Xiang-Fu Wang

List of Publications by Year
in descending order

89 papers	2,828 citations	201674 27 h-index	182427 51 g-index
90 all docs	90 docs citations	90 times ranked	2927 citing authors

#	Article	IF	Citations
1	Optical temperature sensing of rare-earth ion doped phosphors. RSC Advances, 2015, 5, 86219-86236.	3.6	629
2	Atomically thin binary Vâ€“V compound semiconductor: a first-principles study. Journal of Materials Chemistry C, 2016, 4, 6581-6587.	5.5	126
3	Optical temperature sensing of NaYbF_4: Tm^3+ @ SiO_2 core-shell micro-particles induced by infrared excitation. Optics Express, 2013, 21, 21596.	3.4	116
4	Excitation powder dependent optical temperature behavior of Er^3+ doped transparent Sr_069La_031F_231 glass ceramics. Optics Express, 2016, 24, 17792.	3.4	102
5	Influence of Doping and Excitation Powers on Optical Thermometry in Yb3+-Er3+ doped CaWO4. Scientific Reports, 2017, 7, 43383.	3.3	101
6	Excitation power dependent optical temperature behaviors in Mn⁴⁺doped oxyfluoride Na₂WO₂F₄. Physical Chemistry Chemical Physics, 2018, 20, 2028-2035.	2.8	90
7	Tunable electronic properties of GeSe/phosphorene heterostructure from first-principles study. Applied Physics Letters, 2016, 109, .	3.3	87
8	Size and shape modifications, phase transition, and enhanced luminescence of fluoride nanocrystals induced by doping. Journal of Materials Chemistry C, 2013, 1, 3158.	5.5	74
9	Spectral and energy transfer in Bi³⁺â€“Reⁿ⁺(n= 2, 3, 4) co-doped phosphors: extended optical applications. Physical Chemistry Chemical Physics, 2018, 20, 11516-11541.	2.8	72
10	Research progress of flexible wearable pressure sensors. Sensors and Actuators A: Physical, 2021, 330, 112838.	4.1	70
11	Fabrication, photoluminescence and applications of quantum dots embedded glass ceramics. Chemical Engineering Journal, 2020, 383, 123082.	12.7	61
12	Improving Optical Temperature Sensing Performance of Er3+ Doped Y2O3 Microtubes via Co-doping and Controlling Excitation Power. Scientific Reports, 2017, 7, 758.	3.3	59
13	Bluish-white-light-emitting diodes based on two-dimensional lead halide perovskite (C6H5C2H4NH3)2PbCl2Br2. Applied Physics Letters, 2018, 112, .	3.3	50
14	Modifying phase, shape and optical thermometry of NaGdF₄:2%Er³⁺ phosphors through Ca²⁺ doping. Optics Express, 2018, 26, 21950.	3.4	48
15	Curvature and ionization-induced reversible hydrogen storage in metalized hexagonal B36. Journal of Chemical Physics, 2014, 141, 194306.	3.0	47
16	Controlled synthesis, multicolor luminescence, and optical thermometer of bifunctional NaYbF4:Nd3+@NaYF4:Yb3+ active-core/active-shell colloidal nanoparticles. Journal of Alloys and Compounds, 2017, 691, 530-536.	5.5	47
17	Methods, principles and applications of optical detection of metal ios. Chemical Engineering Journal, 2021, 417, 129125.	12.7	47
18	Optical thermometry based on luminescence behavior of Dy3+-doped transparent LaF3 glass ceramics. Applied Physics A: Materials Science and Processing, 2015, 121, 1171-1178.	2.3	42

