Xin Lin

List of Publications by Year in Descending Order

527 papers	11,515 citations	53 h-index	79 g-index
549 ext. papers	14,279 ext. citations	4.6 avg, IF	6.8 L-index

#	Paper	IF	Citations
527	High strength in-situ beta reinforced Ti-based bulk metallic glass composite produced by laser Powder Bed Fusion using elemental powder mixture. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2022**, 833, 142559	5.3	0
526	Effect of Al content on microstructure and microhardness of Inconel 718 superalloy fabricated by laser additive manufacturing. *Journal of Materials Research and Technology*, **2022**, 16, 1832-1845	5.5	3
525	Preface to the Special Issue: Additive Manufacturing. *Acta Metallurgica Sinica (English Letters)*, **2022**, 35, 353	2.5	
524	Laser powder bed fusion of Zr-modified Al□Cu□Mg alloy: Crack-inhibiting, grain refinement, and mechanical properties. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2022**, 838, 142618	5.3	2
523	Interfacial Characteristics and Mechanical Behavior of Hybrid Manufactured AlSi10Mg□Al6061 Bimetal via Selective Laser Melting and Forging. *Acta Metallurgica Sinica (English Letters)*, **2022**, 35, 375	2.5	0
522	Anisotropic high cycle fatigue property of Sc and Zr-modified Al-Mg alloy fabricated by laser powder bed fusion. *Additive Manufacturing*, **2022**, 49, 102514	6.1	0
521	Investigation of □phase evolution and tensile fracture behavior of Ti5Al2Sn2Zr4Mo4Cr alloy fabricated by directed energy deposition. *Journal of Alloys and Compounds*, **2022**, 900, 163497	5.7	0
520	Composition fine-tuning for directed energy deposition of Ti-6Al-4V. *Journal of Materials Processing Technology*, **2022**, 299, 117321	5.3	3
519	Seynergistic effect of Mo and Zr additions on microstructure and mechanical properties of Nb-Ti-Si-based alloys additively manufactured by laser directed energy deposition. *Journal of Materials Science and Technology*, **2022**, 103, 84-97	9.1	2
518	Microstructure and room-temperature tensile property of Ti-5.7Al-4.0Sn-3.5Zr-0.4Mo-0.4Si-0.4Nb-1.0Ta-0.05C with near equiaxed □grain fabricated by laser directed energy deposition technique. *Journal of Materials Science and Technology*, **2022**, 101, 308-320	9.1	3
517	Effect of dimensionless heat input during laser solid forming of high-strength steel. *Journal of Materials Science and Technology*, **2022**, 99, 127-137	9.1	0
516	Precipitation behavior of Nb-Si-based in-situ composite manufactured by laser directed energy deposition. *Scripta Materialia*, **2022**, 207, 114288	5.6	1
515	Effect of laser additive manufacturing on the microstructure and mechanical properties of TiB2 reinforced Al-Cu matrix composite. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2022**, 840, 142950	5.3	3
514	The effect of Al content on Ti/Zr-based bulk metallic glass composite by additive manufacturing. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2022**, 143162	5.3	
513	Effect of line energy density in repairing 34CrNiMo6 steel by electron beam remelting. *Journal of Manufacturing Processes*, **2022**, 79, 314-325	5	0
512	Sliding wear and induced-microstructure of Ti-6Al-4V alloys: Effect of additive laser technology. *Tribology International*, **2022**, 173, 107633	4.9	1
511	Structural evolution and mechanical properties of TiB2 reinforced 2024Al composite stimulated by heat treatment. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2022**, 143290	5.3	0

510	Hot workability and microstructural evolution of a nickel-based superalloy fabricated by laser-based directed energy deposition. *Journal of Alloys and Compounds*, **2022**, 165373	5.7	0
509	The formation and dissolution mechanisms of Laves phase in Inconel 718 fabricated by selective laser melting compared to directed energy deposition and cast. *Composites Part B: Engineering*, **2022**, 239, 109994	10	0
508	Electrochemical dissolution behavior of Ti6Al4V alloy: Effect of microstructure and processing method. *Journal of Materials Processing Technology*, **2022**, 117646	5.3	0
507	Unveiling the transpassive film failure of 3D printing transition alloys. *Corrosion Science*, **2022**, 204, 110418	6.8	0
506	Residual Stresses Control in Additive Manufacturing. *Journal of Manufacturing and Materials Processing*, **2021**, 5, 138	2.2	3
505	Microstructure and Wear Behavior of Nano-TiB2p/2024Al Matrix Composites Fabricated by Laser Direct Energy Deposition With Powder Feeding. *Journal of Tribology*, **2021**, 143,	1.8	2
504	The heterogeneous band microstructure and mechanical performance in a wire + arc additively manufactured 2219 Al alloy. *Additive Manufacturing*, **2021**, 49, 102486	6.1	1
503	Influence of post-heat treatment on the microstructure and mechanical properties of Al-Cu-Mg-Zr alloy manufactured by selective laser melting. *Journal of Materials Science and Technology*, **2021**, 111, 35-35	9.1	3
502	On the role of energy input in the surface morphology and microstructure during selective laser melting of Inconel 718 alloy. *Journal of Materials Research and Technology*, **2021**, 11, 392-403	5.5	5
501	Microstructure and anodic electrochemical behavior of additive manufactured Hastelloy X alloy via directed energy deposition. *Additive Manufacturing*, **2021**, 39, 101824	6.1	0
500	Influence of processing parameters on deposition characteristics of Inconel 625 superalloy fabricated by laser solid forming. *Journal of Central South University*, **2021**, 28, 1003-1014	2.1	0
499	Warpage Analysis and Control of Thin-Walled Structures Manufactured by Laser Powder Bed Fusion. *Metals*, **2021**, 11, 686	2.3	8
498	Substrate design to minimize residual stresses in Directed Energy Deposition AM processes. *Materials and Design*, **2021**, 202, 109525	8.1	19
497	Distinction in electrochemical behaviour of Ti6Al4V alloy produced by direct energy deposition and forging. *Journal of Alloys and Compounds*, **2021**, 860, 157912	5.7	6
496	Keyhole mode induced simultaneous improvement in strength and ductility of Sc modified Al-Mn alloy manufactured by selective laser melting. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 811, 141089	5.3	8
495	Compatibility research of laser additive repairing TA15 forgings with Ti6Al4V-xTA15 alloy. *Journal of Central South University*, **2021**, 28, 1015-1027	2.1	1
494	Strengthening mechanisms in selective laser-melted Inconel718 superalloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 812, 141145	5.3	21
493	Laser powder bed fusion of high-strength Sc/Zr-modified Al-Mg alloy: phase selection, microstructural/mechanical heterogeneity, and tensile deformation behavior. *Journal of Materials Science and Technology*, **2021**, 95, 40-40	9.1	12

