Chengbing Wang

List of Publications by Year
in descending order

72	2,386	212478 28	252626 46
papers	citations	h-index	g-index

73	73	73	1786
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Solar Selective Absorber for Emerging Sustainable Applications. Advanced Energy and Sustainability Research, 2022, 3, .	2.8	34
2	Selfâ€Doped TiAl Nanoparticle/AlN Metalâ€Cermet Solar Selective Absorbing Films. Advanced Materials Interfaces, 2022, 9, 2102008.	1.9	1
3	Engineering a superhydrophilic TiC/C absorber with multiscale pore network for stable and efficient solar evaporation of high-salinity brine. Materials Today Energy, 2022, 26, 101009.	2.5	4
4	Multifunctional wearable thermal management textile fabricated by one-step sputtering. Nano Today, 2022, 45, 101526.	6.2	15
5	MXene-based flexible and washable photothermal fabrics for efficiently continuous solar-driven evaporation and desalination of seawater. Renewable Energy, 2022, 195, 407-415.	4.3	36
6	Monolithic all-weather solar-thermal interfacial membrane evaporator. Chemical Engineering Journal, 2022, 450, 137893.	6.6	21
7	Salt Mitigation Strategies of Solarâ€Driven Interfacial Desalination. Advanced Functional Materials, 2021, 31, 2007855.	7.8	149
8	Transformation of fullerene-like carbon into concentric elliptical multi-shell carbon nanorings: A synergetic effect of compressive stress and moderate electron beam irradiation. Diamond and Related Materials, 2021, 111, 108189.	1.8	1
9	Oxidation behavior of melt-infiltrated SiCâ€"TiB2 ceramic composites at 500â€"1300ÂÂ°C in air. Ceramics International, 2021, 47, 9881-9887.	2.3	12
10	Effect of rotational speed on the interfacial nano-structural evolution and friction behavior of hydrogenated fullerene-like carbon (FLC) films in vacuum. Tribology International, 2021, 154, 106746.	3.0	4
11	Fe2O3-decoration and multilayer structure design of Ti3C2 MXene materials toward strong and broadband absorption of electromagnetic waves in the X-band region. Journal of Materials Science: Materials in Electronics, 2021, 32, 25919-25932.	1.1	15
12	Architecting a Janus biomass carbon/sponge evaporator with salt-rejection and ease of floatation for sustainable solar-driven desalination. Environmental Science: Water Research and Technology, 2021, 7, 879-885.	1.2	19
13	Self-encapsulating Ag nanospheres in amorphous carbon: a novel ultrathin selective absorber for flexible solar-thermal conversion. Journal of Materials Chemistry A, 2021, 9, 11300-11311.	5.2	12
14	Recent Progress on Conductive Metalâ€Organic Framework Films. Advanced Materials Interfaces, 2021, 8, 2002151.	1.9	37
15	Highly Dispersed CoNi Alloy Embedded in Nâ€doped Graphitic Carbon for Catalytic Transfer Hydrogenation of Biomassâ€derived Furfural. Chemistry - an Asian Journal, 2021, 16, 3194-3201.	1.7	21
16	Universal Strategy to Prepare a Flexible Photothermal Absorber Based on Hierarchical Fe-MOF-74 toward Highly Efficient Solar Interfacial Seawater Desalination. ACS Applied Materials & Interfaces, 2021, 13, 45944-45956.	4.0	34
17	A salt-free superhydrophilic metal-organic framework photothermal textile for portable and efficient solar evaporator. Solar Energy Materials and Solar Cells, 2021, 231, 111329.	3.0	23
18	Hexagonal cluster Mn-MOF nanoflowers with super-hydrophilic properties for efficient and continuous solar-driven clean water production. Sustainable Energy and Fuels, 2021, 5, 1995-2002.	2.5	22

