# Jayanta Das

## List of Publications by Year in descending order



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|---|---|---|---|
| 147 papers | 6,275 citations | 66336 42 h-index | 74160 75 g-index |
| 149 all docs | 149 docs citations | 149 times ranked | 3217 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | â€œWork-Hardenableâ€•Ductile Bulk Metallic Glass. Physical Review Letters, 2005, 94, 205501. | 7.8 | 857 |
| 2 | Mechanical properties of bulk metallic glasses and composites. Journal of Materials Research, 2007, 22, 285-301. | 2.6 | 386 |
| 3 | Is the energy density a reliable parameter for materials synthesis by selective laser melting?. Materials Research Letters, 2017, 5, 386-390. | 8.7 | 294 |
| 4 | Deformation-induced martensitic transformation in Cuâ€“Zrâ€“(Al,Ti) bulk metallic glass composites. Scripta Materialia, 2009, 60, 431-434. | 5.2 | 166 |
| 5 | Heterogeneity of a Cu47.5Zr47.5Al5 bulk metallic glass. Applied Physics Letters, 2006, 88, 051911. | 3.3 | 152 |
| 6 | High-strength Ti-base ultrafine eutectic with enhanced ductility. Applied Physics Letters, 2005, 87, 161907. | 3.3 | 151 |
| 7 | Effect of aspect ratio on the compressive deformation and fracture behaviour of Zr-based bulk metallic glass. Philosophical Magazine Letters, 2005, 85, 513-521. | 1.2 | 145 |
| 8 | High strength Tiâ€“Feâ€“Sn ultrafine composites with large plasticity. Scripta Materialia, 2007, 57, 101-104. | 5.2 | 133 |
| 9 | Improved plasticity of bulk metallic glasses upon cold rolling. Scripta Materialia, 2010, 62, 678-681. | 5.2 | 128 |
| 10 | High strength ductile Cu-base metallic glass. Intermetallics, 2006, 14, 876-881. | 3.9 | 123 |
| 11 | High-strength Zr-Nb-(Cu,Ni,Al) composites with enhanced plasticity. Applied Physics Letters, 2003, 82, 4690-4692. | 3.3 | 108 |
| 12 | Tunable (violet to green) emission by high-yield graphene quantum dots and exploiting its unique properties towards sun-light-driven photocatalysis and supercapacitor electrode materials. Materials Today Communications, 2017, 11, 76-86. | 1.9 | 96 |
| 13 | Fabrication and mechanical properties of Niâ€“Nb metallic glass particle-reinforced Al-based metal matrix composite. Scripta Materialia, 2006, 54, 1445-1450. | 5.2 | 95 |
| 14 | Microscopic deformation mechanism of a Ti66.1Nb13.9Ni4.8Cu8Sn7.2 nanostructureâ€“dendrite composite. Acta Materialia, 2006, 54, 3701-3711. | 7.9 | 93 |
| 15 | Phase stability and its effect on the deformation behavior of Tiâ€“Nbâ€“Taâ€“In/Cr Î² alloys. Scripta Materialia, 2006, 54, 1943-1948. | 5.2 | 93 |
| 16 | Dynamic softening and indentation size effect in a Zr-based bulk glass-forming alloy. Scripta Materialia, 2007, 56, 605-608. | 5.2 | 88 |
| 17 | Wavy cleavage fracture of bulk metallic glass. Applied Physics Letters, 2006, 89, 251917. | 3.3 | 83 |
| 18 | Modeling deformation behavior of Cuâ€“Zrâ€“Al bulk metallic glass matrix composites. Applied Physics Letters, 2009, 95, . | 3.3 | 77 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Plasticity induced by nanoparticle dispersions in bulk metallic glasses. Journal of Non-Crystalline Solids, 2007, 353, 327-331. | 3.1 | 76 |
| 20 | Phase formation and thermal stability in Cuâ€“Zrâ€“Ti(Al) metallic glasses. Intermetallics, 2009, 17, 453-462. | 3.9 | 76 |
