

# Muhammad Ali

## List of Publications by Year in descending order

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docs citations

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times ranked

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#	ARTICLE	IF	CITATIONS
1	Cross stacking faults in Zr(Fe,Cr) <sub>2</sub> face-centered cubic Laves phase nanoparticle. Applied Surface Science, 2020, 513, 145716.	6.1	19
2	Observation of FCC-Zr phase in as-cast Zircaloy-4 alloy. Materials Letters, 2020, 267, 127551.	2.6	18
3	Texture development and mechanical behavior of Zircaloy-4 alloy plates fabricated by cold rolling and annealing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 807, 140846.	5.6	18
4	Stress-induced C14 $\rightarrow$ C15 phase transformation in a Zr(Fe,Cr) <sub>2</sub> Laves structured nanophase. Journal of Applied Crystallography, 2020, 53, 222-225.	4.5	18
5	Effects of mechanical polishing treatments on high cycle fatigue behavior of Ti-6Al-2Sn-4Zr-2Mo alloy. International Journal of Fatigue, 2019, 121, 55-62.	5.7	17
6	Fluorine doped CNTs for efficient OER activity outperforming iridium supported carbon electrocatalyst. Journal of Applied Electrochemistry, 2021, 51, 1573-1581.	2.9	15
7	Thermoanalytical studies on acid-treated rice husk and production of some silicon based ceramics from carbonised rice husk. Journal of Asian Ceramic Societies, 2015, 3, 311-316.	2.3	14
8	The effect of three-dimensional loading and texture on deformation mechanism of Zircaloy-4 alloy: Using space Schmid factor model. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 761, 137992.	5.6	13
9	A new type face-centered cubic zirconium phase in pure zirconium. Journal of Materials Science and Technology, 2021, 81, 236-239.	10.7	13
10	Core-shell structured nanoprecipitates in zirconium based alloy. Scripta Materialia, 2020, 185, 170-174.	5.2	13
11	Effect of leaching with 5 $\pm$ 6N H <sub>2</sub> SO <sub>4</sub> on thermal kinetics of rice husk during pure silica recovery. Journal of Advanced Research, 2016, 7, 47-51.	9.5	12
12	Microscopic characterization on low cycle fatigue behavior at room temperature of Zircaloy-4 alloy with recrystallized microstructure. Journal of Alloys and Compounds, 2019, 778, 318-326.	5.5	12
13	Intermediate state of hexagonal close-packed structure to face-centered cubic structure transformation: Direct evidence for basal-type face-centered cubic phase via partial dislocation in zirconium. Journal of Materials Science and Technology, 2022, 98, 44-50.	10.7	11
14	Shear deformation behavior of Zircaloy-4 alloy plate. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 774, 138914.	5.6	10
15	Atomic scale observation of FCC twin, FCC $\rightarrow$ 9R and 9R $\rightarrow$ 12R <sup>TM</sup> transformations in cold-rolled Hafnium. Scripta Materialia, 2022, 207, 114284.	5.2	10
16	Oxygen induced phase transformation in an $\beta$ - $\beta$ titanium alloy. Materials Chemistry and Physics, 2019, 223, 75-77.	4.0	8
17	Anisotropic yielding behavior and associated mechanism of cold rolled and annealed Zircaloy-4 alloy thin sheets under tensile condition. Materials Chemistry and Physics, 2020, 242, 122539.	4.0	8
18	The influence of microtexture on the formation mechanism of nodules in Zircaloy-4 alloy tube. Journal of Materials Science and Technology, 2020, 47, 68-75.	10.7	8

