authors

#	ARTICLE	IF	CITATIONS
1	Simultaneous and sensitive determination of ascorbic acid, dopamine, uric acid, and tryptophan with silver nanoparticles-decorated reduced graphene oxide modified electrode. <i>Colloids and Surfaces B: Biointerfaces</i> , 2013, 111, 97-106.	5.0	253
2	Development of a predictive model for corrosion inhibition of carbon steel by imidazole and benzimidazole derivatives. <i>Corrosion Science</i> , 2016, 108, 23-35.	6.6	177
3	DFT and electrochemical studies of tris(benzimidazole-2-ylmethyl)amine as an efficient corrosion inhibitor for carbon steel surface. <i>Corrosion Science</i> , 2008, 50, 614-624.	6.6	166
4	A new inhibitor for mild carbon steel: Electrochemical and DFT studies. <i>Journal of Electroanalytical Chemistry</i> , 2005, 583, 8-16.	3.8	135
5	Comparison of methods for the photochemical degradation of chlorophenols. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2002, 146, 149-155.	3.9	112
6	Density Functional Theory and Electrochemical Studies: Structure-Efficiency Relationship on Corrosion Inhibition. <i>Journal of Chemical Information and Modeling</i> , 2015, 55, 2391-2402.	5.4	53
7	Benzimidazole ligands in the corrosion inhibition for carbon steel in acid medium: DFT study of its interaction on Fe ₃ O ₄ surface. <i>Journal of Molecular Structure</i> , 2016, 1119, 314-324.	3.6	53
8	Three novel input logic gates supported by fluorescence studies: Organic nanoparticles (ONPs) as chemo-sensor for detection of Zn ²⁺ and Al ³⁺ in aqueous medium. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2015, 146, 142-150.	3.9	48
9	The influence of iodide in corrosion inhibition by organic compounds on carbon steel: Theoretical and experimental studies. <i>Applied Surface Science</i> , 2020, 514, 145928.	6.1	47
10	Tetracycline and its quantum dots for recognition of Al ³⁺ and application in milk developing cells bio-imaging. <i>Food Chemistry</i> , 2019, 278, 523-532.	8.2	46
11	The Photochemical Degradation of Bacterial Cell Wall Using Penicillin-Based Carbon Dots: Weapons Against Multi-Drug Resistant (MDR) Strains. <i>ChemistrySelect</i> , 2017, 2, 9277-9283.	1.5	43
12	Ciprofloxacin as chemosensor for simultaneous recognition of Al ³⁺ and Cu ²⁺ by Logic Gates supported fluorescence: Application to bio-imaging for living cells. <i>Sensors and Actuators B: Chemical</i> , 2017, 248, 447-459.	7.8	40
13	Visible light driven photo-degradation of Congo red by TiO ₂ ZnO/Ag: DFT approach on synergetic effect on band gap energy. <i>Chemosphere</i> , 2018, 213, 481-497.	8.2	39
14	Surface decoration of ZnO nanoparticles: A new strategy to fine tune the recognition properties of imine linked receptor. <i>Sensors and Actuators B: Chemical</i> , 2012, 166-167, 467-472.	7.8	34
15	Fluorescent organic nanoparticles (FONs) for the selective recognition of Zn ²⁺ : Applications to multi-vitamin formulations in aqueous medium. <i>Sensors and Actuators B: Chemical</i> , 2016, 223, 59-67.	7.8	33
16	Fluorescent organic nanoparticles (FONs) for selective recognition of Al ³⁺ : application to bio-imaging for bacterial sample. <i>RSC Advances</i> , 2016, 6, 37944-37952.	3.6	32
17	Tuning of the magnetic response in cobalt ferrite Co _x Fe _{3-x} O ₄ by varying the Fe ²⁺ to Co ²⁺ molar ratios: Rietveld refinement and DFT structural analysis. <i>Journal of Alloys and Compounds</i> , 2017, 695, 2706-2716.	5.5	32
18	Simultaneous recognition of cysteine and cytosine using thiophene-based organic nanoparticles decorated with Au NPs and bio-imaging of cells. <i>Photochemical and Photobiological Sciences</i> , 2019, 18, 1761-1772.	2.9	32

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19	Dissolution rates of jarosite-type compounds in H ₂ SO ₄ medium: A kinetic analysis and its importance on the recovery of metal values from hydrometallurgical wastes. <i>Hydrometallurgy</i> , 2017, 167, 16-29.	4.3	31
