## Jatin Bhatt

List of Publications by Year in descending order

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ΙΔΤΙΝ ΒΗΔΤΤ

#	Article	IF	CITATIONS
1	Microstructure Evolution in Direct Energy Deposited Multilayer Inconel 718. Arabian Journal for Science and Engineering, 2022, 47, 7985-7994.	3.0	7
2	Thermodynamic model to predict bulk metallic glass forming composition in Zr-Cu-Fe-Al system and understanding the role of Dy addition. Physica B: Condensed Matter, 2022, 624, 413416.	2.7	10
3	Composition Design and Nanoindentation Studies on Mg-Ca-Zn Metallic Glass. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2022, 53, 1419-1429.	2.2	5
4	Kinetics and phase formation during crystallization of Hf64Cu18Ni18 amorphous alloy. Phase Transitions, 2021, 94, 110-121.	1.3	2
5	Kinetic Approach to Determine the Glass-Forming Ability in Hf-Based Metallic Glasses. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 1169-1173.	2.2	4
6	Corrosion Studies of Hf64Cu18Ni18 Metallic Glass in Acidic and Alkaline Media. Transactions of the Indian Institute of Metals, 2021, 74, 949-956.	1.5	2
7	Cu-Zr-Ti-Al metallic glass: Thermodynamic prediction, synthesis, and biocorrosion studies. Physica B: Condensed Matter, 2021, 609, 412918.	2.7	12
8	Study of micro indentation assisted deformation on HPT processed Zr62Cu22Al10Fe5Dy1 bulk metallic glass. Journal of Non-Crystalline Solids, 2021, 566, 120877.	3.1	5
9	Effect of micro-EDM machining parameters on the accuracy of micro hole drilling in Zr-based metallic glass. Engineering Research Express, 2020, 2, 015001.	1.6	8
10	Thermodynamic modelling to optimize glass forming composition in multicomponent Zr-Cu-Co-Al system. Materials Today: Proceedings, 2020, 28, 1239-1244.	1.8	3
11	A new perspective to thermodynamical designing of high entropy bulk metallic glasses (HE-BMGs). Physica B: Condensed Matter, 2020, 595, 412350.	2.7	16
12	Room temperature dynamic indentation response of partially crystallized Zr–Cu metallic glass. Journal of Alloys and Compounds, 2020, 834, 155161.	5.5	8
13	The impact of cutting speed and depth of cut on cutting force during turning of austempered ductile iron. Materials Today: Proceedings, 2019, 19, 663-669.	1.8	9
14	An experimental case study on corrosion characterization of Cu46Zr40Ti8.5Al5.5 metallic glass. Journal of Non-Crystalline Solids, 2019, 524, 119654.	3.1	7
15	Structural characterization and influence of calcination temperature on luminescence properties of Sr0.91Mg2Al5.82Si9.18O30: Eu3+ nanophosphors. Powder Technology, 2019, 354, 591-600.	4.2	7
16	Computational Platform for Manufacturing Bulk Metallic Glasses Based on GFA Parameters. Transactions of the Indian Institute of Metals, 2018, 71, 2731-2734.	1.5	7
17	Applicability of γ* Parameter on Glass Forming Ability of Zr-,Ti-,Hf-(Cu–Ni)-based Metallic Glasses. Transactions of the Indian Institute of Metals, 2018, 71, 2839-2843.	1.5	0
18	Thermodynamic calculation and experimental validation of Hf-rich glass forming compositions in Hf-Cu-Ni system. Journal of Non-Crystalline Solids, 2018, 500, 191-195.	3.1	25

