Madhangi M

List of Publications by Year
in descending order

76 papers	1,303 citations	331670 21 h-index	395702 33 g-index
76 all docs	76 docs citations	76 times ranked	1127 citing authors

#	Article	IF	Citations
1	Synthesis, Growth, and Characterization ofl-Proline Cadmium Chloride Monohydrate (l-PCCM) Crystals:Â A New Nonlinear Optical Material. Crystal Growth and Design, 2007, 7, 183-186.	3.0	89
2	Natural dye extract of lawsonia inermis seed as photo sensitizer for titanium dioxide based dye sensitized solar cells. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2014, 128, 420-426.	3.9	86
3	Preparation and characterization of ZnO nanofibers by electrospinning. Crystal Research and Technology, 2006, 41, 446-449.	1.3	60
4	A new organic NLO material isonicotinamidium picrate (ISPA): crystal structure, structural modeling and its physico-chemical properties. RSC Advances, 2016, 6, 57977-57985.	3.6	54
5	Growth and characterization of new semiorganic nonlinear optical zinc guanidinium sulfate single crystal. Journal of Crystal Growth, 2009, 311, 2709-2713.	1.5	53
6	BIOSYNTHESIS AND CHARACTERIZATION OF GOLD NANOPARTICLES USING THE ALGA Kappaphycus alvarezii. International Journal of Nanoscience, 2010, 09, 511-516.	0.7	53
7	Studies on optical and mechanical properties of new organic NLO crystal: Guanidinium 4-aminobenzoate (GuAB). Materials Letters, 2011, 65, 2748-2750.	2.6	47
8	Conventional hydrothermal synthesis of titanate nanotubes: Systematic discussions on structural, optical, thermal and morphological properties. Modern Electronic Materials, 2017, 3, 174-178.	0.6	46
9	Hydrothermal synthesis and characterization of TiO 2 nanostructures prepared using different solvents. Materials Letters, 2018, 220, 20-23.	2.6	38
10	Synthesis, growth and characterization of organic nonlinear optical bis-glycine maleate (BGM) single crystals. Journal of Crystal Growth, 2010, 312, 1855-1859.	1.5	35
11	Growth and physical properties of a new crystal for NLO applications: Bisguanidinium hydrogen phosphate monohydrate (G2HP). Journal of Crystal Growth, 2013, 362, 130-134.	1.5	34
12	Systematic discussions on structural, optical, mechanical, electrical and its application to NLO devices of a novel semi-organic single crystal: Guanidinium tetrafluoroborate (GFB). Optics and Laser Technology, 2018, 105, 249-256.	4.6	34
13	Studies on growth, spectral and mechanical properties of new organic NLO crystal: Guanidinium 4-nitrobenzoate (GuNB). Journal of Crystal Growth, 2013, 362, 304-307.	1.5	33
14	Electronic structure, vibrational spectral and intervening orbital interactions studies of NLO material: Guanidinium 4-nitrobenzoate. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2015, 139, 555-572.	3.9	29
15	Crystal structure, molecular packing, FMO, NBO, nonlinear optical and optical limiting properties of an organic imidazolium diphenylacetate diphenylacetic acid single crystal. New Journal of Chemistry, 2018, 42, 2439-2449.	2.8	28
16	Synthesis, growth, optimization, bulk SR method growth, fabrication of indigenous optical element and anisotropic studies on guanidinium L-monohydrogen tartrate (GuHT) single crystal for nonlinear optical device applications. Journal of Crystal Growth, 2015, 412, 40-48.	1.5	27
17	Growth, spectral, anisotropic, second and third order nonlinear optical studies on potential nonlinear optical crystal anilinium perchlorate (AP) for NLO device fabrications. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2015, 134, 517-525.	3.9	27
18	Synthesis, growth, structural modeling and physio-chemical properties of a charge transfer molecule: Guanidinium tosylate. Optics and Laser Technology, 2018, 101, 127-137.	4.6	27

