Sai Santosh Kumar Raavi

List of Publications by Year
in descending order

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Version: 2024-02-01

90 papers	2,525 citations	279798 23 h-index	197818 49 g-index
92 all docs	92 docs citations	92 times ranked	3847 citing authors

#	Article	IF	Citations
1	Enhanced electrical and photocatalytic activities in Na0.5Bi0.5TiO3 through structural modulation by using anatase and rutile phases of TiO2. Journal of Materiomics, 2022, 8, 18-29.	5.7	11
2	Controlled Modulation of the Structure and Luminescence Properties of Zero-Dimensional Manganese Halide Hybrids through Structure-Directing Metal-Ion (Cd²⁺ and) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 697 Td		15
3	Femtosecond excited-state dynamics and ultrafast nonlinear optical investigations of ethynylthiophene functionalized porphyrin. Optical Materials, 2022, 127, 112232.	3.6	13
4	Nonlinear optical techniques for characterization of organic electronic and photonic devices. European Physical Journal: Special Topics, 2022, 231, 695-711.	2.6	8
5	Structural, impedance, and photoluminescence properties of Ho3+ substituted Na0Â·5Bi0Â·5TiO3. Physica B: Condensed Matter, 2022, 639, 413926.	2.7	6
6	Ultrafast intramolecular charge transfer dynamics and nonlinear optical properties of phenothiazine-based pushâ€“pull zinc porphyrin. Journal of Photochemistry and Photobiology A: Chemistry, 2022, 433, 114141.	3.9	12
7	Comparative photophysical and femtosecond third-order nonlinear optical properties of novel imidazole substituted metal phthalocyanines. Dyes and Pigments, 2021, 184, 108791.	3.7	31
8	Vacancies induced enhancement in neodymium doped titania photoanodes based sensitized solar cells and photo-electrochemical cells. Solar Energy Materials and Solar Cells, 2021, 220, 110843.	6.2	24
9	The metal halide structure and the extent of distortion control the photo-physical properties of luminescent zero dimensional organic-antimony(<scp>iii</scp>) halide hybrids. Journal of Materials Chemistry C, 2021, 9, 348-358.	5.5	42
10	Femtosecond transient absorption studies of two novel energetic tetrazole derivatives. Chemical Physics Impact, 2021, 2, 100016.	3.5	0
11	Optimization of thermally evaporated small molecule ternary organic solar cells. , 2021, , .		1
12	Ultrafast Excited State Relaxation Dynamics of New Fuchsineâ€•a Triphenylmethane Derivative Dye. ChemPhysChem, 2021, 22, 2562-2572.	2.1	9
13	Annealing induced control of trap-assisted recombination in vacuum-deposited small-molecule solar cells. Materials Letters, 2021, 300, 130159.	2.6	3
14	Er3+ doped titania photoanode for enhanced performance of photo-electrochemical water splitting devices. Materials Letters, 2021, 302, 130297.	2.6	13
15	Lead-free zero dimensional tellurium(<scp>iv</scp>) chloride-organic hybrid with strong room temperature emission as a luminescent material. Journal of Materials Chemistry C, 2021, 9, 4351-4358.	5.5	25
16	Samarium-doped TiO2 photoanodes for the molecular devices for solar energy conversion. , 2021, , .		2
17	Effect of electrical poling on the structural, dielectric and photoluminescence properties of small concentration of Ho+3 substituted NBT. Journal of Physics: Conference Series, 2021, 2070, 012016.	0.4	0
18	Femtosecond nonlinear optical properties of -conjugated diketopyrrolopyrrole substituted porphyrin molecules. , 2021, , .		0