| 21 | Formation of a bimodal eutectic structure in Tiâ€“Feâ€“Sn alloys with enhanced plasticity. Applied Physics Letters, 2008, 93, . | 3.3 | 75 |
| 22 | Structural evolution of Cuâ€“Zr metallic glasses under tension. Acta Materialia, 2009, 57, 4133-4139. | 7.9 | 75 |
| 23 | Interfacial reaction during the fabrication of Ni60Nb40 metallic glass particles-reinforced Al based MMCs. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 444, 206-213. | 5.6 | 74 |
| 24 | Facile synthesis of CdO nanorods and exploiting its properties towards supercapacitor electrode materials and low power UV irradiation driven photocatalysis against methylene blue dye. Materials Research Bulletin, 2017, 90, 224-231. | 5.2 | 71 |
| 25 | A review on nano-/ultrafine advanced eutectic alloys. Journal of Alloys and Compounds, 2020, 827, 154226. | 5.5 | 69 |
| 26 | Facile synthesis of CuO nanowires and Cu2O nanospheres grown on rGO surface and exploiting its photocatalytic, antibacterial and supercapacitive properties. Physica B: Condensed Matter, 2019, 558, 74-81. | 2.7 | 68 |
| 27 | Fracture surface morphology of compressed bulk metallic glass-matrix-composites and bulk metallic glass. Intermetallics, 2006, 14, 982-986. | 3.9 | 66 |
| 28 | Strain distribution in Zr64.13Cu15.75Ni10.12Al10 bulk metallic glass investigated by in situ tensile tests under synchrotron radiation. Journal of Applied Physics, 2008, 104, . | 2.5 | 64 |
| 29 | Effect of cryorolling on the microstructure and tensile properties of bulk nano-austenitic stainless steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 631, 241-247. | 5.6 | 62 |
| 30 | Effect of casting conditions on microstructure and mechanical properties of high-strength Zr73.5Nb9Cu7Ni1Al9.5 in situ composites. Scripta Materialia, 2003, 49, 1189-1195. | 5.2 | 56 |
| 31 | Effect of casting conditions on dendrite-amorphous/nanocrystalline Zrâ€“Nbâ€“Cuâ€“Niâ€“Al in situ composites. Intermetallics, 2004, 12, 1153-1158. | 3.9 | 56 |
| 32 | Work hardening ability of ductile Ti45Cu40Ni7.5Zr5Sn2.5 and Cu47.5Zr47.5Al5 bulk metallic glasses. Applied Physics Letters, 2006, 89, 071908. | 3.3 | 56 |
| 33 | Ductile Metallic Glasses in Supercooled Martensitic Alloys. Materials Transactions, 2006, 47, 2606-2609. | 1.2 | 55 |
| 34 | An assessment on the stability of the eutectic phases in high entropy alloys. Journal of Alloys and Compounds, 2019, 798, 167-173. | 5.5 | 51 |
| 35 | Deformation-induced nanostructuring in a Tiâ€“Nbâ€“Taâ€“In Î² alloy. Applied Physics Letters, 2006, 89, 031906. | 3.3 | 50 |
| 36 | Microstructural inhomogeneities introduced in a Zr-based bulk metallic glass upon low-temperature annealing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 491, 124-130. | 5.6 | 50 |

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|---|---|---|---|
| 37 | Microstructure and mechanical properties of slowly cooled Cu47.5Zr47.5Al5. Journal of Materials Research, 2007, 22, 326-333. | 2.6 | 47 |
| 38 | Designing bulk metallic glass and glass matrix composites in martensitic alloys. Journal of Alloys and Compounds, 2009, 483, 97-101. | 5.5 | 47 |
| 39 | Composition Dependence on the Evolution of Nanoeutectic in CoCrFeNiNb<sub>x</sub> (0.45â€‰â‰€â€‰xâ€‰â‰€â€‰0.65) High Entropy Alloys. Advanced Engineering Materials, 2018, 20, 1700908. | 3.5 | 46 |
