

# Jozef Bednarcik

## List of Publications by Citations

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184  
papers

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28  
h-index

41  
g-index

193  
ext. papers

3,083  
ext. citations

3.7  
avg, IF

5.03  
L-index

#	Paper	IF	Citations
184	Deformation-induced martensitic transformation in Cu <sub>47</sub> Zr <sub>53</sub> (Al,Ti) bulk metallic glass composites. <i>Scripta Materialia</i> , <b>2009</b> , 60, 431-434	5.6	148
183	Liquid-liquid transition in a strong bulk metallic glass-forming liquid. <i>Nature Communications</i> , <b>2013</b> , 4, 2083	17.4	136
182	The Extreme Conditions Beamline P02.2 and the Extreme Conditions Science Infrastructure at PETRA III. <i>Journal of Synchrotron Radiation</i> , <b>2015</b> , 22, 908-24	2.4	93
181	Structure and Hydrogenation Properties of a HfNbTiVZr High-Entropy Alloy. <i>Inorganic Chemistry</i> , <b>2018</b> , 57, 2103-2110	5.1	80
180	Synthesis, Thermal Stability and Properties of ZnO <sub>2</sub> Nanoparticles. <i>Journal of Physical Chemistry C</i> , <b>2009</b> , 113, 1320-1324	3.8	70
179	Structural evolution of Cu <sub>47</sub> Zr metallic glasses under tension. <i>Acta Materialia</i> , <b>2009</b> , 57, 4133-4139	8.4	68
178	On the formation of intermetallics in Fe-Al system - An in situ XRD study. <i>Intermetallics</i> , <b>2013</b> , 32, 127-136	3.5	61
177	Mechanosynthesis of the Fast Fluoride Ion Conductor Ba <sub>1-x</sub> LaxF <sub>2+x</sub> : From the Fluorite to the Tysonite Structure. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 7117-7129	3.8	53
176	Strain distribution in Zr <sub>64.13</sub> Cu <sub>15.75</sub> Ni <sub>10.12</sub> Al <sub>10</sub> bulk metallic glass investigated by in situ tensile tests under synchrotron radiation. <i>Journal of Applied Physics</i> , <b>2008</b> , 104, 013522	2.5	53
175	Modulating heterogeneity and plasticity in bulk metallic glasses: Role of interfaces on shear banding. <i>International Journal of Plasticity</i> , <b>2019</b> , 119, 156-170	7.6	52
174	Atomic structure and glass forming ability of Cu <sub>46</sub> Zr <sub>46</sub> Al <sub>8</sub> bulk metallic glass. <i>Journal of Applied Physics</i> , <b>2008</b> , 104, 093519	2.5	46
173	Correlation between elastic structural behavior and yield strength of metallic glasses. <i>Acta Materialia</i> , <b>2012</b> , 60, 3074-3083	8.4	42
172	Linking structure to fragility in bulk metallic glass-forming liquids. <i>Applied Physics Letters</i> , <b>2015</b> , 106, 181901	3.4	40
171	Tensile behavior of bulk metallic glasses by in situ x-ray diffraction. <i>Applied Physics Letters</i> , <b>2007</b> , 91, 081913	3.4	39
170	Transparent polycrystalline cubic silicon nitride. <i>Scientific Reports</i> , <b>2017</b> , 7, 44755	4.9	36
169	Magnetic nanocomposites of periodic mesoporous silica: The influence of the silica substrate dimensionality on the inter-particle magnetic interactions. <i>Journal of Alloys and Compounds</i> , <b>2014</b> , 582, 483-490	5.7	35
168	Amorphous versus Crystalline Li <sub>3</sub> PS <sub>4</sub> : Local Structural Changes during Synthesis and Li Ion Mobility. <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 10280-10290	3.8	33

