

Ramaswamy Nagarajan

List of Publications by Year in descending order

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64
papers

1,515
citations

304743

22
h-index

330143

37
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66
all docs

66
docs citations

66
times ranked

1636
citing authors

#	ARTICLE	IF	CITATIONS
1	The Role of Template in the Enzymatic Synthesis of Conducting Polyaniline. <i>Journal of the American Chemical Society</i> , 1999, 121, 11345-11355.	13.7	227
2	Unraveling the mechanism of thermal and thermo-oxidative degradation of tannic acid. <i>Thermochimica Acta</i> , 2015, 605, 77-85.	2.7	138
3	A renewable waste material for the synthesis of a novel non-halogenated flame retardant polymer. <i>Journal of Cleaner Production</i> , 2011, 19, 454-458.	9.3	73
4	Fire resistant polyphenols based on chemical modification of bio-derived tannic acid. <i>Polymer Degradation and Stability</i> , 2018, 153, 227-243.	5.8	68
5	Intumescent flame-retardant cotton produced by tannic acid and sodium hydroxide. <i>Journal of Analytical and Applied Pyrolysis</i> , 2017, 126, 239-246.	5.5	67
6	Biocatalytically Synthesized Poly(3,4-ethylenedioxythiophene). <i>Macromolecules</i> , 2008, 41, 3049-3052.	4.8	66
7	Biomimetic Synthesis of Water-Soluble Conducting Copolymers/Homopolymers of Pyrrole and 3,4-Ethylenedioxythiophene. <i>Biomacromolecules</i> , 2006, 7, 586-589.	5.4	51
8	Antioxidant Activity of Synthetic Polymers of Phenolic Compounds. <i>Polymers</i> , 2020, 12, 1646.	4.5	51
9	Covalent functionalization of cellulose in cotton and a nylon-cotton blend with phytic acid for flame retardant properties. <i>Cellulose</i> , 2020, 27, 11-24.	4.9	44
10	Bio-Based Flame-Retardant Coatings Based on the Synergistic Combination of Tannic Acid and Phytic Acid for Nylon-Cotton Blends. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 61620-61628.	8.0	44
11	In Situ Polymerized Carboxylated Diacetylene as a Hole Conductor in Solid-State Dye-Sensitized Solar Cells. <i>Chemistry of Materials</i> , 2006, 18, 4215-4217.	6.7	43
12	Enzymatic Synthesis and Characterization of PolyQuercetin. <i>Journal of Macromolecular Science - Pure and Applied Chemistry</i> , 2010, 47, 1191-1196.	2.2	39
13	Micellar Nanoreactors for Hematin Catalyzed Synthesis of Electrically Conducting Polypyrrole. <i>Langmuir</i> , 2012, 28, 13380-13386.	3.5	36
14	Halogen-free ultra-high flame retardant polymers through enzyme catalysis. <i>Green Chemistry</i> , 2012, 14, 819.	9.0	35
15	A Review of Technologies for Characterization of Heavy Metal Contaminants. <i>Indian Geotechnical Journal</i> , 2017, 47, 421-436.	1.4	35
16	PEROXIDASE, HEMATIN, AND PEGYLATED-HEMATIN CATALYZED VINYL POLYMERIZATIONS IN WATER. <i>Journal of Macromolecular Science - Pure and Applied Chemistry</i> , 2001, 38, 1219-1230.	2.2	34
17	Synthesis of polypyrrole with fewer structural defects using enzyme catalysis. <i>Synthetic Metals</i> , 2011, 161, 1611-1617.	3.9	30
18	POLYMERIZATION OF WATER-SOLUBLE CONDUCTIVE POLYPHENOL USING HORSERADISH PEROXIDASE. <i>Journal of Macromolecular Science - Pure and Applied Chemistry</i> , 2001, 38, 1417-1426.	2.2	28