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19	Novel advances in metal-based solar absorber for photothermal vapor generation. Chinese Chemical Letters, 2020, 31, 2159-2166.	4.8	39
20	Spectral properties and microstructure of sputtered WO_x films for solar conversion applications. Surface and Interface Analysis, 2020, 52, 407-412.	0.8	3
21	Single layer WOx films for efficient solar selective absorber. Materials and Design, 2020, 186, 108351.	3.3	16
22	Solar thermal harvesting based on self-doped nanocermet: Structural merits, design strategies and applications. Renewable and Sustainable Energy Reviews, 2020, 134, 110277.	8.2	56
23	Thermal annealing characteristics of solar selective absorber coatings based on nano-multilayered MoOx films. Ceramics International, 2020, 46, 27219-27225.	2.3	6
24	Temperature-induced degradation of bilayer MoOx-based solar absorbers under air annealing conditions. Surfaces and Interfaces, 2020, 21, 100654.	1.5	2
25	Self-organization of Mo nanoparticles embedded in MoOx matrix for efficient solar energy absorption. Solar Energy, 2020, 208, 665-673.	2.9	5
26	Microstructures and mechanical properties of in-situ SiC-TiB2 ceramic composites fabricated by reactive melt infiltration. Journal of Alloys and Compounds, 2020, 840, 155734.	2.8	8
27	Oneâ€Step Reactive Sputtering of Novel MoO_{<i>x</i>} Nanogradient Absorber for Flexible and Wearable Personal Passive Heating. Solar Rrl, 2020, 4, 2000055.	3.1	14
28	Superhydrophilic porous carbon foam as a self-desalting monolithic solar steam generation device with high energy efficiency. Journal of Materials Chemistry A, 2020, 8, 9528-9535.	5.2	163
29	Achieving excellent wide-range efficient microwave absorption property by synthesis of Fe-doped CuAlO2 powders via a facile solâ€“gel route. Journal of Materials Science: Materials in Electronics, 2020, 31, 9328-9334.	1.1	6
30	Engineering controllable water transport of biosafety cuttlefish juice solar absorber toward remarkably enhanced solar-driven gas-liquid interfacial evaporation. Nano Energy, 2020, 73, 104834.	8.2	101
31	Enhanced spectral absorption of bilayer WOx/SiO2 solar selective absorber coatings via low vacuum pre-annealing. Solar Energy Materials and Solar Cells, 2019, 202, 110152.	3.0	19
32	Arched Bamboo Charcoal as Interfacial Solar Steam Generation Integrative Device with Enhanced Water Purification Capacity. Advanced Sustainable Systems, 2019, 3, 1800144.	2.7	142
33	An Ultrathin, Nanogradient, and Substrateâ€Independent WO x â€Based Film as a High Performance Flexible Solar Absorber. Solar Rrl, 2019, 3, 1900180.	3.1	25
34	Efficient Interfacial Solar Steam Generator with Controlled Macromorphology Derived from Flour via â€œDough Figurineâ€• Technology. Energy Technology, 2019, 7, 1900406.	1.8	25
35	Greatly enhanced anticorrosion of Alâ€“AlN_xO_ynanocermet films with self-passivated Al nanoparticles for enduring solar-thermal energy harvesting. Journal of Materials Chemistry A, 2019, 7, 13080-13089.	5.2	28
36	Fastâ€Growing Field of Interfacial Solar Steam Generation: Evolutional Materials, Engineered Architectures, and Synergistic Applications. Solar Rrl, 2019, 3, 1800206.	3.1	132

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37	<i>In situ</i> atomic-scale observation of irradiation induced carbon nanocrystalline formation from dense carbon clusters. Nanotechnology, 2018, 29, 115602.	1.3	3
38	Selfâ€Organization of Amorphous Carbon Nanocapsules into Diamond Nanocrystals Driven by Selfâ€Nanoscopic Excessive Pressure under Moderate Electron Irradiation without External Heating. Small, 2018, 14, 1702072.	5.2	5
39	Self-doped Wâ€“WO_x nanocermet multilayer films fabricated by single tungsten target reactive sputtering for selective solar absorption. Journal of Materials Chemistry A, 2018, 6, 15690-15700.	5.2	41
40	Ultra-low friction mechanism of highly sp3-hybridized amorphous carbon controlled by interfacial molecule adsorption. Physical Chemistry Chemical Physics, 2018, 20, 22445-22454.	1.3	18
41	Superlubricity of hydrogenated carbon films in a nitrogen gas environment: adsorption and electronic interactions at the sliding interface. RSC Advances, 2017, 7, 3025-3034.	1.7	24
42	Tribological properties of hydrogenated amorphous carbon films in different atmospheres. Diamond and Related Materials, 2017, 77, 84-91.	1.8	27
43	Nanocrystalline Graphite Formed at Fullereneâ€Like Carbon Film Frictional Interface. Advanced Materials Interfaces, 2017, 4, 1601113.	1.9	32
44	High performance Alâ€“AlN solar spectrally selective coatings with a self-assembled nanostructure AlN anti-reflective layer. Journal of Materials Chemistry A, 2017, 5, 2852-2860.	5.2	40
45	Structure, optical properties and thermal stability of Al2O3-WC nanocomposite ceramic spectrally selective solar absorbers. Optical Materials, 2016, 58, 219-225.	1.7	30
46	Facile synthesis of hierarchical porous carbon for supercapacitor with enhanced electrochemical performance. Materials Letters, 2016, 182, 1-5.	1.3	14
47	Polychromic Alâ€“AlN cermet solar absorber coating with high absorption efficiency and excellent durability. Solar Energy Materials and Solar Cells, 2016, 144, 14-22.	3.0	48
48	Effect of Si content on the tribological properties of CrSiN films in air and water environments. Tribology International, 2014, 79, 140-150.	3.0	39
49	Study on the antiâ€reflection and structure evolution of hydrogenated amorphous carbon grown by plasma chemical vapor deposition. Surface and Interface Analysis, 2014, 46, 530-534.	0.8	1
50	Structure evolution of hydrogenated carbon films from amorphous carbon to fullereneâ€like nanostructure. Surface and Interface Analysis, 2014, 46, 550-555.	0.8	3
51	Influence of deposition pressure on hydrogenated amorphous carbon films prepared by d.c.â€pulse plasma chemical vapor deposition. Surface and Interface Analysis, 2013, 45, 800-804.	0.8	6
52	Effects of negative bias on the structural, topological and tribological properties of amorphous carbon films prepared by magnetron sputtering. Surface and Interface Analysis, 2011, 43, 1218-1223.	0.8	13
53	The Friction Property of Hydrogenated Carbon with Fullerene Microstructure after Annealing. , 2009, , 608-609.		0
54	Electrochemical corrosion behaviors of a-C:H and a-C:NX:H films. Applied Surface Science, 2008, 254, 3021-3025.	3.1	32

