

# Chuang Dong

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

335  
papers

8,835  
citations

47  
h-index

82  
g-index

340  
ext. papers

9,884  
ext. citations

3.9  
avg, IF

6.13  
L-index

#	Paper	IF	Citations
335	Microstructural stability of low-cost Ni-base superalloys with a high volume fraction of cuboidal $\eta$ nanoprecipitates. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2022</b> , 833, 142550	5.3	0
334	Dual-cluster model of Sn-based binary eutectics and solders. <i>Materials Today Communications</i> , <b>2022</b> , 30, 103191	2.5	0
333	Compositional interpretation of high elasticity CuNiSn alloys using cluster-plus-glue-atom model. <i>Journal of Materials Research and Technology</i> , <b>2022</b> , 17, 1246-1258	5.5	2
332	Composition formulas of solid-solution alloys derived from chemical-short-range orders.. <i>Scientific Reports</i> , <b>2022</b> , 12, 3169	4.9	
331	Spherical-periodic order and relevant short-range structural units in simple crystal structures. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2022</b> , 40, 022201	2.9	
330	The preliminary exploration of composition origin of solid solution alloys used in thermocouple by cluster-plus-glue-atom model. <i>Materials and Design</i> , <b>2022</b> , 216, 110562	8.1	1
329	Achieving high-temperature strength and plasticity in near- $\beta$ Ti-7Al-3Zr-2V alloy using cluster formula design. <i>Journal of Materials Research and Technology</i> , <b>2022</b> , 18, 2582-2592	5.5	3
328	Effect of processing parameters on formability, microstructure, and micro-hardness of a novel laser additive manufactured Ti-6.38Al-3.87V-2.43Mo alloy. <i>China Foundry</i> , <b>2022</b> , 19, 158-168	0.8	
327	Composition origin of Cu-Zr bulk metallic glasses understood via a dual-cluster model of binary eutectics. <i>Journal of Non-Crystalline Solids</i> , <b>2022</b> , 588, 121635	3.9	1
326	Single-phase quasicrystalline AlCuBe thin film prepared by direct current magnetron sputtering on stainless steel. <i>Thin Solid Films</i> , <b>2022</b> , 753, 139272	2.2	0
325	Microstructures and mechanical properties of TiAlNb alloys with cluster formula manufactured by laser additive manufacturing. <i>Transactions of Nonferrous Metals Society of China</i> , <b>2021</b> , 31, 3012-3023	3.3	1
324	Enthalpic interaction promotes the stability of high elastic Cu-Ni-Sn alloys. <i>Journal of Alloys and Compounds</i> , <b>2021</b> , 896, 163068	5.7	1
323	Structure of an AlCuCo decagonal quasicrystal studied by Cs-corrected STEM.. <i>Micron</i> , <b>2021</b> , 153, 103194	4.3	0
322	Influence of Cr/Mo ratio on microstructure and mechanical properties of the Ni-based superalloys fabricated by laser additive manufacturing. <i>Journal of Alloys and Compounds</i> , <b>2021</b> , 894, 162484	5.7	0
321	Structural relationship between crystalline and amorphous states in Cu-(Zr, Ti) binary systems. <i>Journal of Physics Condensed Matter</i> , <b>2021</b> , 33, 074001	1.8	1
320	Dual-cluster model of TiCu binary eutectic and composition interpretation of relevant amorphous alloys. <i>AIP Advances</i> , <b>2021</b> , 11, 035140	1.5	1
319	Composition equivalents of stainless steels understood via gamma stabilizing efficiency. <i>Scientific Reports</i> , <b>2021</b> , 11, 5423	4.9	3