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19	Enhanced broadband emission of co-doped (Nd-Er)TiO2. , 2021, , .		1
20	Femtosecond Excited State Dynamics of Phenanthroimidazole Derivative Molecules Through Excited State Intramolecular Proton Transfer. , 2021, , .		0
21	Ultrafast electron injection kinetics and effect of plasmonic silver nanoparticle at organic dye-TiO2Âinterface. Asian Journal of Physics, 2021, 30, 933.	0.2	2
22	Synergistic electronic coupling/cross-talk between the isolated metal halide units of zero dimensional heterometallic (Sb, Mn) halide hybrid with enhanced emission. Journal of Materials Chemistry C, 2021, 10, 360-370.	5.5	8
23	A simple Dâ€“Ï€â€“A system of phenanthroimidazole-Ï€-fluorenone for highly efficient non-doped bipolar AIE luminogens: synthesis, and molecular optical, thermal and electrochemical properties. New Journal of Chemistry, 2020, 44, 1785-1794.	2.8	11
24	Ligand Structure Directed Dimensionality Reduction (2D â†'1D) in Lead Bromide Perovskite. Journal of Physical Chemistry C, 2020, 124, 1888-1897.	3.1	11
25	Multistep Electron Injection Dynamics and Optical Nonlinearity Investigations of Ï€-Extended Thioalkyl-Substituted Tetrathiafulvalene Sensitizers. Journal of Physical Chemistry C, 2020, 124, 24039-24051.	3.1	21
26	Ultrafast photophysical and nonlinear optical properties of novel free base and axially substituted phosphorus (V) corroles. Journal of Molecular Liquids, 2020, 311, 113308.	4.9	23
27	Ultrafast nonlinear optical properties and excited-state dynamics of Soret-band excited D-Ï€-D porphyrins. Optical Materials, 2020, 107, 110041.	3.6	27
28	A photoanode with plasmonic nanoparticles of earth abundant bismuth for photoelectrochemical reactions. Nanoscale Advances, 2020, 2, 5591-5599.	4.6	15
29	Ultrafast Photophysical Investigations of water-soluble triphenylmethane derivative (New Fuchsin) molecule. , 2020, , .		0
30	Enhanced Broadband Emission in Novel Phenanthroimidazole Derivative Molecules via Excited State Intramolecular Proton Transfer. , 2020, , .		1
31	Plasmon Induced Ultrafast Excited State Interfacial Electron Dynamics of Tetrathiafulvalene Sensitizers. , 2020, , .		0
32	Femtosecond Transient Absorption Spectroscopy Studies of Ethynylthiophene Functionalized Porphyrin. , 2020, , .		0
33	Ultrafast excited state dynamics and femtosecond nonlinear optical properties of laser fabricated Au and Ag50Au50 nanoparticles. Optical Materials, 2019, 95, 109239.	3.6	19
34	Low cost â€˜greenâ€™ dye sensitized solar cells based on New Fuchsin dye with aqueous electrolyte and platinum-free counter electrodes. Solar Energy, 2019, 188, 913-923.	6.1	21
35	Linear and femtosecond nonlinear optical properties of soluble pyrrolo[1,2-a] quinoxalines. Chemical Physics Letters, 2019, 730, 638-642.	2.6	13
36	Control over relaxor, piezo-photocatalytic and energy storage properties in Na0.5Bi0.5TiO3 via processing methodologies. Journal of Alloys and Compounds, 2019, 798, 540-552.	5.5	43

