Atul D Sontakke

List of Publications by Year
in descending order

52 papers	1,359 citations	279798 23 h-index	345221 36 g-index
52 all docs	52 docs citations	52 times ranked	1438 citing authors

#	Article	IF	Citations
1	Concentration-dependent luminescence of Tb3+ ions in high calcium aluminosilicate glasses. Journal of Luminescence, 2009, 129, 1347-1355.	3.1	123
2	Near-infrared multi-wavelengths long persistent luminescence of Nd3+ ion through persistent energy transfer in Ce3+, Cr3+ co-doped Y3Al2Ga3O12 for the first and second bio-imaging windows. Applied Physics Letters, 2015, 107, .	3.3	87
3	Luminescence Properties of Dual Valence Eu Doped Nano-crystalline BaF2 Embedded Glass-ceramics and Observation of Eu2+ âť’ Eu3+ Energy Transfer. Journal of Fluorescence, 2012, 22, 745-752.	2.5	73
4	Concentration quenched luminescence and energy transfer analysis of Nd3+ ion doped Ba-Al-metaphosphate laser glasses. Applied Physics B: Lasers and Optics, 2010, 101, 235-244.	2.2	59
5	Enhanced Blue Emission from Transparent Oxyfluoride Glassâ€“Ceramics Containing Pr³⁺:BaF₂Nanocrystals. Journal of the American Ceramic Society, 2010, 93, 1010-1017.	3.8	59
6	Effect of synthesis conditions on Ce3+ luminescence in borate glasses. Journal of Non-Crystalline Solids, 2016, 431, 150-153.	3.1	55
7	Influence of bismuth on structural, elastic and spectroscopic properties of Nd3+ doped Zincâ€“Boro-Bismuthate glasses. Journal of Luminescence, 2014, 149, 163-169.	3.1	52
8	A Comparison on Ce³⁺ Luminescence in Borate Glass and YAG Ceramic: Understanding the Role of Hostâ€™s Characteristics. Journal of Physical Chemistry C, 2016, 120, 17683-17691.	3.1	51
9	Sensitized red luminescence from Bi3+ co-doped Eu3+: ZnOâ€“B2O3 glasses. Physica B: Condensed Matter, 2009, 404, 3525-3529.	2.7	48
10	Unraveling the Eu²⁺ âť’ Mn²⁺ Energy Transfer Mechanism in w-LED Phosphors. Journal of Physical Chemistry C, 2020, 124, 13902-13911.	3.1	45
11	Study on Tb3+ containing high silica and low silica calcium aluminate glasses: Impact of optical basicity. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2012, 94, 180-185.	3.9	43
12	Enhanced 2Î¼m broad-band emission and NIR to visible frequency up-conversion from Ho3+/Yb3+ co-doped Bi2O3â€“GeO2â€“ZnO glasses. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2013, 112, 301-308.	3.9	40
13	Persistent Luminescence of ZnGa₂O₄:Cr³⁺ Transparent Glass Ceramics: Effects of Excitation Wavelength and Excitation Power. European Journal of Inorganic Chemistry, 2017, 2017, 5114-5120.	2.0	40
14	Spectroscopic properties and concentration effects on luminescence behavior ofÂNd3+ doped Zincâ€“Boroâ€“Bismuthate glasses. Materials Chemistry and Physics, 2013, 137, 916-921.	4.0	38
15	Broadband Er^3+ emission in highly nonlinear Bismuth modified Zinc-Borate glasses. Optical Materials Express, 2011, 1, 344.	3.0	37
16	Role of electron transfer in Ce3+ sensitized Yb3+ luminescence in borate glass. Journal of Applied Physics, 2015, 117, .	2.5	37
17	Efficient non-resonant energy transfer in Nd^3+-Yb^3+ codoped Ba-Al-metaphosphate glasses. Journal of the Optical Society of America B: Optical Physics, 2010, 27, 2750.	2.1	35
18	Persistent energy transfer in ZGO:Cr³⁺,Yb³⁺: a new strategy to design nano glass-ceramics featuring deep red and near infrared persistent luminescence. Physical Chemistry Chemical Physics, 2019, 21, 19458-19468.	2.8	34