318	A Novel Soft-Magnetic B2-Based Multiprincipal-Element Alloy with a Uniform Distribution of Coherent Body-Centered-Cubic Nanoprecipitates. <i>Advanced Materials</i> , <b>2021</b> , 33, e2006723	24	12
317	Formation and Mechanical Behavior of Body-Centered-Cubic Zr(Hf)-Nb-Ti Medium-Entropy Alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2021</b> , 52, 2100-2110 <sup>2-3</sup>	2-3	3
316	Molecule-like chemical units in metallic alloys. <i>Science China Materials</i> , <b>2021</b> , 64, 2563-2571	7-1	1
315	Composition formulas of Ti alloys derived by interpreting Ti-6Al-4V. <i>Science China Technological Sciences</i> , <b>2021</b> , 64, 1732-1740	3-5	4
314	Cluster-Model-Embedded First-Principles Study on Structural Stability of Body-Centered-Cubic-Based Ti-Zr-Hf-Nb Refractory High-Entropy Alloys. <i>Journal of Phase Equilibria and Diffusion</i> , <b>2021</b> , 42, 647	1	
313	Microstructures and Mechanical Properties of Al-Ti-Zr-Nb-Ta-Mo-V Refractory High-Entropy Alloys with Coherent B2 Nanoprecipitation. <i>Crystals</i> , <b>2021</b> , 11, 833	2-3	2
312	New Ni-based superalloys designed for laser additive manufacturing. <i>Journal of Alloys and Compounds</i> , <b>2021</b> , 861, 157979	5-7	9
311	Cuboidal $\beta$ phase coherent precipitation-strengthened Cu <sub>3</sub> NiAl alloys with high softening temperature. <i>Acta Materialia</i> , <b>2021</b> , 203, 116458	8-4	10
310	Composition optimization of high-strength Mg-Gd-Y-Zr alloys based on the structural unit of Mg-Gd solid solution. <i>Journal of Materials Science and Technology</i> , <b>2021</b> , 72, 104-113	9-1	7
309	Synergistic reinforcement of Cu <sub>3</sub> NiAl films with dual nanostructure. <i>Surface Engineering</i> , <b>2021</b> , 37, 795-807.6	7	
308	High-Temperature Oxidation Resistance of Alumina-Forming Austenitic Stainless Steels Optimized by Refractory Metal Alloying. <i>Metals</i> , <b>2021</b> , 11, 213	2-3	1
307	Design and Numerical Simulation of Pyramidal Prefolded Patterned Thin-Walled Tubes. <i>Advances in Materials Science and Engineering</i> , <b>2021</b> , 2021, 1-16	1-5	3
306	Phase evolution in preparing ZnSnO <sub>3</sub> powders by precipitation method. <i>Applied Physics A: Materials Science and Processing</i> , <b>2021</b> , 127, 1	2-6	3
305	Bio-Based Hotmelt Adhesives with Well-Adhesion in Water. <i>Polymers</i> , <b>2021</b> , 13,	4-5	2
304	Design for Ti-Al-V-Mo-Nb alloys for laser additive manufacturing based on a cluster model and on their microstructure and properties. <i>China Foundry</i> , <b>2021</b> , 18, 424-432	0-8	2
303	Coherent precipitation and stability of cuboidal B2 nanoparticles in a ferritic Fe <sub>3</sub> CrNiAl superalloy. <i>Materials Research Letters</i> , <b>2021</b> , 9, 458-466	7-4	0
302	One-step mild preparation of tough and thermo-reversible poly(vinyl alcohol) hydrogels induced by small molecules. <i>Chemical Communications</i> , <b>2021</b> , 57, 3789-3792	5-8	2
301	Composition formula of transparent conductive tin doped indium oxide in terms of cluster plus glue atom model. <i>Journal of Alloys and Compounds</i> , <b>2020</b> , 836, 155514	5-7	4

300	The resistivity-temperature behavior of Al-Co-Cr-Fe-Ni high-entropy alloy films. <i>Thin Solid Films</i> , <b>2020</b> , 700, 137895	2.2	12
299	First-Principles Calculations for Stable Ti-Mo Alloys Using Cluster-Plus-Glue-Atom Model. <i>Acta Metallurgica Sinica (English Letters)</i> , <b>2020</b> , 33, 968-974	2.5	1
298	Effect of alloying elements on lattice misfit and elasticities of Ni-based single crystal superalloys by first-principle calculations. <i>Solid State Communications</i> , <b>2020</b> , 310, 113852	1.6	2
297	Mechanism and control of preferred Cu <sub>6</sub> Sn <sub>5</sub> growth on single crystal (001)Cu. <i>Journal of Materials Science: Materials in Electronics</i> , <b>2020</b> , 31, 5966-5974	2.1	3
296	Molecule-like structural units in silicate-glass-forming oxides. <i>Wuli Xuebao/Acta Physica Sinica</i> , <b>2020</b> , 69, 136101	0.6	
295	Performance and local structure evolution of Nb-Mo-Ta-W-V entropy-stabilized oxide thin films with variable oxygen content. <i>Surface and Coatings Technology</i> , <b>2020</b> , 402, 126326	4.4	5
294	Effect of dual local structures of amorphous Fe-Bi films on the performance of anode of lithium-ion batteries. <i>Materials Chemistry and Physics</i> , <b>2020</b> , 243, 122666	4.4	3
293	Interfacial microstructure and shear strength of Ti-6Al-4V alloy/316L stainless steel joint brazed with Ti-33.3Zr-16.7Cu-50Ni-x amorphous filler metals. <i>Materials and Design</i> , <b>2020</b> , 187, 108380	8.1	19
292	Phase-field simulation of coherent BCC/B2 microstructures in high entropy alloys. <i>Acta Materialia</i> , <b>2020</b> , 197, 10-19	8.4	21
291	Novel kind of decagonal ordering in Al-Cr-Fe. <i>Nature Communications</i> , <b>2020</b> , 11, 6209	17.4	3
290	Differential effects of Zn and Co solutes on the properties of Cu-Ni-Sn alloys. <i>Intermetallics</i> , <b>2020</b> , 125, 106894	3.5	8
289	Cluster-formula-embedded machine learning for design of multicomponent Ti alloys with low Young's modulus. <i>Npj Computational Materials</i> , <b>2020</b> , 6,	10.9	13
288	Composition rules of Ni-base single crystal superalloys and its influence on creep properties via a cluster formula approach. <i>Scientific Reports</i> , <b>2020</b> , 10, 21621	4.9	7
287	Performance of GH4169 brazed joint using a new designed nickel-based filler metal via cluster-plus-glue-atom model. <i>Journal of Materials Science and Technology</i> , <b>2020</b> , 39, 89-98	9.1	11
286	Microstructural stability of Ta minor-alloying HR3C stainless steel at 973 K. <i>Materials Chemistry and Physics</i> , <b>2020</b> , 239, 122306	4.4	0
285	Review of structural models for the compositional interpretation of metallic glasses. <i>International Materials Reviews</i> , <b>2020</b> , 65, 286-296	16.1	15
284	Dual-cluster formulas for eutectic-type bulk metallic glasses and experimental verification in Zr-Al-Fe-Cu system. <i>Materials and Design</i> , <b>2019</b> , 183, 108142	8.1	7
283	Nitrogen-aeration tuned ultrasonic synthesis of SiO <sub>2</sub> @PNIPAm nanoparticles and preparation of temperature responsive Pickering emulsion. <i>Ultrasonics Sonochemistry</i> , <b>2019</b> , 58, 104705	8.9	8

