

# Karuvanthodi Muraleedharan

## List of Publications by Year in descending order

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95  
papers

1,460  
citations

471509

17  
h-index

395702

33  
g-index

97  
all docs

97  
docs citations

97  
times ranked

1788  
citing authors

#	ARTICLE	IF	CITATIONS
1	Chitosan/nano ZnO composite films: Enhanced mechanical, antimicrobial and dielectric properties. <i>Arabian Journal of Chemistry</i> , 2018, 11, 120-127.	4.9	149
2	A computational investigation on the structure, global parameters and antioxidant capacity of a polyphenol, Gallic acid. <i>Food Chemistry</i> , 2017, 220, 93-99.	8.2	141
3	Flexible chitosan-nano ZnO antimicrobial pouches as a new material for extending the shelf life of raw meat. <i>International Journal of Biological Macromolecules</i> , 2017, 97, 382-391.	7.5	98
4	Applications of chitosan powder with in situ synthesized nano ZnO particles as an antimicrobial agent. <i>International Journal of Biological Macromolecules</i> , 2015, 77, 266-272.	7.5	89
5	Photocatalytic activity of ZnO and Sr <sup>2+</sup> doped ZnO nanoparticles. <i>Journal of Water Process Engineering</i> , 2017, 17, 264-270.	5.6	50
6	One-pot synthesis of poly vinyl alcohol (PVA) supported silver nanoparticles and its efficiency in catalytic reduction of methylene blue. <i>Transactions of Nonferrous Metals Society of China</i> , 2016, 26, 2693-2700.	4.2	42
7	The natural food colorant Peonidin from cranberries as a potential radical scavenger – A DFT based mechanistic analysis. <i>Food Chemistry</i> , 2018, 262, 184-190.	8.2	37
8	A DFT based analysis of adsorption of Hg <sup>2+</sup> ion on chitosan monomer and its citralidene and salicylidene derivatives: Prior to the removal of Hg toxicity. <i>International Journal of Biological Macromolecules</i> , 2017, 99, 549-554.	7.5	31
9	DFT and QTAIM based investigation on the structure and antioxidant behavior of lichen substances Atranorin, Evernic acid and Diffractaic acid. <i>Computational Biology and Chemistry</i> , 2019, 80, 66-78.	2.3	31
10	DFT studies on global parameters, antioxidant mechanism and molecular docking of amlodipine besylate. <i>Computational Biology and Chemistry</i> , 2019, 80, 46-53.	2.3	29
11	The pKa values of amine based solvents for CO <sub>2</sub> capture and its temperature dependence – An analysis by density functional theory. <i>International Journal of Greenhouse Gas Control</i> , 2017, 58, 62-70.	4.6	26
12	Thermal decomposition kinetics of 2-furaldehyde thiosemicarbazone complexes of cadmium(II) and mercury(II). <i>Thermochimica Acta</i> , 1989, 155, 247-253.	2.7	24
13	Thermal decomposition kinetics of potassium iodate. <i>Journal of Thermal Analysis and Calorimetry</i> , 2011, 103, 943-955.	3.6	23
14	Theoretical insights on flavanones as antioxidants and UV filters: A TDDFT and NLMO study. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2017, 170, 286-294.	3.8	23
15	Fluorescent carbon nanodots as efficient nitro aromatic sensor- analysis based on computational perspectives. <i>Sensors and Actuators A: Physical</i> , 2020, 302, 111817.	4.1	22
16	Effect of metal oxide additives on the thermal decomposition kinetics of potassium metaperiodate. <i>Journal of Thermal Analysis and Calorimetry</i> , 2010, 100, 177-181.	3.6	21
17	Kinetic Studies on the Thermal Dehydration and Degradation of Chitosan and Citralidene Chitosan. <i>Journal of Polymers and the Environment</i> , 2015, 23, 1-10.	5.0	21
18	Experimental and density functional theory studies on benzalkonium ibuprofenate, a double active pharmaceutical ingredient. <i>Computational Biology and Chemistry</i> , 2018, 72, 113-121.	2.3	21

