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List of Publications by Year
in descending order

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92 papers	3,612 citations	159358 30 h-index	143772 57 g-index
92 all docs	92 docs citations	92 times ranked	3238 citing authors

#	Article	IF	Citations
1	Multifunctional performance of Ti₂AlC MAX phase/2D braided alumina fiber laminates. Journal of the American Ceramic Society, 2022, 105, 120-130.	1.9	3
2	Oxidation and creep behavior of textured Ti2AlC and Ti3AlC2. Journal of the European Ceramic Society, 2022, 42, 364-375.	2.8	10
3	Examination of the binary system Al₂O₃â€ZrO₂ by aero acoustic levitation melting. International Journal of Ceramic Engineering & Science, 2022, 4, 10-15.	0.5	2
4	Effect of texture and grain size on the compressive creep of Ti3SiC2 MAX phase ceramics. Materialia, 2022, 21, 101295.	1.3	1
5	Towards a better understanding of the high-temperature oxidation of MAX phase Cr2AlC. Journal of the European Ceramic Society, 2022, 42, 2089-2096.	2.8	14
6	Abrasive behavior of M2AlX MAX phase materials and its relation to the brittleness index. Ceramics International, 2022, 48, 19501-19506.	2.3	2
7	Influence of powder characteristics on cold sintering of nano-sized ZnO with density above 99 %. Journal of the European Ceramic Society, 2021, 41, 2648-2662.	2.8	27
8	Synthesis, sintering, and effect of surface roughness on oxidation of submicron Ti₂AlC ceramics. Journal of the American Ceramic Society, 2021, 104, 1669-1688.	1.9	23
9	Processing of MAX phases: From synthesis to applications. Journal of the American Ceramic Society, 2021, 104, 659-690.	1.9	213
10	The influence of the catalyst on the CO formation during catalytic wet peroxide oxidation process. Catalysis Today, 2021, 361, 30-36.	2.2	6
11	Solvent Co-intercalation into Few-layered Ti₃C₂T_x MXenes in Lithium Ion Batteries Induced by Acidic or Basic Post-treatment. ACS Nano, 2021, 15, 3295-3308.	7.3	35
12	Self-passivating smart tungsten alloys for DEMO: a progress in joining and upscale for a first wall mockup. Tungsten, 2021, 3, 101-115.	2.0	6
13	Smart alloys as armor material for DEMO: Overview of properties and joining to structural materials. Fusion Engineering and Design, 2021, 166, 112272.	1.0	6
14	Understanding the Links between the Composition-Processing-Properties in New Formulations of HEAs Sintered by SPS. Metals, 2021, 11, 888.	1.0	3
15	Scalable Synthesis of MAX Phase Precursors toward Titanium-Based MXenes for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 26074-26083.	4.0	32
16	Injection Molding and Near-Complete Densification of Monolithic and Al2O3 Fiber-Reinforced Ti2AlC MAX Phase Composites. Materials, 2021, 14, 3632.	1.3	0
17	Processing and oxidation response of Cr2AlC MAX-phase composites containing ceramic fibers. Open Ceramics, 2021, 6, 100090.	1.0	6
18	Mechanism for breakaway oxidation of the Ti2AlC MAX phase. Acta Materialia, 2021, 215, 117025.	3.8	21