282	High-temperature oxidation of thick Cr coating prepared by arc deposition for accident tolerant fuel claddings. <i>Journal of Nuclear Materials</i> , <b>2019</b> , 519, 145-156	3.3	40
281	Exploration of phase structure evolution induced by alloying elements in Ti alloys via a chemical-short-range-order cluster model. <i>Scientific Reports</i> , <b>2019</b> , 9, 3404	4.9	12
280	CuNiBnBi alloys designed by cluster-plus-glue-atom model. <i>Materials and Design</i> , <b>2019</b> , 167, 107641	8.1	23
279	Temperature-affected microstructural stability of coherent cuboidal B2 particles in precipitation-strengthened body-centered-cubic Al <sub>0.7</sub> CoCr <sub>2</sub> FeNi high-entropy alloy. <i>Journal of Materials Science</i> , <b>2019</b> , 54, 8696-8710	4.3	10
278	Controlled Preparation of MgAl-Layered Double Hydroxide/Graphene Hybrids and Their Applications for Metal Protection. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2019</b> , 58, 16516-16525	3.9	15
277	Comparative studies on microstructures and properties of CuNiM alloys controlled by strong interaction between elements. <i>Journal of Alloys and Compounds</i> , <b>2019</b> , 805, 404-414	5.7	6
276	Preparation and electro-catalytic activity of nanoporous palladium by dealloying rapidly-quenched Al <sub>70</sub> Pd <sub>17</sub> Fe <sub>13</sub> quasicrystalline alloy. <i>Transactions of Nonferrous Metals Society of China</i> , <b>2019</b> , 29, 785-790	3.3	3
275	Design of near- $\beta$ Ti alloys via a cluster formula approach and their high-temperature oxidation resistance. <i>Journal of Materials Science and Technology</i> , <b>2019</b> , 35, 1008-1016	9.1	9
274	Microstructure evolution and strengthening mechanism of Cu <sub>x</sub> [Ni <sub>3</sub> Mo] alloys. <i>Materials Science and Technology</i> , <b>2019</b> , 35, 98-106	1.5	1
273	Precipitation evolution in Cu [Ni <sub>3</sub> Cr <sub>1</sub> ] spinodal alloys under mismatch control. <i>Materials Chemistry and Physics</i> , <b>2019</b> , 223, 486-493	4.4	2
272	Quantitative Correlation between Electrical Resistivity and Microhardness of Cu-Ni-Mo Alloys via a Short-Range Order Cluster Model. <i>Journal of Electronic Materials</i> , <b>2019</b> , 48, 312-320	1.9	2
271	Formation of cuboidal B2 nanoprecipitates and microstructural evolution in the body-centered-cubic Al <sub>0.7</sub> NiCoFe <sub>1.5</sub> Cr <sub>1.5</sub> high-entropy alloy. <i>Journal of Alloys and Compounds</i> , <b>2019</b> , 780, 408-421	5.7	11
270	Controlled formation of coherent cuboidal nanoprecipitates in body-centered cubic high-entropy alloys based on Al <sub>2</sub> (Ni,Co,Fe,Cr) <sub>14</sub> compositions. <i>Acta Materialia</i> , <b>2018</b> , 147, 213-225	8.4	139
269	Spherical periodicity as structural homology of crystalline and amorphous states. <i>Science China Materials</i> , <b>2018</b> , 61, 409-416	7.1	6
268	Composition Formulas of Inorganic Compounds in Terms of Cluster Plus Glue Atom Model. <i>Inorganic Chemistry</i> , <b>2018</b> , 57, 710-717	5.1	10
267	Effects of adding elements M (M = C, B, Mn, Al and Al + Co) on stability of amorphous semiconducting FeSi films. <i>Journal of Materials Science: Materials in Electronics</i> , <b>2018</b> , 29, 10550-10560	2.1	
266	Large-sized quasi-crystals with continuously adjustable compositions. <i>Journal of Alloys and Compounds</i> , <b>2018</b> , 746, 356-360	5.7	1
265	Enhanced thermal stability of Cu alloy films by strong interaction between Ni and Zr (or Fe). <i>Journal Physics D: Applied Physics</i> , <b>2018</b> , 51, 135304	3	4