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19	Kinetics of thermal decomposition of sulphate-doped potassium metaperiodate. <i>Thermochimica Acta</i> , 1990, 158, 259-266.	2.7	17
20	Green synthesis of pure and doped semiconductor nanoparticles of ZnS and CdS. <i>Transactions of Nonferrous Metals Society of China</i> , 2015, 25, 3265-3270.	4.2	17
21	A computational exploration into the structure, antioxidant capacity, toxicity and drug-like activity of the anthocyanidin "Petunidin" Heliyon, 2019, 5, e02115.	3.2	17
22	Synthesis, structural characterization, Hirshfeld surface and DFT based reactivity, UV filter and NLO studies of Schiff base analogue of 4-aminoantipyrine. <i>Results in Chemistry</i> , 2020, 2, 100062.	2.0	17
23	Kinetics of non-isothermal decomposition of polymeric complexes of N,N'-bis(dithiocarboxy)piperazine with iron(III) and cobalt(III). <i>Thermochimica Acta</i> , 1990, 159, 101-107.	2.7	16
24	DSC kinetics of the thermal decomposition of copper(II) oxalate by isoconversional and maximum rate (peak) methods. <i>Journal of Thermal Analysis and Calorimetry</i> , 2014, 115, 1969-1978.	3.6	16
25	Studies on the UV filtering and radical scavenging capacity of the bitter masking flavanone Eriodictyol. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2018, 185, 254-261.	3.8	16
26	Effects of dopants on the isothermal decomposition kinetics of potassium metaperiodate. <i>Thermochimica Acta</i> , 2000, 359, 161-168.	2.7	15
27	Synthesis, characterization and vanadium (V) sorption studies on some chitosan derivatives. <i>Journal of Water Process Engineering</i> , 2014, 4, 143-148.	5.6	15
28	Studies on the sorption capacity for Pb(II) and Hg(II) of citralidene chitosan. <i>Polymer Bulletin</i> , 2014, 71, 1919-1932.	3.3	14
29	Solvent Transport Characteristics of Thermoplastic Elastomer Blends Based on Nylon and NBR. <i>Polymer Engineering and Science</i> , 2017, 57, 231-236.	3.1	14
30	Thermal decomposition kinetics of polymeric complexes of nickel(II), zinc(II) and cadmium(II) with N,N'-bis(dithiocarboxy)piperazine. <i>Thermochimica Acta</i> , 1989, 140, 325-335.	2.7	13
31	Effect of pre-treatments on isothermal decomposition kinetics of potassium metaperiodate. <i>Thermochimica Acta</i> , 2010, 510, 160-167.	2.7	13
32	Exploration of the thermal decomposition of oxalates of copper and silver by experimental and computational methods. <i>Journal of Analytical and Applied Pyrolysis</i> , 2016, 120, 207-214.	5.5	13
33	Chitosan"green tea extract powder composite pouches for extending the shelf life of raw meat. <i>Polymer Bulletin</i> , 2017, 74, 3399-3419.	3.3	13
34	Thermal dehydration kinetics of potassium bis(oxalato)cuprate(II) dihydrate. <i>Journal of Analytical and Applied Pyrolysis</i> , 2014, 107, 298-305.	5.5	12
35	Density functional theory studies of Pb (II) interaction with chitosan and its derivatives. <i>International Journal of Biological Macromolecules</i> , 2015, 74, 483-488.	7.5	12
36	Kinetic parameters for non-isothermal decomposition of cobalt(II), nickel(II) and palladium(II) complexes with 2-furaldehyde thiosemicarbazone. <i>Reactivity of Solids</i> , 1990, 8, 91-102.	0.3	11

