Akhilesh Singh

List of Publications by Year
in descending order

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80 papers	2,417 citations	201674 27 h-index	206112 48 g-index

80 all docs	80 docs citations	80 times ranked	2395 citing authors

#	Article	IF	Citations
1	Evidence forMBandMCphases in the morphotropic phase boundary region of(1â^'x)[Pb(Mg1/3Nb2/3)O3]â^'xPbTiO3:A Rietveld study. Physical Review B, 2003, 67, .	3.2	310
2	Powder neutron diffraction study of phase transitions in and a phase diagram of(1â^'x)[Pb(Mg1â^•3Nb2â^•3)O3]â^'xPbTiO3. Physical Review B, 2006, 74, .	3.2	143
3	Probing a highly efficient dual mode: downâ€“upconversion luminescence and temperature sensing performance of rare-earth oxide phosphors. Dalton Transactions, 2013, 42, 1065-1072.	3.3	135
4	Stability of ferroic phases in the highly piezoelectric Pb(ZrxTi1â^'x)O3ceramics. Acta Crystallographica Section A: Foundations and Advances, 2008, 64, 192-203.	0.3	108
5	Structure and the location of the morphotropic phase boundary region in (1-x)[Pb(Mg1/3Nb2/3)O3]-xPbTiO3. Journal of Physics Condensed Matter, 2001, 13, L931-L936.	1.8	99
6	Structural, Thermal, and Fluorescence Properties of Eu(DBM)₃Phen_x Complex Doped in PMMA. Journal of Physical Chemistry B, 2010, 114, 13042-13051.	2.6	91
7	Revelation of the Technological Versatility of the Eu(TTA)₃Phen Complex by Demonstrating Energy Harvesting, Ultraviolet Light Detection, Temperature Sensing, and Laser Applications. ACS Applied Materials & Interfaces, 2015, 7, 18231-18239.	8.0	88
8	Enhanced Red Upconversion Emission, Magnetoluminescent Behavior, and Bioimaging Application of NaSc_{0.75}Er_{0.02}Yb_{0.18}Gd_{0.05}F₄@AuNPs Nanoparticles. ACS Applied Materials & Interfaces, 2015, 7, 15339-15350.	8.0	69
9	Down-shifting and upconversion photoluminescence in Ho³⁺/Yb³⁺ codoped GdNbO₄: effect of the Bi³⁺ ion and the magnetic field. Dalton Transactions, 2014, 43, 15906-15914.	3.3	62
10	High-resolution synchrotron x-ray diffraction study of Zr-rich compositions of Pb(ZrxTi1â^'x)O3â€(0.525â©½xâ©½0.60): Evidence for the absence of the rhombohedral phase. Applied Physics Letters, 2007, 91, .	3.3	59
11	Crystallographic phases, phase transitions, and barrier layer formation in (1 â^' x) [Pb(Fe_{1/2}Nb_{1/2})O₃]â^'xPbTiO₃. Journal of Materials Research, 2003, 18, 2677-2687.	2.6	58
12	Lanthanide complexes for temperature sensing, UV light detection, and laser applications. Sensors and Actuators A: Physical, 2015, 222, 255-261.	4.1	58
13	Comparison of theCcandR3cspace groups for the superlattice phase ofPb(Zr0.52Ti0.48)O3. Physical Review B, 2005, 71, .	3.2	52
14	Highly Efficient, Chemically Stable, and UV/Blue-Light-Excitable Biluminescent Security Ink to Combat Counterfeiting. ACS Applied Materials & Interfaces, 2018, 10, 44570-44575.	8.0	51
15	Magnetoresistance behavior of ferromagnetic shape memory alloy<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Ni</mml:mtext></mml:mrow><mml:mrow><mml:mn>1.75</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math> Physical Review B, 2008, 77, .	3.2	49
16	Enhanced Quantum Cutting via Li⁺ Doping from a Bi³⁺/Yb³⁺-Codoped Gadolinium Tungstate Phosphor. Inorganic Chemistry, 2016, 55, 10928-10935.	4.0	49
17	Efficient dual mode multicolor luminescence in a lanthanide doped hybrid nanostructure: a multifunctional material. Nanotechnology, 2011, 22, 275703.	2.6	47
18	Host matrix impact on Er³⁺ upconversion emission and its temperature dependence. RSC Advances, 2015, 5, 16067-16073.	3.6	44