167	Premartensite to martensite transition and its implications for the origin of modulation in Ni <sub>2</sub> MnGa ferromagnetic shape-memory alloy. <i>Physical Review B</i> , <b>2015</b> , 92,	3.3	33
166	Structural evolution on medium-range-order during the fragile-strong transition in Ge <sub>15</sub> Te <sub>85</sub> . <i>Acta Materialia</i> , <b>2017</b> , 129, 259-267	8.4	32
165	Structural evolution and strength change of a metallic glass at different temperatures. <i>Scientific Reports</i> , <b>2016</b> , 6, 30876	4.9	32
164	Does an icosahedral short-range order prevail in glass-forming Zr-Cu melts?. <i>Europhysics Letters</i> , <b>2012</b> , 100, 56002	1.6	32
163	In situ XRD studies of nanocrystallization of Fe-based metallic glass: a comparative study by reciprocal and direct space methods. <i>Physical Chemistry Chemical Physics</i> , <b>2013</b> , 15, 8470-9	3.6	31
162	Bonding and elastic properties of amorphous AlYB. <i>Solid State Communications</i> , <b>2013</b> , 169, 6-9	1.6	31
161	The effect of low-temperature structural relaxation on free volume and chemical short-range ordering in a Au <sub>49</sub> Cu <sub>26.9</sub> Si <sub>16.3</sub> Ag <sub>5.5</sub> Pd <sub>2.3</sub> bulk metallic glass. <i>Scripta Materialia</i> , <b>2015</b> , 103, 14-17	5.6	30
160	Ab initio molecular dynamics model for density, elastic properties and short range order of Co-Fe-Ta-B metallic glass thin films. <i>Journal of Physics Condensed Matter</i> , <b>2011</b> , 23, 475401	1.8	30
159	Enhanced strength and transformation-induced plasticity in rapidly solidified Zr <sub>40</sub> (Al) alloys. <i>Scripta Materialia</i> , <b>2013</b> , 68, 897-900	5.6	29
158	Short range order and stability of amorphous Ge(x)Te(100-x) alloys (12 ≤ x ≤ 4.6). <i>Journal of Physics Condensed Matter</i> , <b>2013</b> , 25, 195401	1.8	29
157	Thermal expansion of a La-based bulk metallic glass: insight from in situ high-energy x-ray diffraction. <i>Journal of Physics Condensed Matter</i> , <b>2011</b> , 23, 254204	1.8	29
156	Atomic structure and magnetic properties of Fe-Nb-B metallic glasses. <i>Journal of Alloys and Compounds</i> , <b>2014</b> , 586, S189-S193	5.7	25
155	Correlation between atomic structure evolution and strength in a bulk metallic glass at cryogenic temperature. <i>Scientific Reports</i> , <b>2014</b> , 4, 3897	4.9	25
154	In situ observation of the formation of FeSe. <i>Superconductor Science and Technology</i> , <b>2011</b> , 24, 015007	3.1	25
153	Lattice instabilities in bulk EuTiO <sub>3</sub> . <i>Physical Review B</i> , <b>2013</b> , 88,	3.3	24
152	Effect of Al content on the order of phase transition and magnetic entropy change in LaFe <sub>11</sub> Co <sub>0.8</sub> (Si <sub>1-x</sub> Al <sub>x</sub> ) <sub>1.2</sub> alloys. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2014</b> , 372, 201-207	2.8	24
151	Mechanically induced crystallization of an amorphous CoFeZrB alloy. <i>Journal of Applied Physics</i> , <b>2006</b> , 100, 014903	2.5	23
150	Revealing the relationships between chemistry, topology and stiffness of ultrastrong Co-based metallic glass thin films: A combinatorial approach. <i>Acta Materialia</i> , <b>2016</b> , 107, 213-219	8.4	22

