Yanhui Chu

List of Publications by Year
in descending order

72 papers	3,829 citations	109321 35 h-index	123424 61 g-index
72 all docs	72 docs citations	72 times ranked	2947 citing authors

#	Article	IF	Citations
1	Nanocrystalline high-entropy hexaboride ceramics enable remarkable performance as thermionic emission cathodes. Fundamental Research, 2023, 3, 979-987.	3.3	5
2	Nanocrystalline highâ€entropy carbide ceramics with improved mechanical properties. Journal of the American Ceramic Society, 2022, 105, 606-613.	3.8	46
3	High-entropy metal carbide nanowires. Cell Reports Physical Science, 2022, 3, 100839.	5.6	14
4	Synthesis of the superfine high-entropy zirconate nanopowders by polymerized complex method. Journal of Advanced Ceramics, 2022, 11, 136-144.	17.4	19
5	Surface energies in highâ€entropy carbides with variable carbon stoichiometry. Journal of the American Ceramic Society, 2022, 105, 5835-5842.	3.8	6
6	Combustion synthesis of high-entropy carbide nanoparticles for tetracycline degradation via persulfate activation. Science China Materials, 2022, 65, 3144-3149.	6.3	10
7	Rapid fabrication of hierarchical porous SiC/C hybrid structure: toward high-performance capacitive energy storage with ultrahigh cyclability. Journal of Materials Science, 2021, 56, 16068-16081.	3.7	8
8	High-entropy alumino-silicides: a novel class of high-entropy ceramics. Science China Materials, 2020, 63, 300-306.	6.3	45
9	Highâ€temperature oxidation behavior of (Hf_{0.2}Zr_{0.2}Ta_{0.2}Nb_{0.2}Ti_{0.2})C highâ€entropy ceramics in air. Journal of the American Ceramic Society, 2020, 103, 500-507.	3.8	104
10	Lowâ€temperature molten salt synthesis of highâ€entropy carbide nanopowders. Journal of the American Ceramic Society, 2020, 103, 2244-2251.	3.8	50
11	Synthesis of the ternary metal carbide solidâ€solution ceramics by polymerâ€derivedâ€ceramic route. Journal of the American Ceramic Society, 2020, 103, 2970-2974.	3.8	17
12	Formation criterion for binary metal diboride solid solutions established through combinatorial methods. Journal of the American Ceramic Society, 2020, 103, 3338-3348.	3.8	16
13	Highâ€pressure sintering of ultrafineâ€grained highâ€entropy diboride ceramics. Journal of the American Ceramic Society, 2020, 103, 6655-6658.	3.8	42
14	Synthesis of highâ€entropy diboride nanopowders via molten saltâ€mediated magnesiothermic reduction. Journal of the American Ceramic Society, 2020, 103, 4738-4741.	3.8	27
15	Molten salt synthesis, formation mechanism, and oxidation behavior of nanocrystalline HfB2 powders. Journal of Advanced Ceramics, 2020, 9, 35-44.	17.4	56
16	Fabrication and characterization of polymerâ€derived highâ€entropy carbide ceramic powders. Journal of the American Ceramic Society, 2020, 103, 4063-4068.	3.8	49
17	Thermophysical and mechanical properties of novel highâ€entropy metal nitrideâ€carbides. Journal of the American Ceramic Society, 2020, 103, 6475-6489.	3.8	66
18	Chrysanthemum-like high-entropy diboride nanoflowers: A new class of high-entropy nanomaterials. Journal of Advanced Ceramics, 2020, 9, 339-348.	17.4	46