20	DFT studies of 1±-diimines adsorption over Fe _n surface (n=1, 4, 9 and 14) as a model for metal surface coating. <i>Chemical Physics Letters</i> , 2010, 485, 142-151.	2.6	30
21	Structure, spectra and redox behaviour of copper(II) complexes of bis(benzimidazolyl)diamine ligands. <i>Journal of the Chemical Society Dalton Transactions</i> , 1992, , 3377.	1.1	29
22	Synergistic Antibacterial Activity of Nanohybrid Materials ZnO@Ag and ZnO@Au: Synthesis, Characterization, and Comparative Analysis of Undoped and Doped ZnO Nanoparticles. <i>Australian Journal of Chemistry</i> , 2015, 68, 288.	0.9	28
23	Determination of the dissolution rate of hazardous jarosites in different conditions using the shrinking core kinetic model. <i>Journal of Hazardous Materials</i> , 2020, 386, 121664.	12.4	28
24	Kinetics and mechanism for the oxidation of anilines by ClO ₂ : a combined experimental and computational study. <i>Journal of Physical Organic Chemistry</i> , 2014, 27, 440-449.	1.9	25
25	Crystal phase induced band gap energy enhancing the photo-catalytic properties of Zn@Fe ₂ O ₄ /Au NPs: experimental and theoretical studies. <i>Catalysis Science and Technology</i> , 2019, 9, 3066-3080.	4.1	25
26	Pyridyl- and benzimidazole-based ruthenium(III) complex for selective chloride recognition through fluorescence spectroscopy. <i>Analytical Methods</i> , 2013, 5, 3880.	2.7	24
27	Novel insight of indium(III) complex of N, N'-bis(salicylidene)ethylenediamine as chemo-sensor for selective recognition of HSO ₄ ⁻ and hemolytic toxicity (Red Blood Cells) studies: Experimental and theoretical studies. <i>Sensors and Actuators B: Chemical</i> , 2019, 293, 357-365.	7.8	24
28	Kinetic modeling and experimental design of the sodium arsenojarsite decomposition in alkaline media: Implications. <i>Hydrometallurgy</i> , 2013, 137, 115-125.	4.3	23
29	Imine-linked chemosensors for the detection of Zn ²⁺ in biological samples. <i>RSC Advances</i> , 2014, 4, 9784.	3.6	23
30	Crystal plane directed interaction of TiO ₂ [100] with AgNPs [111] silver nanoparticles enhancing solar light induced photo-catalytic oxidation of ciprofloxacin: Experimental and theoretical studies. <i>Chemical Engineering Journal</i> , 2020, 394, 124286.	12.7	22
31	A ruthenium(III) complex derived from N, N'-bis(salicylidene)ethylenediamine as a chemosensor for the selective recognition of acetate and its interaction with cells for bio-imaging: experimental and theoretical studies. <i>New Journal of Chemistry</i> , 2017, 41, 10815-10827.	2.8	21
32	DFT analysis: Fe ₄ cluster and Fe(110) surface interaction studies with pyrrole, furan, thiophene, and selenophene molecules. <i>Structural Chemistry</i> , 2014, 25, 115-126.	2.0	20
33	Exploration of ruthenium complex of (E)-2-((pyridine-2-yl)methylamino) benzoic acid as chemosensor for simultaneous recognition of acetate and HSO ₄ ⁻ ions in cell bio-imaging: Experimental and theoretical studies. <i>Sensors and Actuators B: Chemical</i> , 2018, 270, 570-581.	7.8	20
34	Subtle H···Hal (Hal = Cl, Br) Bonding as Predominant Synthons in the Assembly of Supramolecular Architectures Based on Luminescent Tin(IV) Complexes. <i>Crystallography, Hirshfeld Surfaces, DFT Calculations, and Fluorescence. Crystal Growth and Design</i> , 2014, 14, 3742-3757.	3.0	19
35	Cu nanoparticles supported mesoporous polyaniline and its applications towards non-enzymatic sensing of glucose and electrocatalytic oxidation of methanol. <i>Journal of Polymer Research</i> , 2013, 20, 1.	2.4	18
36	A study on the dissolution rates of K-Cr(VI)-jarosites: kinetic analysis and implications. <i>Geochemical Transactions</i> , 2016, 17, 3.	0.7	18