149	Temperature dependence of the short-range order of Cu <sub>65</sub> Zr <sub>35</sub> metallic glass. <i>Intermetallics</i> , <b>2013</b> , 32, 51-56	3.5	22
148	Cryogenic-temperature-induced structural transformation of a metallic glass. <i>Materials Research Letters</i> , <b>2017</b> , 5, 284-291	7.4	22
147	Insights into formation and stability of $\beta$ MnAlZ <sub>x</sub> (Z = Ti and B). <i>Journal of Alloys and Compounds</i> , <b>2017</b> , 692, 198-203	5.7	22
146	Local strain behavior of bulk metallic glasses under tension studied by in situ x-ray diffraction. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 011911	3.4	22
145	Atomic structure evolution in bulk metallic glass under compressive stress. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 251906	3.4	21
144	In situ investigation of SnAgCu solder alloy microstructure. <i>Journal of Alloys and Compounds</i> , <b>2011</b> , 509, 1550-1553	5.7	20
143	Nanocrystalline glass-coated FeNiMoB microwires. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 062502	3.4	20
142	Highly textured Gd <sub>2</sub> Zr <sub>2</sub> O <sub>7</sub> films grown on textured Ni-5at.%W substrates by solution deposition route: Growth, texture evolution, and microstructure dependency. <i>Thin Solid Films</i> , <b>2012</b> , 520, 1965-1972 <sup>2-2</sup>	2.2	19
141	Characteristic features of the nanocrystalline structure formation in Ln <sub>2</sub> Hf <sub>2</sub> O <sub>7</sub> (Ln = Gd, Dy) compounds. <i>Russian Journal of Inorganic Chemistry</i> , <b>2013</b> , 58, 1400-1407	1.5	19
140	In situ study on the formation of FeTe. <i>Journal of Materials Science</i> , <b>2011</b> , 46, 4540-4544	4.3	19
139	Structure and soft magnetic properties of the bulk samples prepared by compaction of the mixtures of Co-based and Fe-based powders. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2007</b> , 316, e834-e837	2.8	19
138	Fracture-induced amorphization of polycrystalline SiO <sub>2</sub> stishovite: a potential platform for toughening in ceramics. <i>Scientific Reports</i> , <b>2014</b> , 4, 6558	4.9	18
137	Atomic origin for rejuvenation of a Zr-based metallic glass at cryogenic temperature. <i>Journal of Alloys and Compounds</i> , <b>2017</b> , 718, 254-259	5.7	16
136	Short-Range Order in GeAs <sub>3</sub> Se Glasses. <i>Journal of the American Ceramic Society</i> , <b>2014</b> , 97, 1625-1632	3.8	16
135	Mechanical response of metallic glasses: Insights from in-situ high energy X-ray diffraction. <i>Jom</i> , <b>2010</b> , 62, 76-82	2.1	16
134	Tensile behavior of orthorhombic $\beta$ -titanium alloy studied by in situ X-ray diffraction. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2010</b> , 527, 6596-6600	5.3	16
133	Anisotropy of the critical current in MgB <sub>2</sub> tapes made of high energy milled precursor powder. <i>Superconductor Science and Technology</i> , <b>2010</b> , 23, 065011	3.1	15
132	Thermal expansion of La-based BMG studied by in situ high-energy X-ray diffraction. <i>Journal of Alloys and Compounds</i> , <b>2010</b> , 504, S155-S158	5.7	15

131	Compositional complexity dependence of dislocation density and mechanical properties in high entropy alloy systems. <i>Progress in Natural Science: Materials International</i> , <b>2020</b> , 30, 545-551	3.6	15
130	Effect of Si additions on thermal stability and the phase transition sequence of sputtered amorphous alumina thin films. <i>Journal of Applied Physics</i> , <b>2015</b> , 117, 025302	2.5	14
129	In situ X-ray diffraction investigation of nanocrystallization of amorphous CoFeZrB alloys. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2007</b> , 316, e823-e826	2.8	14
128	The effect of Sr(OH) on the hydrogen storage properties of the Mg(NH)-2LiH system. <i>Physical Chemistry Chemical Physics</i> , <b>2017</b> , 19, 8457-8464	3.6	13
127	FeCoSiBNbCu bulk metallic glass with large compressive deformability studied by time-resolved synchrotron X-ray diffraction. <i>Journal of Applied Physics</i> , <b>2014</b> , 115, 053520	2.5	13
126	In situ studies of temperature-dependent behaviour and crystallisation of Ni <sub>36.5</sub> Pd <sub>36.5</sub> Pt <sub>27</sub> metallic glass. <i>Journal of Alloys and Compounds</i> , <b>2014</b> , 615, S208-S212	5.7	13
125	In situ structural investigation of amorphous and nanocrystalline Fe <sub>40</sub> Co <sub>38</sub> Mo <sub>4</sub> B <sub>18</sub> microwires. <i>Journal of Alloys and Compounds</i> , <b>2011</b> , 509, 3409-3412	5.7	13
124	Signature of local stress states in the deformation behavior of metallic glasses. <i>NPG Asia Materials</i> , <b>2020</b> , 12,	10.3	13
123	<sup>57</sup> Fe-enriched perovskites M(Fe <sub>0.5</sub> Nb <sub>0.5</sub> )O <sub>3</sub> (M [Pb, Ba]) studied by Mössbauer spectroscopy, NMR and XRD in the wide temperature range 4.2-333 K. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2019</b> , 475, 334-344	2.8	13
122	Thermal and soft magnetic properties of Co <sub>40</sub> Fe <sub>22</sub> Ta <sub>8</sub> B <sub>30</sub> glassy particles: In-situ X-ray diffraction and magnetometry studies. <i>Journal of Applied Physics</i> , <b>2014</b> , 116, 054904	2.5	12
121	DSC, XRD and TEM characterization of glassy Co <sub>40</sub> Fe <sub>22</sub> Ta <sub>8</sub> B <sub>30</sub> alloy with very high thermal stability. <i>Materials Letters</i> , <b>2013</b> , 93, 322-325	3.3	12
120	Experimental and thermodynamic assessment of the GdZr system. <i>Calphad: Computer Coupling of Phase Diagrams and Thermochemistry</i> , <b>2012</b> , 39, 27-32	1.9	12
119	Co-based soft magnetic bulk amorphous ferromagnets prepared by powder consolidation. <i>Physica Status Solidi A</i> , <b>2003</b> , 199, 299-304		12
118	Cytotoxicity study and influence of SBA-15 surface polarity and pH on adsorption and release properties of anticancer agent pemetrexed. <i>Materials Science and Engineering C</i> , <b>2020</b> , 109, 110552	8.3	12
117	Structural, microstructural and magnetic evolution in cryo milled carbon doped MnAl. <i>Scientific Reports</i> , <b>2018</b> , 8, 2525	4.9	11
116	Structural behaviour of Pd <sub>40</sub> Cu <sub>30</sub> Ni <sub>10</sub> P <sub>20</sub> metallic glass under high pressure. <i>Intermetallics</i> , <b>2013</b> , 38, 9-13	3.5	11
115	Influence of annealing on microstructure and magnetic properties of cobalt-based amorphous/nanocrystalline powders synthesized by mechanical alloying. <i>Journal of Alloys and Compounds</i> , <b>2015</b> , 632, 296-302	5.7	11
114	Elastic and anelastic properties close to the Curie temperature of Fe-based bulk metallic glass. <i>Applied Physics Letters</i> , <b>2013</b> , 102, 041904	3.4	11