| 40 | Plasticity in bulk metallic glasses investigated via the strain distribution. Physical Review B, 2007, 76, . | 3.2 | 45 |
| 41 | Propagation of shear bands in Ti66.1Cu8Ni4.8Sn7.2Nb13.9 nanostructure-dendrite composite during deformation. Applied Physics Letters, 2005, 86, 171909. | 3.3 | 44 |
| 42 | Processing Routes, Microstructure and Mechanical Properties of Metallic Glasses and their Composites. Advanced Engineering Materials, 2007, 9, 443-453. | 3.5 | 44 |
| 43 | Martensite Formation in a Ductile Cu47.5Zr47.5Al5 Bulk Metallic Glass Composite. Advanced Engineering Materials, 2007, 9, 487-491. | 3.5 | 44 |
| 44 | Bulk ultra-fine eutectic structure in Tiâ€“Feâ€“base alloys. Journal of Alloys and Compounds, 2007, 434-435, 28-31. | 5.5 | 42 |
| 45 | Strength asymmetry of ductile dendrites reinforced Zr- and Ti-based composites. Journal of Materials Research, 2006, 21, 2331-2336. | 2.6 | 39 |
| 46 | Mechanism of lamellae deformation and phase rearrangement in ultrafine Î²-Ti/FeTi eutectic composites. Acta Materialia, 2015, 97, 170-179. | 7.9 | 39 |
| 47 | Glass formation and mechanical properties of (Cu50Zr50)100â^'xAlx (x=0, 4, 5, 7) bulk metallic glasses. Journal of Alloys and Compounds, 2009, 483, 146-149. | 5.5 | 38 |
| 48 | Effect of Titanium on Microstructure and Mechanical Properties of Cu50Zr50â^'x Ti x (2.5Ââ‰ÂxÂâ‰Â7.5) Glass Matrix Composites. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2008, 39, 1868-1873. | 2.2 | 36 |
| 49 | Ti-base nanoeutectic-hexagonal structured (D019) dendrite composite. Scripta Materialia, 2008, 58, 631-634. | 5.2 | 36 |
| 50 | Nanostructured Composites in Multicomponent Alloy Systems. Materials Transactions, 2003, 44, 1999-2006. | 1.2 | 34 |
| 51 | Effect of twin spacing, dislocation density and crystallite size on the strength of nanostructured Î±-brass. Journal of Alloys and Compounds, 2015, 618, 139-145. | 5.5 | 34 |
| 52 | Strain rate dependence of plastic flow in Ce-based bulk metallic glass during nanoindentation. Journal of Materials Research, 2007, 22, 258-263. | 2.6 | 33 |
| 53 | Ti-base bulk nanostructure-dendrite composites: Microstructure and deformation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 449-451, 24-29. | 5.6 | 33 |
| 54 | Effect of Sn on microstructure and mechanical properties of (Tiâ€“Cu)-based bulk metallic glasses. Philosophical Magazine Letters, 2006, 86, 479-486. | 1.2 | 32 |

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|---|---|---|---|
| 55 | Propagation of shear bands in a Cu47.5Zr47.5Al5 bulk metallic glass. Journal of Materials Research, 2008, 23, 6-12. | 2.6 | 32 |
| 56 | Nano-/Ultrafine Eutectic in CoCrFeNi(Nb/Ta) High-Entropy Alloys. Transactions of the Indian Institute of Metals, 2018, 71, 2717-2723. | 1.5 | 32 |
| 57 | Structural short-range order of the Î²-Ti phase in bulk Tiâ€“Feâ€“(Sn) nanoeutectic composites. Applied Physics Letters, 2006, 89, 261917. | 3.3 | 31 |
| 58 | Oxidation behaviour of Moâ€“Siâ€“Bâ€“(Al, Ce) ultrafine-eutectic dendrite composites in the temperature range of 500â€“700ÂÂ°C. Intermetallics, 2011, 19, 1-8. | 3.9 | 30 |
| 59 | Repository on maternal child health: Health portal to improve access to information on maternal child health in India. BMC Public Health, 2013, 13, 2. | 2.9 | 30 |