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19	Advanced Self-Passivating Alloys for an Application under Extreme Conditions. Metals, 2021, 11, 1255.	1.0	12
20	Exploring processing, reactivity and performance of novel MAX phase/ultra-high temperature ceramic composites: The case study of Ti3SiC2. Journal of the European Ceramic Society, 2021, 41, 6064-6069.	2.8	12
21	Novel high entropy alloys as binder in cermets: From design to sintering. International Journal of Refractory Metals and Hard Materials, 2021, 99, 105592.	1.7	8
22	A combined experimental and modeling study revealing the anisotropic mechanical response of Ti2AlN MAX phase. Journal of the European Ceramic Society, 2021, 41, 5872-5881.	2.8	11
23	Salt-templated strategy for well dispersed multi-component composites with morphologies ranging from millimeter to nano-scale. Composites Communications, 2021, 27, 100862.	3.3	1
24	Solvent Coâ€Intercalationâ€Induced Activation and Capacity Fade Mechanism of Fewâ€Multiâ€Layered MXenes in Lithium Ion Batteries. Small, 2021, 17, e2104130.	5.2	12
25	Cr₂AlC MAX phase as bond coat for thermal barrier coatings: Processing, testing under thermal gradient loading, and future challenges. Journal of the American Ceramic Society, 2020, 103, 2362-2375.	1.9	35
26	Mechanical and oxidation behavior of textured Ti2AlC and Ti3AlC2 MAX phase materials. Journal of the European Ceramic Society, 2020, 40, 5258-5271.	2.8	49
27	Tungstenâ€“chromiumâ€“yttrium alloys as first wall armor material: Yttrium concentration, oxygen content and transmutation elements. Fusion Engineering and Design, 2020, 158, 111667.	1.0	11
28	Fabrication and mechanical performance of Ti2AlN prepared by FAST/SPS. Journal of the European Ceramic Society, 2020, 40, 4445-4453.	2.8	21
29	Application of Electric Currentâ€Assisted Sintering Techniques for the Processing of Advanced Materials. Advanced Engineering Materials, 2020, 22, 2000051.	1.6	49
30	Lifetime estimation of Cr2AlC MAX phase foam based on long-term oxidation and fracture mechanisms. Materialia, 2020, 12, 100718.	1.3	2
31	Short SiC fiber/Ti₃SiC₂ MAX phase composites: Fabrication and creep evaluation. Journal of the American Ceramic Society, 2020, 103, 7072-7081.	1.9	11
32	Compressive creep of SiC whisker/Ti₃SiC₂ composites at high temperature in air. Journal of the American Ceramic Society, 2020, 103, 5952-5965.	1.9	10
33	Smart Tungsten-based Alloys for a First Wall of DEMO. Fusion Engineering and Design, 2020, 159, 111742.	1.0	13
34	On the plasma suitability of WCrY smart alloysâ€”the effect of mixed D+Ar/He plasmas. Physica Scripta, 2020, T171, 014002.	1.2	4
35	Multifunctional 3Dâ€Printed Cellular MAXâ€Phase Architectures. Advanced Materials Technologies, 2019, 4, 1900375.	3.0	10
36	2D Stacks of MXene Ti₃C₂ and 1Tâ€Phase WS₂ with Enhanced Capacitive Behavior. ChemElectroChem, 2019, 6, 3982-3986.	1.7	39

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37	Argon-seeded plasma exposure and oxidation performance of tungsten-chromium-yttrium smart alloys. Tungsten, 2019, 1, 159-168.	2.0	7
38	Towards In-Situ Electron Microscopy Studies of Flash Sintering. Ceramics, 2019, 2, 472-487.	1.0	5
39	Preferential sputtering induced Cr-Diffusion during plasma exposure of WCrY smart alloys. Journal of Nuclear Materials, 2019, 526, 151767.	1.3	6
40	Cr2AlC MAX phase foams by replica method. Materials Letters, 2019, 240, 271-274.	1.3	14
41	MAX and MAB Phases: Two-Dimensional Layered Carbide and Boride Nanomaterials for Electrochemical Applications. ACS Applied Nano Materials, 2019, 2, 6010-6021.	2.4	47
42	Mechanical characterisation of the protective Al2O3 scale in Cr2AlC MAX phases. Journal of the European Ceramic Society, 2019, 39, 5149-5155.	2.8	9
43	Determination of sintering stress and bulk viscosity from sinter-forging and X-ray microtomography methods: a Review. Materials Today: Proceedings, 2019, 16, 42-48.	0.9	2
44	Electric current activated sintering (ECAS) of undoped and titanium-doped BiFeO3 bulk ceramics with homogeneous microstructure. Journal of the European Ceramic Society, 2019, 39, 2042-2049.	2.8	15
45	Synthesis of Ti3SiC2 MAX phase powder by a molten salt shielded synthesis (MS3) method in air. Journal of the European Ceramic Society, 2019, 39, 3651-3659.	2.8	46
46	High temperature compressive creep of dense and porous Cr2AlC in air. Journal of the European Ceramic Society, 2019, 39, 3660-3667.	2.8	12
47	Sublimation of advanced tungsten alloys under DEMO relevant accidental conditions. Fusion Engineering and Design, 2019, 146, 1198-1202.	1.0	12
48	Sintering of a sodium-based NASICON electrolyte: A comparative study between cold, field assisted and conventional sintering methods. Journal of the European Ceramic Society, 2019, 39, 2697-2702.	2.8	39
49	Molten salt shielded synthesis of oxidation prone materials in air. Nature Materials, 2019, 18, 465-470.	13.3	134
50	Bulk and grain boundary Li-diffusion in dense LiMn₂O₄ pellets by means of isotope exchange and ToF-SIMS analysis. Physical Chemistry Chemical Physics, 2019, 21, 26066-26076.	1.3	19
51	Interaction of single- and double-stranded DNA with multilayer MXene by fluorescence spectroscopy and molecular dynamics simulations. Chemical Science, 2019, 10, 10010-10017.	3.7	59
52	Cold spray deposition of Cr2AlC MAX phase for coatings and bond-coat layers. Journal of the European Ceramic Society, 2019, 39, 860-867.	2.8	33
53	Smart first wall materials for intrinsic safety of a fusion power plant. Fusion Engineering and Design, 2018, 136, 878-882.	1.0	12
54	Environmental resistance of Cr₂AlC MAX phase under thermal gradient loading using a burner rig. Journal of the American Ceramic Society, 2018, 101, 1841-1846.	1.9	39