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19	Controlled synthesis, photoluminescence, and the quantum cutting mechanism of Eu³⁺ doped NaYbF₄ nanotubes. Physical Chemistry Chemical Physics, 2014, 16, 13440-13446.	2.8	40
20	Detecting the origin of luminescence in Er^3+-doped hexagonal Na_15Gd_15F_6 phosphors. Optics Letters, 2016, 41, 5314.	3.3	40
21	Metalized B₄₀fullerene as a novel material for storage and optical detection of hydrogen: a first-principles study. RSC Advances, 2016, 6, 56907-56912.	3.6	38
22	Controlling optical temperature detection of Ca3Al2O6: Yb3+,Er3+ phosphors through doping. Journal of Alloys and Compounds, 2019, 773, 393-400.	5.5	36
23	Fabrication, photoluminescence, and potential application in white light emitting diode of Dy3+â€“Tm3+ doped transparent glass ceramics containing GdSr2F7 nanocrystals. Applied Physics A: Materials Science and Processing, 2013, 112, 317-322.	2.3	33
24	Ultraviolet and infrared photon-excited synergistic effect in Er^3+-doped YbF_3 phosphors. Optics Letters, 2011, 36, 4353.	3.3	32
25	Enhancement of blue emission in Î²-NaYbF4:Tm3+/Nd3+ nanophosphors synthesized by nonclosed hydrothermal synthesis method. Applied Physics B: Lasers and Optics, 2010, 101, 623-629.	2.2	31
26	Two dimensional WS2 lateral heterojunctions by strain modulation. Applied Physics Letters, 2016, 108, 263104.	3.3	31
27	Optical temperature sensing of hexagonal Na0.82Ca0.08Er0.16Y0.853F4 phosphor. RSC Advances, 2014, 4, 24170.	3.6	29
28	Flash foam stamp-inspired fabrication of flexible in-plane graphene integrated micro-supercapacitors on paper. Journal of Power Sources, 2019, 433, 226703.	7.8	28
29	A novel optical thermometry based on the energy transfer from charge transfer band to Eu3+-Dy3+ ions. Scientific Reports, 2017, 7, 6023.	3.3	27
30	Synthesis and blue to near-infrared quantum cutting of Pr3+/Yb3+ co-doped Li2TeO4 phosphors. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2011, 176, 1537-1540.	3.5	26
31	Morphology control, spectrum modification and extended optical applications of rare earth ion doped phosphors. Physical Chemistry Chemical Physics, 2020, 22, 15120-15162.	2.8	26
32	Controlled synthesis and mechanism of large-area WS2 flakes by low-pressure chemical vapor deposition. Journal of Materials Science, 2017, 52, 7215-7223.	3.7	25
33	Highly efficient cooperative up-conversion of Yb3+ in NaYF4. Journal of Materials Science, 2008, 43, 1354-1356.	3.7	24
34	Morphology and upconversion luminescence of NaYbF4:Tm3+ nanocrystals modified by Gd3+ ions. Journal of Alloys and Compounds, 2013, 562, 99-105.	5.5	24
35	Upconversion properties of Nd3+â€“Yb3+â€“Ho3+-doped Î²-Na(Y1.5Na0.5)F6 powders. Journal of Alloys and Compounds, 2009, 477, 941-945.	5.5	23
36	Enhance the Er3+ Upconversion Luminescence by Constructing NaGdF4:Er3+@NaGdF4:Er3+ Active-Core/Active-Shell Nanocrystals. Nanoscale Research Letters, 2017, 12, 163.	5.7	23