113	Electronic structure based design of thin film metallic glasses with superior fracture toughness. <i>Materials and Design</i> , <b>2020</b> , 186, 108327	8.1	11
112	Anomalous behavior of thermal expansion of $\delta$ Fe impurities in the La(Fe,Co,Si) <sub>13</sub> -based alloys modified by Mn or selected lanthanides (Ce, Pr, Ho). <i>Current Applied Physics</i> , <b>2019</b> , 19, 188-192	2.6	11
111	Combining high time and angular resolutions: time-resolved X-ray powder diffraction using a multi-channel analyser detector. <i>Journal of Applied Crystallography</i> , <b>2015</b> , 48, 970-974	3.8	10
110	Fine structure of phases of $\delta$ Family in Al <sub>73.8</sub> Pd <sub>11.9</sub> Co <sub>14.3</sub> alloy. <i>Journal of Alloys and Compounds</i> , <b>2014</b> , 609, 73-79	5.7	10
109	Trends in formation of the nanocrystalline structure and cationic ordering in the Dy <sub>2</sub> O <sub>3</sub> -HfO <sub>2</sub> (1: 1) system. <i>Russian Journal of Inorganic Chemistry</i> , <b>2013</b> , 58, 331-337	1.5	10
108	High-energy X-ray applications: current status and new opportunities. <i>Powder Diffraction</i> , <b>2017</b> , 32, S22-S27	5.7	10
107	Mapping the Strain Distributions in Deformed Bulk Metallic Glasses Using Hard X-Ray Diffraction. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2012</b> , 43, 1558-1563	2.3	10
106	Preparation of a Novel $\text{Ce}_{0.9}\text{La}_{0.1}\text{O}_2/\text{Gd}_2\text{Zr}_2\text{O}_7$ Buffer Layer Stack on NiW Alloy Substrates by the MOD Route. <i>IEEE Transactions on Applied Superconductivity</i> , <b>2011</b> , 21, 2912-2915	1.8	10
105	In Situ X-ray Diffraction Studies on the De/rehydrogenation Processes of the K <sub>2</sub> [Zn(NH <sub>2</sub> ) <sub>4</sub> ]-8LiH System. <i>Journal of Physical Chemistry C</i> , <b>2017</b> , 121, 1546-1551	3.8	10
104	Ultra-stiff metallic glasses through bond energy density design. <i>Journal of Physics Condensed Matter</i> , <b>2017</b> , 29, 265502	1.8	9
103	In situ high-energy X-ray diffraction study of thermally-activated martensitic transformation far below room temperature in CuZr-based bulk metallic glass composites. <i>Journal of Alloys and Compounds</i> , <b>2020</b> , 841, 155781	5.7	9
102	Atomic structure and thermal behavior of (Co <sub>0.65</sub> ,Fe <sub>0.35</sub> ) <sub>72</sub> Ta <sub>8</sub> B <sub>20</sub> metallic glass with excellent soft magnetic properties. <i>Intermetallics</i> , <b>2016</b> , 69, 21-27	3.5	9
101	Synthesis of Al <sub>2</sub> O <sub>3</sub> /SiO <sub>2</sub> nano-nano composite ceramics under high pressure and its inverse Hall-Petch behavior. <i>Journal of the American Ceramic Society</i> , <b>2017</b> , 100, 323-332	3.8	9
100	Diamond synthesis through the generation of plasma during spark plasma sintering. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2012</b> , 209, 2241-2246	1.6	9
99	Mapping strain fields induced in Zr-based bulk metallic glasses during in-situ nanoindentation by X-ray nanodiffraction. <i>Applied Physics Letters</i> , <b>2016</b> , 108, 031907	3.4	9
98	Operando Studies of Antiperovskite Lithium Battery Cathode Material (Li <sub>2</sub> Fe)SO. <i>ACS Applied Energy Materials</i> , <b>2018</b> , 1, 6593-6599	6.1	9
97	Synthesis, structures and thermal decomposition of ammine MBH complexes (M = Li, Na, Ca). <i>Dalton Transactions</i> , <b>2017</b> , 46, 7770-7781	4.3	8
96	A comparison study of dislocation density, recrystallization and grain growth among nickel, FeNiCo ternary alloy and FeNiCoCrMn high entropy alloy. <i>Journal of Alloys and Compounds</i> , <b>2019</b> , 790, 266-273	5.7	8