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19	Frequency upconversion in Er3+ doped Y2O3 nanophosphor:Yb3+ sensitization and tailoring effect of Li+ ion. Materials Research Bulletin, 2013, 48, 4307-4313.	5.2	43
20	New Perspective in Garnet Phosphor: Low Temperature Synthesis, Nanostructures, and Observation of Multimodal Luminescence. Inorganic Chemistry, 2014, 53, 9561-9569.	4.0	41
21	Influence of Bi3+ ion on structural, optical, dielectric and magnetic properties of Eu3+ doped LaVO4 phosphor. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2020, 243, 118787.	3.9	41
22	Optical characteristics and charge transfer band excitation of Dy3+ doped Y2O3 phosphor. Materials Research Bulletin, 2012, 47, 1339-1344.	5.2	40
23	A strategy to achieve efficient dual-mode luminescence in lanthanide-based magnetic hybrid nanostructure and its demonstration for the detection of latent fingerprints. Journal of Colloid and Interface Science, 2017, 491, 199-206.	9.4	39
24	Lanthanide doped ultrafine hybrid nanostructures: multicolour luminescence, upconversion based energy transfer and luminescent solar collector applications. Nanoscale, 2017, 9, 696-705.	5.6	33
25	Confirmation ofMB-type monoclinic phase inPb[(Mg1/3Nb2/3)0.71Ti0.29]O3:A powder neutron diffraction study. Physical Review B, 2003, 68, .	3.2	29
26	Specific interactions in partially miscible polycarbonate (PC)/poly (methyl methacrylate) (PMMA) blends. Chemical Physics Letters, 2010, 486, 32-36.	2.6	28
27	Energy transfer dynamics and time resolved photoluminescence in BaWO4:Eu3+ nanophosphors synthesized by mechanical activation. New Journal of Chemistry, 2017, 41, 8947-8958.	2.8	28
28	Multifunctionality of lanthanide-based luminescent hybrid materials. Coordination Chemistry Reviews, 2022, 455, 214365.	18.8	28
29	Dielectric relaxation and phase transitions at cryogenic temperatures in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>0.65</mml:mn><mml:mrow><mml:mo>[</mml:mo><mml:mi		