492	Phase and microstructure pattern selection of Zn-rich Zn□Cu peritectic alloys during laser surface remelting. *Journal of Materials Science*, **2021**, 56, 14314-14332	4.3	
491	Influence of heat treatments on the microstructure and mechanical properties of Inconel 625 fabricated by directed energy deposition. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 817, 141309	5.3	7
490	Hot deformation induced microstructural evolution in local-heterogeneous wire + arc additive manufactured 2219 Al alloy. *Journal of Alloys and Compounds*, **2021**, 865, 158949	5.7	11
489	Performance of different microstructure on electrochemical behaviors of laser solid formed Ti□Al□V alloy in NaCl solution. *Corrosion Science*, **2021**, 185, 109392	6.8	7
488	Long fatigue crack growth behavior of Ti□Al□V produced via high-power laser directed energy deposition. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 819, 141392	5.3	6
487	Mechanical properties and precipitation behavior of the heat-treated wire + arc additively manufactured 2219 aluminum alloy. *Materials Characterization*, **2021**, 171, 110735	3.9	16
486	Effect of Cu content on microstructure and mechanical properties of in-situ □phases reinforced Ti/Zr-based bulk metallic glass matrix composite by selective laser melting (SLM). *Journal of Materials Science and Technology*, **2021**, 67, 174-185	9.1	7
485	Microstructure evolution and mechanical properties at high temperature of selective laser melted AlSi10Mg. *Journal of Materials Science and Technology*, **2021**, 62, 162-172	9.1	22
484	Laser-based directed energy deposition of novel Sc/Zr-modified Al-Mg alloys: columnar-to-equiaxed transition and aging hardening behavior. *Journal of Materials Science and Technology*, **2021**, 69, 168-179	9.1	21
483	The effect of Mo on microstructure and mechanical properties of Nb-22Ti-16Si alloy additively manufactured via laser directed energy deposition. *Journal of Alloys and Compounds*, **2021**, 858, 158143	5.7	1
482	Directed energy deposition additive manufacturing of a Sc/Zr-modified Al□Mg alloy: Effect of thermal history on microstructural evolution and mechanical properties. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 802, 140606	5.3	13
481	Grain refinement and improved tensile properties of Ti5Al2Sn2Zr4Mo4Cr titanium alloy fabricated by laser solid forming. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 800, 140388	5.3	8
480	Microstructure and fatigue crack growth behavior of Inconel 718 superalloy manufactured by laser directed energy deposition. *International Journal of Fatigue*, **2021**, 143, 106005	5	13
479	Effect of cycling heat treatment on the microstructure, phase, and compression behaviour of directed energy deposited Ti-Mo alloys. *Light Advanced Manufacturing*, **2021**, 2, 1-12	1	
478	Microstructural evolution and anisotropic mechanical properties of Inconel 625 superalloy fabricated by directed energy deposition. *Journal of Alloys and Compounds*, **2021**, 870, 159426	5.7	10
477	Powder Flow Feed Behavior in Synchronous Induction-Assisted Laser Deposition. *Journal of Thermal Spray Technology*, **2021**, 30, 1512-1523	2.5	
476	Effect of solution temperature on the microstructure and mechanical properties of Hastelloy X superalloy fabricated by laser directed energy deposition. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 820, 141537	5.3	8
475	Microstructural features of Ti-6Al-4V manufactured via high power laser directed energy deposition under low-cycle fatigue. *Journal of Materials Science and Technology*, **2021**, 83, 18-33	9.1	8