95	Inhomogeneous thermal expansion of metallic glasses in atomic-scale studied by in-situ synchrotron X-ray diffraction. <i>Journal of Applied Physics</i> , <b>2015</b> , 117, 044902	2.5	8
94	Surface plasma treatment of the electrospun TiO <sub>2</sub> /PVP composite fibers in different atmospheres. <i>Applied Surface Science</i> , <b>2020</b> , 523, 146381	6.7	8
93	Thermal expansion of Pd-based metallic glasses by ab initio methods and high energy X-ray diffraction. <i>Scientific Reports</i> , <b>2017</b> , 7, 15744	4.9	8
92	Large negative thermal expansion in the cubic phase of CaMn <sub>7</sub> O <sub>12</sub> . <i>Physical Review B</i> , <b>2017</b> , 95,	3.3	8
91	Kinetic alteration of the 6Mg(NH)-9LiH-LiBH system by co-adding YCl and LiN. <i>Physical Chemistry Chemical Physics</i> , <b>2017</b> , 19, 32105-32115	3.6	8
90	In-situ synchrotron x-ray study of the crystallization behavior of Ce <sub>0.9</sub> La <sub>0.1</sub> O <sub>2</sub> thin films deposited on NiW alloy substrates by chemical solution method. <i>Materials Letters</i> , <b>2011</b> , 65, 2669-2672	3.3	8
89	Influence of the critical Fe atomic volume on the magnetism of Fe-rich metallic glasses evidenced by pressure-dependent measurements. <i>Physical Review B</i> , <b>2016</b> , 93,	3.3	7
88	In situ monitoring of disorder-order A1 <sub>10</sub> FePt phase transformation in nanocomposite FePt-based alloys. <i>Journal of Alloys and Compounds</i> , <b>2014</b> , 615, S188-S191	5.7	7
87	In situ observation of the phase selection from the undercooled melt in Cu <sub>2</sub> Zr. <i>Journal of Alloys and Compounds</i> , <b>2013</b> , 576, 232-235	5.7	7
86	Thermal behavior and decomposition of cerium(III) butanoate, pentanoate and hexanoate salts upon heating in argon. <i>Journal of Analytical and Applied Pyrolysis</i> , <b>2017</b> , 126, 77-87	6	7
85	Investigation of Mixed Valence State of Sm <sub>{1-x}B_{6}</sub> and Sm <sub>{1-x}La_{x}B_{6}</sub> by XANES. <i>Acta Physica Polonica A</i> , <b>2014</b> , 126, 338-339	0.6	7
84	Local atomic and crystal structure rearrangement during the martensitic transformation in Ti <sub>50</sub> Ni <sub>25</sub> Cu <sub>25</sub> shape memory alloy. <i>Journal of Alloys and Compounds</i> , <b>2014</b> , 585, 428-433	5.7	7
83	Undercooling behavior of Zr <sub>40</sub> Ni <sub>40</sub> Al bulk metallic glasses investigated by in situ synchrotron high energy X-ray diffraction. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2012</b> , 555, 36-43	5.3	7
82	Microscopic origin of demixing in Ge <sub>20</sub> Se <sub>x</sub> Te <sub>80-x</sub> alloys. <i>Journal of Alloys and Compounds</i> , <b>2011</b> , 509, 5190-5194	5.7	7
81	A resistively-heated dynamic diamond anvil cell (RHdDAC) for fast compression x-ray diffraction experiments at high temperatures. <i>Review of Scientific Instruments</i> , <b>2020</b> , 91, 073906	1.7	7
80	Synthesis, characterization and spectral properties of novel azo-azomethine-tetracarboxylic Schiff base ligand and its Co(II), Ni(II), Cu(II) and Pd(II) complexes. <i>Inorganica Chimica Acta</i> , <b>2021</b> , 515, 120064	2.7	7
79	FeO and GdO nanoparticles loaded in mesoporous silica: insights into influence of NPs concentration and silica dimensionality.. <i>RSC Advances</i> , <b>2019</b> , 9, 3679-3687	3.7	6
78	Synchronized collapse and formation of long-period stacking and chemical orders in Mg <sub>85</sub> Zn <sub>6</sub> Y <sub>9</sub> . <i>Physica B: Condensed Matter</i> , <b>2015</b> , 461, 147-153	2.8	6

