

# Satendra Pal Singh

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1689669/publications.pdf>

Version: 2024-02-01

55  
papers

2,072  
citations

236612

25  
h-index

243296

44  
g-index

57  
all docs

57  
docs citations

57  
times ranked

2228  
citing authors

#	ARTICLE	IF	CITATIONS
1	Discovery of a Phosphor for Light Emitting Diode Applications and Its Structural Determination, Ba(Si,Al) <sub>5</sub> (O,N) <sub>8</sub> :Eu <sup>2+</sup> . Journal of the American Chemical Society, 2014, 136, 2363-2373.	6.6	167
2	KVP <sub>2</sub> O <sub>7</sub> as a Robust High-Energy Cathode for Potassium-Ion Batteries: Pinpointed by a Full Screening of the Inorganic Registry under Specific Search Conditions. Advanced Energy Materials, 2018, 8, 1703099.	10.2	154
3	Classification of crystal structure using a convolutional neural network. IUCr, 2017, 4, 486-494.	1.0	141
4	Eu <sup>2+</sup> luminescence from 5 different crystallographic sites in a novel red phosphor, Ca <sub>15</sub> Si <sub>20</sub> O <sub>10</sub> N <sub>30</sub> :Eu <sup>2+</sup> . Journal of Materials Chemistry, 2012, 22, 14068.	6.7	84
5	Rb <sub>3</sub> SiF <sub>7</sub> :Mn <sup>4+</sup> and Rb <sub>2</sub> CsSiF <sub>7</sub> :Mn <sup>4+</sup> Red-Emitting Phosphors with a Faster Decay Rate. Chemistry of Materials, 2018, 30, 6936-6944.	3.2	81
6	A deep-learning technique for phase identification in multiphase inorganic compounds using synthetic XRD powder patterns. Nature Communications, 2020, 11, 86.	5.8	78
7	Discovery of a Red-Emitting Li <sub>3</sub> RbGe <sub>8</sub> O <sub>18</sub> :Mn <sup>4+</sup> Phosphor in the Alkali-Germanate System: Structural Determination and Electronic Calculations. Inorganic Chemistry, 2016, 55, 10310-10319.	1.9	77
8	Reversible K <sup>+</sup> -Insertion/Deinsertion and Concomitant Na <sup>+</sup> -Redistribution in P <sup>23</sup> -Na <sub>0.52</sub> CrO <sub>2</sub> for High-Performance Potassium-Ion Battery Cathodes. Chemistry of Materials, 2018, 30, 2049-2057.	3.2	76
9	Combinatorial chemistry of oxynitride phosphors and discovery of a novel phosphor for use in light emitting diodes, Ca <sub>1.5</sub> Ba <sub>0.5</sub> Si <sub>5</sub> N <sub>6</sub> O <sub>3</sub> :Eu <sup>2+</sup> . Journal of Materials Chemistry C, 2013, 1, 1832.	2.7	73
10	Evidence for monoclinic crystal structure and negative thermal expansion below magnetic transition temperature in Pb(Fe <sub>1</sub> 2Nb <sub>1</sub> 2)O <sub>3</sub> . Applied Physics Letters, 2007, 90, 242915.	1.5	64
11	Ferroc transitions in the multiferroic (1-x)Pb(Fe <sub>1/2</sub> Nb <sub>1/2</sub> )O <sub>3</sub> -xPbTiO <sub>3</sub> system and its phase diagram. Acta Materialia, 2010, 58, 5381-5392.	3.8	64
12	Crystallographic phases, phase transitions, and barrier layer formation in (1-x) [Pb(Fe <sub>1/2</sub> Nb <sub>1/2</sub> )O <sub>3</sub> ] <sub>x</sub> PbTiO <sub>3</sub> . Journal of Materials Research, 2003, 18, 2677-2687.	1.2	58
13	W-doped LiW Ni <sub>0.5</sub> Mn <sub>1.5</sub> O <sub>4</sub> cathodes for the improvement of high rate performances in Li ion batteries. Journal of Power Sources, 2012, 209, 57-64.	4.0	57
14	Highly stable P <sup>23</sup> -K <sub>0.8</sub> CrO <sub>2</sub> cathode with limited dimensional changes for potassium ion batteries. Journal of Power Sources, 2019, 430, 137-144.	4.0	51
15	Mechanically driven luminescence in a ZnS:Cu-PDMS composite. APL Materials, 2016, 4, .	2.2	49
16	Gadolinium-Doped LiMn <sub>2</sub> O <sub>4</sub> Cathodes in Li Ion Batteries: Understanding the Stabilized Structure and Enhanced Electrochemical Kinetics. Journal of the Electrochemical Society, 2012, 159, A1867-A1873.	1.3	45
17	A Mechanoluminescent ZnS:Cu/Rhodamine/SiO <sub>2</sub> /PDMS and Piezoresistive CNT/PDMS Hybrid Sensor: Red-Light Emission and a Standardized Strain Quantification. ACS Applied Materials & Interfaces, 2016, 8, 34777-34783.	4.0	45
18	Particle-swarm-optimization-assisted rate equation modeling of the two-peak emission behavior of non-stoichiometric CaAl <sub>x</sub> Si <sub>(7-3x)</sub> /4N <sub>3</sub> :Eu <sup>2+</sup> phosphors. Optics Express, 2010, 18, 17805.	1.7	44