| 60 | Nanostructured Composite Materials with Improved Deformation Behavior. Advanced Engineering Materials, 2005, 7, 587-596. | 3.5 | 29 |
| 61 | Formation of ductile ultrafine eutectic structure in Tiâ€“Feâ€“Sn alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 449-451, 737-740. | 5.6 | 29 |
| 62 | Lattice distortionâˆ•disordering and local amorphization in the dendrites of a Ti66.1Cu8Ni4.8Sn7.2Nb13.9 nanostructureâ€“dendrite composite during intersection of shear bands. Applied Physics Letters, 2005, 86, 201909. | 3.3 | 28 |
| 63 | High temperature oxidation response of Al/Ce doped Moâ€“Siâ€“B composites. Intermetallics, 2017, 83, 101-109. | 3.9 | 28 |
| 64 | Microstructural investigation of a deformed Ti66.1Cu8Ni4.8Sn7.2Nb13.9 nanostructureâ€“dendrite composite. Journal of Alloys and Compounds, 2007, 434-435, 106-109. | 5.5 | 27 |
| 65 | Deformationâ€induced microstructural heterogeneity in monolithic Zr<sub>44</sub>Ti<sub>11</sub>Cu<sub>9.8</sub>Ni<sub>10.2</sub>Be<sub>25</sub> bulk metallic glass. Physica Status Solidi - Rapid Research Letters, 2009, 3, 46-48. | 2.4 | 27 |
| 66 | Evolution of nanostructure in Î±-brass upon cryorolling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 530, 675-679. | 5.6 | 27 |
| 67 | Influence of environment and grain size on magnetic properties of nanocrystalline Mnâ€“Zn ferrite. Journal of Magnetism and Magnetic Materials, 2006, 306, 9-15. | 2.3 | 25 |
| 68 | Transient stage oxidation behavior of Mo76Si14B10 alloy at 1150Â°C. Corrosion Science, 2013, 68, 231-237. | 6.6 | 25 |
| 69 | High strength Niâ€“Zrâ€“(Al) nanoeutectic composites with large plasticity. Intermetallics, 2015, 63, 51-58. | 3.9 | 25 |
| 70 | High strength hexagonal structured dendritic phase reinforced Zrâ€“Tiâ€“Ni bulk alloy with enhanced ductility. Applied Physics Letters, 2006, 88, 201920. | 3.3 | 24 |
| 71 | Effect of local chemistry, structure and length scale of heterogeneities on the mechanical properties of a Ti45Cu40Ni7.5Zr5Sn2.5 bulk metallic glass. Philosophical Magazine Letters, 2008, 88, 75-81. | 1.2 | 23 |
| 72 | Nanoscale mechanism and intrinsic structure related deformation of Ti-alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 493, 71-78. | 5.6 | 22 |

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|---|---|---|---|
| 73 | Effect of Sn on microstructure and mechanical properties of Ti-Fe-(Sn) ultrafine eutectic composites. Journal of Materials Research, 2010, 25, 943-956. | 2.6 | 22 |
| 74 | Role of crystalline precipitates on the mechanical properties of (Cu0.50Zr0.50)100â^'xAlx (x=4, 5, 7) bulk metallic glasses. Journal of Alloys and Compounds, 2011, 509, S99-S104. | 5.5 | 22 |
| 75 | Origin of plasticity in ultrafine lamellar Ti-Fe-(Sn) composites. AIP Advances, 2012, 2, . | 1.3 | 21 |
| 76 | Influence of superficial CeO2 coating on high temperature oxidation behavior of Tiâ€“6Alâ€“4V. Journal of Alloys and Compounds, 2012, 519, 106-111. | 5.5 | 21 |
| 77 | Strengthening face centered cubic crystals by annealing induced nano-twins. Scientific Reports, 2017, 7, 17512. | 3.3 | 20 |
| 78 | Deformation behavior of a Ti66Cu8Ni4.8Sn7.2Nb14 nanostructured composite containing ductile dendrites. Journal of Alloys and Compounds, 2007, 434-435, 13-17. | 5.5 | 19 |
