Ali Gholinia

List of Publications by Year
in descending order

78 papers	7,949 citations	147801 31 h-index	79698 73 g-index
80 all docs	80 docs citations	80 times ranked	11292 citing authors

#	Article	IF	Citations
1	Vertical field-effect transistor based on grapheneâ€“WS2 heterostructures for flexible and transparent electronics. Nature Nanotechnology, 2013, 8, 100-103.	31.5	1,543
2	Light-emitting diodes by band-structure engineering in van der Waals heterostructures. Nature Materials, 2015, 14, 301-306.	27.5	1,397
3	Cross-sectional imaging of individual layers and buried interfaces of graphene-based heterostructures and superlattices. Nature Materials, 2012, 11, 764-767.	27.5	796
4	Electronic Properties of Graphene Encapsulated with Different Two-Dimensional Atomic Crystals. Nano Letters, 2014, 14, 3270-3276.	9.1	433
5	The effect of strain path on the development of deformation structures in severely deformed aluminium alloys processed by ECAE. Acta Materialia, 2000, 48, 1115-1130.	7.9	384
6	Developing stable fineâ€“grain microstructures by large strain deformation. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 1999, 357, 1663-1681.	3.4	337
7	Antibacterial effects of nanopillar surfaces are mediated by cell impedance, penetration and induction of oxidative stress. Nature Communications, 2020, 11, 1626.	12.8	235
8	WSe₂ Light-Emitting Tunneling Transistors with Enhanced Brightness at Room Temperature. Nano Letters, 2015, 15, 8223-8228.	9.1	231
9	Large volume serial section tomography by Xe Plasma FIB dual beam microscopy. Ultramicroscopy, 2016, 161, 119-129.	1.9	231
10	Analysis of the billet deformation behaviour in equal channel angular extrusion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2000, 287, 87-99.	5.6	217
11	Production of ultra-fine grain microstructures in Alâ€“Mg alloys by coventional rolling. Acta Materialia, 2002, 50, 4461-4476.	7.9	205
12	Graphene bubbles with controllable curvature. Applied Physics Letters, 2011, 99, .	3.3	176
13	Modelling texture development during equal channel angular extrusion of aluminium. Acta Materialia, 2002, 50, 2121-2136.	7.9	147
14	Correlative Tomography. Scientific Reports, 2014, 4, 4711.	3.3	124
15	The microstructure and microtexture of zirconium oxide films studied by transmission electron backscatter diffraction and automated crystal orientation mapping with transmission electron microscopy. Acta Materialia, 2014, 80, 159-171.	7.9	121
16	HAZ development and accelerated post-weld natural ageing in ultrasonic spot welding aluminium 6111-T4 automotive sheet. Acta Materialia, 2012, 60, 2816-2828.	7.9	104
17	Comparison of tool wear mechanisms and surface integrity for dry and wet micro-drilling of nickel-base superalloys. International Journal of Machine Tools and Manufacture, 2014, 76, 49-60.	13.4	101
18	Electron backscatter diffraction and electron channeling contrast imaging of tilt and dislocations in nitride thin films. Physical Review B, 2007, 75, .	3.2	69