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19	Synthesis and characterization of CdS/TiO2 nanocomposite: Methylene blue adsorption and enhanced photocatalytic activities. Vacuum, 2019, 159, 476-481.	3.5	27
20	Synthesis, spectral analysis, optical and thermal properties of new organic NLO crystal: N,Nâ€²-Diphenylguanidinium Nitrate (DPGN). Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2014, 131, 17-21.	3.9	24
21	Green synthesis of Au and the impact of Au on the efficiency of TiO2 based dye sensitized solar cell. Materials Science for Energy Technologies, 2019, 2, 171-180.	1.8	24
22	Studies on growth, spectral, optical and mechanical properties of new organic NLO crystal: Guanidinium l-glutamate (GuGL). Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2012, 97, 741-745.	3.9	22
23	Growth and characterization of new semiorganic nonlinear optical single crystal L-Phenylalanine L-Phenylalaninium perchlorate (LPPAPC). Materials Letters, 2009, 63, 363-365.	2.6	21
24	Performance of Caesalpinia sappan heartwood extract as photo sensitizer for dye sensitized solar cells. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2015, 137, 345-350.	3.9	21
25	Growth, linear and nonlinear optical studies on guanidinium 4-nitrobenzoate (GuNB): An organic NLO material. Optik, 2012, 123, 1153-1156.	2.9	20
26	Second- and third-order optical studies of 4-Bromoanilinium hydrogen phthalate single crystal for nonlinear optical device applications. Applied Physics A: Materials Science and Processing, 2014, 115, 1139-1146.	2.3	19
27	Growth and characterizaion of urea p-nitrophenol crystal: an organic nonlinear optical material for optoelectronic device application. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	2.3	18
28	Experimental and theoretical investigations on N,Nâ€²-diphenylguanidinium dihydrogen phosphite â€“ A semi-organic nonlinear optical material. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2015, 138, 340-347.	3.9	16
29	Synthesis, spectral, optical and electric studies of N,Nâ€²-diphenylguanidinium hydrogen (+)-l-tartrate monohydrateâ€"A new organic NLO crystal. Optik, 2015, 126, 68-73.	2.9	16
30	Growth and characterization of tris allylthiourea mercuric chloride crystals. Crystal Research and Technology, 2006, 41, 771-774.	1.3	14
31	Pre dye treated titanium dioxide nano particles sensitized by natural dye extracts of Pterocarpus marsupium for dye sensitized solar cells. Optik, 2015, 126, 1027-1031.	2.9	14
32	Growth, spectral, optical and thermal characterization of new metallorganic crystalâ€"Bisthiourea nickel chloride. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2009, 74, 1005-1009.	3.9	13
33	Growth, spectroscopy properties and DFT based PCM calculations of guanidinium chlorochromate. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2013, 110, 255-261.	3.9	13
34	Crystal growth, thermal and optical studies on a metalorganic nonlinear optical material dipotassium boro maleate (DKBM). Materials Letters, 2010, 64, 1506-1509.	2.6	12
35	Self-assembled supramolecular synthons of 2,6 diaminopyridinium tosylate. Journal of Thermal Analysis and Calorimetry, 2016, 124, 871-879.	3.6	12
36	Synthesis and characterization of Znq2 and Znq2:CTAB particles for optical applications. Bulletin of Materials Science, 2017, 40, 1049-1053.	1.7	12

