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List of Publications by Year in descending order

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33
papers

778
citations

566801

15
h-index

525886

27
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33
all docs

33
docs citations

33
times ranked

740
citing authors

#	ARTICLE	IF	CITATIONS
1	High resolution electron back-scatter diffraction analysis of thermally and mechanically induced strains near carbide inclusions in a superalloy. <i>Acta Materialia</i> , 2011, 59, 263-272.	3.8	92
2	High-resolution electron backscatter diffraction: An emerging tool for studying local deformation. <i>Journal of Strain Analysis for Engineering Design</i> , 2010, 45, 365-376.	1.0	73
3	Predicting dwell fatigue life in titanium alloys using modelling and experiment. <i>Nature Communications</i> , 2020, 11, 5868.	5.8	63
4	Microstructural understanding of the oxidation of an austenitic stainless steel in high-temperature steam through advanced characterization. <i>Acta Materialia</i> , 2020, 194, 321-336.	3.8	58
5	Selective laser melting of high-strength, low-modulus Ti-35Nb-7Zr-5Ta alloy. <i>Materialia</i> , 2020, 14, 100941.	1.3	48
6	Grain boundary serration in nickel alloy inconel 600: Quantification and mechanisms. <i>Acta Materialia</i> , 2019, 181, 352-366.	3.8	41
7	Mapping the full lattice strain tensor of a single dislocation by high angular resolution transmission Kikuchi diffraction (HR-TKD). <i>Scripta Materialia</i> , 2019, 164, 36-41.	2.6	39
8	Mechanism of the β -Zr to hexagonal-ZrO transformation and its impact on the corrosion performance of nuclear Zr alloys. <i>Acta Materialia</i> , 2019, 179, 328-341.	3.8	34
9	Linking microstructure and local mechanical properties in SiC-SiC fiber composite using micromechanical testing. <i>Acta Materialia</i> , 2019, 168, 178-189.	3.8	33
10	Elastic strain tensor measurement using electron backscatter diffraction in the SEM. <i>Journal of Electron Microscopy</i> , 2010, 59, S155-S163.	0.9	32
11	Nanoscale imaging of the full strain tensor of specific dislocations extracted from a bulk sample. <i>Physical Review Materials</i> , 2020, 4, .	0.9	32
12	Probing Deformation and Revealing Microstructural Mechanisms with Cross-Correlation-Based, High-Resolution Electron Backscatter Diffraction. <i>Jom</i> , 2013, 65, 1245-1253.	0.9	26
13	Modification of oxide inclusions in calcium-treated Al-killed high sulphur steels. <i>Ironmaking and Steelmaking</i> , 2019, 46, 663-670.	1.1	22
14	Cold creep of titanium: Analysis of stress relaxation using synchrotron diffraction and crystal plasticity simulations. <i>Acta Materialia</i> , 2020, 199, 561-577.	3.8	22
15	Ultra-high temperature deformation in a single crystal superalloy: Mesoscale process simulation and micromechanisms. <i>Acta Materialia</i> , 2021, 203, 116468.	3.8	19
16	On the role of intergranular nanocavities in long-term stress corrosion cracking of Alloy 690. <i>Acta Materialia</i> , 2022, 222, 117453.	3.8	19
17	Crystallographic orientation relationships of boride and carbide particles with β and β' phases in a β -Ti alloy. <i>Journal of Alloys and Compounds</i> , 2014, 612, 435-442.	2.8	18
18	Electron back scattered diffraction characterization of thermomechanical fatigue crack propagation of a near β titanium alloy Timetal 834. <i>Materials & Design</i> , 2015, 65, 297-311.	5.1	18

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19	Observation and quantification of the diffusion-induced grain boundary migration ahead of SCC crack tips. <i>Corrosion Science</i> , 2019, 147, 163-168.	3.0	15
20	Dynamic recovery and recrystallization during high-temperature tensile deformation of a free-standing Pt-aluminide bond coat. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 604, 18-22.	2.6	12
21	Foreshattered electron imaging of nanoparticles in scanning electron microscopy. <i>Materials Characterization</i> , 2019, 155, 109814.	1.9	8
22	Investigation on Stabilization of Ladle Furnace Slag with Different Additives. <i>Journal of Sustainable Metallurgy</i> , 2020, 6, 121-131.	1.1	8
23	An in-situ synchrotron diffraction study of stress relaxation in titanium: Effect of temperature and oxygen on cold dwell fatigue. <i>Acta Materialia</i> , 2021, 213, 116937.	3.8	8
24	Orientation dependence of the nano-indentation behaviour of pure Tungsten. <i>Scripta Materialia</i> , 2020, 189, 135-139.	2.6	7
25	A more holistic characterisation of internal interfaces in a variety of materials via complementary use of transmission Kikuchi diffraction and Atom probe tomography. <i>Applied Surface Science</i> , 2020, 528, 147011.	3.1	7
26	Cold dwell behaviour of Ti6Al alloy: Understanding load shedding using digital image correlation and dislocation based crystal plasticity simulations. <i>Journal of Materials Science and Technology</i> , 2022, 128, 254-272.	5.6	6
27	Using local GND density to study SCC initiation. <i>Ultramicroscopy</i> , 2020, 217, 113054.	0.8	5
28	In Vitro Corrosion Behavior of Selective Laser Melted Ti-35Nb-7Zr-5Ta. <i>Journal of Materials Engineering and Performance</i> , 2021, 30, 7967-7978.	1.2	5
29	New perspectives on collision cascade damage in self-ion irradiated tungsten from HR-EBSD and ECCI. <i>Journal of Nuclear Materials</i> , 2021, 554, 153074.	1.3	5
30	Deformation behaviour of ion-irradiated FeCr: A nanoindentation study. <i>Journal of Materials Research</i> , 2022, 37, 2045-2060.	1.2	2
31	In Situ Analysis of nm-Scale Alpha Formation in Titanium Alloys. <i>Microscopy and Microanalysis</i> , 2019, 25, 1490-1491.	0.2	1
32	Effect of sample thinning on strains and lattice rotations measured from Transmission Kikuchi diffraction in the SEM. <i>Ultramicroscopy</i> , 2021, 225, 113267.	0.8	0
33	Macroscopic analysis of time dependent plasticity in Ti alloys. <i>Journal of Materials Science and Technology</i> , 2022, , .	5.6	0