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19	Interface structure and bonding in abrasion circle friction stir spot welding: A novel approach for rapid welding aluminium alloy to steel automotive sheet. Materials Chemistry and Physics, 2012, 134, 459-463.	4.0	64
20	Evaluation of surface integrity in micro drilling process for nickel-based superalloy. International Journal of Advanced Manufacturing Technology, 2011, 55, 465-476.	3.0	63
21	Identifying suboxide grains at the metalâ€“oxide interface of a corroded Zrâ€“1.0%Nb alloy using (S)TEM, transmission-EBSD and EELS. Micron, 2015, 69, 35-42.	2.2	62
22	Multi-scale 3D characterisation of porosity and organic matter in shales with variable TOC content and thermal maturity: Examples from the Lublin and Baltic Basins, Poland and Lithuania. International Journal of Coal Geology, 2017, 180, 100-112.	5.0	58
23	Self-Nanostructuring in SrTiO₃: A Novel Strategy for Enhancement of Thermoelectric Response in Oxides. ACS Applied Materials & Interfaces, 2019, 11, 32833-32843.	8.0	56
24	Protective Film Formation on AA2024-T3 Aluminum Alloy by Leaching of Lithium Carbonate from an Organic Coating. Journal of the Electrochemical Society, 2016, 163, C45-C53.	2.9	52
25	Broad ion beam serial section tomography. Ultramicroscopy, 2017, 172, 52-64.	1.9	46
26	Anomalous twin boundaries in two dimensional materials. Nature Communications, 2018, 9, 3597.	12.8	46
27	Incorporation of halloysite nanotubes into forsterite surface layer during plasma electrolytic oxidation of AM50 Mg alloy. Electrochimica Acta, 2019, 299, 772-788.	5.2	45
28	Assessment of surface integrity of Ni superalloy after electrical-discharge, laser and mechanical micro-drilling processes. International Journal of Advanced Manufacturing Technology, 2015, 79, 1303-1311.	3.0	44
29	On the three-dimensional structure of WC grains in cemented carbides. Acta Materialia, 2013, 61, 4726-4733.	7.9	42
30	Using transmission Kikuchi diffraction to study intergranular stress corrosion cracking in type 316 stainless steels. Micron, 2015, 75, 1-10.	2.2	39
31	Enhancing the thermoelectric power factor of Sr_{0.9}Nd_{0.1}TiO₃ through control of the nanostructure and microstructure. Journal of Materials Chemistry A, 2018, 6, 24928-24939.	10.3	34
32	An organic coating pigmented with strontium aluminium polyphosphate for corrosion protection of zinc alloy coated steel. Progress in Organic Coatings, 2017, 102, 29-36.	3.9	32
33	Processing to ultrafine grain structures by conventional routes. Materials Science and Technology, 2000, 16, 1251-1255.	1.6	28
34	Submicron-scale depth profiling of residual stress in amorphous materials by incremental focused ion beam slotting. Acta Materialia, 2012, 60, 2337-2349.	7.9	27
35	Structure and mechanical behaviour of an Al-Mg alloy after equal channel angular extrusion. Scripta Materialia, 1999, 12, 839-842.	0.5	24
36	An investigation of the corrosion inhibitive layers generated from lithium oxalateâ€containing organic coating on AA2024â€T3 aluminium alloy. Surface and Interface Analysis, 2016, 48, 798-803.	1.8	23

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37	Coupled Broad Ion Beamâ€“Scanning Electron Microscopy (BIBâ€“SEM) for polishing and three dimensional (3D) serial section tomography (SST). Ultramicroscopy, 2020, 214, 112989.	1.9	20
38	Growth of nanotubes on zirconium in glycerol/fluoride electrolytes. Electrochimica Acta, 2011, 56, 10500-10506.	5.2	19
39	An investigation of dynamic recrystallisation on Cuâ€“Sn bronze using 3D EBSD. Materials Science and Technology, 2010, 26, 685-690.	1.6	18
40	Timeâ€lapse labâ€based xâ€ray nanoâ€CT study of corrosion damage. Journal of Microscopy, 2017, 267, 98-106.	1.8	18
41	CH₃NH₃PbI₃ films prepared by combining 1- and 2-step deposition: how crystal growth conditions affect properties. Physical Chemistry Chemical Physics, 2017, 19, 7204-7214.	2.8	16
42	On the capability of revealing the pseudosymmetry of the chalcopyriteâ€type crystal structure. Crystal Research and Technology, 2008, 43, 234-239.	1.3	15
43	Correction of artefacts associated with large area EBSD. Ultramicroscopy, 2021, 226, 113315.	1.9	15
44	Comparison of nanotube formation on zirconium in fluoride/glycerol electrolytes at different anodizing potentials. Electrochimica Acta, 2011, 58, 389-398.	5.2	14
45	Quaternion-based disorientation coloring of orientation maps. Ultramicroscopy, 2017, 182, 62-67.	1.9	14
46	Effects of reagent purity on plasma electrolytic oxidation of titanium in an aluminateâ€“phosphate electrolyte. Transactions of the Institute of Metal Finishing, 2016, 94, 32-42.	1.3	12
47	Thermoanalytical studies of the processing of bulk and thin film BSCCO highT c superconductors by the Edita-Gel route. Journal of Thermal Analysis, 1994, 42, 733-743.	0.6	11
48	Quantitative microstructure characterization of selfâ€annealed copper films with electron backscatter diffraction. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 275-281.	1.8	11
49	Cast microstructure and dispersoid formation in spray deposited Alâ€“Li alloys. Materials Science and Technology, 1999, 15, 328-336.	1.6	9
50	Thermal Stability of Electrodeposited Ni and Ni-Co Layers; an EBSD-Study. Materials Science Forum, 2004, 467-470, 1345-1352.	0.3	9
51	Three-Dimensional Crystallographic Analysis Beyond EBSD Mapping: The Next Dimension. Microscopy Today, 2006, 14, 34-37.	0.3	8
52	Electronically tunable aperiodic distributed feedback terahertz lasers. Journal of Applied Physics, 2013, 113, .	2.5	8
53	In-situ EBSD Phase Transformation and Recrystallisation. Journal of Physics: Conference Series, 2014, 522, 012011.	0.4	8
54	Industrial Gear Oils: Tribological Performance and Subsurface Changes. Tribology Letters, 2018, 66, 65.	2.6	8