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37	Green synthesis of Ag and the effect of Ag on the efficiency of TiO2 based dye sensitized solar cell. Journal of Materials Science: Materials in Electronics, 2017, 28, 15423-15434.	2.2	12
38	Investigation on optical, thermal, mechanical, dielectric and ferroelectric properties of non linear optical single crystal guanidinium manganese sulphate. Journal of Materials Science: Materials in Electronics, 2018, 29, 12526-12535.	2.2	11
39	Growth and characterization of a novel organic nonlinear optical crystal guanidinium 4-hydroxybenzoate: Potential candidate for opto-electronic applications. Materials Letters, 2019, 241, 152-155.	2.6	10
40	Optimization of growth parameters and investigations on the physico-chemical properties of an organometallic guanidinium chromate single crystal for nonlinear optical and optical limiting applications. Optical Materials, 2020, 99, 109558.	3.6	10
41	Pre dye treated titanium dioxide nanoparticles synthesized by modified solâ€“gel method for efficient dye-sensitized solar cells. Applied Physics A: Materials Science and Processing, 2015, 119, 989-995.	2.3	9
42	Crystal structure, DFT and third order non-linear optical studies of an organic bisguanidinium isophthalate monohydrate single crystal. Journal of Molecular Structure, 2020, 1204, 127476.	3.6	9
43	Studies on the effect of nickel on growth, structural, optical, electrical, thermal and mechanical properties of l-valinium picrate. Optik, 2013, 124, 493-500.	2.9	8
44	A combined experimental and quantum chemical analysis to explore the nonlinear optical activity of guanidinium l -monohydrogen tartrate. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2015, 145, 417-424.	3.9	8
45	Influence of annealing temperature on structural, morphological and optical properties of CTAB assisted cadmium sulphide (CdS) quantum dots: promising candidate for quantum dot sensitized solar cell (QDSSC) applications. Journal of Materials Science: Materials in Electronics, 2017, 28, 11317-11324.	2.2	8
46	Oleic acid capped cadmium sulphide (CdS) quantum dots: Discussions on synthesis, structural, optical and morphological behavior. Materials Letters, 2018, 220, 277-280.	2.6	8
47	Synthesis, crystal growth, optical, thermal, and mechanical properties of a nonlinear optical single crystal: ammonium sulfate hydrogen sulphamate (ASHS). Applied Physics A: Materials Science and Processing, 2018, 124, 1.	2.3	8
48	Green synthesis of Au and Au@TiO2 coreâ€“shell structure formation by hydrothermal method for dye sensitized solar cell applications. Journal of Materials Science: Materials in Electronics, 2018, 29, 491-499.	2.2	8
49	Quantum chemical analysis on supramolecular assemblies of guanidinium tetrafluoroborate (GFB) crystal structure: Emission and NLO behavior. Journal of Molecular Structure, 2019, 1198, 126859.	3.6	8
50	GROWTH AND CHARACTERIZATION OF A NEW SEMI-ORGANIC NON-LINEAR OPTICAL CRYSTAL L-ARGININE HYDROCHLOROFLUORIDE MONOHYDRATE (LAHClF). Surface Review and Letters, 2006, 13, 803-808.	1.1	7
51	Synthesis and growth of sodium bitartrate monohydrate a new organometallic nonlinear optical single crystal. Current Applied Physics, 2009, 9, 1125-1128.	2.4	7
52	Effect of Co2+ on the growth and physical properties of potential nonlinear optical l-Asparaginium picrate crystal. Optik, 2013, 124, 2696-2700.	2.9	7
53	Enhanced photovoltaic behavior of dye sensitized solar cells fabricated using pre dye treated titanium dioxide nanoparticles. Journal of Materials Science: Materials in Electronics, 2016, 27, 146-153.	2.2	6
54	Effective chemical route for the synthesis of thiophenol stabilized cadmium sulphide (CdS) quantum dots: compact discussions on the structural, morphological, optical and dielectric properties. Journal of Materials Science: Materials in Electronics, 2018, 29, 2899-2906.	2.2	6