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37	Luminescent zinc(<scp>ii</scp>) selone macrocyclic ring. RSC Advances, 2019, 9, 14841-14848.	3.6	5
38	Quantum Dot Donorâ€“Polymer Acceptor Architecture for a FRET-Enabled Solar Cell. ACS Applied Materials & Interfaces, 2019, 11, 18395-18403.	8.0	7
39	Particle size dependent properties of Na0.5Bi0.5TiO3 synthesized using hydrothermal technique. AIP Conference Proceedings, 2019, , .	0.4	0
40	Synthesis, Optical, Electrochemical, DFT Studies, NLO Properties, and Ultrafast Excited State Dynamics of Carbazole-Induced Phthalocyanine Derivatives. Journal of Physical Chemistry C, 2019, 123, 11118-11133.	3.1	70
41	Optoelectronic, femtosecond nonlinear optical properties and excited state dynamics of a triphenyl imidazole induced phthalocyanine derivative. RSC Advances, 2019, 9, 36726-36741.	3.6	29
42	Femtosecond Transient Absorption and Nonlinear Optical Studies of a Novel Zinc Phthalocyanine. , 2019, , .		0
43	Enhanced Electrocaloric Effect and Energy Storage Density of Ndâ€Substituted 0.92NBTâ€0.08BT Lead Free Ceramic. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700915.	1.8	40
44	Multifunctional Nd³⁺ substituted Na_{0.5}Bi_{0.5}TiO₃ as lead-free ceramics with enhanced luminescence, ferroelectric and energy harvesting properties. RSC Advances, 2018, 8, 15282-15289.	3.6	35
45	A lead free 0.96(Na0.5Bi0.49Nd0.01TiO3) -0.04BaTiO3 piezoceramic for possible optoelectronic device applications. AIP Conference Proceedings, 2018, , .	0.4	0
46	Correlation between structural, ferroelectric and luminescence properties through compositional dependence of Nd3+ ion in lead free Na0.5Bi0.5TiO3. Journal of Alloys and Compounds, 2018, 732, 233-239.	5.5	23
47	Improved ferroelectric and photoluminescence properties in Pr3+ substituted Na0.5Bi0.5TiO3 synthesized using hydrothermal route. AIP Conference Proceedings, 2018, , .	0.4	0
48	Improved electrical and photoluminescence properties in Nd substitution of 0.94(Na0.5Bi0.5TiO3)-0.06BaTiO3 lead free multi-functional ceramics. Advanced Materials Letters, 2018, 9, 656-659.	0.6	4
49	The effect on electrical and luminescent properties in nanocrystalline Na0.5Bi0.5â^'xNdxTiO3. Materials Research Express, 2017, 4, 095019.	1.6	3
50	Enhancement in electrical and optical properties by substitution of lanthanides (Nd3+ and Eu3+) in lead free Na0.5Bi0.5 TiO3 ceramics. Ferroelectrics, 2017, 518, 23-30.	0.6	9
51	Femtosecond to Microsecond Dynamics of Soret-Band Excited Corroles. Journal of Physical Chemistry C, 2015, 119, 28691-28700.	3.1	27
52	Small-Size Effects on Electron Transfer in P3HT/InP Quantum Dots. Journal of Physical Chemistry C, 2015, 119, 26783-26792.	3.1	10
53	Femtosecond to nanosecond excited states dynamics of novel Corroles. , 2014, , .		0
54	Photoactive Molecular Junctions Based on Self-Assembled Monolayers of Indoline Dyes. ACS Applied Materials & Interfaces, 2014, 6, 19774-19782.	8.0	5

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55	Focus issue introduction: Renewable energy and the environment 2013. Optics Express, 2014, 22, A561.	3.4	0
56	Triple bulk heterojunctions as means for recovering the microstructure of photoactive layers in organic solar cell devices. Solar Energy Materials and Solar Cells, 2014, 120, 37-47.	6.2	14
57	Impact of Molecular Charge-Transfer States on Photocurrent Generation in Solid State Dye-Sensitized Solar Cells Employing Low-Band-Gap Dyes. Journal of Physical Chemistry C, 2014, 118, 16825-16830.	3.1	13
58	Ultrafast charge photogeneration in low band-gap semiconducting polymer based solid-state dye sensitized solar cell (sDSC). , 2014, , .		0
59	Panchromatic â€œDye-Dopedâ€•Polymer Solar Cells: From Femtosecond Energy Relays to Enhanced Photo-Response. Journal of Physical Chemistry Letters, 2013, 4, 442-447.	4.6	14
60	Ultrafast Energy Transfer in Ultrathin Organic Donor/Acceptor Blend. Scientific Reports, 2013, 3, 2073.	3.3	39
61	Effect of polymer morphology on P3HT-based solid-state dye sensitized solar cells: an ultrafast spectroscopic investigation. Optics Express, 2013, 21, A469.	3.4	17
62	Semiconducting organic polymers as hole-transport layer in solid-state dye sensitized solar cells: comprehensive insights from femtosecond transient spectroscopy and device optimization. , 2012, , .		0
63	Transient absorption spectroscopic techniques for organic photovoltaics: tracking the photogenerated charges. , 2012, , .		0
64	The effect of selective interactions at the interface of polymerâ€“oxide hybrid solar cells. Energy and Environmental Science, 2012, 5, 9068.	30.8	42
65	Boosting Infrared Light Harvesting by Molecular Functionalization of Metal Oxide/Polymer Interfaces in Efficient Hybrid Solar Cells. Advanced Functional Materials, 2012, 22, 2160-2166.	14.9	49
66	On the role of semiconducting polymer as hole-transport layer in solid-state dye sensitized solar cells. , 2012, , .		0
67	Ultrafast Dynamics of Exciton Fission in Polycrystalline Pentacene. Journal of the American Chemical Society, 2011, 133, 11830-11833.	13.7	394
68	Plasmonic Dye-Sensitized Solar Cells Using Coreâ^'Shell Metalâ^'Insulator Nanoparticles. Nano Letters, 2011, 11, 438-445.	9.1	550
69	Primary photo-events in a metastable photomerocyanine of spirooxazines. Optical Materials Express, 2011, 1, 293.	3.0	25
70	Influence of Ion Induced Local Coulomb Field and Polarity on Charge Generation and Efficiency in Poly(3â€Hexylthiophene)â€Based Solidâ€State Dyeâ€Sensitized Solar Cells. Advanced Functional Materials, 2011, 21, 2571-2579.	14.9	68
71	Spectroscopic techniques to probe the charge generation and recombination in solid-state dye sensitized solar cells. , 2011, , .		1
72	Improved performances in annealed P3HT-based dye sensitized solar cells (DSSC): a detailed morphological and spectroscopic investigation. , 2011, , .		0