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55	Thermal cycling testing of TBCs on Cr2AlC MAX phase substrates. Surface and Coatings Technology, 2018, 340, 17-24.	2.2	35
56	Comparison between sinter forging and X-ray microtomography methods for determining sintering stress and bulk viscosity. Journal of the European Ceramic Society, 2018, 38, 2053-2058.	2.8	7
57	Highâ€temperature oxidation and compressive strength of Cr₂AlC <scp>MAX</scp> phase foams with controlled porosity. Journal of the American Ceramic Society, 2018, 101, 542-552.	1.9	34
58	Unveiling the mechanisms of cold sintering of ZnO at 250ÂÂ°C by varying applied stress and characterizing grain boundaries by Kelvin Probe Force Microscopy. Acta Materialia, 2018, 144, 116-128.	3.8	117
59	Oxidation resistance of bulk plasma-facing tungsten alloys. Nuclear Materials and Energy, 2018, 15, 226-231.	0.6	28
60	Enhancing efficiency of field assisted sintering by advanced thermal insulation. Journal of Materials Processing Technology, 2018, 262, 326-339.	3.1	19
61	WCrY smart alloys as advanced plasma-facing materials â€“ Exposure to steady-state pure deuterium plasmas in PSI-2. Nuclear Materials and Energy, 2018, 15, 220-225.	0.6	21
62	Advanced smart tungsten alloys for a future fusion power plant. Plasma Physics and Controlled Fusion, 2017, 59, 064003.	0.9	27
63	Development and characterization of powder metallurgically produced discontinuous tungsten fiber reinforced tungsten composites. Physica Scripta, 2017, T170, 014005.	1.2	23
64	Continuous functionally graded material to improve the thermoelectric properties of ZnO. Journal of the European Ceramic Society, 2017, 37, 4693-4700.	2.8	32
65	New oxidation-resistant tungsten alloys for use in the nuclear fusion reactors. Physica Scripta, 2017, T170, 014012.	1.2	34
66	Novel Cr 2 AlC MAX-phase/SiC fiber composites: Synthesis, processing and tribological response. Journal of the European Ceramic Society, 2017, 37, 467-475.	2.8	33
67	Effect of Internal Current Flow During the Sintering of Zirconium Diboride byÂField Assisted Sintering Technology. Journal of the American Ceramic Society, 2016, 99, 35-42.	1.9	12
68	Effect of sintering method on the microstructure of pure Cr₂AlC MAX phase ceramics. Journal of the Ceramic Society of Japan, 2016, 124, 415-420.	0.5	40
69	Near Net Shaping of Monolithic and Composite <scp>MAX</scp> Phases by Injection Molding. Journal of the American Ceramic Society, 2016, 99, 3210-3213.	1.9	16
70	FAST/SPS sintering of nanocrystalline zinc oxideâ€”Part II: Abnormal grain growth, texture and grain anisotropy. Journal of the European Ceramic Society, 2016, 36, 1221-1232.	2.8	54
71	FAST/SPS sintering of nanocrystalline zinc oxideâ€”Part I: Enhanced densification and formation of hydrogen-related defects in presence of adsorbed water. Journal of the European Ceramic Society, 2016, 36, 1207-1220.	2.8	56
72	Effect of Carbon Nanotubes on Thermoelectric Properties in Zn0.98Al0.02O. Journal of Electronic Materials, 2016, 45, 1459-1463.	1.0	14