264	Chemical short-range orders and the induced structural transition in high-entropy alloys. <i>Scripta Materialia</i> , <b>2018</b> , 144, 64-68	5.6	78
263	Influence of phase dissolution and hydrogen absorption on the stress corrosion cracking behavior of Mg-7%Gd-5%Y-1%Nd-0.5%Zr alloy in 3.5 wt.% NaCl solution. <i>Corrosion Science</i> , <b>2018</b> , 142, 185-200	6.8	21
262	Effect of Ti substitution for Al on the cuboidal nanoprecipitates in Al <sub>0.7</sub> NiCoFeCr <sub>2</sub> high-entropy alloys. <i>Journal of Materials Research</i> , <b>2018</b> , 33, 3266-3275	2.5	6
261	Dual-cluster interpretation of binary eutectics associated with hexagonal close-packed solid solution phases. <i>Materials Letters</i> , <b>2018</b> , 233, 71-73	3.3	6
260	Ni-V(or Cr) Co-addition Cu alloy films with high stability and low resistivity. <i>Materials Chemistry and Physics</i> , <b>2018</b> , 205, 253-260	4.4	4
259	Solute-homogenization model and its experimental verification in Mg-Gd-based alloys. <i>Journal of Materials Science and Technology</i> , <b>2018</b> , 34, 1132-1141	9.1	12
258	High-Temperature Structural Stabilities of Ni-Based Single-Crystal Superalloys NiCoCrMoWAlTiTa with Varying Co Contents. <i>Acta Metallurgica Sinica (English Letters)</i> , <b>2018</b> , 31, 127-133	2.5	13
257	Coherent Precipitation and Strengthening in Compositionally Complex Alloys: A Review. <i>Entropy</i> , <b>2018</b> , 20,	2.8	42
256	Microstructures and mechanical properties of body-centered-cubic (Al,Ti) <sub>0.7</sub> (Ni,Co,Fe,Cr) <sub>5</sub> high entropy alloys with coherent B2/L21 nanoprecipitation. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2018</b> , 737, 286-296	5.3	30
255	Cluster-plus-glue-atom formulas of Fe-B-based metallic glasses. <i>Intermetallics</i> , <b>2018</b> , 99, 35-38	3.5	2
254	Electronic transport and magnetic performance of NiNbZr metallic glasses. <i>Rare Metals</i> , <b>2017</b> , 36, 894-898	3.5	5
253	Effects of Nb and Zr on structural stabilities of Ti-Mo-Sn-based alloys with low modulus. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2017</b> , 687, 1-7	5.3	33
252	Composition interpretation procedures of bulk metallic glasses via example of Cu <sub>64</sub> Zr <sub>36</sub> . <i>Journal of Non-Crystalline Solids</i> , <b>2017</b> , 460, 125-129	3.9	8
251	Preparation and characterization of CuN-based ternary alloy films using Cr or Zr for stabilizing N. <i>Journal of Materials Research</i> , <b>2017</b> , 32, 1333-1342	2.5	0
250	Composition formulas of Ni-(Nb, Ta) bulk metallic glasses. <i>Intermetallics</i> , <b>2017</b> , 85, 176-179	3.5	8
249	Composition range of semiconducting amorphous Fe-Si thin films interpreted using a cluster-based short-range-order model. <i>Journal of Alloys and Compounds</i> , <b>2017</b> , 706, 495-501	5.7	7
248	Mechanical and Magnetic Properties of New (Fe,Co,Ni) <sub>88</sub> Si <sub>12</sub> Bulk Glassy Alloys. <i>Acta Metallurgica Sinica (English Letters)</i> , <b>2017</b> , 30, 659-664	2.5	3
247	Composition formulas of Fe-based transition metals-metalloid bulk metallic glasses derived from dual-cluster model of binary eutectics. <i>Scientific Reports</i> , <b>2017</b> , 7, 9150	4.9	17

246	Minor-alloyed Cu-Ni-Si alloys with high hardness and electric conductivity designed by a cluster formula approach. <i>Progress in Natural Science: Materials International</i> , <b>2017</b> , 27, 467-473	3.6	19
245	Structural Stability of the Metastable $\beta$ [(Mo <sub>0.5</sub> Sn <sub>0.5</sub> )-(Ti <sub>13</sub> Zr <sub>1</sub> )]Nb <sub>1</sub> Alloy with Low Young's Modulus at Different States. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2017</b> , 48, 3912-3919	2.3	9
244	Influence of Nitrogen Vacancy Concentration on Mechanical and Electrical Properties of Rocksalt Zirconium Nitride Films. <i>Acta Metallurgica Sinica (English Letters)</i> , <b>2017</b> , 30, 1100-1108	2.5	8
243	The BCC/B2 Morphologies in Al <sub>x</sub> NiCoFeCr High-Entropy Alloys. <i>Metals</i> , <b>2017</b> , 7, 57	2.3	76
242	New Low-Sn Zr Cladding Alloys with Excellent Autoclave Corrosion Resistance and High Strength. <i>Metals</i> , <b>2017</b> , 7, 144	2.3	3
241	Evolution of Nanostructure and Metastable Phases at the Surface of a HCPEB-Treated WC-6% Co Hard Alloy with Increasing Irradiation Pulse Numbers. <i>Coatings</i> , <b>2017</b> , 7, 178	2.9	7
240	Influences of Mo/Zr minor-alloying on the phase precipitation behavior in modified 310S austenitic stainless steels at high temperatures. <i>Materials and Design</i> , <b>2017</b> , 128, 34-46	8.1	21
239	Characteristics of cluster formulas for binary bulk metallic glasses. <i>Journal of Alloys and Compounds</i> , <b>2016</b> , 654, 340-343	5.7	11
238	Effect of solution treatment on stress corrosion cracking behavior of an as-forged Mg-Zn-Y-Zr alloy. <i>Scientific Reports</i> , <b>2016</b> , 6, 29471	4.9	19
237	Nitrogen concentration dependent mechanical properties of TiN <sub>x</sub> single-phase films (0.75 ≤ x ≤ 0.99). <i>Ceramics International</i> , <b>2016</b> , 42, 10332-10337	5.1	7
236	Microstructure and mechanical properties of Sn-rich Au-Sn solders designed using cluster-plus-glue-atom model. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2016</b> , 664, 221-226	5.3	10
235	Composition formulas of Fe-B binary amorphous alloys. <i>Journal of Non-Crystalline Solids</i> , <b>2016</b> , 432, 453-458	4.9	20
234	Electrical resistivity interpretation of ternary Cu-Ni-Mo alloys using a cluster-based short-range-order structural model. <i>Journal Physics D: Applied Physics</i> , <b>2016</b> , 49, 035306	3	9
233	Composition interpretation of binary bulk metallic glasses via principal cluster definition. <i>Materials and Design</i> , <b>2016</b> , 96, 115-121	8.1	21
232	Effects of zinc coating on magnesium alloy-steel joints produced by cold metal transfer method. <i>Materials Science and Technology</i> , <b>2016</b> , 32, 1805-1817	1.5	12
231	Investigation of a new phase in Cu-containing Fe-Ni alloy for corrosion resistance behavior. <i>Integrated Ferroelectrics</i> , <b>2016</b> , 172, 59-65	0.8	
230	Microstructure, magnetic and magnetocaloric properties of Fe <sub>2</sub> Si <sub>1-x</sub> Mn <sub>x</sub> P <sub>0.4</sub> Si <sub>0.6</sub> alloys. <i>Science China Materials</i> , <b>2016</b> , 59, 1062-1068	7.1	8
229	Effect of solution treatment on the fatigue behavior of an as-forged Mg-Zn-Y-Zr alloy. <i>Scientific Reports</i> , <b>2016</b> , 6, 23955	4.9	14