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19	Synthesis and characterization of (Zr_{1/3}Nb_{1/3}Ti_{1/3})C metal carbide solidâ€solution ceramic. Journal of the American Ceramic Society, 2019, 102, 919-923.	3.8	38
20	Synthesis and characterization of (Pr, Ce)â€ZrSiO₄ ceramic pigments: The properties of the pigments and the effect of Ce. Journal of the American Ceramic Society, 2019, 102, 2619-2628.	3.8	14
21	Synthesis of highâ€purity highâ€entropy metal diboride powders by boro/carbothermal reduction. Journal of the American Ceramic Society, 2019, 102, 7071-7076.	3.8	55
22	Scalable ultrasmall three-dimensional nanowire transistor probes for intracellular recording. Nature Nanotechnology, 2019, 14, 783-790.	31.5	129
23	Magnetic double-network hydrogels for tissue hyperthermia and drug release. Journal of Materials Chemistry B, 2019, 7, 1311-1321.	5.8	67
24	Preparation and properties of dense ZrB₂ composite reinforced by elongated SiC and Al₃BC₃ grains. International Journal of Applied Ceramic Technology, 2019, 16, 2190-2196.	2.1	5
25	Oneâ€step synthesis of coralâ€like highâ€entropy metal carbide powders. Journal of the American Ceramic Society, 2019, 102, 6372-6378.	3.8	48
26	Oxidation behavior of (Hf0.2Zr0.2Ta0.2Nb0.2Ti0.2)C high-entropy ceramics at 1073-1473 K in air. Corrosion Science, 2019, 153, 327-332.	6.6	143
27	Synthesis of superfine high-entropy metal diboride powders. Scripta Materialia, 2019, 167, 110-114.	5.2	120
28	First-principles study, fabrication and characterization of (Zr0.25Nb0.25Ti0.25V0.25)C high-entropy ceramics. Acta Materialia, 2019, 170, 15-23.	7.9	294
29	Synthesis and characterization of the ternary metal diboride solidâ€solution nanopowders. Journal of the American Ceramic Society, 2019, 102, 4956-4962.	3.8	24
30	Bioinspired neuron-like electronics. Nature Materials, 2019, 18, 510-517.	27.5	277
31	Firstâ€principles study, fabrication, and characterization of (Hf_{0.2}Zr_{0.2}Ta_{0.2}Nb_{0.2}Ti_{0.2})C highâ€entropy ceramic. Journal of the American Ceramic Society, 2019, 102, 4344-4352.	3.8	217
32	Molten salt synthesis, characterization, and formation mechanism of superfine (Hf_xZr_{1â€x})B₂ solidâ€solution powders. Journal of the American Ceramic Society, 2019, 102, 3763-3770.	3.8	23
33	Morphological control and kinetics in three dimensions for hierarchical nanostructures growth by screw dislocations. Acta Materialia, 2019, 162, 284-291.	7.9	28
34	High-Temperature Plateauâ€“Rayleigh Growth of Beaded SiC/SiO₂ Nanochain Heterostructures. Crystal Growth and Design, 2018, 18, 2941-2947.	3.0	26
35	The influence of micronization on the properties of Pr-ZrSiO4 pigment. Dyes and Pigments, 2018, 153, 74-83.	3.7	31
36	In situ synthesis of homogeneously dispersed SiC nanowires in reaction sintered silicon-based ceramic powders. Ceramics International, 2018, 44, 6681-6685.	4.8	28

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37	Spontaneous growth of hexagonal ZrB₂ nanoplates driven by a screw dislocation mechanism. CrystEngComm, 2018, 20, 7637-7641.	2.6	9
38	Synthesis of Ti_{0.2}Zr_{0.8}B₂ solidâ€solution nanopowders by molten salt assisted borothermal reduction. Journal of the American Ceramic Society, 2018, 101, 4899-4904.	3.8	9
39	Lowâ€temperature synthesis of ultrafine TiB₂ nanopowders by moltenâ€salt assisted borothermal reduction. Journal of the American Ceramic Society, 2018, 101, 5299-5303.	3.8	20
40	SiC nanowire-induced fabrication of fine-grained and highly-density SiC coating by pressure-less reactive sintering. Journal of Alloys and Compounds, 2018, 755, 206-210.	5.5	21
41	Screw dislocation assisted spontaneous growth of single-crystalline Î±-Al2O3 microrods. Composites Communications, 2018, 10, 93-96.	6.3	3
42	Optomechanical Transistor with Phonons and Photons. IEEE Sensors Journal, 2017, , 1-1.	4.7	1
43	Influence of microstructure properties and layer thickness on strength and permeance of ceramic membranes. International Journal of Applied Ceramic Technology, 2017, 14, 562-573.	2.1	2
44	Solid Conical Cap-closing Hollow Tube Growth by Axial Screw Dislocations. Scientific Reports, 2017, 7, 2803.	3.3	3
45	Engineer in Situ Growth of Î±-Al₂O₃ Whiskers by Axial Screw Dislocations. Crystal Growth and Design, 2017, 17, 1999-2005.	3.0	12
46	Controlling signal transport in a carbon nanotube opto-transistor. Scientific Reports, 2016, 6, 37193.	3.3	1
47	Shape-Controlled Deterministic Assembly of Nanowires. Nano Letters, 2016, 16, 2644-2650.	9.1	57
48	General synthesis of complex nanotubes by gradient electrospinning and controlled pyrolysis. Nature Communications, 2015, 6, 7402.	12.8	370
49	Oxidation protection of carbon/carbon composites by a novel SiC nanoribbon-reinforced SiCâ€“Si ceramic coating. Corrosion Science, 2015, 92, 272-279.	6.6	51
50	Ultraâ€Highâ€Temperature Ceramic HfB₂â€SiC Coating for Oxidation Protection of SiCâ€Coated Carbon/Carbon Composites. International Journal of Applied Ceramic Technology, 2015, 12, 560-567.	2.1	51
51	Oxidation protection and behavior of in-situ zirconium diborideâ€“silicon carbide coating for carbon/carbon composites. Journal of Alloys and Compounds, 2015, 645, 164-170.	5.5	56
52	SiC Nanowires Toughed HfC Ablative Coating for C/C Composites. Journal of Materials Science and Technology, 2015, 31, 70-76.	10.7	35
53	Ferroceneâ€Catalyzed Growth of Singleâ€Crystalline 6Hâ€SiC Nanoribbons. Journal of the American Ceramic Society, 2014, 97, 3363-3366.	3.8	9
54	Adsorbed <scp><scp>O</scp></scp>₂ on the Graphiteâ€Induced Growth of Ultraâ€Long Singleâ€Crystalline 6<scp><scp>H</scp></scp>â€“<scp><scp>SiC</scp></scp> Nanowires. Journal of the American Ceramic Society, 2014, 97, 2379-2382.	3.8	10

