

Jatin Bhatt

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8933840/publications.pdf>

Version: 2024-02-01

63
papers

1,053
citations

394421

19
h-index

477307

29
g-index

64
all docs

64
docs citations

64
times ranked

876
citing authors

#	ARTICLE	IF	CITATIONS
1	Determination of Silica Activity Index and XRD, SEM and EDS Studies of Amorphous SiO ₂ Extracted from Rice Husk Ash. Transactions of the Indian Institute of Metals, 2012, 65, 63-70.	1.5	91
2	Optimization of bulk metallic glass forming compositions in Zr-Cu-Al system by thermodynamic modeling. Intermetallics, 2007, 15, 716-721.	3.9	74
3	Critical evaluation of glass forming ability criteria. Materials Science and Technology, 2016, 32, 380-400.	1.6	55
4	Tribological behaviour of Cu ₆₀ Zr ₃₀ Ti ₁₀ bulk metallic glass. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 458, 290-294.	5.6	47
5	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
6	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
7	Micro and nano indentation studies on Zr ₆₀ Cu ₁₀ Al ₁₅ Ni ₁₅ bulk metallic glass. Materials & Design, 2015, 65, 98-103.	5.1	35
8	Structural and Photoluminescence properties of nepheline-structure NaAlSiO ₄ :Dy ³⁺ nanophosphors. Journal of Alloys and Compounds, 2014, 609, 100-106.	5.5	34
9	Prediction of Glass Forming Ability Using Thermodynamic Parameters. Transactions of the Indian Institute of Metals, 2012, 65, 559-563.	1.5	33
10	Crystal structure, energy transfer mechanism and tunable luminescence in Ce ³⁺ /Dy ³⁺ co-activated Ca ₂₀ Mg ₃ Al ₂₆ Si ₃ O ₆₈ nanophosphors. Ceramics International, 2016, 42, 10854-10865.	4.8	31
11	Synthesis of nanocrystalline/quasicrystalline Mg ₃₂ (Al,Zn) ₄₉ by melt spinning and mechanical milling. Journal of Materials Science, 2004, 39, 5155-5159.	3.7	29
12	Nanoindentation studies of ex situ AlN/Al metal matrix nanocomposites. Journal of Alloys and Compounds, 2014, 615, S392-S396.	5.5	29
13	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
14	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
15	Synthesis of nanostructured Al-Mg-SiO ₂ metal matrix composites using high-energy ball milling and spark plasma sintering. Journal of Alloys and Compounds, 2012, 536, S35-S40.	5.5	28
16	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
17	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
18	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

#	ARTICLE	IF	CITATIONS
19	Compressive, tensile and wear behavior of ex situ Al/AlN metal matrix nanocomposites. Journal of Composite Materials, 2015, 49, 1917-1928.	2.4	21
20	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
21	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
22	Micro indentation study on Cu ₆₀ Zr ₂₀ Ti ₂₀ metallic glass. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 550, 160-166.	5.6	16
23	A new perspective to thermodynamical designing of high entropy bulk metallic glasses (HE-BMGs). Physica B: Condensed Matter, 2020, 595, 412350.	2.7	16
24	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
25	Bio-corrosion and Cytotoxicity Studies on Novel Zr ₅₅ Co ₃₀ Ti ₁₅ and Cu ₆₀ Zr ₂₀ Ti ₂₀ Metallic Glasses. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 2422-2430.	2.2	15
26	Identification of Bulk Metallic Forming Compositions through Thermodynamic and Topological Models. Materials Science Forum, 0, 649, 67-73.	0.3	14
27	Cu-Zr-Ti-Al metallic glass: Thermodynamic prediction, synthesis, and biocorrosion studies. Physica B: Condensed Matter, 2021, 609, 412918.	2.7	12
28	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
29	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
30	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
31	Structure Property Correlation of Al Based MMC Reinforced with Cu Coated Rice Husk Ash SiO ₂ Particles. Transactions of the Indian Institute of Metals, 2015, 68, 201-209.	1.5	10
32	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
33	Structural and luminescence characteristics of Sr ₃ Al ₈ SiO ₁₇ :Eu ²⁺ +nanophosphor. Journal of Alloys and Compounds, 2013, 578, 389-393.	5.5	9
34	Corrosion characterization on melt spun Cu ₆₀ Zr ₂₀ Ti ₂₀ metallic glass: An experimental case study. Journal of Non-Crystalline Solids, 2013, 379, 48-53.	3.1	9
35	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
36	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