474	Characterizations of micro-nano structure and tensile properties of a Sc modified AlMn alloy fabricated by selective laser melting. *Materials Characterization*, **2021**, 178, 111305	3.9	4
473	Crystallization mechanism of Zr55Cu30Al10Ni5 metallic glass in an extended range of heating rates. *Intermetallics*, **2021**, 136, 107256	3.5	1
472	Room and high temperature high-cycle fatigue properties of Inconel 718 superalloy prepared using laser directed energy deposition. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 825, 141865	5.3	6
471	The in-situ □phase reinforced Ti/Zr-based bulk metallic glass matrix composite by selective laser melting. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 824, 141720	5.3	1
470	Effect of electrolyte solutions on the electrochemical dissolution behavior of additively manufactured Hastelloy X superalloy via laser solid forming. *Journal of Alloys and Compounds*, **2021**, 878, 160395	5.7	3
469	A novel high-efficient finite element analysis method of powder bed fusion additive manufacturing. *Additive Manufacturing*, **2021**, 46, 102187	6.1	6
468	Making selective-laser-melted high-strength Al□Mg5Sc□r alloy tough via ultrafine and heterogeneous microstructure. *Scripta Materialia*, **2021**, 203, 114052	5.6	13
467	Microstructure evolution and mechanical properties of the wire + arc additive manufacturing Al-Cu alloy. *Additive Manufacturing*, **2021**, 47, 102298	6.1	3
466	Precipitation behavior of □phase and its effect on stress rupture properties of selective laser-melted Inconel 718 superalloy. *Composites Part B: Engineering*, **2021**, 224, 109202	10	2
465	Heat-affected coarsening of □grain in titanium alloy during laser directed energy deposition. *Scripta Materialia*, **2021**, 205, 114180	5.6	9
464	Overcoming the limitation of in-situ microstructural control in laser additive manufactured Ti□Al□V alloy to enhanced mechanical performance by integration of synchronous induction heating. *Journal of Materials Science and Technology*, **2021**, 94, 32-46	9.1	4
463	The Effect of Heat Treatment on Dynamic Properties of an Additively Manufactured Ti-6Al-4V Alloy. *Crystals*, **2021**, 11, 111	2.3	0
462	Influence of grain inhomogeneity and precipitates on the stress rupture properties of Inconel 718 superalloy fabricated by selective laser melting. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 803, 140702	5.3	4
461	Electrochemical dissolution and passivation of laser additive manufactured Ti6Al4V controlled by elements segregation and phases distribution. *Transactions of Nonferrous Metals Society of China*, **2021**, 31, 3739-3751	3.3	0
460	A comparative study of laser metal deposited and forged Ti-6Al-4V alloy: Uniaxial mechanical response and vibration fatigue properties. *International Journal of Fatigue*, **2020**, 136, 105629	5	7
459	Comparison study on microstructure and mechanical properties of Ti-6Al-4V alloys fabricated by powder-based selective-laser-melting and sintering methods. *Materials Characterization*, **2020**, 164, 110358	3.9	25
458	Strength-ductility synergy of selective laser melted Al-Mg-Sc-Zr alloy with a heterogeneous grain structure. *Additive Manufacturing*, **2020**, 34, 101260	6.1	17
457	Compression behaviour of quasicrystal/Al composite with powder mixture driven layered microstructure prepared by selective laser melting. *Optics and Laser Technology*, **2020**, 129, 106277	4.2	9

456	Investigation on microstructure and properties of laser solid formed low expansion Invar 36 alloy. *Journal of Materials Research and Technology*, **2020**, 9, 5827-5839	5.5	3
455	Thermal analysis of synchronous induction-assisted laser deposition of Ti-6Al-4V using different laser-induction interaction modes. *Additive Manufacturing*, **2020**, 35, 101267	6.1	2
454	Electrochemical dissolution behavior of heat treated laser solid formed Inconel718. *Corrosion Science*, **2020**, 173, 108750	6.8	8
453	Investigation of heating behavior of laser beam on powder stream in directed energy deposition. *Surface and Coatings Technology*, **2020**, 397, 126061	4.4	9
452	Thermal Boundary Evolution of Molten Pool During Wire and Arc Additive Manufacturing of Single Walls of 5A06 Aluminum Alloy. *Metals*, **2020**, 10, 848	2.3	2
451	Microstructure and mechanical properties of wire and arc additive manufactured AZ31 magnesium alloy using cold metal transfer process. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2020**, 774, 138942	5.3	27
450	Microstructure, tensile and wear properties of a novel graded Al matrix composite prepared by direct energy deposition. *Journal of Alloys and Compounds*, **2020**, 826, 154077	5.7	10
449	Effect of boron on the microstructure and mechanical properties of Ti-6Al-4V produced by laser directed energy deposition after heat treatment. *Journal of Laser Applications*, **2020**, 32, 012007	2.1	5
448	Diverse Interface Structures in TiO2 (B)/Anatase Dual-Phase Nanofibers. *Advanced Materials Interfaces*, **2020**, 7, 1901819	4.6	2
447	Effects of subtransus heat treatments on microstructure features and mechanical properties of wire and arc additive manufactured Ti□Al□V alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2020**, 776, 139020	5.3	28
446	Element Vaporization of Ti-6Al-4V Alloy during Selective Laser Melting. *Metals*, **2020**, 10, 435	2.3	11
445	Influence of inclined substrate on process characteristics of directed energy deposition. *Optics and Laser Technology*, **2020**, 129, 106288	4.2	3
444	A Real-Time Method to Detect the Deformation Behavior during Laser Solid Forming of Thin-Wall Structure. *Metals*, **2020**, 10, 508	2.3	1
443	Selective laser melting of low modulus Ti-Mo alloy: □heterogeneous conchoidal structure. *Materials Letters*, **2020**, 267, 127544	3.3	13
442	Microstructure and isothermal oxidation behavior of Nb-Ti-Si-based alloy additively manufactured by powder-feeding laser directed energy deposition. *Corrosion Science*, **2020**, 173, 108757	6.8	5
441	Influence of post-heat-treatment on the microstructure and fracture toughness properties of Inconel 718 fabricated with laser directed energy deposition additive manufacturing. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2020**, 798, 140092	5.3	28
440	On the effect of the thermal cycle during the directed energy deposition application to the in-situ production of a Ti-Mo alloy functionally graded structure. *Additive Manufacturing*, **2020**, 31, 100911	6.1	7
439	Plastic deformation behavior and dynamic recrystallization of Inconel 625 superalloy fabricated by directed energy deposition. *Materials and Design*, **2020**, 186, 108359	8.1	30