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19	Role of polyhedral order in glass to crystal transition dynamics in Zr60Cu10Al15Ni15 glass forming alloy. Journal of Non-Crystalline Solids, 2017, 471, 256-263.	3.1	2
20	Machinability study of Zr-Cu-Ti metallic glass by micro hole drilling using micro-USM. Journal of Materials Processing Technology, 2017, 240, 42-51.	6.3	42
21	Critical evaluation of glass forming ability criteria. Materials Science and Technology, 2016, 32, 380-400.	1.6	55
22	Identifying non-equiatomic high entropy bulk metallic glass formers through thermodynamic approach: A theoretical perspective. Journal of Non-Crystalline Solids, 2016, 450, 164-173.	3.1	6
23	Interpreting room temperature deformation of Zr 67 Cu 33 metallic glass through Voronoi cluster dynamics. Journal of Non-Crystalline Solids, 2016, 454, 59-69.	3.1	3
24	Crystal structure, energy transfer mechanism and tunable luminescence in Ce3+/Dy3+ co-activated Ca20Mg3Al26Si3O68 nanophosphors. Ceramics International, 2016, 42, 10854-10865.	4.8	31
25	Compressive, tensile and wear behavior of ex situ Al/AlN metal matrix nanocomposites. Journal of Composite Materials, 2015, 49, 1917-1928.	2.4	21
26	Bio-corrosion and Cytotoxicity Studies on Novel Zr55Co30Ti15 and Cu60Zr20Ti20 Metallic Glasses. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 2422-2430.	2.2	15
27	Structure Property Correlation of Al Based MMC Reinforced with Cu Coated Rice Husk Ash SiO2 Particles. Transactions of the Indian Institute of Metals, 2015, 68, 201-209.	1.5	10
28	Thermodynamic modeling and composition design for the formation of Zr–Ti–Cu–Ni–Al high entropy bulk metallic glasses. Intermetallics, 2015, 65, 42-50.	3.9	29
29	Icosahedral Cluster Energetics in Zr60Cu10Al15Ni15 Bulk Metallic Glass and Their Role on Solidification Behavior. Transactions of the Indian Institute of Metals, 2015, 68, 1107-1112.	1.5	1
30	Nanoindentation, Compressive and Tensile Deformation Study of In-Situ Al–AlN Metal Matrix Composites. Transactions of the Indian Institute of Metals, 2015, 68, 291-297.	1.5	7
31	The Effect of Cutting Speed and Depth of Cut on Surface Roughness During Machining of Austempered Ductile Iron. Transactions of the Indian Institute of Metals, 2015, 68, 99-108.	1.5	23
32	Micro and nano indentation studies on Zr60Cu10Al15Ni15 bulk metallic glass. Materials & Design, 2015, 65, 98-103.	5.1	35
33	Nanoindentation studies of ex situ AlN/Al metal matrix nanocomposites. Journal of Alloys and Compounds, 2014, 615, S392-S396.	5.5	29
34	Thermodynamic Basis for Glass Formation in Cu-Zr Rich Ternary Systems and Their Synthesis by Mechanical Alloying. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 2363-2370.	2.2	11
35	The Wear Behavior of In-Situ Al–AlN Metal Matrix Composites. Transactions of the Indian Institute of Metals, 2014, 67, 841-849.	1.5	15
36	Structural and Photoluminescence properties of nepheline-structure NaAlSiO4:Dy3+ nanophosphors. Journal of Alloys and Compounds, 2014, 609, 100-106.	5.5	34

