Satendra Pal Singh

List of Publications by Year
in descending order

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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	Powder Xâ€Ray Diffraction Pattern Is All You Need for Machineâ€Learningâ€Based Symmetry Identification and Property Prediction. Advanced Intelligent Systems, 2022, 4, .	3.3	13
2	A novel sulfide phosphor, BaNaAlS3:Eu2+, discovered via particle swarm optimization. Journal of Alloys and Compounds, 2022, 922, 166187.	2.8	8
3	Fabrication of 1D mesoporous NiO nano-rods as high capacity and long-life anode material for lithium ion batteries. Journal of Alloys and Compounds, 2021, 850, 156755.	2.8	38
4	A data-driven XRD analysis protocol for phase identification and phase-fraction prediction of multiphase inorganic compounds. Inorganic Chemistry Frontiers, 2021, 8, 2492-2504.	3.0	22
5	Cyan-Light-Emitting Chalcogenometallate Phosphor, KGaS₂:Eu²⁺, for Phosphor-Converted White Light-Emitting Diodes. Inorganic Chemistry, 2021, 60, 6047-6056.	1.9	28
6	Improved lithium storage in Fe2O3 nano-particles over nano-rods morphology. Solid State Ionics, 2021, 362, 115586.	1.3	4
7	Ultra-stable Ti2O(PO4)2(H2O) as a viable new Ca2+ storage electrode material for calcium-ion batteries. Energy Storage Materials, 2021, 43, 85-96.	9.5	16
8	A data-driven approach to predicting band gap, excitation, and emission energies for Eu²⁺-activated phosphors. Inorganic Chemistry Frontiers, 2021, 8, 4610-4624.	3.0	10
9	Designed synthesis of CuCo2O4 /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
10	A deep-learning technique for phase identification in multiphase inorganic compounds using synthetic XRD powder patterns. Nature Communications, 2020, 11, 86.	5.8	78
11	Hierarchically nanorod structured Na2Ti6O13/Na2Ti3O7 nanocomposite as a superior anode for high-performance sodium ion battery. Journal of Electroanalytical Chemistry, 2020, 877, 114747.	1.9	13
12	Discovery of a Quaternary Sulfide, Ba_{2â€“x}LiAlS₄:Eu²⁺, and Its Potential as a Fast-Decaying LED Phosphor. Chemistry of Materials, 2020, 32, 6697-6705.	3.2	27
13	Structural and electrochemical behavior of a NiMnO₃/Mn₂O₃ nanocomposite as an anode for high rate and long cycle lithium ion batteries. New Journal of Chemistry, 2019, 43, 12916-12922.	1.4	4
14	Highly stable Pâ€²3-K0.8CrO2 cathode with limited dimensional changes for potassium ion batteries. Journal of Power Sources, 2019, 430, 137-144.	4.0	51
15	A rate equation model for the energy transfer mechanism of a novel multi-color-emissive phosphor, Ca_{1.624}Sr_{0.376}Si₅O₃N₆:Eu²⁺. Inorganic Chemistry Frontiers, 2019, 6, 3493-3500.	3.0	9
16	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
17	Reversible K⁺-Insertion/Deinsertion and Concomitant Na⁺-Redistribution in Pâ€²3-Na_{0.52}CrO₂ for High-Performance Potassium-Ion Battery Cathodes. Chemistry of Materials, 2018, 30, 2049-2057.	3.2	76
18	KVP₂O₇ as a Robust Highâ€Energy Cathode for Potassiumâ€Ion Batteries: Pinpointed by a Full Screening of the Inorganic Registry under Specific Search Conditions. Advanced Energy Materials, 2018, 8, 1703099.	10.2	154