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37	Thermal decomposition of potassium metaperiodate doped with trivalent ions. <i>Thermochimica Acta</i> , 2010, 502, 24-29.	2.7	11
38	The effect of particle size on the thermal decomposition kinetics of potassium bromate. <i>Journal of Thermal Analysis and Calorimetry</i> , 2012, 108, 1171-1182.	3.6	11
39	Effect of addition of silver on the thermal decomposition kinetics of copper oxalate. <i>Journal of Thermal Analysis and Calorimetry</i> , 2016, 123, 643-651.	3.6	11
40	Thermal decomposition kinetics of zirconyl oxalate, zirconyl oxalic acid and ammonium zirconyl oxalate. <i>Thermochimica Acta</i> , 1991, 191, 105-113.	2.7	10
41	Effects of cashew leaf extract on physicochemical, antioxidant, and antimicrobial properties of N, O- $\alpha$ -Carboxymethyl chitosan films. <i>Carbohydrate Polymer Technologies and Applications</i> , 2022, 3, 100191.	2.6	10
42	Thermal decomposition kinetics of sodium metaperiodate. <i>Reaction Kinetics and Catalysis Letters</i> , 1989, 39, 339-344.	0.6	9
43	Thermal decomposition kinetics of thiophene-2-carboxaldehyde thiosemicarbazone complexes of nickel(II) and palladium(II). <i>Journal of Thermal Analysis</i> , 1991, 37, 791-801.	0.6	9
44	Thermal decomposition kinetics of potassium iodate. <i>Journal of Thermal Analysis and Calorimetry</i> , 2013, 114, 491-496.	3.6	9
45	Kinetic studies on the thermal decomposition of phosphate-doped sodium oxalate. <i>Journal of Thermal Analysis and Calorimetry</i> , 2013, 111, 137-144.	3.6	9
46	Virtual screening of molecular properties of chitosan and derivatives in search for druggable molecules. <i>International Journal of Biological Macromolecules</i> , 2015, 74, 392-396.	7.5	9
47	Effect of Ca(II) on the multistep kinetic behavior of thermally induced oxidative decomposition of cerium(III) oxalate to CeO <sub>2</sub> (IV). <i>Journal of Analytical and Applied Pyrolysis</i> , 2016, 120, 379-388.	5.5	9
48	Synthesis, Z-Scan and Degenerate Four Wave Mixing characterization of certain novel thiocoumarin derivatives for third order nonlinear optical applications. <i>Optical Materials</i> , 2016, 58, 171-182.	3.6	9
49	QSAR classification-based virtual screening followed by molecular docking studies for identification of potential inhibitors of 5-lipoxygenase. <i>Computational Biology and Chemistry</i> , 2018, 77, 154-166.	2.3	9
50	Quantum chemical investigation of the antiradical property of avenanthramides, oat phenolics. <i>Heliyon</i> , 2021, 7, e06125.	3.2	9
51	Phytochemicals as potential inhibitors for COVID-19 revealed by molecular docking, molecular dynamic simulation and DFT studies. <i>Structural Chemistry</i> , 2022, 33, 1423-1443.	2.0	9
52	Thermal degradation and optical properties of SiC-infused polystyrene nanocomposites. <i>Journal of Thermal Analysis and Calorimetry</i> , 2016, 126, 1809-1819.	3.6	8
53	Theoretical studies on anti-oxidant potential of alpinetin. <i>Materials Today: Proceedings</i> , 2018, 5, 8908-8915.	1.8	8
54	A non toxic natural food colorant and antioxidant $\alpha$ -Peonidin <sup>TM</sup> as a pH indicator: A TDDFT analysis. <i>Computational Biology and Chemistry</i> , 2018, 76, 202-209.	2.3	8