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37	Evidence for a monoclinicMAto tetragonal morphotropic phase transition in (1â^'x)[Pb(Fe1/2Nb1/2)O3]â€"xPbTiO3ceramics. Journal of Physics Condensed Matter, 2007, 19, 036217.	1.8	17
38	On the Discovery of Two New Monoclinic Phases in the Morphotropic Phase Boundary Region of Pb[(Mg1/3Nb2/3)O3]-xPbTiO3Ceramics. Ferroelectrics, 2005, 326, 91-99.	0.6	16
39	Lanthanide Doped Dual-Mode Nanophosphor as a Spectral Converter for Promising Next Generation Solar Cells. Science of Advanced Materials, 2014, 6, 405-412.	0.7	14
40	Barrier Layer Formation and PTCR Effect in (1 â^' x) [Pb(Fe1/2Nb1/2)O3]-xPbTiO3(x= 0.13) Ceramics. Ferroelectrics, 2005, 324, 49-53.	0.6	13
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55	Incommensurately modulated phase and charge ordering transition in nanocrystalline Nd0.5Sr0.5MnO3perovskite. Journal of Applied Physics, 2018, 123, 124301.	2.5	7
56	Wide-bandgap lanthanide niobates: Optical properties and applications. Materials Research Bulletin, 2020, 131, 110960.	5.2	7
57	X-ray diffraction and dielectric studies across morphotropic phase boundary in (1â^'x)[Pb(Mg0.5W0.5)O3]â€“xPbTiO3 ceramics. Journal of Alloys and Compounds, 2011, 509, 5167-5172.	5.5	6
58	Photo-dynamic Burstein-Moss doping of PbS quantum dots in solution by single and two-photon optical pumping. Optical Materials Express, 2015, 5, 2431.	3.0	6
59	Synthesis and band-gap tuning of (Co, Bi) doped PbTiO₃ for photoferroelectrics applications. Integrated Ferroelectrics, 2018, 194, 145-151.	0.7	6
60	A step towards synthesizing unique UV and visible light excitable AWO4:Eu3+ (Aâ€‰=â€‰Ca and Sr) nanophosphors using high energy ball milling method: luminescence differences in going from Ca2+ â†' Sr2+. Journal of Materials Science: Materials in Electronics, 2018, 29, 13751-13765.	2.2	6
61	Structural, dielectric, semiconducting and optical properties of high-energy ball milled YFeO3 nano-particles. AIP Conference Proceedings, 2019, , .	0.4	6
62	Discovery of ordered tetragonal and cubic phases in the morphotropic phase boundary region of (1-x)Bi(Mg3/4W1/4)O3-xPbTiO3 piezoceramics. Ceramics International, 2019, 45, 17395-17408.	4.8	6
63	Control of Layering in Aurivillius Phase Nanocomposite Thin Films and Influence on Ferromagnetism and Optical Absorption. ACS Applied Electronic Materials, 2022, 4, 1997-2004.	4.3	6
64	Defect level influenced optical properties of Eu3+ and Tb3+ doped in ZnOâ€“CaAlxOy composite. Materials Chemistry and Physics, 2012, 135, 298-303.	4.0	5
65	Low temperature phase transition studies on Pb(Mg0.5W0.5)O3 ceramic. Solid State Sciences, 2012, 14, 100-105.	3.2	5
66	Magneto-optical controlled transmittance alteration of PbS quantum dots by moderately applied magnetic fields at room temperature. Applied Physics Letters, 2014, 105, .	3.3	5
67	New Leadâ€free (1â^'x)BaTiO₃â€“xBi(Mg_{1/2}Zr_{1/2})O₃ Solid Solution with Morphotropic Phase Boundary and Diffuse Phase Transition. Journal of the American Ceramic Society, 2016, 99, 3651-3658.	3.8	5
68	Euâ€“Mg defects and donorâ€“acceptor pairs in GaN: photodissociation and the excitation transfer problem. Journal Physics D: Applied Physics, 2018, 51, 065106.	2.8	5
69	Hysteretic Photochromic Switching (HPS) in Doubly Doped GaN(Mg):Euâ€”A Summary of Recent Results. Materials, 2018, 11, 1800.	2.9	5
70	Presence of a monoclinic (Cc) phase in the (1â^'x)BiFeO3-xCaTiO3 solid solution nanoparticles: A Rietveld study. Journal of Applied Physics, 2017, 122, 204101.	2.5	4
71	All-optical switch based on PbS quantum dots. Applied Physics Letters, 2021, 119, .	3.3	4
72	Band gap tuning of ferroelectric PbTiO3 by Mo doping. Journal of Materials Science: Materials in Electronics, 2022, 33, 2550-2565.	2.2	4

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73	Dielectric and Piezoelectric Properties of (1-x)[Pb(Mg_{0.5}W_{0.5})O₃]-xPbTiO₃ Ceramics. Integrated Ferroelectrics, 2010, 117, 129-138.	0.7	3
74	Magneto-optical reflectance and absorbance of PbS quantum dots. Physica Scripta, 2015, 90, 095501.	2.5	2
75	Optical properties of a scorpion (Centruroides limpidus). Physica Scripta, 2016, 91, 045802.	2.5	2
76	Origin of ferroelectric Pâ€E loop in cubic compositions and structure of poled (1â€x)Bi(Mg_{1/2}Zr_{1/2})O₃â€<scp>xPbTiO</scp>₃ piezoceramics. Journal of the American Ceramic Society, 2017, 100, 1743-1750.	3.8	2
77	MOF derived Co/C and Co3O4/C polyhedron for hydrogen evolution reaction. AIP Conference Proceedings, 2019, , .	0.4	2
78	Synthesis and structural characterization of highly tetragonal (1-x)Bi(Zn[sub 1âˆ•2]Ti[sub) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 542 Td	0.4	1
79	Deposition of Fe/Nb multilayers and Fe/Nb/Fe trilayers using HIPIMS: XRR measurements for interface diffusion study. AIP Conference Proceedings, 2019, , .	0.4	1
80	Developing a reduction resistant layer with SrNi0.8Mo0.2O3-Î´ mixedâ€“oxide for Sm0.2Ce0.8O2-Î´ based solid oxide fuel cells. AIP Conference Proceedings, 2019, , .	0.4	0