| 79 | Ductilization of BMGs by optimization of nanoparticle dispersion. Journal of Alloys and Compounds, 2007, 434-435, 6-9. | 5.5 | 19 |
| 80 | Evolution and interaction of twins, dislocations and stacking faults in rolled Î±-brass during nanostructuring at sub-zero temperature. AIP Advances, 2014, 4, . | 1.3 | 19 |
| 81 | Effect of Ce addition on the oxidation behaviour of Moâ€“Siâ€“Bâ€“Al ultrafine composites at 1100 Â°C. Scripta Materialia, 2011, 64, 486-489. | 5.2 | 18 |
| 82 | Mechanism of microstructure evolution and spheroidization in ultrafine lamellar CoCrFeNi(Nb0Â·5/Ta0.4) eutectic high entropy alloys upon hot deformation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 835, 142669. | 5.6 | 18 |
| 83 | Consolidation and mechanical properties of ball milled Zr50Cu50 glassy ribbons. Journal of Alloys and Compounds, 2009, 483, 227-230. | 5.5 | 17 |
| 84 | Correlation between Poisson ratio and Mohrâ€“Coulomb coefficient in metallic glasses. Journal of Alloys and Compounds, 2009, 483, 125-131. | 5.5 | 17 |
| 85 | Mechanical response of metallic glasses: Insights from in-situ high energy X-ray diffraction. Jom, 2010, 62, 76-82. | 1.9 | 17 |
| 86 | Microscopic mechanism on the evolution of plasticity in nanolamellar Î³-Ni/Ni5Zr eutectic composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 666, 72-79. | 5.6 | 15 |
| 87 | Effect of Zr Addition on Microstructure, Hardness and Oxidation Behavior of Arc-Melted and Spark Plasma Sintered Multiphase Mo-Si-B Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 2041-2060. | 2.2 | 15 |
| 88 | A tool to predict the evolution of phase and Youngâ€™s modulus in high entropy alloys using artificial neural network. Computational Materials Science, 2021, 197, 110619. | 3.0 | 15 |
| 89 | Evolution of microstructure homogeneity and mechanical properties in nano-/ultrafine eutectic CoCrFeNiNb (0.45Ââ‰ÂxÂâ‰Â0.65) high entropy alloy ingots and cast rods. Journal of Alloys and Compounds, 2022, 901, 163610. | 5.5 | 15 |
| 90 | Heterogeneous distribution of shear strains in deformed Ti66.1Cu8Ni4.8Sn7.2Nb13.9nanostructure-dendrite composite. Physica Status Solidi (A) Applications and Materials Science, 2005, 202, 2405-2412. | 1.8 | 14 |

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|---|---|---|---|
| 91 | Effect of prestraining on the deformation and fracture behavior of Zr44Ti11Cu9.8Ni10.2Be25. Intermetallics, 2010, 18, 1902-1907. | 3.9 | 14 |
| 92 | Synthesis of a robust multifunctional composite with concurrent magnetocaloric effect and enhanced energy absorption capabilities through a tailored processing route. Materials and Design, 2020, 187, 108399. | 7.0 | 14 |
| 93 | New Feâ€“Crâ€“Moâ€“Gaâ€“C composites with high compressive strength and large plasticity. Acta Materialia, 2007, 55, 3513-3520. | 7.9 | 13 |
| 94 | Corrosion and pitting behaviour of ultrafine eutectic Tiâ€“Feâ€“Sn alloys. Journal of Alloys and Compounds, 2010, 503, 19-24. | 5.5 | 12 |
| 95 | Improvement of oxidation resistance of arc-melted Mo 76 Si 14 B 10 by microstructure control upon minor Fe addition. Intermetallics, 2017, 88, 28-30. | 3.9 | 12 |
| 96 | Bacterial aetiology of neonatal meningitis: A study from north-east India. Indian Journal of Medical Research, 2017, 145, 138. | 1.0 | 12 |
