Xiang-Hu Gao

List of Publications by Year
in descending order

31 papers	688 citations	394286 19 h-index	552653 26 g-index
31 all docs	31 docs citations	31 times ranked	402 citing authors

#	Article	IF	Citations
1	Engineering a Versatile Spectrally Selective Absorber for Moderateâ€•and Lowâ€Temperature Application with Gradient Highâ€Entropy Nitride Nanofilms. Solar Rrl, 2022, 6, 2100752.	3.1	10
2	Reinforcement optical performance and thermal tolerance in a TiB2-HfB2-based double-layer spectral selective absorber via a pre-annealing strategy. Materials Today Physics, 2022, 24, 100690.	2.9	8
3	Entropy-Assisted High-Entropy Oxide with a Spinel Structure toward High-Temperature Infrared Radiation Materials. ACS Applied Materials & Interfaces, 2022, 14, 1950-1960.	4.0	21
4	Ultrabroad wavelength absorption in high-temperature solar selective absorber coatings enabled by high-entropy nanoceramic AlTiZrHfNbN for high-performance solar-thermal conversion. Journal of Materials Chemistry C, 2022, 10, 9266-9277.	2.7	3
5	High-Entropy Alloy Nitride AlMo_{0.5}NbTa_{0.5}TiZrN_{<i>x</i>}-Based High-Temperature Solar Absorber Coating: Structure, Optical Properties, and Thermal Stability. ACS Applied Energy Materials, 2022, 5, 9214-9224.	2.5	5
6	Greatly enhanced solar absorption via high entropy ceramic AlCrTaTiZrN based solar selective absorber coatings. Journal of Materiomics, 2021, 7, 460-469.	2.8	20
7	Toward high-temperature thermal tolerance in solar selective absorber coatings: choosing high entropy ceramic HfNbTaTiZrN. Journal of Materials Chemistry A, 2021, 9, 21270-21280.	5.2	24
8	Scalable and highly efficient high temperature solar absorber coatings based on high entropy alloy nitride AlCrTaTiZrN with different antireflection layers. Journal of Materials Chemistry A, 2021, 9, 6413-6422.	5.2	32
9	Scalable and Ultrathin Highâ€Temperature Solar Selective Absorbing Coatings Based on the Highâ€Entropy Nanoceramic AlCrWTaNbTiN with High Photothermal Conversion Efficiency. Solar Rrl, 2021, 5, 2000790.	3.1	23
10	Highly Enhanced Thermal Robustness and Photothermal Conversion Efficiency of Solar-Selective Absorbers Enabled by High-Entropy Alloy Nitride MoTaTiCrN Nanofilms. ACS Applied Materials & Interfaces, 2021, 13, 16987-16996.	4.0	26
11	Nanometer-Thick High-Entropy Alloy Nitride Al_{0.4}Hf_{0.6}NbTaTiZrN-Based Solar Selective Absorber Coatings. ACS Applied Nano Materials, 2021, 4, 4504-4512.	2.4	13
12	Toward a Scalable and Cost-Conscious Structure in Spectrally Selective Absorbers: Using High-Entropy Nitride TiVCrAlZrN. ACS Applied Energy Materials, 2021, 4, 8801-8809.	2.5	5
13	A novel multilayer high temperature solar absorber coating based on high-entropy alloy NbMoTaW: Optical properties, thermal stability and corrosion properties. Journal of Materiomics, 2021, 7, 895-903.	2.8	11
14	Enhanced spectral selectivity of HfC based high temperature solar absorbers with the addition of Mo. Thin Solid Films, 2020, 713, 138349.	0.8	6
15	Further investigation of a novel high entropy alloy MoNbHfZrTi based solar absorber coating with double antireflective layers. Solar Energy Materials and Solar Cells, 2020, 217, 110709.	3.0	18
16	Optical design, thermal shock resistance and failure mechanism of a novel multilayer spectrally selective absorber coating based on HfB2 and ZrB2. Solar Energy Materials and Solar Cells, 2020, 211, 110533.	3.0	21
17	A novel multilayer high temperature colored solar absorber coating based on high-entropy alloy MoNbHfZrTi: Optimized preparation and chromaticity investigation. Solar Energy Materials and Solar Cells, 2020, 209, 110444.	3.0	42
18	Structure, thermal stability and optical simulation of ZrB2 based spectrally selective solar absorber coatings. Solar Energy Materials and Solar Cells, 2019, 193, 178-183.	3.0	46

#	Article	IF	Citations
19	A novel TiCâ€“ZrB2/ZrB2/Al2O3 multilayer high temperature solar selective absorbing coating: Microstructure, optical properties and failure mechanism. Solar Energy Materials and Solar Cells, 2019, 203, 110187.	3.0	24
20	Structure, optical simulation and thermal stability of the HfB₂-based high-temperature solar selective absorbing coatings. RSC Advances, 2019, 9, 29726-29733.	1.7	20
21	Thermal stability investigation of the SS/MO/Al₂O₃ spectrally selective solar absorber coatings. Surface Engineering, 2019, 35, 565-572.	1.1	5
22	Optical properties and failure analysis of ZrC-ZrOx ceramic based spectrally selective solar absorbers deposited at a high substrate temperature. Solar Energy Materials and Solar Cells, 2018, 176, 93-99.	3.0	25
23	Enhanced optical properties of TiN-based spectrally selective solar absorbers deposited at a high substrate temperature. Solar Energy Materials and Solar Cells, 2017, 163, 91-97.	3.0	47
24	Microstructure, chromaticity and thermal stability of SS/TiC-WC/Al2O3 spectrally selective solar absorbers. Solar Energy Materials and Solar Cells, 2017, 164, 63-69.	3.0	25
25	Optical simulation, corrosion behavior and long term thermal stability of TiC-based spectrally selective solar absorbers. Solar Energy Materials and Solar Cells, 2017, 167, 150-156.	3.0	35
26	Microstructure and Optical Properties of SS/Mo/Al2O3 Spectrally Selective Solar Absorber Coating. Journal of Materials Engineering and Performance, 2017, 26, 161-167.	1.2	18
27	Enhanced thermal stability and spectral selectivity of SS/TiC-Y/Al 2 O 3 spectrally selective solar absorber by thermal annealing. Solar Energy, 2016, 140, 199-205.	2.9	17
28	Structure, optical properties and thermal stability of TiC-based tandem spectrally selective solar absorber coating. Solar Energy Materials and Solar Cells, 2016, 157, 543-549.	3.0	56
29	Structure, optical properties and thermal stability of Al2O3-WC nanocomposite ceramic spectrally selective solar absorbers. Optical Materials, 2016, 58, 219-225.	1.7	30
30	Structure, optical properties and thermal stability of SS/TiCâ€“ZrC/Al₂O₃ spectrally selective solar absorber. RSC Advances, 2016, 6, 63867-63873.	1.7	19
31	Solâ€“Gel Combustionâ€Derived CoCuMnO_{<i>x</i>} Spinels as Pigment for Spectrally Selective Paints. Journal of the American Ceramic Society, 2011, 94, 827-832.	1.9	33