77	Doxorubicin as cargo in a redox-responsive drug delivery system capped with water dispersible ZnS nanoparticles.. <i>RSC Advances</i> , <b>2020</b> , 10, 15825-15835	3.7	6
76	High temperature superelasticity realized in equiatomic Ti-Ni conventional shape memory alloy by severe cold rolling. <i>Materials and Design</i> , <b>2020</b> , 193, 108875	8.1	6
75	Thermal behavior, structural relaxation and magnetic study of a new Hf-microalloyed Co-based glassy alloy with high thermal stability. <i>Journal of Alloys and Compounds</i> , <b>2018</b> , 748, 553-560	5.7	6
74	On the structure of GeAsTeCu glasses. <i>Journal of Non-Crystalline Solids</i> , <b>2016</b> , 433, 1-5	3.9	6
73	Experimental and thermodynamic assessment of the GdNi system. <i>Calphad: Computer Coupling of Phase Diagrams and Thermochemistry</i> , <b>2013</b> , 42, 19-26	1.9	6
72	Identification of the Curie point in Fe-based metallic glasses using in situ hard x-ray diffraction. <i>Journal Physics D: Applied Physics</i> , <b>2012</b> , 45, 455302	3	6
71	Microstructural changes induced by thermal treatment in Cu <sub>47</sub> Ti <sub>33</sub> Zr <sub>11</sub> Ni <sub>8</sub> Si <sub>1</sub> metallic glass. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2008</b> , 498, 335-340	5.3	6
70	Mesoporous Silica as a Drug Delivery System for Naproxen: Influence of Surface Functionalization. <i>Molecules</i> , <b>2020</b> , 25,	4.8	6
69	Collapsed tetragonal phase as a strongly covalent and fully nonmagnetic state: Persistent magnetism with interlayer As-As bond formation in Rh-doped Ca <sub>0.8</sub> Sr <sub>0.2</sub> Fe <sub>2</sub> As <sub>2</sub> . <i>Physical Review B</i> , <b>2018</b> , 97,	3.3	5
68	Transparent polycrystalline nanoceramics consisting of triclinic Al <sub>2</sub> SiO <sub>5</sub> kyanite and Al <sub>2</sub> O <sub>3</sub> corundum. <i>Journal of the American Ceramic Society</i> , <b>2018</b> , 101, 998-1003	3.8	5
67	Mechanism of nanostructure formation in ball-milled Cu and Cu <sub>3</sub> wt%Zn studied by X-ray diffraction line profile analysis. <i>Journal of Alloys and Compounds</i> , <b>2014</b> , 588, 138-143	5.7	5
66	Temperature-Induced Short-Range Order Changes in Co <sub>67</sub> B <sub>33</sub> Glassy Thin Films and Elastic Limit Implications. <i>Materials Research Letters</i> , <b>2015</b> , 3, 82-87	7.4	5
65	Local structure of metallic chips examined by X-ray microdiffraction. <i>Journal of Alloys and Compounds</i> , <b>2013</b> , 581, 579-584	5.7	5
64	Structure and Magnetic Properties of Three-Dimensional Gadolinium-Based Hybrid Framework. <i>Acta Physica Polonica A</i> , <b>2014</b> , 126, 308-309	0.6	5
63	Quantum mechanically guided design of Co <sub>43</sub> Fe <sub>20</sub> Ta <sub>(5.5)X<sub>(31.5)</sub> (X=B, Si, P, S) metallic glasses. <i>Journal of Physics Condensed Matter</i>, <b>2012</b>, 24, 175402</sub>	1.8	5
62	Structural evolution in bulk metallic glass under high-temperature tension. <i>Applied Physics Letters</i> , <b>2013</b> , 102, 051909	3.4	5
61	Preparation and soft magnetic properties of bulk amorphous Co-rich alloys. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2007</b> , 310, e852-e854	2.8	5
60	The influence of short-time ball-milling on the stability of amorphous CoFeB alloys. <i>Journal of Physics Condensed Matter</i> , <b>2007</b> , 19, 176215	1.8	5