228	Hidden electronic rule in the "cluster-plus-gluce-atom" model. <i>Scientific Reports</i> , <b>2016</b> , 6, 33672	4.9	9
227	Ta/Zr-Alloyed VCrTi Alloys via a Cluster-Plus-Gluce-Atom Model for BCC Solid Solutions. <i>Transactions of the Indian Institute of Metals</i> , <b>2016</b> , 69, 1557-1562	1.2	2
226	Composition design procedures of Ti-based bulk metallic glasses using the cluster-plus-gluce-atom model. <i>Acta Materialia</i> , <b>2016</b> , 111, 366-376	8.4	42
225	A cuboidal B2 nanoprecipitation-enhanced body-centered-cubic alloy Al <sub>0.7</sub> CoCrFe <sub>2</sub> Ni with prominent tensile properties. <i>Scripta Materialia</i> , <b>2016</b> , 120, 85-89	5.6	86
224	Formation and structure-property correlation of new bulk Fe <sub>80</sub> Si <sub>10</sub> Bi <sub>10</sub> F metallic glasses. <i>Materials and Design</i> , <b>2016</b> , 106, 69-73	8.1	27
223	Magnetic properties and a structure model for high Fecontent Fe <sub>80</sub> Si <sub>10</sub> Zr bulk glassy alloys. <i>Journal of Non-Crystalline Solids</i> , <b>2016</b> , 450, 1-5	3.9	9
222	Effect of corrosion attack on the fatigue behavior of an as-cast Mg <sub>70</sub> Gd <sub>5</sub> Y <sub>10</sub> Nd <sub>0.5</sub> Zr alloy. <i>Materials and Design</i> , <b>2015</b> , 84, 185-193	8.1	22
221	Direct Friction Welding of TiAl Alloy to 42CrMo Steel Rods. <i>Materials and Manufacturing Processes</i> , <b>2015</b> , 30, 1104-1108	4.1	15
220	Composition formulas of Cu-Ni industrial alloy specifications. <i>Science China Materials</i> , <b>2015</b> , 58, 355-362	7.1	13
219	Microstructures and Stability Origins of [(Ti,Zr)-(Mo,Sn)-Nb Alloys with Low Young's Modulus. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2015</b> , 46, 3924-3933	2.3	14
218	Fe <sub>80</sub> Si <sub>10</sub> Zr soft magnetic bulk glassy alloys. <i>Intermetallics</i> , <b>2015</b> , 67, 138-144	3.5	13
217	Cluster-plus-gluce-atom model and universal composition formulas [cluster](gluce atom) <sub>x</sub> for BCC solid solution alloys. <i>Journal of Alloys and Compounds</i> , <b>2015</b> , 652, 63-69	5.7	31
216	Nearest-neighbor coordination polyhedral clusters in metallic phases defined using Friedel oscillation and atomic dense packing. <i>Journal of Applied Crystallography</i> , <b>2015</b> , 48, 2002-2005	3.8	18
215	Effect of heat treatment on the corrosion resistance and mechanical properties of an as-forged Mg <sub>70</sub> Sn <sub>10</sub> Zr alloy. <i>Corrosion Science</i> , <b>2015</b> , 92, 228-236	6.8	68
214	Effects of distribution and growth orientation of precipitates on oxidation resistance of Cu <sub>12</sub> [Cr <sub>x</sub> /(12+x)Ni <sub>12</sub> /(12+x)] <sub>5</sub> alloys. <i>Journal of Materials Research</i> , <b>2015</b> , 30, 3299-3306	2.5	1
213	The metastable structure of hypereutectic Al <sub>70</sub> Si alloy surface induced by high current pulsed electron beam. <i>Materials Research Innovations</i> , <b>2015</b> , 19, S5-320-S5-324	1.9	2
212	Composition formulas of binary eutectics. <i>Scientific Reports</i> , <b>2015</b> , 5, 17880	4.9	25
211	Structural Stabilities of Ti Alloys Studied Using a New Mo Equivalent Derived from [Ti] Phase-Boundary Slopes. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2015</b> , 46, 3440-3447	2.3	54