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55	Habitual growth and its influence on the properties of anilinium perchlorate (AP) single crystal for nonlinear optical device applications. Journal of Materials Science: Materials in Electronics, 2018, 29, 5718-5725.	2.2	4
56	Investigations on the growth, linear, nonlinear, dielectric tensor and thermal properties of an acidic molecule: diphenylacetic acid single crystal. Journal of Optics (India), 2018, 47, 28-34.	1.7	4
57	Unveiling photophysical-chemical properties of ethylenediamine ditartrate dihydrate acentric single crystal: a proficient material for nonlinear optical application. Journal of Materials Science: Materials in Electronics, 2019, 30, 11257-11268.	2.2	4
58	Physical and optical study of potassium-doped meta-Nitroaniline crystal (mNAK). Journal of Nonlinear Optical Physics and Materials, 2014, 23, 1450012.	1.8	3
59	Corrigendum to â€œNatural dye extract of lawsonia inermis seed as photo sensitizer for titanium dioxide based dye sensitized solar cellsâ€•[Spectrochim. Acta A Mol. Biomol. Spectrosc. 128 (2014) 420â€“426]. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2015, 143, 324.	3.9	3
60	Synthesis, structural, optical and thermal studies on 3,5-diethyl-2, 6-di (4-methoxyphenyl)-4-oxopiperidinium chloride. Journal of Molecular Structure, 2016, 1123, 238-244.	3.6	3
61	Development of optical element on bulk bisguanidinium hydrogen phosphate monohydrate single crystal for nonlinear optical device applications. Journal of Optics (India), 2017, 46, 368-374.	1.7	3
62	Growth, piezoelectric study and particle size dependent SHG of an 80â€...mm long SR grown imidazolium l-tartrate single crystals. AIP Conference Proceedings, 2018, , .	0.4	3
63	Synthesis, structural, optical and thermal studies on 3, 5-diethyl-2, 6-di (4-fluorophenyl)-4-oxopiperidinium chloride. Journal of Molecular Structure, 2017, 1129, 32-36.	3.6	2
64	Synthesis, growth, frontier molecular orbitals, fracture mechanics and nonlinear optical studies of l-serine methyl ester hydrochloride single crystal. Journal of Optics (India), 2018, 47, 374-379.	1.7	2
65	Crystalline perfection, optical and piezoelectric properties of a novel semi-organic single crystal: Zinc guanidinium sulphate. AIP Conference Proceedings, 2018, , .	0.4	2
66	GROWTH AND CHARACTERIZATION OF NEW NONLINEAR OPTICAL SINGLE CRYSTALS OF 3-AMINOPHENOL ORTHOPHOSPHORIC ACID (3-AMPHPH). Modern Physics Letters B, 2012, 26, 1150038.	1.9	1
67	Electronic, nonlinear optical and optical limiting properties of 2-amino-3-propanoic 4-methylbenzenesulfonate (2A3PMS) single crystal. AIP Conference Proceedings, 2019, , .	0.4	1
68	Growth, optimized molecular geometry, natural bonding orbitals and dielectric studies of imidazolium diphenylacetate diphenylacetic acid single crystal. AIP Conference Proceedings, 2018, , .	0.4	0
69	Investigation on optical and mechanical properties of an organic single crystal: Guanidinium 4-aminobenzene sulfonate. AIP Conference Proceedings, 2019, , .	0.4	0
70	Crystal growth, optical and orbital molecular study of a promising semi-organic nonlinear optical material: L-histidinium tetrafluroborate (LHTF). AIP Conference Proceedings, 2019, , .	0.4	0
71	Growth, optimized molecular geometry, natural bonding orbitals and electronic study of organic single crystal: Iminomethanediamine tosylate. AIP Conference Proceedings, 2019, , .	0.4	0
72	Discussion on growth, emission and piezoelectric properties of zinc guanidinium phosphate single crystal: a potential candidate for transducer and LED applications. Bulletin of Materials Science, 2019, 42, 1.	1.7	0

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73	Enhanced morphology of l-histidinium 4-methylbenzene sulfonate via recrystallization and study on its physio-chemical properties. Journal of Materials Science: Materials in Electronics, 2020, 31, 5635-5646.	2.2	0
74	Discussion on spectral, electrical and third-order nonlinear optical susceptibility of semi-organic tris(cyclohexylammonium) tris(o-chlorobenzoate) dihydrate single crystal. Journal of Materials Science: Materials in Electronics, 2021, 32, 141-150.	2.2	0
75	Quantitative and qualitative analysis on a dielectric material: Guanidine chromate single crystal for the fabrication of photonic applications. AIP Conference Proceedings, 2020, , .	0.4	0
76	Electronic, nonlinear optical and optical limiting properties of 2-amino-3-(1H-imidazole-4-yl) propanoic tetrafluoroborate (2A3PT) single crystal. AIP Conference Proceedings, 2020, , .	0.4	0