59	Room temperature hydrocarbon generation in olivine powders: Effect of mechanical processing under CO <sub>2</sub> atmosphere. <i>Powder Technology</i> , <b>2020</b> , 364, 915-923	5.2	5
58	Thermosensitive Drug Delivery System SBA-15-PEI for Controlled Release of Nonsteroidal Anti-Inflammatory Drug Diclofenac Sodium Salt: A Comparative Study. <i>Materials</i> , <b>2021</b> , 14,	3.5	5
57	Key Factor for the Transformation from hcp to 18R-Type Long-Period Stacking Ordered Structure in Mg Alloys. <i>Materials Transactions</i> , <b>2019</b> , 60, 237-245	1.3	5
56	Magnetic properties of iron clusters in Sc <sub>75</sub> Fe <sub>25</sub> nanoglass. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2020</b> , 494, 165819	2.8	5
55	Compositional complexity dependence of lattice distortion in FeNiCoCrMn high entropy alloy system. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2021</b> , 823, 141775	5.3	5
54	D03+hcp mixed phase with nanostructures in Mg <sub>85</sub> Zn <sub>6</sub> Y <sub>9</sub> alloy obtained by high-pressure and high-temperature treatments. <i>Materials Letters</i> , <b>2015</b> , 155, 11-14	3.3	4
53	Phase formation of a biocompatible Ti-based alloy under kinetic constraints studied via in-situ high-energy X-ray diffraction. <i>Progress in Natural Science: Materials International</i> , <b>2020</b> , 30, 432-436	3.6	4
52	Fast-current-heating devices to study in situ phase formation in metallic glasses by using high-energy synchrotron radiation. <i>Review of Scientific Instruments</i> , <b>2020</b> , 91, 073901	1.7	4
51	Local atomic structure and electrical properties of Ge <sub>20</sub> Se <sub>80-x</sub> Tex (x = 0, 5, 10, and 15) glasses doped with Ho. <i>Journal of Alloys and Compounds</i> , <b>2014</b> , 586, 308-313	5.7	4
50	Fabrication and characterization of Co <sub>40</sub> Fe <sub>22</sub> Ta <sub>8-x</sub> Y <sub>x</sub> B <sub>30</sub> (x = 0, 2.5, 4, 6, and 8) metallic glasses with high thermal stability and good soft magnetic properties. <i>Journal of Applied Physics</i> , <b>2014</b> , 116, 184904	2.5	4
49	Modelling the atomic structure of Al <sub>92</sub> U <sub>8</sub> metallic glass. <i>Journal of Physics Condensed Matter</i> , <b>2010</b> , 22, 404209	1.8	4
48	Deformation of metallic glasses: Insight from in-situ high- energy x-ray diffraction. <i>Journal of Physics: Conference Series</i> , <b>2009</b> , 144, 012058	0.3	4
47	Influence of cryomilling on structure of CoFeZrB alloy. <i>Journal of Non-Crystalline Solids</i> , <b>2008</b> , 354, 5117-5119	5.1	4
46	Magnetic Properties of Fe@Pt Nanoparticles with Core/Shell Morphology. <i>Acta Physica Polonica A</i> , <b>2010</b> , 118, 1002-1004	0.6	4
45	Microstructural Study of Fe-Si(Ge)-Nb-Cu-B Finemet Alloys. <i>Acta Physica Polonica A</i> , <b>2010</b> , 118, 818-819	0.6	4
44	Guiding shear bands in bulk metallic glasses using stress fields: A perspective from the activation of flow units. <i>Physical Review B</i> , <b>2020</b> , 102,	3.3	4
43	The structure of near stoichiometric Ge-Ga-Sb-S glasses: A reverse Monte Carlo study. <i>Journal of Non-Crystalline Solids</i> , <b>2019</b> , 505, 340-346	3.9	4
42	Local-structure change rendered by electronic localization-delocalization transition in cerium-based metallic glasses. <i>Physical Review B</i> , <b>2018</b> , 97,	3.3	3