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73	The structural evolution of photochromic reaction in Spirooxazine traced with sub-40fs transient absorption spectroscopy. , 2010, , .		0
74	Optical studies of two dimensional gratings in fused silica, GE 124, and Foturanâ„¢ glasses fabricated using femtosecond laser pulses. Optics Communications, 2009, 282, 4537-4542.	2.1	16
75	Ultrafast nonlinear optical properties of alkyl phthalocyanines investigated using degenerate four-wave mixing technique. Optical Materials, 2009, 31, 1042-1047.	3.6	45
76	Femtosecond laser direct writing of gratings and waveguides in high quantum efficiency erbium-doped Baccarat glass. Journal Physics D: Applied Physics, 2009, 42, 205106.	2.8	24
77	Fabrication and optoelectronic characterisation of ZnO photonic structures. Materials Letters, 2008, 62, 1183-1186.	2.6	31
78	Linear and Nonlinear Optical Properties of Mesoionic Oxyallyl Derivatives: Enhanced Non-Resonant Third Order Optical Nonlinearity in Croconate Dyes. Journal of Physical Chemistry C, 2008, 112, 13272-13280.	3.1	35
79	Control of the polarization properties of the supercontinuum generation in a noncentrosymmetric crystal. Optics Letters, 2008, 33, 1198.	3.3	10
80	Four wave mixing at air-dielectric interfaces with a femtosecond laser excitation. Optics Express, 2008, 16, 18034.	3.4	0
81	Inscription and characterization of micro-structures in silicate, Foturan and tellurite glasses by femtosecond laser direct writing. Proceedings of SPIE, 2008, , .	0.8	1
82	Depolarization properties of the femtosecond supercontinuum generated in condensed media. Physical Review A, 2008, 78, .	2.5	13
83	Micro-Raman mapping of micro-gratings in Baccarat glass directly written using femtosecond laser. Proceedings of SPIE, 2008, , .	0.8	3
84	Nonlinear optical properties of alkyl phthalocyanines in the femtosecond, nanosecond, and cw excitation regimes. Proceedings of SPIE, 2008, , .	0.8	16
85	Femtosecond and nanosecond nonlinear optical properties of alkyl phthalocyanines studied using Z-scan technique. Chemical Physics Letters, 2007, 447, 274-278.	2.6	167
86	Second harmonic generation and crystal growth of new chalcone derivatives. Journal of Crystal Growth, 2007, 303, 520-524.	1.5	97
87	Broadband supercontinuum generation in a single potassium di-hydrogen phosphate (KDP) crystal achieved in tandem with sum frequency generation. Applied Physics B: Lasers and Optics, 2007, 86, 615-621.	2.2	27
88	Nonlinear absorption and scattering properties of cadmium sulphide nanocrystals with its application as a potential optical limiter. Journal of Applied Physics, 2006, 100, 074309.	2.5	73
89	Nonlinear Optical Absorption and Switching Properties of Gold Nanoparticle Doped SiO₂â€“TiO₂ Solâ€“Gel Films. Journal of Nanoscience and Nanotechnology, 2006, 6, 1990-1994.	0.9	34
90	Femtosecond Third-Order Non-Linear Optical Properties of Unconstrained Green Fluorescence Protein Chromophores. Frontiers in Physics, 0, 10, .	2.1	7