#	ARTICLE	IF	CITATIONS
19	New insight into prismatic-type face-centered cubic zirconium phase in pure zirconium. Journal of Materials Science, 2021, 56, 2631-2637.	3.7	8
20	Moiré fringes in nanoprecipitates in a zirconium alloy. Materials Letters, 2020, 269, 127678.	2.6	7
21	Direct evidence for stress-induced face-centered cubic zirconium. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 807, 140814.	5.6	7
22	Formation of carbon nanostructures on nickel acetate algogel by CVD method and its OER electrocatalytic study in alkaline media. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	2.3	7
23	Atypical U-shape micro-stacking faults within body-centered tetragonal Zr <sub>2</sub> Si nanoparticle in silicon modified Zircaloy-4 alloy. Scripta Materialia, 2021, 203, 114051.	5.2	7
24	Deformation mechanism and cyclic stress response of Zircaloy-4 alloy cladding tube during low cycle fatigue at room temperature. International Journal of Fatigue, 2022, 160, 106875.	5.7	7
25	Deformation twinning in octahedron-based face-centered cubic metallic structures: Localized shear-force dipoles drive atomic displacements. Journal of Materials Science and Technology, 2022, 126, 116-126.	10.7	7
26	Incommensurate modulated structure in zirconium under three-point bending deformation. Materials Letters, 2021, 295, 129830.	2.6	6
27	The formation mechanism of $\{112\frac{1}{2}\langle 1\frac{1}{2}1\frac{1}{2}\rangle$ , primary paired $\{101\frac{1}{2}\langle 1\frac{1}{2}011\rangle$ and secondary twins in Zircaloy-4 alloy with coarse $\langle \alpha \rangle$ lamellae. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 802, 140603.	5.6	5
28	Rotation twin in body-centered tetragonal SiZr <sub>2</sub> nanoparticle in silicon modified Zircaloy-4 alloy. Journal of Alloys and Compounds, 2021, 862, 158386.	5.5	5
29	The formation mechanism of stacking faults in ZrFe <sub>2</sub> Laves phase in Zircaloy-4 alloy. Journal of Materials Science, 2021, 56, 11164-11173.	3.7	4
30	High-resolution transmission electron microscopy study of body-centered tetragonal Zr <sub>2</sub> Fe nanoparticle phase in Zircaloy-4 alloy and its typical crystalline defect structures. Journal of Materials Science, 2021, 56, 18272-18280.	3.7	4
31	Direct observation of Face-centered cubic zirconium phase growth-induced stacking faults in Zr <sub>3</sub> Ge secondary phase nanoparticle. Scripta Materialia, 2022, 210, 114461.	5.2	4
32	Effect of cold Pilger rolling followed by annealing on fatigue crack initiation in Zircaloy-4 alloy cladding tube. International Journal of Fatigue, 2022, 163, 107046.	5.7	3
33	Increase in Ductility of High Carbon Steel Due to Accelerated Precipitation of Cementite. Metal Science and Heat Treatment, 2017, 59, 294-296.	0.6	2
34	Effect of cyclic $\hat{\Gamma}^2$ annealing on phase evolution and lamellar boundary characteristics at surface and subsurface layers of Ti-6Al-4V alloy. Journal of Alloys and Compounds, 2020, 823, 153732.	5.5	2
35	The formation mechanism of curved slip band in W-3Re alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 844, 143190.	5.6	2
36	Manganese doped Sm-Cd nanoalloys—their synthesis, characterisation and evaluation of electrical properties. Journal of Alloys and Compounds, 2016, 662, 593-597.	5.5	1

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37	Triangularly arranged needle-shaped precipitates in Ge containing zirconium alloy. <i>Materials Chemistry and Physics</i> , 2020, 251, 123142.	4.0	1
38	A novel method for predicting variant selection of $\{101\bar{1}2\}$ twins in pure hafnium. <i>Materials Letters</i> , 2021, 304, 130738.	2.6	1
39	In-situ observation on the twinning boundary movement of pure zirconium during three-point bending tests. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 833, 142361.	5.6	1
40	The formation mechanism between the $\{101\bar{1}2\}$ twins and prismatic $\langle a \rangle$ slip on $(101\bar{1}40)$ plane: Application to Zircaloy-4 alloy. <i>Materials Chemistry and Physics</i> , 2020, 242, 122500.	4.0	0
41	Low-energy electron-driven observation of nanometer-sized Laves phases at alloy surfaces enabling statistical characterization with high precision and efficiency. <i>Applied Nanoscience (Switzerland)</i> , 2021, 11, 1549-1564.	3.1	0
42	Effect of Ta and Pd Addition on Mechanical Properties of Inconel 718. <i>Russian Journal of Non-Ferrous Metals</i> , 2021, 62, 206-211.	0.6	0
43	Incommensurately modulated structure zone in $\hat{1}\pm$ -Zr instigated by the drag force on a grain boundary. <i>Journal of Applied Crystallography</i> , 2021, 54, 982-986.	4.5	0