#	ARTICLE	IF	CITATIONS
37	Room temperature dynamic indentation response of partially crystallized Zr-Cu metallic glass. Journal of Alloys and Compounds, 2020, 834, 155161.	5.5	8
38	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
39	Thermodynamic criteria for bulk metallic glass formation in Zr rich quaternary system. , 2012, , .		7
40	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
41	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
42	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
43	An experimental case study on corrosion characterization of Cu ₄₆ Zr ₄₀ Ti _{8.5} Al _{5.5} metallic glass. Journal of Non-Crystalline Solids, 2019, 524, 119654.	3.1	7
44	Structural characterization and influence of calcination temperature on luminescence properties of Sr _{0.91} Mg ₂ Al _{5.82} Si _{9.18} O ₃₀ : Eu ³⁺ nanophosphors. Powder Technology, 2019, 354, 591-600.	4.2	7
45	Microstructure Evolution in Direct Energy Deposited Multilayer Inconel 718. Arabian Journal for Science and Engineering, 2022, 47, 7985-7994.	3.0	7
46	Synthesis and Characterization of Al-Mg-SiO ₂ Particulate Composite Using Amorphous SiO ₂ from Rice Husk Ash. Transactions of the Indian Institute of Metals, 2011, 64, 575-581.	1.5	6
47	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
48	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
49	Study of micro indentation assisted deformation on HPT processed Zr ₆₂ Cu ₂₂ Al ₁₀ Fe ₅ Dy ₁ bulk metallic glass. Journal of Non-Crystalline Solids, 2021, 566, 120877.	3.1	5
50	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
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	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
53	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
54	Nanoindentation Studies on Amorphous, Nanoquasicrystalline and Nanocrystalline Zr ₈₀ Pt ₂₀ and Zr ₇₅ Pd ₂₅ Alloys. Journal of Nanoscience and Nanotechnology, 2007, 7, 658-662.	0.9	3

#	ARTICLE	IF	CITATIONS
55	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
56	Thermodynamic modelling to optimize glass forming composition in multicomponent Zr-Cu-Co-Al system. Materials Today: Proceedings, 2020, 28, 1239-1244.	1.8	3
57	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
58	Role of polyhedral order in glass to crystal transition dynamics in Zr ₆₀ Cu ₁₀ Al ₁₅ Ni ₁₅ glass forming alloy. Journal of Non-Crystalline Solids, 2017, 471, 256-263.	3.1	2
59	Kinetics and phase formation during crystallization of Hf ₆₄ Cu ₁₈ Ni ₁₈ amorphous alloy. Phase Transitions, 2021, 94, 110-121.	1.3	2
60	Corrosion Studies of Hf ₆₄ Cu ₁₈ Ni ₁₈ Metallic Glass in Acidic and Alkaline Media. Transactions of the Indian Institute of Metals, 2021, 74, 949-956.	1.5	2
61	Icosahedral Cluster Energetics in Zr ₆₀ Cu ₁₀ Al ₁₅ Ni ₁₅ Bulk Metallic Glass and Their Role on Solidification Behavior. Transactions of the Indian Institute of Metals, 2015, 68, 1107-1112.	1.5	1
62	Luminescence properties of Eu ²⁺ -activated Ca _{0.13} Sr _{0.87} Al ₂ Si ₂ O ₈ : A bluish green phosphor for solid state lighting. Transactions of the Indian Institute of Metals, 2011, 64, 213-215.	1.5	0
63	Applicability of Γ^{3*} 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