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55	Stress relief patterns of hydrogenated amorphous carbon films grown by dc-pulse plasma chemical vapor deposition. Applied Surface Science, 2008, 255, 1836-1840.	3.1	9
56	Super-low friction and super-elastic hydrogenated carbon films originated from a unique fullerene-like nanostructure. Nanotechnology, 2008, 19, 225709.	1.3	82
57	Correlation between nitrogen incorporation and structural modification of hydrogenated carbon nitride films. Journal of Non-Crystalline Solids, 2008, 354, 1608-1614.	1.5	18
58	The infrared characteristics investigation of carbon nitride films. Diamond and Related Materials, 2008, 17, 174-179.	1.8	8
59	The evolution of the structure and mechanical properties of fullerenelike hydrogenated amorphous carbon films upon annealing. Journal of Applied Physics, 2008, 104, .	1.1	13
60	The correlation between pentatomic and heptatomic carbon rings and stress of hydrogenated amorphous carbon films prepared by dc-pulse plasma chemical vapor deposition. Applied Physics Letters, 2008, 93, .	1.5	18
61	Nanocrystalline diamond embedded in hydrogenated fullerenelike carbon films. Journal of Applied Physics, 2008, 103, 056110.	1.1	5
62	Comparative study of hydrogenated diamondlike carbon film and hard hydrogenated graphitelike carbon film. Journal of Applied Physics, 2008, 103, 123531.	1.1	29
63	Annealing effect on the microstructure modification and tribological properties of amorphous carbon nitride films. Journal of Applied Physics, 2008, 104, 073306.	1.1	19
64	Elastic properties of aâ€C:N:H films. Journal of Applied Physics, 2007, 101, 013501.	1.1	43
65	Fullerene nanostructure-induced excellent mechanical properties in hydrogenated amorphous carbon. Applied Physics Letters, 2007, 91, 141902.	1.5	99
66	Tribochemical effects on the friction and wear behaviors of a-C:H and a-C films in different environment. Tribology International, 2007, 40, 132-138.	3.0	94
67	Ripple surface generated on hydrogenated amorphous carbon nitride films. Applied Surface Science, 2007, 253, 4099-4102.	3.1	1
68	Humidity dependence on the friction and wear behavior of diamond-like carbon film in air and nitrogen environments. Diamond and Related Materials, 2006, 15, 1585-1592.	1.8	48
69	Friction-induced physical and chemical interactions among diamond-like carbon film, steel ball and water and/or oxygen molecules. Diamond and Related Materials, 2006, 15, 1228-1234.	1.8	44
70	Annealing effect on the structure, mechanical and tribological properties of hydrogenated diamond-like carbon films. Thin Solid Films, 2006, 515, 2153-2160.	0.8	123
71	Friction behaviors of hydrogenated diamond-like carbon film in different environment sliding against steel ball. Applied Surface Science, 2005, 249, 257-265.	3.1	60
72	Effect of relative humidity on the tribological properties of hydrogenated diamond-like carbon films in a nitrogen environment. Journal Physics D: Applied Physics, 2005, 38, 62-69.	1.3	29