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37	Visible photon-avalanche upconversion in Ho^3+ singly doped Î²â^'Na(Y_15Na_05)F_6 under 980 nm excitation. Optics Letters, 2008, 33, 2653.	3.3	22
38	Thermal loading induced near-infrared broadband upconversion emission of Sm3+-doped Î²-NaYbF4 nano-phosphors. Journal of Luminescence, 2011, 131, 2325-2329.	3.1	19
39	Dynamic model for piezotronic and piezo-phototronic devices under low and high frequency external compressive stresses. Journal of Applied Physics, 2018, 123, .	2.5	19
40	Optical thermometry in low temperature through manipulating the energy transfer from WO66â^' to Ho3+ in Y2WO6:Ho3+ phosphors. Optical Materials, 2018, 84, 778-785.	3.6	19
41	Controllable synthesis and down-conversion properties of flower-like NaY(MoO4)2 microcrystals via polyvinylpyrrolidone-mediated. Journal of Solid State Chemistry, 2013, 204, 266-271.	2.9	18
42	Optical Property of Dy³⁺â€and Ce³⁺â€Doped Siâ€“Bâ€“Naâ€“Sr Glasses. Journal of the American Ceramic Society, 2014, 97, 1750-1755.	3.8	17
43	Giant enhancement of upconversion emission in NaYF₄:Er³⁺@NaYF₄:Yb³⁺ active-core/active-shell nanoparticles. RSC Advances, 2016, 6, 22845-22851.	3.6	17
44	Preparation and photoluminescence properties of SrY2O4:Yb3+, Er3+ powders. Journal of Alloys and Compounds, 2009, 474, 424-427.	5.5	16
45	Photolithographic nanoseeding method for selective synthesis of metal-catalysed nanostructures. Nanotechnology, 2019, 30, 015302.	2.6	16
46	Controlled synthesis and optical characterization of multifunctional ordered Y2O3â€‰:â€‰Er3+ porous pyramid arrays. Journal of Materials Chemistry, 2011, 21, 4251.	6.7	15
47	Shape-controlled tunable homochromatic luminescence and inner photoelectric effect of hexagonal Na1.23Ca0.12Y1.28Er0.24F6 phosphors. Physical Chemistry Chemical Physics, 2012, 14, 7137.	2.8	15
48	Surface enhanced Raman effect on CVD growth of WS2 film. Chemical Physics Letters, 2018, 707, 71-74.	2.6	14
49	Greenâ€“whiteâ€“yellow tunable luminescence from Dy 3 + â€“ Tb 3 + â€“ Eu 3 + $mathrm{Dy}^{3+}mbox{--}mathrm{Tb}^{3+}mbox{--}mathrm{Eu}^{3+}$ doped transparent glass ceramics containing GdSr 2 F 7 $mathrm{GdSr}_{2}mathrm{F}_{7}$ nanocrystals. Applied Physics A: Materials Science and Processing, 2013, 113, 41-46.	2.3	13
50	Effect of light scattering on upconversion photoluminescence quantum yield in microscale-to-nanoscale materials. Optics Express, 2020, 28, 22803.	3.4	13
51	Magnesene: a theoretical prediction of a metallic, fast, high-capacity, and reversible anode material for sodium-ion batteries. Nanoscale, 2022, 14, 6118-6125.	5.6	13
52	Structure and Luminescence Properties of Single-Phased BaCa₂Y₆O₁₂:Eu³⁺, Dy³⁺. ECS Journal of Solid State Science and Technology, 2014, 3, R216-R221.	1.8	11
53	Seven-photon ultraviolet upconversion emission of Er3+ induced by 1,540-nm laser excitation. Applied Physics B: Lasers and Optics, 2014, 115, 443-449.	2.2	11
54	Fabrication and optical thermometry of transparent glassâ€ceramics containing Ag@NaGdF₄: Er³⁺ coreâ€shell nanocrystals. Journal of the American Ceramic Society, 2019, 102, 6564-6574.	3.8	11

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55	Ferromagnetic half-metal properties of two dimensional vertical tellurene/VS2 heterostructure: A first-principles study. Computational Materials Science, 2020, 171, 109215.	3.0	11
56	Structures, plasmon-enhanced luminescence, and applications of heterostructure phosphors. Physical Chemistry Chemical Physics, 2021, 23, 20765-20794.	2.8	11
57	Upconversion emission of SrYbF5:Er3+ nanosheets modified by Tm3+ ions. Journal of Rare Earths, 2013, 31, 1053-1058.	4.8	10
58	Preparation and upconversion properties of Ba2ErF7 and Ba2ErF7:Yb3+ powders. Journal of Luminescence, 2010, 130, 38-44.	3.1	9
59	Novel upconversion phenomenon of Nd3+ sensitized by Yb3+ in Nd3+â€“Yb3+-co-doped Î²-Na(Y1.5Na0.5)F6. Materials Letters, 2008, 62, 3865-3867.	2.6	8
60	Î²-Na(Y1.5Na0.5)F6:Tm3+â€”A blue upconversion phosphor. Journal of Luminescence, 2009, 129, 325-327.	3.1	8
61	Infrared excitation induced upconversion fluorescence properties and photoelectric effect of NaYbF₄:Tm³⁺@TiO₂coreâ€“shell nanoparticles. RSC Advances, 2014, 4, 49415-49420.	3.6	7
62	Dual-mode infrared laser-excited synergistic effect in NaGdF₄:Er³⁺ nano-glass ceramics: a kinetic model. Physical Chemistry Chemical Physics, 2018, 20, 22114-22122.	2.8	7
63	Flexible Planarâ€Integrated Microâ€Supercapacitors from Electrochemically Exfoliated Graphene as Advanced Electrodes Prepared by Flash Foamâ€“Assisted Stamp Technique on Paper. Energy Technology, 2019, 7, 1900664.	3.8	7
64	Controlled synthesis and frictional properties of 2D MoTe2 via chemical vapor deposition. Chemical Physics Letters, 2019, 728, 156-159.	2.6	7
65	Morphology modification, spectrum, and optical thermometer application of rare earth ions doped Î±-Ag2WO4. Journal of Luminescence, 2020, 224, 117303.	3.1	7
66	Site-dependent photoluminescence and optical thermometric behaviors of double-perovskite CaBa2WO6:Er3+. Chemical Physics Letters, 2020, 749, 137410.	2.6	7
67	Promoting sensitivity and selectivity of NO2 gas sensor based on (P,N)-doped single-layer WSe2: A first principles study. Results in Physics, 2022, 34, 105296.	4.1	6
68	Controlling optical temperature behaviors of Er3+ doped Sr2CaWO6 through doping and changing excitation powers. Optical Materials Express, 2018, 8, 1926.	3.0	5
69	PDMS-based subwavelength structures for broadband and wide-angle anti-reflection. Physica B: Condensed Matter, 2020, 580, 411943.	2.7	5
70	Efficient ultraviolet and near-infrared conversion amorphous YbF3:Er film. Journal of Luminescence, 2014, 145, 351-356.	3.1	4
71	Ultraviolet Light Induced White Emission of Eu3+and Dy3+Co-Doped Oxyfluoride Glass-Ceramics Containing LaF3Nanocrystals. Transactions of the Indian Ceramic Society, 2015, 74, 16-21.	1.0	3
72	Monte Carlo simulation and experimental evaluation of the quantum efficiency of Eu³⁺-doped glass at different temperatures. Physical Chemistry Chemical Physics, 2020, 22, 26015-26024.	2.8	3