438	Effect of solution temperature on static recrystallization and ductility of Inconel 625 superalloy fabricated by directed energy deposition. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2020**, 772, 138711	5.3	30
437	Crystallization behavior of Zr55Cu30Al10Ni5 amorphous alloys produced by selective laser melting of preannealed powders. *Journal of Alloys and Compounds*, **2020**, 819, 153013	5.7	6
436	A study on obtaining equiaxed prior-β grains of wire and arc additive manufactured Ti6Al4V. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2020**, 772, 138703	5.3	7
435	The microstructure evolution and tensile properties of Inconel 718 fabricated by high-deposition-rate laser directed energy deposition. *Additive Manufacturing*, **2020**, 31, 100941	6.1	15
434	Passive behavior of nickel-based superalloys prepared by high-deposition-rate laser solid forming additive manufacturing. *Corrosion Science*, **2020**, 177, 109036	6.8	10
433	Effect of isothermal temperature on bainite transformation, microstructure and mechanical properties of LSFed 300M steel. *Materials Today Communications*, **2020**, 25, 101452	2.5	2
432	Achieving superior ductility for laser directed energy deposition 300 M steel through isothermal bainitic transformation. *Journal of Manufacturing Processes*, **2020**, 60, 426-434	5	4
431	Modeling of the Effect of the Building Strategy on the Thermomechanical Response of Ti-6Al-4V Rectangular Parts Manufactured by Laser Directed Energy Deposition. *Metals*, **2020**, 10, 1643	2.3	8
430	Laves phase control of inconel 718 superalloy fabricated by laser direct energy deposition via δ aging and solution treatment. *Journal of Materials Research and Technology*, **2020**, 9, 9753-9765	5.5	32
429	Dynamic evolution of powder stream convergence with powder feeding durations in direct energy deposition. *International Journal of Machine Tools and Manufacture*, **2020**, 157, 103606	9.4	15
428	In situ tailoring microstructure in laser solid formed titanium alloy for superior fatigue crack growth resistance. *Scripta Materialia*, **2020**, 174, 53-57	5.6	22
427	Influence of travel speed on microstructure and mechanical properties of wire + arc additively manufactured 2219 aluminum alloy. *Journal of Materials Science and Technology*, **2020**, 37, 143-153	9.1	50
426	Direct laser deposited bulk CoCrFeNiNbx high entropy alloys. *Intermetallics*, **2019**, 114, 106592	3.5	26
425	In situ measurements and thermo-mechanical simulation of Ti6Al4V laser solid forming processes. *International Journal of Mechanical Sciences*, **2019**, 153-154, 119-130	5.5	34
424	Preparation and laser performances of Nd3+:GSGG ceramic powder raw materials. *Journal of Materials Science and Technology*, **2019**, 35, 926-929	9.1	3
423	Influence of trace boron addition on microstructure, tensile properties and their anisotropy of Ti6Al4V fabricated by laser directed energy deposition. *Materials and Design*, **2019**, 181, 107943	8.1	38
422	Surface improvement of laser solid forming Inconel 718 by electrochemical machining. *Journal of Laser Applications*, **2019**, 31, 022516	2.1	
421	Selective Laser Melting (SLM) of in-situ beta phase reinforced Ti/Zr-based bulk metallic glass matrix composite. *Scripta Materialia*, **2019**, 171, 21-25	5.6	20