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209	Effects of Sb Content on Solidification Pathways and Grain Size of AZ91 Magnesium Alloy. <i>Acta Metallurgica Sinica (English Letters)</i> , <b>2015</b> , 28, 115-121	2.5	19
208	Ultrafast atomic layer-by-layer oxygen vacancy-exchange diffusion in double-perovskite LnBaCo <sub>2</sub> O <sub>5.5</sub> + $\delta$ thin films. <i>Scientific Reports</i> , <b>2014</b> , 4, 4726	4.9	33
207	Ultrafast chemical dynamic behavior in highly epitaxial LaBaCo <sub>2</sub> O <sub>5</sub> + $\delta$ thin films. <i>Journal of Materials Chemistry C</i> , <b>2014</b> , 2, 5660-5666	7.1	9
206	Hardness of Al-based quasicrystals evaluated via cluster-plus-glue-atom model. <i>Philosophical Magazine</i> , <b>2014</b> , 94, 1463-1477	1.6	6
205	Microstructure modifications and associated hardness and corrosion improvements in the AISI 420 martensitic stainless steel treated by high current pulsed electron beam (HCPEB). <i>Surface and Coatings Technology</i> , <b>2014</b> , 259, 737-745	4.4	49
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202	Thermal stability of barrierless CuNiSn films. <i>Applied Surface Science</i> , <b>2014</b> , 297, 89-94	6.7	8
201	Composition design of superhigh strength maraging stainless steels using a cluster model. <i>Progress in Natural Science: Materials International</i> , <b>2014</b> , 24, 35-41	3.6	9
200	Understanding the Cu-Zn brass alloys using a short-range-order cluster model: significance of specific compositions of industrial alloys. <i>Scientific Reports</i> , <b>2014</b> , 4, 7065	4.9	57
199	Stress corrosion cracking susceptibility of a high strength Mg-7%Gd-5%Y-1%Nd-0.5%Zr alloy. <i>Journal of Magnesium and Alloys</i> , <b>2014</b> , 2, 335-341	8.8	18
198	Vacuum Brazing TC4 Titanium Alloy to 304 Stainless Steel with Cu-Ti-Ni-Zr-V Amorphous Alloy Foil. <i>Journal of Materials Engineering and Performance</i> , <b>2014</b> , 23, 3770-3777	1.6	22
197	Compositions of Al-Based Quasicrystals Interpreted by Cluster Formulae. <i>Acta Physica Polonica A</i> , <b>2014</b> , 126, 446-448	0.6	5
196	Application of cluster-plus-glue-atom model to barrierless CuNiTi and CuNiTiAl films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2014</b> , 32, 061510	2.9	6
195	Microstructure and mechanical properties of friction welds between TiAl alloy and 40Cr steel rods. <i>Transactions of Nonferrous Metals Society of China</i> , <b>2014</b> , 24, 3126-3133	3.3	12
194	24 electron cluster formulas as the molecular units of ideal metallic glasses. <i>Philosophical Magazine</i> , <b>2014</b> , 94, 2520-2540	1.6	38
193	Correlation between the glass-forming ability and activation energy of crystallization for Zr <sub>75</sub> Ni <sub>25</sub> Al <sub>x</sub> metallic glasses. <i>International Journal of Minerals, Metallurgy and Materials</i> , <b>2013</b> , 20, 445-449	3.1	7

192	Formation and properties of high Fe-content Fe-(B-Si)-Zr bulk amorphous alloys. <i>International Journal of Minerals, Metallurgy and Materials</i> , <b>2013</b> , 20, 371-374	3.1	2
191	First-principles calculations of elastic moduli of TiMoNb alloys using a cluster-plus-glue-atom model for stable solid solutions. <i>Journal of Materials Science</i> , <b>2013</b> , 48, 3138-3146	4.3	9
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189	Ti Alloys with Low Young's Moduli Interpreted by Cluster-Plus-Glue-Atom Model. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2013</b> , 44, 1872-1879	2.3	39
188	Vacuum brazing of TiAl alloy to 40Cr steel with Ti60Ni22Cu10Zr8 alloy foil as filler metal. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2013</b> , 561, 252-258	5.3	34
187	Analysis of the evaporation and re-condensation processes induced by pulsed beam treatments. <i>International Journal of Heat and Mass Transfer</i> , <b>2013</b> , 64, 1172-1182	4.9	40
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185	WC/Co composite surface structure and nano graphite precipitate induced by high current pulsed electron beam irradiation. <i>Applied Surface Science</i> , <b>2013</b> , 285, 552-556	6.7	22
184	Structural and Mechanical Properties of TiON Nanocomposite Films Deposited on Silicon by Pulsed Bias Arc Ion Plating <b>2013</b> , 2111-2115		
183	Reaction induced anomalous temperature dependence of equilibrium contact angle of TiZr based glass forming melt on Al <sub>2</sub> O <sub>3</sub> substrate. <i>Materials Science and Technology</i> , <b>2013</b> , 29, 332-336	1.5	3
182	Microstructure and storage properties of low V-containing TiCrV hydrogen storage alloys prepared by arc melting and suction casting. <i>Rare Metals</i> , <b>2013</b> , 32, 354-358	5.5	4
181	Designing Multi-Component Ti Alloys with Low Young's Modulus. <i>Materials Science Forum</i> , <b>2013</b> , 747-748, 885-889	0.4	1
180	Barrierless Cu-Ni-Nb thin films on silicon with high thermal stability and low electrical resistivity. <i>Journal of Materials Research</i> , <b>2013</b> , 28, 3367-3373	2.5	7
179	Glass-Forming Ability, Corrosion Resistance and Mechanical Properties of Zr <sub>60-x</sub> Al <sub>15</sub> Ni <sub>25</sub> TM <sub>x</sub> (TM = Nb and Ta) Bulk Metallic Glasses. <i>Materials Transactions</i> , <b>2013</b> , 54, 1368-1372	1.3	2
178	Structural and Mechanical Properties of TiON Nanocomposite Films Deposited on Silicon by Pulsed Bias Arc Ion Plating <b>2013</b> , 2111-2115		
177	Cluster formula of Fe-containing Monel alloys with high corrosion-resistance. <i>Materials Characterization</i> , <b>2012</b> , 68, 94-101	3.9	11
176	A ferrite stainless steel Cr <sub>27</sub> Mo <sub>6</sub> Al <sub>3</sub> Cu with oxidation resistance. <i>Materials &amp; Design</i> , <b>2012</b> , 40, 171-175		6
175	Stable reflectivity of bulk metallic glass mirrors for ITER optical diagnostic through an irradiation-induced self-recovery mechanism. <i>Journal of Nuclear Materials</i> , <b>2012</b> , 429, 221-225	3.3	5