41	Influence of ball milling on atomic structure and magnetic properties of Co <sub>40</sub> Fe <sub>22</sub> Ta <sub>8</sub> B <sub>30</sub> glassy alloy. <i>Materials Characterization</i> , <b>2014</b> , 92, 96-105	3.9	3
40	Pressure dependence of magnetic properties in Fe-Mn-B amorphous alloys: evidence for inhomogeneous ferromagnetism. <i>Journal of Physics Condensed Matter</i> , <b>2013</b> , 25, 346002	1.8	3
39	Phase separation in ternary Co-Gd-Ti liquids. <i>Journal of Physics Condensed Matter</i> , <b>2013</b> , 25, 245104	1.8	3
38	Synchrotron X-ray powder diffraction study on synthetic Sr-Fresnoite. <i>Powder Diffraction</i> , <b>2013</b> , 28, S333-S338	1.8	3
37	The magnetic properties and structure of Co <sub>70.3</sub> Fe <sub>4.7</sub> Si <sub>10</sub> B <sub>15</sub> powder prepared by ball milling. <i>Physica Status Solidi A</i> , <b>2003</b> , 196, 209-212		3
36	Structure-dynamics relationships in cryogenically deformed bulk metallic glass.. <i>Nature Communications</i> , <b>2022</b> , 13, 127	17.4	3
35	Insights into phase transitions and magnetism of MnBi crystals synthesized from self-flux. <i>Journal of Alloys and Compounds</i> , <b>2019</b> , 781, 308-314	5.7	3
34	Structural evolution in a metallic glass pillar upon compression. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2018</b> , 721, 8-13	5.3	2
33	Phase structure and crystallization of the bulk glassy FeCoZrWB alloys. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2010</b> , 7, 1336-1339		2
32	Co-based Soft Magnetic Bulk Materials Prepared by Hot Powder Compaction. <i>European Physical Journal D</i> , <b>2004</b> , 54, 81-84		2
31	The influence of ball-milling on structural and magnetic properties of Co-based powders. <i>European Physical Journal D</i> , <b>2005</b> , 55, 791-801		2
30	Structure and Magnetic Properties of Fe(Mn)-Si-B-Nb-Cu Alloys. <i>Acta Physica Polonica A</i> , <b>2009</b> , 115, 399-402		2
29	Magnetic Properties of Crystalline NiFe Alloy Prepared by High-Energy Ball Milling and Compacting. <i>Acta Physica Polonica A</i> , <b>2010</b> , 118, 797-799	0.6	2
28	A role of atomic size misfit in lattice distortion and solid solution strengthening of TiNbHfTaZr high entropy alloy system. <i>Scripta Materialia</i> , <b>2022</b> , 210, 114470	5.6	2
27	Short-range order and atomic diffusion in liquid Ge and Si <sub>20</sub> Ge <sub>80</sub> investigated by neutron scattering and x-ray diffraction. <i>Physical Review B</i> , <b>2021</b> , 104,	3.3	2
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22	Effect of Annealing Time on Structure of Fe <sub>{72.5}</sub> Cu <sub>{1}</sub> Nb <sub>{2}</sub> Mo <sub>{2}</sub> Si <sub>{15.5}</sub> B <sub>{7}</sub> Alloy. <i>Acta Physica Polonica A</i> , <b>2014</b> , 126, 116-117	0.6	1
21	Isobaric Thermal Expansion and Isothermal Compression of Powdered NiFe Based Alloys Studied by In-Situ EDXRD. <i>Acta Physica Polonica A</i> , <b>2014</b> , 126, 128-129	0.6	1
20	Formation of less-known structurally complex B and orthorhombic quasicrystalline approximant B on solidification of selected AlPdCr alloys. <i>Materials Characterization</i> , <b>2014</b> , 97, 189-198	3.9	1
19	Evolution of phases in Al55Ni30Pd15 alloy at temperatures up to 600 °C. <i>Intermetallics</i> , <b>2014</b> , 46, 141-146	6.5	1
18	In situ tensile deformation of Fe-rich metallic glass at elevated temperatures using hard X-ray diffraction. <i>Journal of Alloys and Compounds</i> , <b>2011</b> , 509, S92-S94	5.7	1
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14	Soft magnetic amorphous alloys in X-ray light: Insights from ultra-fast Joule heating experiments. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2020</b> , 499, 166282	2.8	1
13	57Fe75Mo8Cu1B16 metallic glass studied by CEMS, CXMS and HEXRD <b>2016</b> ,		1
12	Influence of External Factors on Amorphous and Nanocrystalline Soft Magnetic Alloys Studied by Mössbauer Spectroscopy. <i>Materials Science Forum</i> , <b>2006</b> , 518, 195-202	0.4	0
11	Structural Evolution in Wet Mechanically Alloyed Co-Fe-(Ta,W)-B Alloys. <i>Metals</i> , <b>2021</b> , 11, 800	2.3	0
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