| 97 | Microstructure and size effect in ultrafine (Ti0.705Fe0.295)100â^'xSnx (0â©½xâ©½4at.%) composites. Journal of Alloys and Compounds, 2014, 585, 54-62. | 5.5 | 11 |
| 98 | Toughening mechanisms of a Ti-based nanostructured composite containing ductile dendrites. International Journal of Materials Research, 2005, 96, 675-680. | 0.8 | 11 |
| 99 | Tailoring the microstructure and mechanical properties of Tiâ€“Al alloy using a novel electromagnetic stirring method. Scripta Materialia, 2006, 55, 1143-1146. | 5.2 | 10 |
| 100 | Synthesis of mullite-based coatings from alumina and zircon powder mixtures by plasma spraying and laser remelting. Materials Chemistry and Physics, 2015, 154, 22-29. | 4.0 | 10 |
| 101 | Influence of Nb on the Microstructure and Fracture Toughness of (Zr0.76Fe0.24)100â^'xNbx Nano-Eutectic Composites. Materials, 2018, 11, 113. | 2.9 | 10 |
| 102 | Novel In Situ Nanostructure-Dendrite Composites in Zr-Base Multicomponent Alloy System. Materials and Manufacturing Processes, 2004, 19, 423-437. | 4.7 | 9 |
| 103 | Effect of Cold Deformation on the Machinability of a Free Cutting Steel. Materials and Manufacturing Processes, 2006, 21, 333-340. | 4.7 | 9 |
| 104 | Tuning of nanostructure by the control of twin density, dislocation density, crystallite size, and stacking fault energy in Cu 100â^'x Zn x (0â‰¤ x â‰¤30 wt%). Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 672, 203-215. | 5.6 | 9 |
| 105 | Effect of Fe addition and moist environment on the high temperature oxidation behavior of Mo76-Si14B10Fe (x = 0, 0.5, 1â€“at.%) composites. Intermetallics, 2019, 111, 106498. | 3.9 | 9 |
| 106 | Effect of Cold Rolling on the Evolution of Shear Bands and Nanoindentation Hardness in Zr41.2Ti13.8Cu12.5Ni10Be22.5 Bulk Metallic Glass. Nanomaterials, 2021, 11, 1670. | 4.1 | 9 |
| 107 | Effect of high pressure during the fabrication on the thermal and mechanical properties of amorphous Ni60Nb40 particle-reinforced Al-based metal matrix composites. Journal of Materials Research, 2007, 22, 1168-1173. | 2.6 | 8 |
| 108 | Impact of Microstructural Inhomogenities on the Ductility of Bulk Metallic Glasses. Materials Transactions, 2007, 48, 1806-1811. | 1.2 | 8 |

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|---|---|---|---|
| 109 | Strengthening of multicomponent glass-forming alloys by microstructure design. Journal of Non-Crystalline Solids, 2007, 353, 3742-3749. | 3.1 | 8 |
| 110 | Effect of Cu on local amorphization in bulk Niâ€“Tiâ€“Zrâ€“Si alloys during solidification. Acta Materialia, 2006, 54, 3141-3150. | 7.9 | 7 |
| 111 | Influence of annealing on the microstructure and hardness of Ti67.79Fe28.36Sn3.85 nanocomposite rods. Scripta Materialia, 2006, 55, 1087-1090. | 5.2 | 7 |
| 112 | Microstructural comparison of Zr73.5Nb9Cu7Ni1Al9.5 nanostructure-dendrite composites produced by different casting techniques. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 449-451, 747-751. | 5.6 | 7 |
| 113 | Effect of moist environment on the oxidation behavior of Mo76-Si14B10Fe (x = 0, 0.5, 1 at.%) ultrafine composites in the range of 700â€“800â€‰Â°C. Corrosion Science, 2019, 155, 86-96. | 6.6 | 7 |
| 114 | Metallic glass formation in the Cu47Ti33Zr11Ni8Si1 alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 444, 257-264. | 5.6 | 6 |