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19	VARIATION IN THE STRUCTURE OF CONDUCTING POLYANILINE WITH AND WITHOUT THE PRESENCE OF TEMPLATE DURING ENZYMATIC POLYMERIZATION: A SOLID-STATE NMR STUDY. <i>Journal of Macromolecular Science - Pure and Applied Chemistry</i> , 2002, 39, 1223-1240.	2.2	25
20	A stable biomimetic redoxcatalyst obtained by the enzyme catalyzed amidation of iron porphyrin. <i>Green Chemistry</i> , 2009, 11, 334-338.	9.0	24
21	A reinforced thermal barrier coat of a Na ⁺ -tannic acid complex from the view of thermal kinetics. <i>RSC Advances</i> , 2019, 9, 10914-10926.	3.6	24
22	ENZYMATIC SYNTHESIS OF MOLECULAR COMPLEXES OF POLYANILINE WITH DNA AND SYNTHETIC OLIGONUCLEOTIDES: THERMAL AND MORPHOLOGICAL CHARACTERIZATION. <i>Journal of Macromolecular Science - Pure and Applied Chemistry</i> , 2001, 38, 1519-1537.	2.2	23
23	NOVEL ENZYMATIC POLYETHYLENE OXIDE-POLYPHENOL SYSTEM FOR IONIC CONDUCTIVITY. <i>Journal of Macromolecular Science - Pure and Applied Chemistry</i> , 2002, 39, 1061-1068.	2.2	21
24	Detection of Explosive Vapors by Surface Acoustic Wave Sensors Containing Novel Siloxane Based Coatings. <i>Journal of Macromolecular Science - Pure and Applied Chemistry</i> , 2010, 47, 1172-1175.	2.2	21
25	Biomimetic Synthesis of Water Soluble Conductive Polypyrrole and Poly(3,4-ethylenedioxythiophene). <i>Journal of Macromolecular Science - Pure and Applied Chemistry</i> , 2003, 40, 1327-1333.	2.2	20
26	Thermally Stable Polymers of Cardanol as Char-Forming Additives for Polypropylene. <i>Journal of Renewable Materials</i> , 2013, 1, 289-301.	2.2	20
27	Soybean Peroxidase Catalyzed Enzymatic Synthesis of Pyrrole/EDOT Copolymers. <i>Macromolecular Chemistry and Physics</i> , 2010, 211, 1610-1617.	2.2	19
28	A Bio-derived Char Forming Flame Retardant Additive for Nylon 6 Based on Crosslinked Tannic Acid. <i>Thermochimica Acta</i> , 2020, 693, 178750.	2.7	16
29	ENZYMATICALLY SYNTHESIZED POLYANILINE IN THE PRESENCE OF A TEMPLATE POLY(VINYLPHOSPHONIC) Tj ETQq1 1 0.784314 rgB 2001, 38, 1315-1328.	2.2	15
30	Facile microwave assisted flame retardant treatment for cotton fabric using a biobased industrial byproduct: phytic acid. <i>Cellulose</i> , 2021, 28, 10655-10674.	4.9	15
31	Enzymatic Synthesis of Electrically Conducting Polymers. <i>ACS Symposium Series</i> , 2010, , 315-341.	0.5	14
32	Role of Temperature in Suppression of the Formation of Pummerer's Type Ketone in Enzymatic Polymerization of 4-Propylphenol: An in-Situ Variable Temperature ¹ H NMR Study. <i>Macromolecules</i> , 2004, 37, 2322-2324.	4.8	12
33	Biocatalytic Synthesis of Fluorescent Conjugated Indole Oligomers. <i>Bioengineering</i> , 2014, 1, 246-259.	3.5	12
34	Bioinspired flame retardant polymers of tyrosol. <i>Journal of Applied Polymer Science</i> , 2017, 134, 45394.	2.6	11
35	Identifying sustainable alternatives to dimethyl formamide for coating applications using Hansen Solubility Parameters. <i>Journal of Cleaner Production</i> , 2021, 322, 129011.	9.3	11
36	Investigation of QCM Sensors with Azobenzene Functionalized Coatings for the Detection of Nitroaromatics. <i>Journal of Macromolecular Science - Pure and Applied Chemistry</i> , 2011, 48, 1031-1037.	2.2	10