420	Effect of heat treatment on the microstructural evolution and mechanical properties of GH4099 additive-manufactured by directed energy deposition. *Journal of Alloys and Compounds*, **2019**, 800, 163-173	5.7	20
419	Low cycle fatigue properties of Ti-6Al-4V alloy fabricated by high-power laser directed energy deposition: Experimental and prediction. *International Journal of Fatigue*, **2019**, 127, 58-73	5	21
418	Large superelastic recovery and elastocaloric effect in as-deposited additive manufactured Ni50.8Ti49.2 alloy. *Applied Physics Letters*, **2019**, 114, 221903	3.4	13
417	Microstructure and properties of Ti-6Al-4V fabricated by low-power pulsed laser directed energy deposition. *Journal of Materials Science and Technology*, **2019**, 35, 2027-2037	9.1	26
416	A study of β variant selection in laser solid forming Ti-6Al-4V. *Journal of Alloys and Compounds*, **2019**, 792, 1261-1266	5.7	11
415	Thermomechanical behavior of laser metal deposited Inconel 718 superalloy over a wide range of temperature and strain rate: Testing and constitutive modeling. *Mechanics of Materials*, **2019**, 135, 13-25	3.3	18
414	Effect of selective post-aging treatment on subsurface damage of quasicrystal reinforced Al composite manufactured by selective laser melting. *Wear*, **2019**, 426-427, 934-941	3.5	5
413	Development of efficient distortion prediction numerical method for laser additive manufactured parts. *Journal of Laser Applications*, **2019**, 31, 022314	2.1	3
412	Microstructure and mechanical properties of laser solid formed 30CrMnSiNi2A ultra-high-strength steel. *Science and Technology of Welding and Joining*, **2019**, 24, 457-464	3.7	2
411	Multi-band tunable terahertz bandpass filter based on vanadium dioxide hybrid metamaterial. *Materials Research Express*, **2019**, 6, 055809	1.7	17
410	Bimodal hybrid lightweight sound-absorbing material with high stiffness. *Applied Physics Express*, **2019**, 12, 035002	2.4	3
409	Three dimensional dendritic morphology and orientation transition induced by high static magnetic field in directionally solidified Al-10 wt.%Zn alloy. *Journal of Materials Science and Technology*, **2019**, 35, 1587-1592	9.1	9
408	Effects of deposition strategies on macro/microstructure and mechanical properties of wire and arc additive manufactured Ti 6Al 4V. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2019**, 754, 735-749	5.3	41
407	Research on the crystallization behavior occurred in the process of preparing bulk metallic glass with selective laser melting. *Materials Research Express*, **2019**, 6, 066582	1.7	2
406	Effect of stress-relief annealing on anodic dissolution behaviour of additive manufactured Ti-6Al-4V via laser solid forming. *Corrosion Science*, **2019**, 153, 314-326	6.8	33
405	Preparation and properties of a new porous ceramic material used in clean energy field. *Journal of Materials Science and Technology*, **2019**, 35, 1255-1260	9.1	2
404	Residual stress and distortion of rectangular and S-shaped Ti-6Al-4V parts by Directed Energy Deposition: Modelling and experimental calibration. *Additive Manufacturing*, **2019**, 26, 166-179	6.1	73
403	Microstructures and stress rupture properties of pulse laser repaired Inconel 718 superalloy after different heat treatments. *Journal of Alloys and Compounds*, **2019**, 770, 125-135	5.7	38

402	Effect of microstructure on the Charpy impact properties of directed energy deposition 300M steel. *Additive Manufacturing*, **2019**, 29, 100795	6.1	8
401	A novel method for the molten pool and porosity formation modelling in selective laser melting. *International Journal of Heat and Mass Transfer*, **2019**, 140, 1091-1105	4.9	42
400	Effect of layer band and heterogeneity of microstructure on electrochemical dissolution of laser solid formed Ti-6Al-4V alloy. *Journal of Laser Applications*, **2019**, 31, 022312	2.1	3
399	Compression behavior of selected laser melted Al/quasicrystal composite lattice structure. *Journal of Laser Applications*, **2019**, 31, 022311	2.1	1
398	Interactions between Nanoparticles and Polymers in the Diffusion Boundary Layer during Freezing Colloidal Suspensions. *Langmuir*, **2019**, 35, 10446-10452	4	4
397	In-situ observation and numerical simulation on the transient strain and distortion prediction during additive manufacturing. *Journal of Manufacturing Processes*, **2019**, 38, 494-501	5	25
396	Lightweight mullite ceramics with controlled porosity and enhanced properties prepared by SLS using mechanical mixed FAHSs/polyamide12 composites. *Ceramics International*, **2019**, 45, 20803-20809	5.1	19
395	Fabrication of 3D Expanded Graphite-Based (MnO2Nanowalls and PANI Nanofibers) Hybrid as Bifunctional Material for High-Performance Supercapacitor and Sensor. *Journal of the Electrochemical Society*, **2019**, 166, A3965-A3971	3.9	56
394	Microstructure and tensile properties of Ti-Mo alloys manufactured via using laser powder bed fusion. *Journal of Alloys and Compounds*, **2019**, 771, 877-884	5.7	30
393	Solidification behavior and morphological evolution in laser surface forming of AlCoCrCuFeNi multi-layer high-entropy alloy coatings on AZ91D. *Journal of Alloys and Compounds*, **2019**, 772, 994-1002	5.7	17
392	The microstructure evolution and strengthening mechanism of a -strengthening superalloy prepared by induction-assisted laser solid forming. *Journal of Alloys and Compounds*, **2019**, 780, 461-475	5.7	7
391	Laser solid forming additive manufacturing TiB2 reinforced 2024Al composite: Microstructure and mechanical properties. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2019**, 745, 319-325	5.3	39
390	The recent progress on three-dimensional porous graphene-based hybrid structure for supercapacitor. *Composites Part B: Engineering*, **2019**, 165, 10-46	10	105
389	The influence of climate, topography, parent material and vegetation on soil nitrogen fractions. *Catena*, **2019**, 175, 329-338	5.8	17
388	Implementing continuous freeze-casting by separated control of thermal gradient and solidification rate. *International Journal of Heat and Mass Transfer*, **2019**, 133, 986-993	4.9	5
387	Zirconium modified Nb-22Ti-16Si alloys fabricated by laser additive manufacturing: Microstructure and fracture toughness. *Journal of Alloys and Compounds*, **2019**, 783, 66-76	5.7	16
386	Microstructure and compressive/tensile characteristic of large size Zr-based bulk metallic glass prepared by laser solid forming. *Journal of Materials Science and Technology*, **2019**, 35, 328-335	9.1	19
385	High strength and ductility of 34CrNiMo6 steel produced by laser solid forming. *Journal of Materials Science and Technology*, **2019**, 35, 377-387	9.1	13