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73	Improved compaction of ZnO nano-powder triggered by the presence of acetate and its effect on sintering. Science and Technology of Advanced Materials, 2015, 16, 025008.	2.8	20
74	Anomalous coarsening of nanocrystalline zinc oxide particles in humid air. Journal of Crystal Growth, 2015, 419, 69-78.	0.7	25
75	Effect of Electric Field/Current on Liquid Phase Sintering. Journal of the American Ceramic Society, 2015, 98, 2018-2027.	1.9	41
76	Field-assisted/spark plasma sintering behavior of CNT-reinforced zirconia composites: A comparative study between model and experiments. Journal of the European Ceramic Society, 2015, 35, 4241-4249.	2.8	12
77	Flash Sintering of Nanocrystalline Zinc Oxide and its Influence on Microstructure and Defect Formation. Journal of the American Ceramic Society, 2014, 97, 1728-1735.	1.9	131
78	Fieldâ€Assisted Sintering Technology/Spark Plasma Sintering: Mechanisms, Materials, and Technology Developments. Advanced Engineering Materials, 2014, 16, 830-849.	1.6	923
79	Effect of electric field and atmosphere on the processing of nanocrystalline ZnO. Proceedings of SPIE, 2014, , .	0.8	0
80	Robust and wear resistant in-situ carbon nanotube/Si3N4 nanocomposites with a high loading of nanotubes. Carbon, 2014, 72, 338-347.	5.4	23
81	Enhanced oxidation resistance of ZrB2/SiC composite through in situ reaction of gadolinium oxide in patterned surface cavities. Journal of the European Ceramic Society, 2014, 34, 4157-4166.	2.8	16
82	The beneficial effect of graphene nanofillers on the tribological performance of ceramics. Carbon, 2013, 61, 431-435.	5.4	146
83	Anisotropic thermal conductivity of silicon nitride ceramics containing carbon nanostructures. Journal of the European Ceramic Society, 2012, 32, 1847-1854.	2.8	76
84	Carbon nanotubes functionalization process for developing ceramic matrix nanocomposites. Journal of Materials Chemistry, 2011, 21, 6063.	6.7	13
85	Enhanced Tribological Performance of Silicon Nitride-Based Materials by Adding Carbon Nanotubes. Journal of the American Ceramic Society, 2011, 94, 2542-2548.	1.9	40
86	Carbon nanotubes growth on silicon nitride substrates. Materials Letters, 2011, 65, 1479-1481.	1.3	7
87	Carbon nanofillers for machining insulating ceramics. Materials Today, 2011, 14, 496-501.	8.3	65
88	Multi-scale electrical response of silicon nitride/multi-walled carbon nanotubes composites. Composites Science and Technology, 2011, 71, 60-66.	3.8	32
89	Enhanced particle rearrangement during liquid phase spark plasma sintering of silicon nitride-based ceramics. Ceramics International, 2011, 37, 159-166.	2.3	41
90	Spark plasma sintering: A powerful tool to develop new silicon nitride-based materials. Journal of the European Ceramic Society, 2010, 30, 2937-2946.	2.8	115

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91	Continuous in situ functionally graded silicon nitride materials. Acta Materialia, 2009, 57, 2607-2612.	3.8	50
92	Processing and Characterization of Porous Ti₂AlC Using Space Holder Technique. Key Engineering Materials, 0, 704, 197-203.	0.4	4