Peizhong Feng

List of Publications by Year
in descending order

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90 papers	2,355 citations	218677 26 h-index	233421 45 g-index
90 all docs	90 docs citations	90 times ranked	1712 citing authors

#	Article	IF	Citations
1	Oxidation inhibition behaviors of HfB₂â€MoSi₂â€SiC oxygen blocking coating prepared by spark plasma sintering. Journal of the American Ceramic Society, 2022, 105, 1568-1580.	3.8	11
2	Recycling MoSi2 heating elements for preparing oxidation resistant multilayered coatings. Journal of the European Ceramic Society, 2022, 42, 921-934.	5.7	6
3	A sandwich structure of cobalt pyrophosphate/nickel phosphite@C: one step synthesis and its good electrocatalytic performance. Journal of Solid State Electrochemistry, 2022, 26, 1221-1230.	2.5	2
4	Oxidation resistance at 900ÂÂ°C of porous Ni-Al-Cr intermetallics synthesized via rapid thermal explosion reaction. Journal of Alloys and Compounds, 2022, 906, 164374.	5.5	8
5	One-step synthesis via solution combustion of Fe(III)-doped BiOCl nanoparticles with high photocatalytic activity. Journal of Sol-Gel Science and Technology, 2022, 103, 309-318.	2.4	3
6	Amorphous Iron Boride in Situ Grown on Black Phosphorus Sheets: A Promising Electrocatalyst for OER. Journal of Electronic Materials, 2022, 51, 3705-3713.	2.2	5
7	Effect of film-forming regulation of the self-formed compound layer on the oxidation inhibition capacity of HfB2-SiC coating. Ceramics International, 2022, 48, 22039-22052.	4.8	4
8	Pore formation mechanism and oxidation resistance of porous CoAl3 intermetallic prepared by rapid thermal explosion. Intermetallics, 2022, 147, 107592.	3.9	5
9	Oxidation of TaB2-SiC coatings prepared by spark plasma sintering and effect of pre-oxidation treatments. Journal of the European Ceramic Society, 2022, 42, 5238-5248.	5.7	3
10	Effect of the heating rate on the thermal explosion behavior and oxidation resistance of 3D-structure porous NiAl intermetallic. Materials Characterization, 2022, 190, 112062.	4.4	7
11	Ultra-High Energy Storage Performance in BNT-based Ferroelectric Ceramics with Simultaneously Enhanced Polarization and Breakdown Strength. ACS Sustainable Chemistry and Engineering, 2022, 10, 9176-9183.	6.7	20
12	Oxygen barrier capability of ZrB2-SiC coating at 1700ÂÂ°C strengthened by film-forming treatment. Corrosion Science, 2022, 205, 110456.	6.6	1
13	Microstructural Characterization and Antiâ€Oxidation Properties of Molybdenum Disilicide Coating on Niobium by Spent MoSi₂â€Based Materials. Advanced Engineering Materials, 2021, 23, .	3.5	1
14	Effect of the ZrB2 content on the oxygen blocking ability of ZrB2-SiC coating at 1973K. Journal of the European Ceramic Society, 2021, 41, 1059-1070.	5.7	32
15	Microstructure and high-temperature oxidation resistance of MoSi2-ZrO2 composite coatings for Niobium substrate. Journal of the European Ceramic Society, 2021, 41, 1197-1210.	5.7	35
16	Preparation of MoSi2-SiB6 oxidation inhibition coating on graphite by spark plasma sintering method. Surface and Coatings Technology, 2021, 405, 126511.	4.8	9
17	In situ growth of porous carbon with adjustable morphology on black phosphorus nanosheets for boosting electrocatalytic H₂ and O₂ evolution. New Journal of Chemistry, 2021, 45, 12203-12212.	2.8	4
18	Microstructure and properties of Coâ€“Al porous intermetallics fabricated by thermal explosion reaction. High Temperature Materials and Processes, 2021, 40, 141-150.	1.4	0