384	Quantitative cellular automaton model and simulations of dendritic and anomalous eutectic growth. *Computational Materials Science*, **2019**, 156, 157-166	3.2	13
383	The research progress in mechanism and influence of biosorption between lactic acid bacteria and Pb(II): A review. *Critical Reviews in Food Science and Nutrition*, **2019**, 59, 395-410	11.5	20
382	Influence of process parameters and heat treatments on the microstructures and dynamic mechanical behaviors of Inconel 718 superalloy manufactured by laser metal deposition. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2018**, 721, 215-225	5.3	47
381	Motion of Solid Grains During Magnetic Field-Assisted Directional Solidification. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2018**, 49, 861-865	2.5	6
380	Finite element analysis and experimental validation of the thermomechanical behavior in laser solid forming of Ti-6Al-4V. *Additive Manufacturing*, **2018**, 21, 30-40	6.1	49
379	The initiation and propagation mechanism of the overlapping zone cracking during laser solid forming of IN-738LC superalloy. *Journal of Alloys and Compounds*, **2018**, 749, 859-870	5.7	48
378	Effects of processing defects on the dynamic tensile mechanical behavior of laser-solid-formed Ti-6Al-4 V. *Materials Characterization*, **2018**, 140, 15-29	3.9	19
377	The full-field strain distribution and the evolution behavior during additive manufacturing through in-situ observation. *Materials and Design*, **2018**, 150, 49-54	8.1	13
376	Formation and improvement of surface waviness for additive manufacturing 5A06 aluminium alloy component with GTAW system. *Rapid Prototyping Journal*, **2018**, 24, 342-350	3.8	17
375	Grey relational analysis for evaluating the effects of different rates of wine lees-derived biochar application on a plant-soil system with multi-metal contamination. *Environmental Science and Pollution Research*, **2018**, 25, 6990-7001	5.1	7
374	Speed-dependent ice bandings in freezing colloidal suspensions. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2018**, 543, 126-132	5.1	3
373	Coupling eutectic nucleation mechanism investigated by phase field crystal model. *Acta Materialia*, **2018**, 145, 175-185	8.4	15
372	Process mechanisms based on powder flow spatial distribution in direct metal deposition. *Journal of Materials Processing Technology*, **2018**, 254, 361-372	5.3	22
371	Electrochemical behavior of Inconel 718 fabricated by laser solid forming on different sections. *Corrosion Science*, **2018**, 132, 79-89	6.8	43
370	Super-high hardness of (Fe,Co)-B-Si-Zr/Hf bulk glassy alloys. *Journal of Alloys and Compounds*, **2018**, 753, 351-355	5.7	8
369	Modeling and simulation of the columnar-to-equiaxed transition during laser melting deposition of Invar alloy. *Journal of Alloys and Compounds*, **2018**, 755, 123-134	5.7	28
368	Experimental research on temperature field distributions for optical lenses irradiated by femtosecond laser. *Optics and Laser Technology*, **2018**, 106, 251-258	4.2	1
367	Microstructure and electrochemical anodic behavior of Inconel 718 fabricated by high-power laser solid forming. *Electrochimica Acta*, **2018**, 276, 247-260	6.7	20

366	Control of microstructure and mechanical properties of laser solid formed Inconel 718 superalloy by electromagnetic stirring. *Optics and Laser Technology*, **2018**, 99, 342-350	4.2	36
365	Formation of anomalous eutectic in Ni-Sn alloy by laser cladding. *Optics and Laser Technology*, **2018**, 99, 154-159	4.2	12
364	A Processing Route for Achieving Isotropic Tensile Properties in Laser Solid Formed □ Titanium Alloy. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2018**, 49, 3651-3662	2.3	15
363	Evolution of solidification microstructure and dynamic recrystallisation of Inconel 625 during laser solid forming process. *Journal of Materials Science*, **2018**, 53, 15650-15666	4.3	19
362	Grain morphology evolution and texture characterization of wire and arc additive manufactured Ti-6Al-4V. *Journal of Alloys and Compounds*, **2018**, 768, 97-113	5.7	60
361	Electrochemical behaviour of laser solid formed Ti□Al□V alloy in a highly concentrated NaCl solution. *Corrosion Science*, **2018**, 142, 161-174	6.8	39
360	The Formation and Evolution of Shear Bands in Plane Strain Compressed Nickel-Base Superalloy. *Metals*, **2018**, 8, 141	2.3	9
359	Experimental Observation of Acoustic Weyl Points and Topological Surface States. *Physical Review Applied*, **2018**, 10,	4.3	49
358	Effect of solution heat treatment on the microstructure and mechanical properties of Inconel 625 superalloy fabricated by laser solid forming. *Journal of Alloys and Compounds*, **2018**, 767, 330-344	5.7	53
357	High Entropy Alloys: From Bulk Metallic Materials to Nanoparticles. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2018**, 49, 4986-4990	2.3	12
356	Distinction in anodic dissolution behavior on different planes of laser solid formed Ti-6Al-4V alloy. *Electrochimica Acta*, **2018**, 283, 1482-1489	6.7	29
355	Microstructure evolution and liquid phase separation in Ta-O hypermonotectic melts during laser-cladding. *China Foundry*, **2018**, 15, 222-227	0.8	
354	HAZ Liquation Cracking Mechanism of IN-738LC Superalloy Prepared by Laser Solid Forming. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2018**, 49, 5118-5136	2.3	27
353	Influence of mangrove roots on microbial abundance and ecoenzyme activity in sediments of a subtropical coastal mangrove ecosystem. *International Biodeterioration and Biodegradation*, **2018**, 132, 10-17	4.8	7
352	Adsorption characteristics of Cd(ii) in aqueous solutions using spent mushroom substrate biochars produced at different pyrolysis temperatures.. *RSC Advances*, **2018**, 8, 28002-28012	3.7	11
351	Region selectivity of nanometer scale crystallization behavior in metallic glass. *Journal of Materials Science*, **2018**, 53, 15643-15649	4.3	
350	Porcine reproductive and respiratory syndrome virus suppresses post-transcriptionally the protein expression of IFN-□ by upregulating cellular microRNAs in porcine alveolar macrophages. *Experimental and Therapeutic Medicine*, **2018**, 15, 115-126	2.1	4
349	Orientation determination and manipulation of single ice crystal via unidirectional solidification. *Wuli Xuebao/Acta Physica Sinica*, **2018**, 67, 196401	0.6	1