| 115 | Synthesis of crescent shaped heterocycle-fused aromatics via Garratt-Braverman cyclization and their DNA-binding studies. Tetrahedron Letters, 2017, 58, 2014-2018. | 1.4 | 6 |
| 116 | Precise estimation of glass transition and crystallization temperatures of Zr 55 Cu 30 Ni 5 Al 10 metallic glass using step-scan modulated temperature differential scanning calorimeter. Thermochimica Acta, 2018, 660, 18-22. | 2.7 | 6 |
| 117 | Synthesis, structural and magnetic properties of NiO nanospheres and rGO-NiO nanocomposites and observing magnetocaloric effect in rGO-NiO nanocomposites. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2021, 265, 115007. | 3.5 | 6 |
| 118 | Improvement of intrinsic plasticity and strength of Zr55Cu30Ni5Al10 metallic glass by tuning the glass transition temperature. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 762, 138102. | 5.6 | 5 |
| 119 | The effect of milling time on the evolution of nanostructure, thermal stability, and magnetocaloric properties of (Ni0.50Fe0.50)70.5B17.7Si7.8Ti4. Journal of Alloys and Compounds, 2019, 772, 157-163. | 5.5 | 5 |
| 120 | Interfacial instability-driven amorphizationâˆ•nanocrystallization in a bulkNi45Cu5Ti33Zr16Si1alloy during solidification. Physical Review B, 2005, 72, . | 3.2 | 4 |
| 121 | Effect of tungsten metal particle sizes on the solubility of molten alloy melt: Experimental observation of Gibbs-Thomson effect in nanocomposites. Applied Physics Letters, 2012, 101, 124103. | 3.3 | 4 |
| 122 | Effect of Oxygen Partial Pressure on the Cyclic Oxidation Behavior of Mo76Si14B10. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 2910-2913. | 2.2 | 4 |
| 123 | Nanoeutectic Composites: Processing, Microstructure and Properties. Transactions of the Indian Institute of Metals, 2015, 68, 1199-1205. | 1.5 | 4 |
| 124 | Correlating the lattice parameter and Curie temperature of Î³-Ni in Fe-Ni-base alloys. AIP Advances, 2019, 9, . | 1.3 | 4 |
| 125 | Accurate measurement of glass transition temperature of Cu47.5Zr47.5Al5 and Zr41.2Ti13.8Cu12.5Ni10Be22.5 using step-scan modulated differential scanning calorimeter. Journal of Alloys and Compounds, 2019, 800, 314-319. | 5.5 | 4 |
| 126 | Effect of cooling rate and composition on the microstructure and mechanical properties of (Ni0.92Zr0.08)100âˆ’xAlx (0 â‰¤ x â‰¤ 4 at.%) ultrafine eutectic composites. Journal of Materials Research, 2019, 34, 1704-1713. | 2.6 | 4 |

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|---|---|---|---|
| 127 | Size effect and anisotropy in cold rolled Zr-base bulk metallic glasses during nanoindentation. Journal of Non-Crystalline Solids, 2022, 593, 121767. | 3.1 | 4 |
| 128 | Influence of additional elements on the development of nanoscale heterogeneities in (TiCu)-based bulk metallic glasses with enhanced ductility. Journal of Materials Research, 2007, 22, 2223-2229. | 2.6 | 3 |
| 129 | Formation of nano-scale Ï‰-phase in arc-melted micron-scale dendrite reinforced Zr73.5Nb9Cu7Ni1Al9.5 ultrafine composite during heat treatment. Intermetallics, 2008, 16, 538-543. | 3.9 | 3 |
| 130 | Strain rate sensitivity and deformation mechanism of nano-lamellar Î³-Ni/Ni<sub>5</sub>Zr eutectic at room temperature. Journal of Materials Research, 2020, 35, 2777-2788. | 2.6 | 3 |