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19	Preparation and highâ€temperature oxidation resistance of multilayer MoSi₂/MoB coating by spent MoSi₂â€based materials. Journal of the American Ceramic Society, 2021, 104, 3682-3694.	3.8	13
20	Progress of porous Al-containing intermetallics fabricated by combustion synthesis reactions: a review. Journal of Materials Science, 2021, 56, 11605-11630.	3.7	21
21	Solvothermal synthesis of weakly crystalline cobaltâ€“nickel sulfide to obtain high pseudocapacitance. Journal of Materials Science: Materials in Electronics, 2021, 32, 11072-11083.	2.2	2
22	Preparation and 1500â€‰Â°C oxidation behavior of crack-free bentonite doped MoSi2 protective coating on molybdenum. Corrosion Science, 2021, 184, 109379.	6.6	24
23	Reversal of triboelectric charges on solâ€“gel oxide films annealed at different temperatures. Applied Physics Letters, 2021, 118, .	3.3	3
24	Effects of Oxygen Vacancies and Cation Valence States on the Triboelectric Property of Substoichiometric Oxide Films. ACS Applied Materials & Interfaces, 2021, 13, 35795-35803.	8.0	6
25	Vortex domain configuration for energy-storage ferroelectric ceramics design: A phase-field simulation. Applied Physics Letters, 2021, 119, .	3.3	13
26	Influence of Ta2O5 on the micromorphology and high-temperature oxidation resistance of MoSi2-based composite coating for protecting niobium. Materials Characterization, 2021, 179, 111328.	4.4	8
27	New two-layer Ruddlesdenâ€”Popper cathode materials for protonic ceramics fuel cells. Journal of Advanced Ceramics, 2021, 10, 1052-1060.	17.4	65
28	Preparation of ZrB2-MoSi2 high oxygen resistant coating using nonequilibrium state powders by self-propagating high-temperature synthesis. Journal of Advanced Ceramics, 2021, 10, 1011-1024.	17.4	33
29	Reaction mechanism and oxidation resistance at 700â€“900 Â°C of high porosity NiAl intermetallic. Corrosion Science, 2021, 191, 109731.	6.6	20
30	Preparation of Porous NiAl Intermetallic with Controllable Shape and Pore Structure by Rapid Thermal Explosion with Space Holder. Metals and Materials International, 2021, 27, 4216-4224.	3.4	7
31	Rapid Preparation of Porous Niâ€“Al Intermetallics by Thermal Explosion. Combustion Science and Technology, 2020, 192, 486-492.	2.3	8
32	Influence of the ZrB2 content on the anti-oxidation ability of ZrB2-SiC coatings in aerobic environments with broad temperature range. Journal of the European Ceramic Society, 2020, 40, 203-211.	5.7	35
33	Oxidation inhibition behaviors of the HfB2-SiC-TaSi2 coating for carbon structural materials at 1700 Â°C. Corrosion Science, 2020, 177, 108982.	6.6	42
34	Interfacial microstructure and mechanical properties of Ti/Cu joint manufactured by Ni-Al thermal explosion reaction. Journal of Manufacturing Processes, 2020, 57, 919-929.	5.9	6
35	Influence of MoSi2 on oxidation protective ability of TaB2-SiC coating in oxygen-containing environments within a broad temperature range. Journal of Advanced Ceramics, 2020, 9, 703-715.	17.4	46
36	Dissimilar Metal Joining of Ti and Ni Using Ti-Al Powder Interlayer Via Rapid Thermal Explosion Method. Journal of Materials Engineering and Performance, 2020, 29, 7239-7249.	2.5	1