348	The factors affecting biochar application in restoring heavy metal-polluted soil and its potential applications. *Chemistry and Ecology*, **2018**, 34, 177-197	2.3	9
347	Achieving superior ductility for laser solid formed extra low interstitial Ti-6Al-4V titanium alloy through equiaxial alpha microstructure. *Scripta Materialia*, **2018**, 146, 187-191	5.6	72
346	Fabrication of a novel superhydrophobic and superoleophilic surface by one-step electrodeposition method for continuous oil/water separation. *Applied Surface Science*, **2018**, 434, 1015-1020	6.7	25
345	Lightweight Network Research Based on Deep Learning: A Review **2018**,		3
344	Cellular Automaton Simulation of the Growth of Anomalous Eutectic during Laser Remelting Process. *Materials*, **2018**, 11,	3.5	3
343	Wear and Corrosion Resistance of AlCoCrCuFeNi High-Entropy Alloy Coating Deposited on AZ91D Magnesium Alloy by Laser Cladding. *Entropy*, **2018**, 20,	2.8	12
342	Microstructure formation of Ti-6Al-4 V in synchronous induction assisted laser deposition. *Materials and Design*, **2018**, 160, 1096-1105	8.1	14
341	Microstructure and Tribological Properties of Laser Forming Repaired 34CrNiMo6 Steel. *Materials*, **2018**, 11,	3.5	10
340	Layered Graphite Prepared by an Ozone Aeration Treatment as an Anode Material for Lithium Ion Batteries. *International Journal of Electrochemical Science*, **2018**, 7282-7290	2.2	2
339	The Prediction of Carbothermal Reduction Reaction Induced Ti4O7/Ti5O9 Interface Structures in Titanium Oxide Nanosystems. *Advanced Materials Interfaces*, **2018**, 5, 1801256	4.6	5
338	Strengthening Porous PVA with TiO 2 Structure by an Ice-Templating Method. *Chinese Physics Letters*, **2018**, 35, 088101	1.8	
337	Distinction in Anodic Dissolution Behavior of Inconel 718 Prepared by Different Forming Technologies. *Journal of the Electrochemical Society*, **2018**, 165, E546-E555	3.9	7
336	In-situ synthesis of aluminum/nano-quasicrystalline Al-Fe-Cr composite by using selective laser melting. *Composites Part B: Engineering*, **2018**, 155, 382-390	10	30
335	3D printing well organized porous iron-nickel/polyaniline nanocages multiscale supercapacitor. *Journal of Alloys and Compounds*, **2018**, 760, 78-83	5.7	22
334	In situ observation of the unstable lens growth in freezing colloidal suspensions. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2018**, 553, 681-688	5.1	4
333	Ultrafine layered graphite as an anode material for lithium ion batteries. *Materials Letters*, **2018**, 229, 134-137	3.3	19
332	A prediction model of layer geometrical size in wire and arc additive manufacture using response surface methodology. *International Journal of Advanced Manufacturing Technology*, **2017**, 93, 175-186	3.2	19
331	Evolution of plastic deformation and its effect on mechanical properties of laser additive repaired Ti64ELI titanium alloy. *Optics and Laser Technology*, **2017**, 92, 36-43	4.2	26