| 131 | Carbon nanotubes, nanochains and quantum dots synthesized through the chemical treatment of charcoal powder. Journal of Molecular Structure, 2021, 1227, 129419. | 3.6 | 3 |
| 132 | Effect of cold rolling on the pressure coefficient of glass transition temperature in bulk metallic glasses. Thermochimica Acta, 2021, 706, 179071. | 2.7 | 3 |
| 133 | Effect of cold rolling on the serrated flow behavior of Zr41.2Ti13.8Cu12.5Ni10Be22.5 bulk metallic glass during nanoindentation. Journal of Materials Research, 2022, 37, 976. | 2.6 | 3 |
| 134 | Enhanced Work Hardening of Cu-Based Bulk Metallic Glass Composites by In Situ Formed Nano-Scale Heterogeneities. Materials Science Forum, 2009, 633-634, 665-673. | 0.3 | 2 |
| 135 | Effect of Moist Air and Minor Zr Addition on Oxidation Behavior of Arc-Melted Multiphase Moâ€“Siâ€“B Alloys in the Temperature Range of 1000ÂÂ°Câ€“1300ÂÂ°C. Oxidation of Metals, 2020, 93, 483-513. | 2.1 | 2 |
| 136 | Strengthening ultrafine lamellar Ni-Zr-(Al) eutectic by precipitation hardening. Journal of Alloys and Compounds, 2021, 882, 160684. | 5.5 | 2 |
| 137 | Effect of testing conditions on the nanomechanical behavior of surface and inner core of as-cast Zr-base bulk metallic glassy plates. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 845, 143206. | 5.6 | 2 |
| 138 | In Situ Formed Bulk Nanostructured Ti-Base Composites. Journal of Metastable and Nanocrystalline Materials, 2005, 24-25, 31-36. | 0.1 | 1 |
| 139 | Deformation and fracture of Ti-base nanostructured composite. International Journal of Materials Research, 2008, 99, 985-990. | 0.3 | 1 |
| 140 | Stress-induced martensitic transformation in a Ti<sub>45</sub>Zr<sub>38</sub>Al<sub>17</sub>cast rod. Journal of Physics: Conference Series, 2009, 144, 012090. | 0.4 | 1 |
| 141 | A Few Aspects on the Processing and Deformation Behavior of Advanced Eutectic Alloys. Transactions of the Indian Institute of Metals, 2012, 65, 571-576. | 1.5 | 1 |
| 142 | Assessing two rapid quenching techniques for the production of Laâ€Feâ€Si magnetocaloric alloys in reduced annealing time. Material Design and Processing Communications, 2019, 1, e96. | 0.9 | 1 |
| 143 | Superior oxidation resistance of ultrafine Niâ€“Zr-(Al) eutectic composites in the temperature range of 500â€“900ÂÂ°C. Journal of Alloys and Compounds, 2021, 854, 155998. | 5.5 | 1 |
| 144 | Observation of superspin-glass behaviour and metamagnetic transition in spark plasma-sintered Ni50â^'xCoxMn40Sn10 (xâ€‰=â€‰3, 5, 7, and 9 at.%). Journal of Materials Research, 2022, 37, 1513-1519. | 2.6 | 1 |

| # | Article | IF | Citations |
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| 145 | Observation of a large magnetocaloric effect and suppressed transition in Ti doped Ni-Co-Mn-Sn ribbons upon annealing. Journal of Alloys and Compounds, 2022, 917, 165490. | 5.5 | 1 |
| 146 | Enhanced magnetocaloric effect in Fe-rich (NixFe1-x)70.5B17.7Si7.8Ti4 (xÂ=Â0.3 and 0.4) mechanically alloyed nanocrystalline powder. Journal of Magnetism and Magnetic Materials, 2022, 541, 168574. | 2.3 | 0 |
| 147 | How to Improve the Ductility of Nanostructured Materials. Journal of Korean Powder Metallurgy Institute, 2006, 13, 340-350. | 0.3 | 0 |