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37	Visible Observation and Formation Mechanism of Porous TiAl3 Intermetallics During the Continuous Sintering Process. Jom, 2020, 72, 3652-3660.	1.9	6
38	Significantly enhanced dielectric breakdown strength of ferroelectric energy-storage ceramics via grain size uniformity control: Phase-field simulation and experimental realization. Applied Physics Letters, 2020, 117, 212902.	3.3	14
39	Microstructure, properties and oxidation behavior of MoSi2-MoB-ZrO2 coating for Mo substrate using spark plasma sintering. Surface and Coatings Technology, 2019, 375, 773-781.	4.8	32
40	Preparation of oxidation protective MoSi2â€“SiC coating on graphite using recycled waste MoSi2 by one-step spark plasma sintering method. Ceramics International, 2019, 45, 22040-22046.	4.8	22
41	Investigations of TaB2 on oxidation-inhibition property and mechanism of Si-based coatings in aerobic environment with broad temperature region for carbon materials. Journal of the European Ceramic Society, 2019, 39, 4554-4564.	5.7	22
42	Microstructure and oxidation resistance of porous NbAl₃ intermetallic prepared by thermal explosion reaction. Materials Science and Technology, 2019, 35, 1624-1631.	1.6	10
43	Preparation and moderate temperature oxidation behavior of Ti- and Al-doped NbSi2-Si3N4 composite coatings on Nb alloy. Surface and Coatings Technology, 2019, 379, 125005.	4.8	5
44	Exothermic behavior and thermodynamic analysis for the formation of porous TiAl3 intermetallics sintering with different heating rates. Journal of Alloys and Compounds, 2019, 811, 152056.	5.5	18
45	Rapid reactive synthesis of TiAl3 intermetallics by thermal explosion and its oxidation resistance at high temperature. Progress in Natural Science: Materials International, 2019, 29, 447-452.	4.4	23
46	Contact-Electrification between Two Identical Materials: Curvature Effect. ACS Nano, 2019, 13, 2034-2041.	14.6	78
47	Dynamic oxidation protective ultrahigh temperature ceramic TaB2-20%wtSiC composite coating for carbon material. Composites Part B: Engineering, 2019, 161, 220-227.	12.0	28
48	Porous NbAl3/TiAl3 intermetallic composites with controllable porosity and pore morphology prepared by two-step thermal explosion. Journal of Materials Research and Technology, 2019, 8, 3188-3197.	5.8	14
49	Effects of Metal Work Function and Contact Potential Difference on Electron Thermionic Emission in Contact Electrification. Advanced Functional Materials, 2019, 29, 1903142.	14.9	75
50	Recycling Molybdenum Oxides from Waste Molybdenum Disilicides: Oxidation Experimental Study and Photocatalytic Properties. Oxidation of Metals, 2019, 92, 1-12.	2.1	6
51	Numerical Study on the Electron-Blocking Mechanism of Ceria-Related Composite Electrolytes Considering Mixed Conductivities of Free Electron, Oxygen Ion, and Proton. ACS Applied Energy Materials, 2019, 2, 3142-3150.	5.1	9
52	Reaction synthesis of spark plasma sintered MoSi2-B4C coatings for oxidation protection of Nb alloy. Ceramics International, 2019, 45, 4290-4297.	4.8	21
53	Fabrication and Characterization of Highly Porous FeAlâ€Based Intermetallics by Thermal Explosion Reaction. Advanced Engineering Materials, 2019, 21, 1801110.	3.5	12
54	Porous TiAl3 intermetallics with symmetrical graded pore-structure fabricated by leaching space holder and thermal explosion process. Intermetallics, 2018, 95, 144-149.	3.9	21

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55	On the Electronâ€Transfer Mechanism in the Contactâ€Electrification Effect. Advanced Materials, 2018, 30, e1706790.	21.0	483
56	Microstructure Evolution and Pore Formation Mechanism of Porous TiAl3 Intermetallics via Reactive Sintering. Acta Metallurgica Sinica (English Letters), 2018, 31, 440-448.	2.9	18
57	A novel fabrication strategy for highly porous FeAl/Al2O3 composite by thermal explosion in vacuum. Vacuum, 2018, 149, 225-230.	3.5	24
58	Microstructure and properties of Al-Cr porous intermetallics fabricated by thermal explosion reaction. Materials Letters, 2018, 217, 174-176.	2.6	10
59	Preparation of TaB 2 -SiC oxidation protective coating for carbon materials by liquid phase sintering. Ceramics International, 2018, 44, 10708-10715.	4.8	23
60	Fe-Al intermetallic foam with porosity above 60 % prepared by thermal explosion. Journal of Alloys and Compounds, 2018, 732, 443-447.	5.5	39
61	Low temperature synthesis of pure phase TaB2 powders and its oxidation protection modification behaviors for Si-based ceramic coating in dynamic oxidation environments. Ceramics International, 2018, 44, 15517-15525.	4.8	9
62	Anti-oxidation modification behaviors and mechanisms of ZrB2 phase on Si-based ceramic coatings in aerobic environment with wider temperature region. Journal of Alloys and Compounds, 2018, 769, 387-396.	5.5	14
63	Combustion synthesis and mechanical properties of MoSi₂â€“ZrB₂â€“SiC ceramics. Journal of the Ceramic Society of Japan, 2018, 126, 504-509.	1.1	4
64	Fabrication of Highly Porous CuAl Intermetallic by Thermal Explosion Using NaCl Space Holder. Jom, 2018, 70, 2173-2178.	1.9	6
65	Fabrication of highly porous TiAl3 intermetallics using titanium hydride as a reactant in the thermal explosion reaction. Journal of Materials Research, 2018, 33, 2680-2688.	2.6	5
66	Raising the Working Temperature of a Triboelectric Nanogenerator by Quenching Down Electron Thermionic Emission in Contactâ€Electrification. Advanced Materials, 2018, 30, e1803968.	21.0	199
67	Multilayer Black Phosphorus Exfoliated with the Aid of Sodium Hydroxide: An Improvement in Electrochemical Energy Storage. Journal of Electronic Materials, 2018, 47, 4793-4798.	2.2	14
68	Oxidation Resistance of Highly Porous Fe-Al Foams Prepared by Thermal Explosion. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 3683-3691.	2.2	10
69	Porous mullite thermal insulators from coal gangue fabricated by a starch-based foam gel-casting method. Journal of the Australian Ceramic Society, 2017, 53, 287-291.	1.9	31
70	Novel Fabrication and Enhanced Photocatalytic MB Degradation of Hierarchical Porous Monoliths of MoO3 Nanoplates. Scientific Reports, 2017, 7, 1845.	3.3	64
71	Aluminium matrix tungsten aluminide and tungsten reinforced composites by solid-state diffusion mechanism. Scientific Reports, 2017, 7, 12391.	3.3	30
72	Synthesis of ultraâ€fine TaB₂ nano powders by liquid phase method. Journal of the American Ceramic Society, 2017, 100, 5358-5362.	3.8	13