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19	Synthesis and Structural Probing of <scp><scp>Eu³⁺</scp></scp> Doped <scp><scp>BaYF₅</scp></scp> Nanoâ€Crystals in Transparent Oxyfluoride Glassâ€Ceramics. International Journal of Applied Glass Science, 2012, 3, 154-162.	2.0	26
20	Near-infrared frequency down-conversion and cross-relaxation in Eu2+/Eu3+â€“Yb3+ doped transparent oxyfluoride glass and glassâ€“ceramics. Journal of Alloys and Compounds, 2014, 608, 266-271.	5.5	24
21	Experimental insights on the electron transfer and energy transfer processes between Ce3+-Yb3+ and Ce3+-Tb3+ in borate glass. Applied Physics Letters, 2015, 106, .	3.3	24
22	One Ion, Many Facets: Efficient, Structurally and Thermally Sensitive Luminescence of Eu²⁺ in Binary and Ternary Strontium Borohydride Chlorides. Chemistry of Materials, 2019, 31, 8957-8968.	6.7	24
23	Yb^3+ ion concentration effects on âˆ¼1â€‰â€‰Î¼m emission in tellurite glass. Journal of the Optical Society of America B: Optical Physics, 2012, 29, 1569.	2.1	23
24	Enhanced 1.8Î¼m emission in Yb3+/Tm3+ co-doped tellurite glass: Effects of Yb3+â†”Tm3+ energy transfer and back transfer. Journal of Quantitative Spectroscopy and Radiative Transfer, 2014, 147, 112-120.	2.3	22
25	Energy transfer kinetics in oxy-fluoride glass and glass-ceramics doped with rare-earth ions. Journal of Applied Physics, 2012, 112, .	2.5	19
26	Thermally Stimulated Luminescence and First-Principle Study of Defect Configurations in the Perovskite-Type Hydrides LiMH₃:Eu²⁺ (M = Sr, Ba) and the Corresponding Deuterides. Journal of Physical Chemistry C, 2016, 120, 29414-29422.	3.1	19
27	Tunable trap depth for persistent luminescence by cationic substitution in Pr 3+ :K 1âˆ’ x Na x NbO 3 perovskites. Journal of the American Ceramic Society, 2018, 102, 2629.	3.8	18
28	Time Resolved Fluorescence and Energy Transfer Analysis of Nd3+â€“Yb3+â€“Er3+ Triply-Doped Baâ€“Al-Metaphosphate Glasses for an Eye Safe Emission (1.54ÂÎ¼m). Journal of Fluorescence, 2010, 20, 425-434.	2.5	17
29	Significance of host×³s intrinsic absorption band tailing on Ce3+ luminescence quantum yield in borate glass. Journal of Luminescence, 2016, 170, 785-788.	3.1	17
30	Phonon assisted effective non-resonant energy transfer based 1Î¼m luminescence from Nd3+â€“Yb3+ codoped zincâ€“boroâ€“bismuthate glasses. Journal of Luminescence, 2013, 138, 229-234.	3.1	16
31	Afterglow Luminescence in Wet-Chemically Synthesized Inorganic Materials: Ultra-Long Room Temperature Phosphorescence Instead of Persistent Luminescence. Journal of Physical Chemistry Letters, 2017, 8, 4735-4739.	4.6	16
32	Evidence of Organic Luminescent Centers in Solâ€“Gelâ€Synthesized Yttrium Aluminum Borate Matrix Leading to Bright Visible Emission. Angewandte Chemie - International Edition, 2017, 56, 13995-13998.	13.8	15
33	Energy transfer based efficient infrared emission at 1.57Î¼m from Yb3+â€“Er3+ codoped Zinc-borobismuthate glasses. Optical Materials, 2013, 35, 472-478.	3.6	14
34	Nonisothermal crystallization kinetics and microstructure evolution of calcium lanthanum metaborate glass. Journal of Thermal Analysis and Calorimetry, 2010, 101, 143-151.	3.6	13
35	Hexagonal Sr_{1âˆ’x/2}Al_{2âˆ’x}Si_xO₄:Eu²⁺,Dy³⁺transparent ceramics with tuneable persistent luminescence properties. Dalton Transactions, 2020, 49, 16849-16859.	3.3	13
36	Transparent Glass Ceramics. Crystals, 2021, 11, 156.	2.2	10