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73	Numerical modeling of laser-induced heating effect in optical thermometry. Laser Physics, 2020, 30, 036001.	1.2	3
74	Modeling and Monte Carlo simulation on photothermal effect in Gd 3 Al 3 Ga 2 O 12 :Ce 3+ /Y 3 Al 5 O 12 :Cr 3+ layered composite ceramic. Journal of the American Ceramic Society, 0, , .	3.8	3
75	Enhanced insulating behavior in the Ir-vacant Sr2Ir1â€“x O4 system dominated by the local structureÂdistortion. Journal of Synchrotron Radiation, 2018, 25, 1123-1128.	2.4	2
76	Detecting Variable Resistance by Fluorescence Intensity Ratio Technology. Sensors, 2019, 19, 2400.	3.8	2
77	Dynamic simulation of growth of NaYF4 nanocrystals at high temperature and pressure. Journal of Alloys and Compounds, 2020, 831, 154785.	5.5	2
78	Electrically controllable magneto-optic effects in a two-dimensional hexagonal organometallic lattice. Physical Review B, 2020, 101, .	3.2	2
79	Scattering Media Influences Photoluminescence Quantum Yield of Upconversion Microtube Phosphor. , 2020, , .		2
80	Quantum-size effect on the electronic and optical properties of hybrid TiO2/Au clusters. Journal of Chemical Physics, 2014, 141, 054301.	3.0	1
81	Press dependent electronic structure and optical property of Ba2Mg(PO4)2:Eu2+. Journal of Alloys and Compounds, 2021, 883, 160870.	5.5	1
82	Preparation and photothermal properties of composite materials ofÂgradient indexÂglass andÂdisordered mesoporous carbon. Journal of Materials Science: Materials in Electronics, 2021, 32, 27534.	2.2	1
83	Pressure modified structure, bandgap, and optical property of self-activated strontium chlorovanadate phosphors. Physica B: Condensed Matter, 2022, 635, 413845.	2.7	1
84	An Overview on the Local Atomic Displacements and Electronic Structures in BiS2/BiSe2-Based Superconductors. Journal of Superconductivity and Novel Magnetism, 2019, 32, 1517-1527.	1.8	0
85	A Flexible Low-Pass Filter Based on Laser-Induced Graphene. Journal of Electronic Materials, 2020, 49, 6348-6357.	2.2	0
86	Simulation of light transmission through core-shell heterostructure nano-materials. Chemical Physics, 2020, 535, 110785.	1.9	0
87	Modeling and simulation of temperature nano-probes for nano-devices with variable powers. Bulletin of Materials Science, 2021, 44, 1.	1.7	0
88	The fabrication and optical property of WLED encapsulated with the graded-index fluorescent glass film. Journal of Materials Science: Materials in Electronics, 0, , 1.	2.2	0
89	Simulation on in-situ crystal growth of lead-free solder Sn-57Bi alloy. Materials Today Communications, 2022, 30, 103161.	1.9	0