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19	Determination of possible configurations for Li_{0.5}CoO₂delithiated Li-ion battery cathodesviaDFT calculations coupled with a multi-objective non-dominated sorting genetic algorithm (NSGA-III). Physical Chemistry Chemical Physics, 2018, 20, 26405-26413.	1.3	20
20	KCrS₂ Cathode with Considerable Cyclability and High Rate Performance: The First K⁺ Stoichiometric Layered Compound for Potassiumâ€ion Batteries. Small, 2018, 14, e1803495.	5.2	33
21	Rb₃SiF₇:Mn⁴⁺ and Rb₂CsSiF₇:Mn⁴⁺ Red-Emitting Phosphors with a Faster Decay Rate. Chemistry of Materials, 2018, 30, 6936-6944.	3.2	81
22	Density functional theory calculations for the band gap and formation energy of Pr_{4â^'x}Ca_xSi₁₂O_{3+x}N_{18â^'x}; a highly disordered compound with low symmetry and a large cell size. Physical Chemistry Chemical Physics, 2017, 19, 16702-16712.	1.3	17
23	Metaheuristics-Assisted Combinatorial Screening of Eu²⁺-Doped Caâ€“Srâ€“Baâ€“Liâ€“Mgâ€“Alâ€“Siâ€“Geâ€“N Compositional Space in Search of a Narrow-Band Green Emitting Phosphor and Density Functional Theory Calculations. Inorganic Chemistry, 2017, 56, 9814-9824.	1.9	23
24	Classification of crystal structure using a convolutional neural network. IUCrJ, 2017, 4, 486-494.	1.0	141
25	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
26	A Mechanoluminescent ZnS:Cu/Rhodamine/SiO₂/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
27	Mechanically driven luminescence in a ZnS:Cu-PDMS composite. APL Materials, 2016, 4, .	2.2	49
28	Discovery of a Red-Emitting Li₃RbGe₈O₁₈:Mn⁴⁺ Phosphor in the Alkali-Germanate System: Structural Determination and Electronic Calculations. Inorganic Chemistry, 2016, 55, 10310-10319.	1.9	77
29	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
30	Combinatorial Screening of Eu²⁺and Ce³⁺-doped AE-Sc-Si-O-N (AE = Mg, Ca, Sr,) Tj ETQq0 0 0 rgBT /Overlock Science and Technology, 2016, 5, R3032-R3039.	0.9	10
31	Combinatorial Screening of Luminescent and Structural Properties in a Ce³⁺-Doped Ln-Al-Si-O-N (Ln = Y, La, Gd, Lu) System: The Discovery of a Novel Gd₃Al_{3+x}Si_{3â€“x}O_{12+x}N_{2â€“x}:Ce<sup> Phosphor. Inorganic Chemistry, 2015, 54, 1829-1840.	1.9	24
32	Phosphor Informatics Based on Confirmatory Factor Analysis. ACS Combinatorial Science, 2015, 17, 317-325.	3.8	16
33	Discovery of a Phosphor for Light Emitting Diode Applications and Its Structural Determination, Ba(Si,Al)₅(O,N)₈:Eu²⁺. Journal of the American Chemical Society, 2014, 136, 2363-2373.	6.6	167
34	Combinatorial chemistry of oxynitride phosphors and discovery of a novel phosphor for use in light emitting diodes, Ca1.5Ba0.5Si5N6O3:Eu2+. Journal of Materials Chemistry C, 2013, 1, 1832.	2.7	73
35	A Yellow-Emitting Oxynitride Phosphor: Ce_{4-x}Ca_xSi₁₂O_{3+x}N_{18-x}:Eu²⁺. ECS Journal of Solid State Science and Technology, 2013, 2, R3100-R3106.	0.9	30
36	Gadolinium-Doped LiMn₂O₄Cathodes in Li Ion Batteries: Understanding the Stabilized Structure and Enhanced Electrochemical Kinetics. Journal of the Electrochemical Society, 2012, 159, A1867-A1873.	1.3	45

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37	Eu2+ luminescence from 5 different crystallographic sites in a novel red phosphor, Ca15Si20O10N30:Eu2+. Journal of Materials Chemistry, 2012, 22, 14068.	6.7	84
38	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
39	Suppression of Phase Transition in LiTb_{0.01}Mn_{1.99}O₄ Cathodes with Fast Li⁺ Diffusion. ACS Applied Materials & Interfaces, 2012, 4, 6842-6848.	4.0	24
40	Solid-State Combinatorial Screening of ARSi4N7:Eu2+ (A = Sr, Ba, Ca; R = Y, La, Lu) Phosphors. ACS Combinatorial Science, 2012, 14, 537-544.	3.8	20
41	W-doped LiW Ni0.5Mn1.5â^'O4 cathodes for the improvement of high rate performances in Li ion batteries. Journal of Power Sources, 2012, 209, 57-64.	4.0	57
42	Y6+x/3Si11â^'yAlyN20+xâ^'yO1â^'x+y:Re3+ (Re = Ce3+, Tb3+, Sm3+) phosphors identified by solid-state combinatorial chemistry. Journal of Materials Chemistry, 2011, 21, 5780.	6.7	27
43	Photoluminescent and Structural Properties of MgAlSiN[sub 3]:Eu[sup 2+] Phosphors. Journal of the Electrochemical Society, 2011, 158, J32.	1.3	15
44	The Effect of Al on a Red Shift in LaSi₃N₅:Ce₃₊ Phosphors. Journal of the Electrochemical Society, 2011, 158, J184-J188.	1.3	20
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55	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.	1.2	58