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37	Al2O3 influence on structural, elastic, thermal properties of Yb3+ doped Baâ€“La-tellurite glass: Evidence of reduction in self-radiation trapping at 1Î¼m emission. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2014, 133, 318-325.	3.9	9
38	Time-gated triplet-state optical spectroscopy to decipher organic luminophores embedded in rigid matrices. Physical Chemistry Chemical Physics, 2018, 20, 23294-23300.	2.8	9
39	Selective Vertical and Horizontal Growth of 2D WS₂ Revealed by In Situ Thermolysis using Transmission Electron Microscopy. Advanced Functional Materials, 2022, 32, 2106450.	14.9	8
40	Effect of TiO2 on thermal, structural and third-order nonlinear optical properties of Caâ€“Laâ€“Bâ€“O glass system. Journal of Alloys and Compounds, 2010, 489, 493-498.	5.5	7
41	Synthesis and optical properties of the Eu2+-doped alkaline-earth metal hydride chlorides AE7H12Cl2 (AEâ€¯=â€¯Ca and Sr). Journal of Luminescence, 2019, 209, 150-155.	3.1	7
42	Lanthanide Ions as Local Probes in Ionic Hydrides: A Pulsed Electron Nuclear Double Resonance and Thermoluminescence Study of Eu²⁺-Doped Hydride Perovskites. Journal of Physical Chemistry C, 2019, 123, 5031-5041.	3.1	6
43	MCaH<i>_x</i>F_{3âˆ'}<i>_x</i> (M = Rb, Cs): Synthesis, Structure, and Bright, Siteâ€Sensitive Tunable Eu²⁺ Luminescence. Advanced Optical Materials, 2021, 9, 2002052.	7.3	6
44	Network coordination in low germanium alkaline-earth gallate systems: influence on glass formation. RSC Advances, 2012, 2, 13024.	3.6	5
45	Mn²⁺ activated Ca-Î±-SiAlON â€" broadband deep-red luminescence and sensitization by Eu²⁺, Yb²⁺ and Ce³⁺. Materials Advances, 2021, 2, 2075-2084.	5.4	5
46	Photoluminescence properties of glassy yttrium aluminum borate powders: Dopant-free phosphors for solid-state lighting. Journal of Luminescence, 2017, 188, 448-453.	3.1	4
47	Evidence of Organic Luminescent Centers in Solâ€"Gelâ€Synthesized Yttrium Aluminum Borate Matrix Leading to Bright Visible Emission. Angewandte Chemie, 2017, 129, 14183-14186.	2.0	3
48	Persistent luminescence in both first and second biological windows in ZnGa2O4 :Cr3+,Yb3+ glass ceramics. , 2018, , .		2
49	Broadband white emitting amorphous yttrium-aluminum-borate phosphors for high CRI w-LEDs. , 2017, , .		1
50	Cathodoluminescence and microstructural analysis of amorphous yttrium-aluminum-borate luminescent powders. Journal of Luminescence, 2019, 215, 116669.	3.1	1
51	Afterglow luminescence in sol-gel/Pechini grown oxide materials: persistence or phosphorescence process? (Conference Presentation). , 2017, , .		0
52	Selective Vertical and Horizontal Growth of 2D WS₂ Revealed by In Situ Thermolysis using Transmission Electron Microscopy (Adv. Funct. Mater. 1/2022). Advanced Functional Materials, 2022, 32, .	14.9	0