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73	A stage-by-stage phase-induction and nucleation of black phosphorus from red phosphorus under low-pressure mineralization. CrystEngComm, 2017, 19, 7207-7212.	2.6	32
74	Effect of heating rate on porous TiAl-based intermetallics synthesized by thermal explosion. Materials and Manufacturing Processes, 2017, 32, 489-494.	4.7	19
75	Facile synthesis, structure and enhanced photocatalytic activity of novel BiOBr/Bi(C2O4)OH composite photocatalysts. Journal of Colloid and Interface Science, 2017, 486, 8-15.	9.4	31
76	Hierarchical porous TiAl3 intermetallics synthesized by thermal explosion with a leachable space-holder material. Materials Letters, 2016, 181, 261-264.	2.6	26
77	Synthesis and Properties of MoSi₂â€“MoBâ€“SiC Ceramics. Journal of the American Ceramic Society, 2016, 99, 1147-1150.	3.8	27
78	Effects of Raw Materials on Synthesis, Microstructure and Properties of MoSi₂-10 Vol% SiC Composites. Transactions of the Indian Ceramic Society, 2016, 75, 33-39.	1.0	6
79	Synthesis and hydrogenation of anatase TiO₂ microspheres composed of porous single crystals for significantly improved photocatalytic activity. RSC Advances, 2016, 6, 62907-62910.	3.6	8
80	Fabrication and Characterization of (Mo_{1â€x}Ni_x)(Si_{1â€x}Al_x)₂ (x = 0.025, 0.05, and 0.1) Alloys. International Journal of Applied Ceramic Technology, 2016, 13, 359-366.	2.1	2
81	Highly porous open cellular TiAl-based intermetallics fabricated by thermal explosion with space holder process. Intermetallics, 2016, 68, 95-100.	3.9	51
82	Complex-Shaped Porous Cu Bodies Fabricated by Freeze-Casting and Vacuum Sintering. Metals, 2015, 5, 1821-1828.	2.3	15
83	Synthesis, microstructure and properties of Tiâ€“Al porous intermetallic compounds prepared by a thermal explosion reaction. RSC Advances, 2015, 5, 46339-46347.	3.6	36
84	One-pot synthesis of Bi₂₄O₃₁Br₁₀/Bi₄V₂O₁₁heterostructures and their photocatalytic properties. RSC Advances, 2014, 4, 43399-43405.	3.6	40
85	Synthesis, microstructure and properties of MoSi 2 â€“5 vol%Al 2 O 3 composites. Ceramics International, 2014, 40, 16381-16387.	4.8	27
86	One-pot synthesis of Bismuth Oxyhalide/Oxygen-rich bismuth oxyhalide Heterojunction and its photocatalytic activity. Journal of Colloid and Interface Science, 2014, 431, 187-193.	9.4	31
87	Microstructure and properties of Ti5Si3-based porous intermetallic compounds fabricated via combustion synthesis. Journal of Alloys and Compounds, 2014, 612, 337-342.	5.5	29
88	Combustion synthesis of (Mo1â^'xCrx)Si2 (x=0.00â€“0.30) alloys in SHS mode. Advanced Powder Technology, 2012, 23, 133-138.	4.1	20
89	Effect of high-temperature preoxidation treatment on the low-temperature oxidation behavior of a MoSi2-based composite at 500 Â°C. Journal of Alloys and Compounds, 2009, 473, 185-189.	5.5	20
90	Self-propagating high temperature synthesis of MoSi2 matrix composites. Rare Metals, 2006, 25, 225-230.	7.1	14