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55	Betti base and its modified phthalonitrile derivative for the turn on fluorimetric detection of Hg <sup>2+</sup> and Cr <sup>3+</sup> ions. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2019, 382, 111904.	3.9	8
56	Evaluation of kinetic parameters for the thermal decomposition of piperonaldehyde tfflosemicarbazone complexes of cobalt(II) and zinc(II) halides. <i>Thermochimica Acta</i> , 1989, 146, 149-159.	2.7	7
57	Thermal decomposition kinetics of potassium iodate. <i>Journal of Thermal Analysis and Calorimetry</i> , 2012, 109, 237-245.	3.6	7
58	Synthesis, characterization and thermal dehydration and degradation kinetics of chitosan Schiff bases of o-, m- and p-nitrobenzaldehyde. <i>Polymer Bulletin</i> , 2017, 74, 39-54.	3.3	7
59	QSAR modeling of benzoquinone derivatives as 5-lipoxygenase inhibitors. <i>Food Science and Human Wellness</i> , 2019, 8, 53-62.	4.9	7
60	Novel 4,4'-Fluoresceinoxy Bisphthalonitrile Showing Aggregation-Induced Enhanced Emission and Fluorescence Turn off Behavior to Fe <sup>3+</sup> Ions. <i>Journal of Fluorescence</i> , 2019, 29, 279-291.	2.5	7
61	Thermal decomposition kinetics of barium zirconyl oxalate. <i>Thermochimica Acta</i> , 1989, 144, 109-116.	2.7	6
62	A comparative study of the thermal decomposition kinetics of zirconyl oxalates of calcium and strontium. <i>Thermochimica Acta</i> , 1989, 146, 225-232.	2.7	6
63	Numerical data for the evaluation of kinetic parameters of solid state decompositions by the non-isothermal method. <i>Thermochimica Acta</i> , 1991, 186, 265-272.	2.7	6
64	Influence of trivalent ion dopants on the thermal decomposition kinetics of potassium bromate. <i>Thermochimica Acta</i> , 2011, 525, 150-160.	2.7	6
65	Effect of precompression on isothermal decomposition kinetics of pure and doped potassium bromate. <i>Journal of Thermal Analysis and Calorimetry</i> , 2011, 104, 991-997.	3.6	6
66	Kinetic study of the multistep thermal behaviour of barium titanyl oxalate prepared via chemical precipitation method. <i>Journal of Thermal Analysis and Calorimetry</i> , 2019, 136, 1295-1306.	3.6	6
67	Identification of flavanones from <i>Boesenbergia rotunda</i> as potential antioxidants and monoamine oxidase B inhibitors. <i>Chemical Papers</i> , 2017, 71, 2473-2483.	2.2	5
68	Effect of nano-transition metal oxides of Fe, Co and Ni and ferrites of Co and Ni on the multistage thermal decomposition of oxalates of Ce(III). <i>Journal of Thermal Analysis and Calorimetry</i> , 2019, 136, 549-563.	3.6	5
69	Exploration of the thermal decomposition of zinc oxalate by experimental and computational methods. <i>Journal of Thermal Analysis and Calorimetry</i> , 2020, 142, 1315-1327.	3.6	5
70	Kinetics of the thermal dehydration of potassium titanium oxalate, K <sub>2</sub> TiO(C <sub>2</sub> O <sub>4</sub> ) <sub>2</sub> ·2H <sub>2</sub> O. <i>Journal of Thermal Analysis and Calorimetry</i> , 2012, 109, 89-96.	3.6	4
71	Effect of pre-compression on the kinetics of thermal decomposition of pure and doped sodium oxalate under isothermal conditions. <i>Reaction Kinetics, Mechanisms and Catalysis</i> , 2012, 106, 355-367.	1.7	4
72	A ligand-based comparative molecular field analysis (CoMFA) and homology model based molecular docking studies on 3,4-dihydroxyflavones as rat 5-lipoxygenase inhibitors: Design of new inhibitors. <i>Computational Biology and Chemistry</i> , 2017, 71, 188-200.	2.3	4