174	Hydrogen plasma induced crystallization of Si thin films by remote inductively coupled plasma source assistant pulsed dc twin magnetron sputtering. <i>Surface and Coatings Technology</i> , <b>2012</b> , 206, 3159-3164	4.4	1
173	Kinetic of glass transition of Zr <sub>57.2</sub> Al <sub>21.4</sub> Ni <sub>21.4</sub> bulk metallic glass. <i>Thermochimica Acta</i> , <b>2012</b> , 532, 92-95	9	9
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170	Cu-Containing Fe-Ni Corrosion-Resistant Alloys Designed by a Cluster-Based Stable Solid Solution Model. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2012</b> , 43, 544-554	2.3	4
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167	A Zr <sub>57.2</sub> Al Bulk Metallic Glass Derived from the Atomic-Cluster-Plus-Glue-Atom Model and Its Mechanical Properties. <i>Transactions of the Indian Institute of Metals</i> , <b>2012</b> , 65, 577-580	1.2	1
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165	Surface modification of Al <sub>2</sub> Si alloy by high current pulsed electron beam. <i>Applied Surface Science</i> , <b>2012</b> , 258, 2052-2056	6.7	49
164	Barrierless Cu-Ni-Mo Interconnect Films with High Thermal Stability Against Silicide Formation. <i>Journal of Electronic Materials</i> , <b>2012</b> , 41, 3447-3452	1.9	17
163	Effects of Cu, Fe and Co addition on the glass-forming ability and mechanical properties of Zr-Al-Ni bulk metallic glasses. <i>Science China: Physics, Mechanics and Astronomy</i> , <b>2012</b> , 55, 2367-2371	3.6	13
162	Butt Joining of Aluminum to Steel by Arc Brazing Process. <i>Materials and Manufacturing Processes</i> , <b>2012</b> , 27, 1392-1396	4.1	9
161	Surface Modification of Light Alloys by Low-Energy High-Current Pulsed Electron Beam. <i>Journal of Metallurgy</i> , <b>2012</b> , 2012, 1-10	0	13
160	COMPOSITION DESIGN OF HIGH-STRENGTH MARTENSITIC PRECIPITATION HARDENING STAINLESS STEELS BASED ON A CLUSTER MODEL. <i>Jinshu Xuebao/Acta Metallurgica Sinica</i> , <b>2012</b> , 48, 1201		12
159	Enhancement of glass-forming ability and corrosion resistance of Zr-based Zr-Ni-Al bulk metallic glasses with minor addition of Nb. <i>Journal of Applied Physics</i> , <b>2011</b> , 110, 023513	2.5	13
158	Microstructure and property modifications in a near Ti alloy induced by pulsed electron beam surface treatment. <i>Surface and Coatings Technology</i> , <b>2011</b> , 206, 295-304	4.4	50
157	A Cluster Resonance Criterion for Al-TM Quasicrystal Compositions. <i>Israel Journal of Chemistry</i> , <b>2011</b> , 51, 1226-1234	3.4	11

156	The e/a values of ideal metallic glasses in relation to cluster formulae. <i>Acta Materialia</i> , <b>2011</b> , 59, 5917-5923	2.1	67
155	Alloy phases and metallic glass formation understood via cluster formulas. <i>Chemical Physics Letters</i> , <b>2011</b> , 502, 176-179	2.5	11
154	Ni-Nb-Ta bulk metallic glasses designed by a cluster-plus-glue atom model. <i>Transactions of the Indian Institute of Metals</i> , <b>2011</b> , 64, 293-295	1.2	5
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149	Surface modification of Al <sub>0</sub> Si alloy by high current pulsed electron beam. <i>Applied Surface Science</i> , <b>2011</b> , 257, 3913-3919	6.7	64
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141	Crater Eruption Induced by High Current Pulsed Electron Beam (HCPEB) Treatment. <i>Materials Science Forum</i> , <b>2010</b> , 654-656, 1700-1703	0.4	4
140	Grain Refinement and Hardening Induced by Heavy Deformation Using Low Energy High Current Pulsed Electron Beam Surface Treatment. <i>Materials Science Forum</i> , <b>2010</b> , 667-669, 499-504	0.4	1
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136	Composition rule for Al-transition metal binary quasicrystals. <i>Philosophical Magazine</i> , <b>2010</b> , 90, 3935-3946	6	11
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127	Low energy high current pulsed electron beam treatment for improving surface microstructure and properties. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2010</b> , 12, 012010	0.4	3
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125	Formation and corrosion properties of Fe-based bulk metallic glasses. <i>International Journal of Minerals, Metallurgy and Materials</i> , <b>2010</b> , 17, 323-326	3.1	4
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122	Magnetic properties of Sm-based bulk metallic glasses. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2010</b> , 322, 2845-2850	2.8	4
121	Mechanisms of hardening, wear and corrosion improvement of 316L stainless steel by low energy high current pulsed electron beam surface treatment. <i>Thin Solid Films</i> , <b>2010</b> , 519, 1404-1415	2.2	106

