Bingyan Qu

List of Publications by Year
in descending order

33 papers	689 citations	687363 13 h-index	552781 26 g-index
33 all docs	33 docs citations	33 times ranked	800 citing authors

#	Article	IF	Citations
1	Mechanistic Study of the Persistent Luminescence of CaAl₂O₄:Eu,Nd. Chemistry of Materials, 2015, 27, 2195-2202.	6.7	186
2	Aliovalent Doping and Surface Grafting Enable Efficient and Stable Leadâ€Free Blueâ€Emitting Perovskite Derivative. Advanced Optical Materials, 2020, 8, 2000779.	7.3	68
3	Ni²⁺-Doped Garnet Solid-Solution Phosphor-Converted Broadband Shortwave Infrared Light-Emitting Diodes toward Spectroscopy Application. ACS Applied Materials & Interfaces, 2022, 14, 4265-4275.	8.0	68
4	Luminescent properties of La2LiTaO6:Mn4+ and its application as red emission LEDs phosphor. Applied Physics A: Materials Science and Processing, 2014, 117, 1777-1783.	2.3	45
5	Green persistent luminescence and the electronic structure of Î²-Sialon:Eu²⁺. Journal of Materials Chemistry C, 2019, 7, 12544-12551.	5.5	38
6	Understanding the quenching nature of Mn⁴⁺in wide band gap inorganic compounds: design principles for Mn⁴⁺phosphors with higher efficiency. Physical Chemistry Chemical Physics, 2018, 20, 16992-16999.	2.8	30
7	A comprehensive study of the red persistent luminescence mechanism of Y₂O₂S:Eu,Ti,Mg. Physical Chemistry Chemical Physics, 2019, 21, 25118-25125.	2.8	25
8	The role of coâ€dopants on the luminescent properties of Î±â€Al₂O₃:Mn⁴⁺ and BaMgAl₁₀O₁₇:Mn⁴⁺. Journal of the American Ceramic Society, 2019, 102, 2737-2744.	3.8	22
9	Rutile TiO₂(011)-2 Ã— 1 Reconstructed Surfaces with Optical Absorption over the Visible Light Spectrum. ACS Applied Materials & Interfaces, 2016, 8, 27403-27410.	8.0	18
10	Mechanistic insights into tunable luminescence and persistent luminescence of the full-color-emitting BCNO phosphors. Carbon, 2017, 122, 176-184.	10.3	18
11	Crossover of thermal expansion from positive to negative by removing the excess fluorines in cubic ReO₃-type TiZrF_{7â^'x}. Journal of Materials Chemistry C, 2018, 6, 5148-5152.	5.5	17
12	How to predict the location of the defect levels induced by 3d transition metal ions at octahedral sites of aluminate phosphors. Journal of Materials Chemistry C, 2019, 7, 95-103.	5.5	16
13	Persistent Luminescence Hole-Type Materials by Design: Transition-Metal-Doped Carbon Allotrope and Carbides. ACS Applied Materials & Interfaces, 2016, 8, 5439-5444.	8.0	14
14	The influence of liquid Pbâ€“Bi on the anti-corrosion behavior of Fe₃O₄: a first-principles study. Physical Chemistry Chemical Physics, 2016, 18, 7789-7796.	2.8	13
15	Yellow persistent luminescence and electronic structure of Ca-Î±-Sialon: Eu2+. Journal of Alloys and Compounds, 2020, 821, 153482.	5.5	13
16	Highly efficient and stable broadband near-infrared-emitting lead-free metal halide double perovskites. Journal of Materials Chemistry C, 2021, 9, 13474-13483.	5.5	13
17	Mechanistic study of pressure and temperature dependent structural changes in reactive formation of silicon carbonate. RSC Advances, 2016, 6, 26650-26657.	3.6	10
18	New phases of 3d-transition metalâ€“cerium binary compounds: an extensive structural search. RSC Advances, 2017, 7, 40486-40498.	3.6	10

#	Article	IF	Citations
19	Anatase (101) Reconstructed Surface with Novel Functionalities: Desired Bandgap for Visible Light Absorption and High Chemical Reactivity. Advanced Functional Materials, 2018, 28, 1705529.	14.9	9
20	Reaction mechanism between small-sized Ce clusters and water molecules: an ab initio investigation on Ce_n + H₂O. Physical Chemistry Chemical Physics, 2019, 21, 4006-4014.	2.8	8
21	Reaction mechanism between small-sized Ce clusters and water molecules II: anab initioinvestigation on Ce_n(n= 1â€“3) +mH₂O (m= 2â€“6). Physical Chemistry Chemical Physics, 2019, 21, 8945-8955.	2.8	8
22	Unraveling Crystalline Structure of High-Pressure Phase of Silicon Carbonate. Physical Review X, 2014, 4, .	8.9	7
23	Atomic structure and dynamics properties of Cu50Zr50 films. Journal of Applied Physics, 2018, 123, .	2.5	7
24	Role of vacancies to p-type semiconducting properties of SiGe nanowires. Journal of Materials Chemistry C, 2014, 2, 6536-6546.	5.5	5
25	Quantitative insights into the chemical trend of four-coordinated Mn2+ emission in inorganic compounds. Journal of Luminescence, 2020, 225, 117399.	3.1	4
26	Structural evolution and atomic diffusion behavior in the Ce70Al10Cu20 melt under compression: A theoretical study using ab-initio molecular dynamics simulations. Journal of Applied Physics, 2017, 122, .	2.5	3
27	Structural origin of the high glass-forming ability of Ce70Ga10Cu20 alloys. Physical Chemistry Chemical Physics, 2019, 21, 4209-4214.	2.8	3
28	Migration and oxidation of vanadium atom and dimer supported on anatase TiO2(1ÂOÂ1) surface. Applied Surface Science, 2021, 565, 150517.	6.1	3
29	A first-principles study on the negative thermal expansion material: Mn3(A0.5B0.5)N (A=Cu, Zn, Ag, or) Tj ETQq1 1 0.784314 rgBT /Ov	1.3	2
30	The dependence of the boson peak on the thickness of Cu50Zr50 film metallic glasses. Physical Chemistry Chemical Physics, 2021, 23, 982-989.	2.8	2
31	Micro-alloying effects of Co on structural and dynamic properties of CeAlCu glass-forming melts by ab initio molecular dynamics simulations. Journal of Non-Crystalline Solids, 2021, 572, 121109.	3.1	2
32	Defects levels and VUV/UV luminescence of Ce3+ and Eu3+ doped chloroapatite phosphors M5(PO4)3Cl (M = Ca, Sr, Ba). Optical Materials, 2020, 107, 110014.	3.6	1
33	The predictability of the ground state of 3d transition metal ion as luminescent centers in the tetrahedral sites in inorganic compounds. Journal of Luminescence, 2022, 247, 118919.	3.1	1