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73	Kinetic modelling of formation of K + doped BaTiO <sub>3</sub> bones from barium titanate oxalate via multi stage thermal decomposition. <i>Materials Research Bulletin</i> , 2017, 94, 231-240.	5.2	4
74	Suzuki coupling derived indolocarbazole based macromolecule as a solid phase/solution phase sensor for Hg <sup>2+</sup> : Experimental and theoretical explorations. <i>European Polymer Journal</i> , 2019, 114, 287-297.	5.4	4
75	Thermal decomposition of potassium titanium oxalate. <i>Journal of the Serbian Chemical Society</i> , 2011, 76, 1015-1026.	0.8	3
76	Effect of semiconducting metal oxide additives on the kinetics of thermal decomposition of sodium oxalate under isothermal conditions. <i>Thermochimica Acta</i> , 2012, 534, 71-76.	2.7	3
77	Kinetic studies on the thermal decomposition of aluminium doped sodium oxalate under isothermal conditions. <i>Thermochimica Acta</i> , 2012, 534, 64-70.	2.7	3
78	Isothermal decomposition of K <sub>2</sub> C <sub>2</sub> O <sub>4</sub> . <i>Journal of Thermal Analysis and Calorimetry</i> , 2014, 116, 1055-1060.	3.6	3
79	A comparative study on the druggability of Schiff bases and dithiocarbamate derivatives of chitosan. <i>Polymer Bulletin</i> , 2016, 73, 2165-2177.	3.3	3
80	Effect of Ca(II) additive on the thermal dehydration kinetics of cerium oxalate rods. <i>Journal of Thermal Analysis and Calorimetry</i> , 2017, 128, 541-552.	3.6	3
81	Structural Evaluation and Toxicological Study of a Bitter Masking Bioactive Flavanone, Eriodictyol™, 2018, , 45-60.		3
82	Thermal decomposition kinetics of bis(thiophene-2-carboxaldehyde thiosemicarbazone) cobalt(II). <i>Reaction Kinetics and Catalysis Letters</i> , 1989, 39, 279-285.	0.6	2
83	Effect of Particle Size on Non-Isothermal Decomposition of Potassium Titanium Oxalate. <i>Zeitschrift Fur Physikalische Chemie</i> , 2011, 225, 169-181.	2.8	2
84	Effect of chloride dopant on the kinetics of the thermal decomposition of sodium oxalate. <i>Thermochimica Acta</i> , 2012, 537, 25-30.	2.7	2
85	Thermal dehydration and degradation kinetics of heptylidene chitosan. <i>Polymer Bulletin</i> , 2015, 72, 809-819.	3.3	2
86	Data on the UV filtering and radical scavenging capacity of the bitter masking flavanone Eriodictyol. <i>Data in Brief</i> , 2018, 20, 981-985.	1.0	2
87	Synthesis, evaluation of kinetic characteristics and investigation of apoptosis of Cu <sup>2+</sup> -modified ceria nano discs. <i>Journal of Rare Earths</i> , 2018, 36, 1050-1059.	4.8	2
88	Theoretical probing to the reactivity and biological effects of the phytochemical, coumestrol and its derivatives. <i>Chemical Physics Impact</i> , 2022, 4, 100080.	3.5	2
89	Effects of dopants on the isothermal decomposition kinetics of potassium metaperiodate. <i>Journal of the Serbian Chemical Society</i> , 2011, 76, 1129-1138.	0.8	1
90	The effect of pre-heating on the kinetics of the thermal decomposition of pure and chloride and phosphate doped sodium oxalate. <i>Thermochimica Acta</i> , 2013, 552, 10-14.	2.7	1

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91	Performance of knowledge-based biological models in higher dimensional chemical space. Chemometrics and Intelligent Laboratory Systems, 2016, 153, 58-66.	3.5	1
92	A cheminformatic study on chemical space characterization and diversity analysis of 5-LOX inhibitors. Journal of Molecular Graphics and Modelling, 2020, 100, 107699.	2.4	1
93	Biological Evaluation and Molecular Docking Studies of Benzalkonium Ibuprofenate. , 0, , .		0
94	Towards a systematic analysis of structure-activity relationships of 5-LOX inhibitors through activity landscape and chemotype enrichment. Chemometrics and Intelligent Laboratory Systems, 2020, 207, 104188.	3.5	0
95	Structure and non-covalent interactions of (E,Z)3-benzoyl-1,5-bis(4-ethoxyphenyl)formazan: A crystallographic and DFT/TD-DFT study. Journal of Molecular Structure, 2022, 1266, 133501.	3.6	0