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55	Oxidation protection of C/C composites by ultra long SiC nanowire-reinforced SiCâ€“Si coating. Corrosion Science, 2014, 84, 204-208.	6.6	49
56	Periodically twinned 6H-SiC nanowires with fluctuating stems. Ceramics International, 2014, 40, 4455-4460.	4.8	24
57	Preparation of oxidation protective ZrB2â€“SiC coating by in-situ reaction method on SiC-coated carbon/carbon composites. Surface and Coatings Technology, 2014, 247, 61-67.	4.8	67
58	ZrB2â€“SiC gradient oxidation protective coating for carbon/carbon composites. Ceramics International, 2014, 40, 7171-7176.	4.8	89
59	Bamboo-shaped SiC nanowire-toughened SiC coating for oxidation protection of C/C composites. Corrosion Science, 2013, 70, 11-16.	6.6	57
60	Oxidation resistant graded multiphase coating for carbon/carbon composites. Surface and Coatings Technology, 2013, 232, 821-826.	4.8	31
61	TaB2â€“SiCâ€“Si multiphase oxidation protective coating for SiC-coated carbon/carbon composites. Journal of the European Ceramic Society, 2013, 33, 2953-2959.	5.7	73
62	Oxidation protection and behavior of C/C composites with an in situ SiC nanowireâ€“SiCâ€“Si/SiCâ€“Si coating. Corrosion Science, 2013, 70, 285-289.	6.6	57
63	Large-scale synthesis, growth mechanism, and photoluminescence of 3C-SiC nanobelts. Materials Letters, 2013, 109, 275-278.	2.6	18
64	Wear behavior of SiC nanowire-reinforced SiC coating for C/C composites at elevated temperatures. Journal of the European Ceramic Society, 2013, 33, 2961-2969.	5.7	35
65	Oxidation protection of C/C composites with in situ bamboo-shaped SiC nanowire-toughened Siâ€“Cr coating. Corrosion Science, 2013, 74, 419-423.	6.6	36
66	Improvement of <scp><scp>SiC</scp></scp>â€“<scp><scp>Si</scp></scp>/<scp>MAS</scp> Interface in the Joints via In Situ Synthesizing <scp><scp>SiC</scp></scp> Nanowires. Journal of the American Ceramic Society, 2013, 96, 3926-3932.	3.8	11
67	Toughening by <scp><scp>SiC</scp></scp> Nanowires in a Dense <scp><scp>SiC</scp></scp>â€“<scp><scp>Si</scp></scp> Ceramic Coating for Oxidation Protection of <scp><scp>C</scp></scp>/<scp><scp>C</scp></scp> Composites. Journal of the American Ceramic Society, 2012, 95, 3691-3697.	3.8	63
68	Oxidation protection of SiC-coated C/C composites by SiC nanowire-toughened CrSi 2 â€“SiCâ€“Si coating. Corrosion Science, 2012, 55, 394-400.	6.6	57
69	Oxidation protection of C/C composites with a multilayer coating of SiC and Si + SiC + SiC nanowires. Carbon, 2012, 50, 1280-1288.	10.3	116
70	Influence of SiC nanowires on the properties of SiC coating for C/C composites between room temperature and 1500Â°C. Corrosion Science, 2011, 53, 3048-3053.	6.6	72
71	Thermal fatigue behavior of C/C composites modified by SiCâ€“MoSi2â€“CrSi2 coating. Journal of Alloys and Compounds, 2011, 509, 8111-8115.	5.5	30
72	Microstructure and growth mechanism of SiC nanowires with periodically fluctuating hexagonal prisms by CVD. Journal of Alloys and Compounds, 2010, 508, L36-L39.	5.5	31