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55	Resolving physical interactions between bacteria and nanotopographies with focused ion beam scanning electron microscopy. IScience, 2021, 24, 102818.	4.1	8
56	The decomposition of edta-gel precursors in the production of BSCCO superconductors. Journal of Thermal Analysis, 1993, 40, 349-356.	0.6	7
57	Cathodoluminescence microscopy of impurity phases in ZrO2/Ni nanoâ€“composites. Journal of Materials Science, 1997, 32, 6625-6628.	3.7	6
58	Ultrafine grain structures formed by thermomechanical processing of spray cast Alâ€“Li alloys. Materials Science and Technology, 1999, 15, 605-615.	1.6	6
59	Measuring and Modelling the Microstructures of Two-Phase Aluminium Alloys after Deformation. Materials Science Forum, 0, 715-716, 23-32.	0.3	6
60	Exploring domain continuity across BaTiO3 grain boundaries: Theory meets experiment. Acta Materialia, 2022, 235, 118096.	7.9	6
61	The Texture of Ultra-Fine Grained Al-Mg Alloys. Materials Science Forum, 2002, 408-412, 1519-1524.	0.3	5
62	A 3D EBSD Investigation of Dynamic Recrystallisation in a Cu-Sn Bronze. Microscopy and Microanalysis, 2009, 15, 406-407.	0.4	5
63	Surface terracing on ferritic stainless-steel fibres and potential relevance toin vitrocell growth. Philosophical Magazine, 2009, 89, 2285-2303.	1.6	5
64	Characterisation of nitride thin films by electron backscatter diffraction and electron channelling contrast imaging. Materials Science and Technology, 2006, 22, 1352-1358.	1.6	4
65	High-Resolution EBSD Analysis of Severely Deformed Submicron Grained Aluminum Alloys. Materials Research Society Symposia Proceedings, 1999, 601, 323.	0.1	3
66	Porous Anodic Film Growth on a Zr-W Alloy. Electrochemical and Solid-State Letters, 2012, 15, C8.	2.2	3
67	Plasmon-induced nanoscale quantised conductance filaments. Scientific Reports, 2017, 7, 2878.	3.3	3
68	Characterization of Materials Properties by EBSD, EDS and AFM. Microscopy and Microanalysis, 2018, 24, 594-595.	0.4	3
69	X-ray computed tomographic and focused ion beam/electron microscopic investigation of coating defects in niobium-coated copper superconducting radio-frequency cavities. Materials Chemistry and Physics, 2021, 273, 125062.	4.0	3
70	A 3D FIB Investigation of Dynamic Recrystallization in a Cu-Sn Bronze. Materials Science Forum, 2012, 715-716, 498-501.	0.3	2
71	Nanoscale orientation mapping made easy: a new sample preparation workflow for rapid, large-area TKD analysis. Microscopy and Microanalysis, 2021, 27, 1596-1598.	0.4	2
72	New method to characterise grain boundary plane orientations based on EBSD orientation microscopy for serial sectioned surfaces. Materials Science and Technology, 2010, 26, 650-660.	1.6	1

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73	Cross sectional STEM imaging and analysis of multilayered two dimensional crystal heterostructure devices. Microscopy and Microanalysis, 2015, 21, 107-108.	0.4	1
74	Advances in Serial-Section Broad-Ion-Beam Tomography. Microscopy and Microanalysis, 2017, 23, 16-17.	0.4	1
75	Elementary Facet Method for Grain Boundary Plane Determination by 3D EBSD. Solid State Phenomena, 2010, 160, 217-222.	0.3	0
76	Ultrahigh Resolution EDX Spectrum Imaging: Nuclear Materials Applications. Microscopy and Microanalysis, 2013, 19, 1138-1139.	0.4	0
77	On the Three-Dimensional Microstructure of Martensite in Carbon Steels. , 0, , 19-24.		0
78	Co-precipitation on the Basal and Prismatic Planes in Mgâ€“Gdâ€“Agâ€“Zr Alloy Subjected to Over-Ageing. Minerals, Metals and Materials Series, 2018, , 379-383.	0.4	0