#	ARTICLE	IF	CITATIONS
19	Fabrication of 1D mesoporous NiO nano-rods as high capacity and long-life anode material for lithium ion batteries. <i>Journal of Alloys and Compounds</i> , 2021, 850, 156755.	2.8	38
20	KCrS <sub>2</sub> Cathode with Considerable Cyclability and High Rate Performance: The First K <sup>+</sup> Stoichiometric Layered Compound for Potassium-ion Batteries. <i>Small</i> , 2018, 14, e1803495.	5.2	33
21	A Yellow-Emitting Oxynitride Phosphor: Ce <sub>4-x</sub> Ca <sub>x</sub> Si <sub>12</sub> O <sub>3+x</sub> N <sub>18-x</sub> :Eu <sup>2+</sup> . <i>ECS Journal of Solid State Science and Technology</i> , 2013, 2, R3100-R3106.	0.9	30
22	Cyan-Light-Emitting Chalcogenometallate Phosphor, KGaS <sub>2</sub> :Eu <sup>2+</sup> , for Phosphor-Converted White Light-Emitting Diodes. <i>Inorganic Chemistry</i> , 2021, 60, 6047-6056. <a href="#">Dielectric relaxation and phase transitions at cryogenic temperatures in</a>	1.9	28
23	$\text{xmlns:mml}="http://www.w3.org/1998/Math/MathML"$		