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37	Study on Quantification of Oxide Phases in Ex-situ AlN/Al Metal Matrix Nanocomposites. Transactions of the Indian Institute of Metals, 2014, 67, 761-767.	1.5	2
38	Nucleation Criteria for the Formation of Aluminum Nitride in Aluminum Matrix by Nitridation. Transactions of the Indian Institute of Metals, 2013, 66, 265-271.	1.5	7
39	Optimization of process parameter for synthesis of silicon quantum dots using low pressure chemical vapour deposition. Bulletin of Materials Science, 2013, 36, 483-490.	1.7	4
40	Structural and luminescence characteristics of Sr3Al8SiO17:Eu2+nanophosphor. Journal of Alloys and Compounds, 2013, 578, 389-393.	5.5	9
41	Corrosion characterization on melt spun Cu60Zr20Ti20 metallic glass: An experimental case study. Journal of Non-Crystalline Solids, 2013, 379, 48-53.	3.1	9
42	Characterization of Inoculated Low Carbon Equivalent Iron at Lower Austempering Temperature. Transactions of the Indian Institute of Metals, 2012, 65, 449-458.	1.5	7
43	Prediction of Bulk Metallic Glass Formation in Cu–Zr–Ag–Hf System by Thermodynamic and Topological Modeling. Transactions of the Indian Institute of Metals, 2012, 65, 827-831.	1.5	20
44	Prediction of Glass Forming Ability Using Thermodynamic Parameters. Transactions of the Indian Institute of Metals, 2012, 65, 559-563.	1.5	33
45	Synthesis of nanostructured Al–Mg–SiO2 metal matrix composites using high-energy ball milling and spark plasma sintering. Journal of Alloys and Compounds, 2012, 536, S35-S40.	5.5	28
46	Thermodynamic criteria for bulk metallic glass formation in Zr rich quaternary system. , 2012, , .		7
47	Determination of Silica Activity Index and XRD, SEM and EDS Studies of Amorphous SiO2 Extracted from Rice Husk Ash. Transactions of the Indian Institute of Metals, 2012, 65, 63-70.	1.5	91
48	Micro indentation study on Cu60Zr20Ti20 metallic glass. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 550, 160-166.	5.6	16
49	Thermodynamic prediction of bulk metallic glass forming alloys in ternary Zr–Cu–X (X=Ag, Al, Ti, Ga) systems. Journal of Non-Crystalline Solids, 2011, 357, 3495-3499.	3.1	36
50	Synthesis and Characterization of Al–Mg–SiO2 Particulate Composite Using Amorphous SiO2 from Rice Husk Ash. Transactions of the Indian Institute of Metals, 2011, 64, 575-581.	1.5	6
51	Synthesis of Al-AlN metal matrix composites by nitrogenation. Transactions of the Indian Institute of Metals, 2011, 64, 111-115.	1.5	4
52	Luminescence properties of Eu2+-activated Ca0.13Sr0.87Al2Si2O8: A bluish green phosphor for solid state lighting. Transactions of the Indian Institute of Metals, 2011, 64, 213-215.	1.5	0
53	On Prediction of Amorphous Phase Forming Compositions in the Iron-Rich Fe-Zr-B Ternary System and Their Synthesis. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2011, 42, 3913-3920.	2.2	11
54	Thermodynamic modeling of Zr-Ti-Cu-Ni-Be bulk metallic glass. Transactions of the Indian Institute of Metals, 2009, 62, 413-416.	1.5	10

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55	Thermodynamic and Topological Modeling and Synthesis of Cu-Zr-Ti-Ni–Based Bulk Metallic Glasses by Mechanical Alloying. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2008, 39, 1543-1551.	2.2	26
56	On the conditions for the synthesis of bulk metallic glasses by mechanical alloying. Journal of Alloys and Compounds, 2008, 459, 135-141.	5.5	28
57	Nanoindentation Studies on Amorphous, Nanoquasicrystalline and Nanocrystalline Zr80Pt20 and Zr75Pd25 Alloys. Journal of Nanoscience and Nanotechnology, 2007, 7, 658-662.	0.9	3
58	Optimization of bulk metallic glass forming compositions in Zr–Cu–Al system by thermodynamic modeling. Intermetallics, 2007, 15, 716-721.	3.9	74
59	Identification of compositions with highest glass forming ability in multicomponent systems by thermodynamic and topological approaches. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 449-451, 211-214.	5.6	20
60	Tribological behaviour of Cu60Zr30Ti10 bulk metallic glass. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 458, 290-294.	5.6	47
61	Synthesis of nanocrystalline/quasicrystalline Mg32(Al,Zn)49by melt spinning and mechanical milling. Journal of Materials Science, 2004, 39, 5155-5159.	3.7	29
62	Identification of Bulk Metallic Forming Compositions through Thermodynamic and Topological Models. Materials Science Forum, 0, 649, 67-73.	0.3	14
63	Thermodynamic Model and Synthesis of Bulk Metallic Glass in Cu-Zr-Ti System by Mechanical Alloying. Materials Science Forum, 0, 675-677, 189-192.	0.3	6