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37	DFT and Experimental Studies of Perchlorate Ion Coordination in <i>cis</i> / <i>trans</i> -Copper(II) Complexes of Tetradentate Pyridyl Ligands. <i>European Journal of Inorganic Chemistry</i> , 2008, 2008, 3274-3285.	2.0	17
38	Organic-Inorganic Hybrid Nanoparticles for Bacterial Inhibition: Synthesis and Characterization of Doped and Undoped ONPs with Ag/Au NPs. <i>Molecules</i> , 2015, 20, 6002-6021.	3.8	16
39	Electrochemical and theoretical studies of the interactions of a pyridyl-based corrosion inhibitor with iron clusters (Fe ₁₅ , Fe ₃₀ , Fe ₄₅ , and Fe ₆₀). <i>Journal of Molecular Modeling</i> , 2017, 23, 342.	1.8	16
40	Mercaptoethanesulfonic acid (CoM imitator) interaction studies with nickel(II) complexes of pyridyl groups containing tetradentate ligands: Synthesis, structure, spectra and redox properties. <i>Inorganica Chimica Acta</i> , 2006, 359, 1-12.	2.4	13
41	Synthesis of imidazole-based NHC-Au(I) complexes and their application in non-enzymatic glucose sensing. <i>Journal of Applied Electrochemistry</i> , 2013, 43, 939-951.	2.9	13
42	Voltammetric Simultaneous Determination of Cu ²⁺ , Cd ²⁺ and Pb ²⁺ in Full Aqueous Medium Using Organic Nanoparticles of Disulfide Based Receptor. <i>Electroanalysis</i> , 2015, 27, 2544-2551.	2.9	13
43	The role of keto group in cyclic ligand 1,4,8,11-tetraazacyclotetradecane-5,7-dione as strong corrosion inhibitor for carbon steel surface: Experimental and theoretical studies. <i>Journal of Molecular Structure</i> , 2019, 1189, 131-145.	3.6	13
44	structure, spectra and redox behavior of pink-[Co(bbes) ₂](ClO ₄) ₂ and blue-[Co(bbes) ₂](ClO ₄) ₂ . <i>Inorganica Chimica Acta</i> , 2004, 357, 2570-2578.	2.4	12
45	Fluorescent organic nanoparticles (FONs) of imine-linked peptide for the detection of Cr ³⁺ in aqueous medium. <i>Sensors and Actuators B: Chemical</i> , 2015, 206, 90-97.	7.8	12
46	Why ionic liquids coated ZnO nanocomposites emerging as environmental remediate: Enhanced photo-oxidation of 4-nitroaniline and encouraged antibacterial behavior. <i>Journal of Molecular Liquids</i> , 2020, 319, 114107.	4.9	12
47	Synthesis, molecular structure and spectral analysis: DFT-TDDFT computational study of ruthenium complex of tetradentate N,N-bis(benzimidazole-2-yl-ethyl)-ethylenediamine. <i>Journal of Molecular Structure</i> , 2011, 989, 70-79.	3.6	11
48	How porous periodicity of mesoporous materials like TiO ₂ -SBA-15-10 encourages photocatalytic degradation of rhodamine B: a comparative study with aperiodic TiO ₂ -SiO ₂ -aerogel-10. <i>Journal of Nanoparticle Research</i> , 2021, 23, 1.	1.9	11
49	Mercaptoethanesulfonic acid studies with nickel(II) complexes of tetra- and hexadentate ligands containing pyridyl groups: synthesis, structure, spectra and redox behavior. <i>Inorganica Chimica Acta</i> , 2003, 343, 79-89.	2.4	10
50	Spectroscopic determination of poly-aromatic compounds in petroleum contaminated soils. <i>Water, Air, and Soil Pollution</i> , 2004, 158, 137-151.	2.4	10
51	Fe _n Clusters (n=7) Interaction with Furan Ring: DFT Studies over Iron Surface Suitability for Furan Adsorption. <i>Journal of Cluster Science</i> , 2011, 22, 459-471.	3.3	10
52	Corrosion inhibition studies of cigarette waste on the iron surface in acid medium: electrochemical and surface morphology analysis. <i>Anti-Corrosion Methods and Materials</i> , 2016, 63, 245-255.	1.5	10
53	ZnO-Fe ₃ O ₄ -Au Hybrid Composites for Thioanisole Oxidation Under Visible Light: Experimental and Theoretical Studies. <i>Journal of Cluster Science</i> , 2017, 28, 1897-1922.	3.3	10
54	Structural influence in the interaction of cysteine with five coordinated copper complexes: Theoretical and experimental studies. <i>Journal of Molecular Structure</i> , 2018, 1157, 660-671.	3.6	10