#	ARTICLE	IF	CITATIONS
37	A succession of relaxor ferroelectric transitions in Ba <sub>0.55</sub> Sr <sub>0.45</sub> TiO <sub>3</sub> . Journal of Applied Physics, 2008, 103, 016107.	1.1	16
38	Phosphor Informatics Based on Confirmatory Factor Analysis. ACS Combinatorial Science, 2015, 17, 317-325.	3.8	16
39	Ultra-stable Ti <sub>2</sub> O(PO <sub>4</sub> ) <sub>2</sub> (H <sub>2</sub> O) as a viable new Ca <sup>2+</sup> storage electrode material for calcium-ion batteries. Energy Storage Materials, 2021, 43, 85-96.	9.5	16
40	Photoluminescent and Structural Properties of MgAlSiN <sub>3</sub> :Eu <sup>2+</sup> Phosphors. Journal of the Electrochemical Society, 2011, 158, J32.	1.3	15
41	Discovery of novel phosphors for use in light emitting diodes using heuristics optimization-assisted combinatorial chemistry. Journal of Materials Chemistry, 2012, 22, 8505.	6.7	15
42	Systematic Approach To Calculate the Band Gap Energy of a Disordered Compound with a Low Symmetry and Large Cell Size via Density Functional Theory. ACS Omega, 2016, 1, 483-490.	1.6	14
43	Designed synthesis of CuCo <sub>2</sub> O <sub>4</sub> /CuO nano-composite as a potential anode material for lithium ion batteries. Physica E: Low-Dimensional Systems and Nanostructures, 2020, 116, 113736.	1.3	14
44	Barrier Layer Formation and PTCR Effect in (1 - x) [Pb(Fe <sub>1/2</sub> Nb <sub>1/2</sub> )O <sub>3</sub> ]-xPbTiO <sub>3</sub> (x= 0.13) Ceramics. Ferroelectrics, 2005, 324, 49-53.	0.3	13
45	Identification of a narrow band red light-emitting phosphor using computational screening of ICSD: Its synthesis and optical characterization. Journal of Alloys and Compounds, 2019, 774, 338-346.	2.8	13
46	Hierarchically nanorod structured Na <sub>2</sub> Ti <sub>6</sub> O <sub>13</sub> /Na <sub>2</sub> Ti <sub>3</sub> O <sub>7</sub> nanocomposite as a superior anode for high-performance sodium ion battery. Journal of Electroanalytical Chemistry, 2020, 877, 114747.	1.9	13
47	Powder X-Ray Diffraction Pattern Is All You Need for Machine Learning-Based Symmetry Identification and Property Prediction. Advanced Intelligent Systems, 2022, 4, .	3.3	13
48	A study of phase coexistence and temperature dependent monoclinic to tetragonal phase transition in the multiferroic (1-x)Pb(Fe <sub>1/2</sub> Nb <sub>1/2</sub> )O <sub>3</sub> -xPbTiO <sub>3</sub> (x=0.08). Applied Physics Letters, 2010, 97, 122902.	1.5	10
49	Combinatorial Screening of Eu <sup>2+</sup> and Ce <sup>3+</sup> -doped AE-Sc-Si-O-N (AE = Mg, Ca, Sr, Tj) ETQq1 1 0.784314 rgB Science and Technology, 2016, 5, R3032-R3039.	0.9	10
50	A data-driven approach to predicting band gap, excitation, and emission energies for Eu <sup>2+</sup> -activated phosphors. Inorganic Chemistry Frontiers, 2021, 8, 4610-4624.	3.0	10
51	A rate equation model for the energy transfer mechanism of a novel multi-color-emissive phosphor, Ca <sub>1.624</sub> Sr <sub>0.376</sub> Si <sub>5</sub> O <sub>3</sub> N <sub>6</sub> :Eu <sup>2+</sup> . Inorganic Chemistry Frontiers, 2019, 6, 3493-3500.	3.0	9
52	A novel sulfide phosphor, BaNaAlS <sub>3</sub> :Eu <sup>2+</sup> , discovered via particle swarm optimization. Journal of Alloys and Compounds, 2022, 922, 166187.	2.8	8
53	Yttrium Copper Titanate as a Highly Efficient Electrocatalyst for Oxygen Reduction Reaction in Fuel Cells, Synthesized via Ultrafast Automatic Flame Technique. Scientific Reports, 2017, 7, 9407.	1.6	6
54	Structural and electrochemical behavior of a NiMnO <sub>3</sub> /Mn <sub>2</sub> O <sub>3</sub> nanocomposite as an anode for high rate and long cycle lithium ion batteries. New Journal of Chemistry, 2019, 43, 12916-12922.	1.4	4

#	ARTICLE	IF	CITATIONS
55	Improved lithium storage in Fe <sub>2</sub> O <sub>3</sub> nano-particles over nano-rods morphology. Solid State Ionics, 2021, 362, 115586.	1.3	4