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37	Biocatalytic Modification of Naturally Occurring Iron Porphyrin. Journal of Macromolecular Science - Pure and Applied Chemistry, 2008, 45, 951-956.	2.2	9
38	Biocatalytic Synthesis of Multi-Block Copolymer Composed of Poly(tetrahydrofuran) and Poly(ethylene oxide). Journal of Macromolecular Science - Pure and Applied Chemistry, 2006, 43, 1975-1981.	2.2	8
39	Microwave-assisted synthesis and characterization of hydrophilically functionalized polygalacturonic acid. Carbohydrate Polymers, 2017, 155, 432-439.	10.2	8
40	Barrier properties and abrasion resistance of biopolymer-based coatings on biodegradable poly(lactic acid) Tj ETQq0 0,0,rgBT /Oyerglock 10 3,1	3.1	8
41	Unusual role of labile phenolics in imparting flame resistance to polyamide. Polymer Degradation and Stability, 2020, 175, 109103.	5.8	7
42	Enzymatic Template Synthesis of Polyphenol. Materials Research Society Symposia Proceedings, 1999, 600, 255.	0.1	6
43	CHEMOENZYMATIC FUNCTIONALIZATION OF RIBONUCLEIC ACID WITH AZOBENZENE CHROMOPHORES. Journal of Macromolecular Science - Pure and Applied Chemistry, 2001, 38, 1383-1392.	2.2	6
44	Enhancing detection of nitroaromatic vapors by utilizing polymer coatings on quartz crystal microbalances having strong dipoles. Sensors and Actuators B: Chemical, 2015, 216, 443-452.	7.8	5
45	Facile enzymatic preparation of fluorescent conjugated polymers of phenols and their application in sensing. Journal of Applied Polymer Science, 2018, 135, 46496.	2.6	5
46	Biocatalytic synthesis of novel electronic and photovoltaic materials. Pure and Applied Chemistry, 2005, 77, 263-272.	1.9	4
47	Biocatalytic Synthesis of Fluorescent Conjugated Polyserotonin. Journal of Renewable Materials, 2019, 7, 205-214.	2.2	4
48	Poly[bis-(p-toluene sulphonate) of 2,4-Hexadiyne-1,6-diol] Langmuir-Blodgett Thin Film Formation and Characterization. Journal of Macromolecular Science - Pure and Applied Chemistry, 2005, 42, 1555-1560.	2.2	3
49	Horseradish Peroxidase Catalyzed Synthesis of Polycardanol Microcapsules. Journal of Macromolecular Science - Pure and Applied Chemistry, 2011, 48, 1004-1008.	2.2	3
50	Patterning Flexible Substrates Using Surface Relief Structures in Azobenzene Functionalized Polymer Films. Journal of Macromolecular Science - Pure and Applied Chemistry, 2008, 45, 938-941.	2.2	2
51	Metalloporphyrin based Biomimetic Catalysts for Materials Synthesis and Biosensing. ACS Symposium Series, 2010, , 221-242.	0.5	2
52	Synthesis of Novel Halogen-Free Phenol Based Polymers and their utilization as Flame Retardant in Polypropylene system. Materials Research Society Symposia Proceedings, 2013, 1492, 161-166.	0.1	2
53	Undergraduate Modules for Bio-Based Plastics. Plastics Engineering, 2016, 72, 30-34.	0.0	2
54	Synthesis of Main-Chain Liquid-Crystalline Polyesters Containing Diphenyl Mesogens by Chemo-Enzymatic Route. Journal of Macromolecular Science - Pure and Applied Chemistry, 2006, 43, 1983-1990.	2.2	1

#	ARTICLE	IF	CITATIONS
55	Detection of Explosives using nanofibrous membranes. , 2008, , .		1
56	Detection of Cadmium using Conjugated Polymer Modified Electrodes. Materials Research Society Symposia Proceedings, 2012, 1436, 46.	0.1	1
57	Biocatalytic synthesis of unusually photoluminescent oligomers and electrically conducting polymers of 4-(3-pyrrolyl)butyric acid. Journal of Applied Polymer Science, 2014, 131, .	2.6	1
58	Novel Enzymatically Synthesized Substituted Polyaniline with High Conjugation and Conductivity. MRS Advances, 2018, 3, 1519-1524.	0.9	1
59	Biochemical Synthesis and Unusual Conformational Switching of a Molecular Complex of Polyaniline and DNA. Materials Research Society Symposia Proceedings, 1999, 600, 249.	0.1	0
60	Novel Chemoenzymatic Synthesis of Azobenzene Functionalized Ribonucleic Acid. Materials Research Society Symposia Proceedings, 2000, 660, 1.	0.1	0
61	Novel Chemoenzymatic Synthesis of Azobenzene Functionalized Ribonucleic Acid. Materials Research Society Symposia Proceedings, 2000, 660, .	0.1	0
62	Novel Templated Polyphenol for Ionic Conductivity. Materials Research Society Symposia Proceedings, 2001, 702, 1.	0.1	0
63	Biomimetic Synthesis of Water Soluble Conductive Polypyrrole and Poly (3,4 ethylenedioxythiophene).. Materials Research Society Symposia Proceedings, 2002, 736, 1.	0.1	0
64	Enzymatic and Biomimetic Approaches to the Synthesis of Electrically Conducting Polymers. , 2017, , 191-239.		0