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55	Mechanosynthesis of Photochromic Oligophenyleneimines: Optical, Electrochemical and Theoretical Studies. <i>Molecules</i> , 2019, 24, 849.	3.8	9
56	Understanding of benzimidazole based ionic liquid as an efficient corrosion inhibitor for carbon steel: Experimental and theoretical studies. <i>Journal of Molecular Liquids</i> , 2022, 358, 119204.	4.9	9
57	Ruthenium(II) complexes containing benzimidazolic tripodal ligands. <i>Inorganica Chimica Acta</i> , 2015, 431, 258-265.	2.4	8
58	A new computational model for the prediction of toxicity of phosphonate derivatives using QSPR. <i>Molecular Diversity</i> , 2018, 22, 269-280.	3.9	8
59	Photochemical and antibacterial properties of ruthenium complex of N,N'-bis(benzimidazole-2-yl-ethyl)ethylenediamine under visible light: Experimental and theoretical studies. <i>Journal of Molecular Structure</i> , 2020, 1203, 127377.	3.6	8
60	Synthesis, structure, spectra and redox chemistry of mono- and dinuclear copper(II) complexes containing pyridyl groups. <i>Journal of Coordination Chemistry</i> , 2005, 58, 1087-1098.	2.2	7
61	Understanding of [RuL(ONO)] ⁿ⁺ acting as nitric oxide precursor, a theoretical study of ruthenium complexes of 1,4,8,11-tetraazacyclo-tetradecane having different substituents: How spin multiplicity influences bond angle and bond lengths (Ru-O-NO) in releasing of NO. <i>Journal of Inorganic Biochemistry</i> , 2021, 218, 111406.	3.5	7
62	Ruthenium complex of bis(benzimidazole-yl-ethyl)sulfide as chemo-sensor for selective recognition of chloride ion, and its application in real bacterial samples. <i>Inorganica Chimica Acta</i> , 2021, 522, 120354.	2.4	7
63	Rapid electrochemical recognition of trimethoprim in human urine samples using new modified electrodes (CPE/Ag/Au NPs) analysing tunable electrode properties: experimental and theoretical studies. <i>Analyst</i> , The, 2021, 146, 7653-7669.	3.5	6
64	Nanomolar Detection of Iodide in Aqueous Medium Using Organic-Inorganic Hybrid Nanoparticles: Application in Urine Analysis. <i>ChemPlusChem</i> , 2015, 80, 665-672.	2.8	5
65	Selective recognition of Cr ³⁺ in multivitamin formulations in aqueous medium by fluorescent organic-inorganic nanohybrids. <i>Research on Chemical Intermediates</i> , 2018, 44, 3179-3197.	2.7	5
66	Photochemical oxidation of chlorinated phenols in comparison with electro-oxidation. <i>Toxicological and Environmental Chemistry</i> , 2006, 88, 23-33.	1.2	4
67	Nanohybrid Chemosensor for the Simultaneous Detection of Fluoride and Iodide in Aqueous System and Its Utility in Real Samples. <i>Electroanalysis</i> , 2015, 27, 534-543.	2.9	4
68	Surface-decorated CdS nanoparticles for the recognition of K ⁺ in aqueous medium: DFT and antibacterial studies. <i>Research on Chemical Intermediates</i> , 2018, 44, 155-171.	2.7	4
69	Activation of Pt-O and Pt-H bonds: DFT studies on adsorption of [Gd(H ₂ O) _n] ³⁺ (n=8-9) with Pt _n (n=3-7) cluster. <i>Computational and Theoretical Chemistry</i> , 2014, 1047, 47-54.	2.5	3
70	Synthesis of Photochromic Oligophenyleneimines: Optical and Computational Studies. <i>Molecules</i> , 2015, 20, 5440-5455.	3.8	3
71	Theoretical and experimental studies of phenol oxidation by ruthenium complex with N,N,N'-tris(benzimidazol-2-yl-methyl)amine. <i>Journal of Molecular Modeling</i> , 2015, 21, 224.	1.8	3
72	A critical evaluation of [ML(ONO)] ⁺ (M=Fe, Ru, Os) as nitric oxide precursor influenced by spin multiplicity and geometrical parameters (M-O-NO and MO-N-O) for the NO release: A theoretical study. <i>Inorganica Chimica Acta</i> , 2021, 527, 120584.	2.4	2

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73	Phenol oxidation through its adduct formation with chromium complex of 1,4,8,11-tetrakis(2-pyridylmethyl)-1,4,8,11-tetraazacyclotetradecane: A theoretical study. <i>Journal of Molecular Structure</i> , 2017, 1133, 111-121.	3.6	0