120	Formation and evolution of craters in carbon steels during low-energy high-current pulsed electron-beam treatment. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2009</b> , 27, 1217-1226	2.9	47
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100	A cluster line approach for composition rules of quasicrystals and bulk metallic glasses. <i>Journal of Physics: Conference Series</i> , <b>2008</b> , 98, 012015	0.3	2
99	Formation and soft magnetic properties of Co (-Fe)-Si-B-Nb bulk metallic glasses in relation to clusters. <i>Journal of Physics: Conference Series</i> , <b>2008</b> , 98, 012017	0.3	15
98	Fe-B-Y-Nb bulk metallic glasses in relation to clusters <b>2008</b> , 51, 421-426		3
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81	Structural and Mechanical Properties of AlN Films by Pulsed Bias Arc Ion Plating. <i>Materials Science Forum</i> , <b>2007</b> , 561-565, 1157-1160	0.4	3
80	Cluster-Based Bulk Metallic Glass Formation in Co (-Fe)-Si-B-Nb Alloy Systems. <i>Materials Science Forum</i> , <b>2007</b> , 561-565, 1275-1278	0.4	2
79	Surface Microstructure and Corrosion Resistance of 316L Stainless Steel after High Current Pulsed Electron Beam Treatment. <i>Materials Science Forum</i> , <b>2007</b> , 561-565, 2381-2384	0.4	1
78	The thermal stability and activation energy of crystallization of (Cu <sub>61.8</sub> Zr <sub>38.2</sub> ) <sub>1-x</sub> Al <sub>x</sub> bulk metallic glasses. <i>Journal of Non-Crystalline Solids</i> , <b>2007</b> , 353, 3421-3424	3.9	6
77	Bulk metallic glass formation in Cu <sub>50</sub> Zr <sub>30</sub> Ti ternary system. <i>Journal of Non-Crystalline Solids</i> , <b>2007</b> , 353, 3425-3428	3.9	20
76	Formation of quasicrystals and metallic glasses in relation to icosahedral clusters. <i>Journal of Non-Crystalline Solids</i> , <b>2007</b> , 353, 3405-3411	3.9	13
75	The best glass-forming compositions in Al <sub>50</sub> (Co(or Ni)) <sub>50</sub> ternary systems. <i>Journal of Alloys and Compounds</i> , <b>2007</b> , 434-435, 167-170	5.7	5
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73	Microstructures and phase formations in the surface layer of an AISI D2 steel treated with pulsed electron beam. <i>Journal of Alloys and Compounds</i> , <b>2007</b> , 434-435, 707-709	5.7	32
72	Ternary Sm <sub>50</sub> Al <sub>50</sub> Ni bulk metallic glasses. <i>Intermetallics</i> , <b>2007</b> , 15, 652-654	3.5	12
71	Optimization of bulk metallic glass forming compositions in Zr <sub>50</sub> Ti <sub>50</sub> Al system by thermodynamic modeling. <i>Intermetallics</i> , <b>2007</b> , 15, 716-721	3.5	66
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69	Cluster-based composition rules for ternary alloy systems. <i>International Journal of Minerals, Metallurgy, and Materials</i> , <b>2007</b> , 14, 1-3		3
68	A cluster line approach to finding new Fe-B-Y-Nb-Zr bulk metallic glasses. <i>International Journal of Minerals, Metallurgy, and Materials</i> , <b>2007</b> , 14, 26-30		2
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62	Design of Cu <sub>8</sub> Zr <sub>5</sub> -based bulk metallic glasses. <i>Applied Physics Letters</i> , <b>2006</b> , 88, 241913	3.4	61
61	Cluster-based composition rule for stable ternary quasicrystals in Al-(Cu, Pd, Ni)-TM systems. <i>Philosophical Magazine</i> , <b>2006</b> , 86, 263-274	1.6	36
60	Ternary bulk metallic glasses formed by minor alloying of Cu <sub>8</sub> Zr <sub>5</sub> icosahedron. <i>Applied Physics Letters</i> , <b>2006</b> , 88, 101907	3.4	74
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58	Improved pitting corrosion resistance of AISI 316L stainless steel treated by high current pulsed electron beam. <i>Surface and Coatings Technology</i> , <b>2006</b> , 201, 1393-1400	4.4	109
57	Improved in vitro corrosion resistance of a NiTi alloy by high current pulsed electron beam treatment. <i>Surface and Coatings Technology</i> , <b>2006</b> , 201, 3096-3102	4.4	73
56	Numerical analysis of effects of thickness on electromagnetic wave absorption properties of CPCCB/paraffin wax composite. <i>Applied Physics B: Lasers and Optics</i> , <b>2006</b> , 83, 629-633	1.9	5
55	Transformation mechanism from carbon nanotubes to n-diamond. <i>Journal of Materials Research</i> , <b>2005</b> , 20, 1485-1489	2.5	5
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51	Formation and Optimization of Cu-Based Cu-Zr-Al Bulk Metallic Glasses. <i>Materials Science Forum</i> , <b>2005</b> , 475-479, 3381-3384	0.4	14
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