330	Enhanced adsorption of aromatic chemicals on boron and nitrogen co-doped single-walled carbon nanotubes. *Environmental Science: Nano*, **2017**, 4, 558-564	7.1	21
329	Preparation and characterization of laser-melted Mg-Sn-Zn alloys for biomedical application. *Journal of Materials Science: Materials in Medicine*, **2017**, 28, 13	4.5	13
328	Anodized TiO2 nanotubes coated with Pt nanoparticles for enhanced photoelectrocatalytic activity. *Journal of Materials Research*, **2017**, 32, 757-765	2.5	11
327	Influence of α interface phase on the tensile properties of laser cladding deposited Ti6Al4V titanium alloy. *Journal of Materials Science and Technology*, **2017**, 33, 675-681	9.1	41
326	Formation mechanism of the α variant and its influence on the tensile properties of laser solid formed Ti-6Al-4V titanium alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 691, 16-24	5.3	59
325	Numerical simulation and experimental calibration of additive manufacturing by blown powder technology. Part I: thermal analysis. *Rapid Prototyping Journal*, **2017**, 23, 448-463	3.8	59
324	Austenitizing Behavior of Laser Solid Formed Ultrahigh-Strength 300 M Steel. *Steel Research International*, **2017**, 88, 1600371	1.6	4
323	Mechanical and Magnetic Properties of New (Fe,Co,Ni)BSiTa Bulk Glassy Alloys. *Acta Metallurgica Sinica (English Letters)*, **2017**, 30, 659-664	2.5	3
322	Effect of microstructure on the fatigue crack growth behavior of laser solid formed 300M steel. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2017**, 695, 258-264	5.3	27
321	The failure mechanism of 50% laser additive manufactured Inconel 718 and the deformation behavior of Laves phases during a tensile process. *International Journal of Advanced Manufacturing Technology*, **2017**, 91, 2733-2740	3.2	26
320	High pressure floating-zone growth and property characterization of Cr-doped hexagonal YMnO3 crystals. *Journal of Materials Science and Technology*, **2017**, 33, 1061-1066	9.1	2
319	Effect of Ti addition on cracking and microhardness of Inconel 625 during the laser solid forming processing. *Journal of Alloys and Compounds*, **2017**, 711, 267-277	5.7	49
318	Effect of endophytic fungi on the host plant growth, expression of expansin gene and flavonoid content in Tetrastigma hemsleyanum Diels & Gilg ex Diels. *Plant and Soil*, **2017**, 417, 393-402	4.2	17
317	Microstructure and deformation behavior of Ti-6Al-4V alloy by high-power laser solid forming. *Acta Materialia*, **2017**, 132, 82-95	8.4	147
316	Microstructural characteristics and mechanical properties of laser solid formed K465 superalloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2017**, 700, 649-655	5.3	11
315	Electrochemical Removal of Different Phases from Laser Solid Formed Inconel 718. *Journal of the Electrochemical Society*, **2017**, 164, E151-E157	3.9	23
314	The relationships among energy consumption, economic output and energy intensity of countries at different stage of development. *Renewable and Sustainable Energy Reviews*, **2017**, 74, 258-264	16.2	16
313	The influence of Laves phases on the high-cycle fatigue behavior of laser additive manufactured Inconel 718. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 695, 6-13	5.3	109

312	The tensile deformation behavior of laser repaired Inconel 718 with a non-uniform microstructure. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2017**, 688, 480-487	5.3	39
311	The effect of preheating on microstructure and mechanical properties of laser solid forming IN-738LC alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 691, 71-80	5.3	38
310	Molecular dynamics simulation on the micro-structural evolution in heat-affected zone during the preparation of bulk metallic glasses with selective laser melting. *Journal of Alloys and Compounds*, **2017**, 697, 443-449	5.7	19
309	Geometric Limitation and Tensile Properties of Wire and Arc Additive Manufacturing 5A06 Aluminum Alloy Parts. *Journal of Materials Engineering and Performance*, **2017**, 26, 621-629	1.6	54
308	Regular eutectic and anomalous eutectic growth behavior in laser remelting of Ni-30wt%Sn alloys. *Acta Materialia*, **2017**, 126, 210-220	8.4	35
307	Optimization of wire feed for GTAW based additive manufacturing. *Journal of Materials Processing Technology*, **2017**, 243, 40-47	5.3	89
306	Granaxylocartin A, New Limonoid from the Seeds of Xylocarpus granatum. *Chemistry of Natural Compounds*, **2017**, 53, 901-903	0.7	2
305	Ectopic expression of cucumber (Cucumis sativus L.) CsTIR/AFB genes enhance salt tolerance in transgenic Arabidopsis. *Plant Cell, Tissue and Organ Culture*, **2017**, 131, 107-118	2.7	1
304	Nd-induced honeycomb structure of intermetallic phase enhances the corrosion resistance of Mg alloys for bone implants. *Journal of Materials Science: Materials in Medicine*, **2017**, 28, 130	4.5	16
303	Dynamic particle packing in freezing colloidal suspensions. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2017**, 531, 93-98	5.1	10
302	Effect of Co substitution on magnetic and magnetocaloric properties in multiferroic hexagonal YMnO3. *Journal of Materials Science: Materials in Electronics*, **2017**, 28, 15819-15825	2.1	4
301	Microstructure and Mechanical Properties of Laser Solid Formed Ti-6Al-4V Alloy Under Dynamic Shear Loading. *Journal of Materials Engineering and Performance*, **2017**, 26, 3121-3132	1.6	4
300	Microstructure and mechanical properties of Ti-2Al alloyed with Mo formed in laser additive manufacture. *Journal of Alloys and Compounds*, **2017**, 727, 821-831	5.7	30
299	Branching-induced grain boundary evolution during directional solidification of columnar dendritic grains. *Acta Materialia*, **2017**, 136, 148-163	8.4	25
298	Columnar structure and electrochemical anisotropy of a nickel-based superalloy fabricated via laser solid forming. *Journal of Applied Electrochemistry*, **2017**, 47, 1083-1090	2.6	7
297	Structure and magnetism of Cr-doped h -YMnO 3. *Journal of Magnetism and Magnetic Materials*, **2017**, 424, 371-375	2.8	19
296	Complex interplay between formation routes and natural organic matter modification controls capabilities of C nanoparticles (nC) to accumulate organic contaminants. *Journal of Environmental Sciences*, **2017**, 51, 315-323	6.4	8
295	Optimisation of interpass temperature and heat input for wire and arc additive manufacturing 5A06 aluminium alloy. *Science and Technology of Welding and Joining*, **2017**, 22, 472-483	3.7	59

294	Laser rapid solidification improves corrosion behavior of Mg-Zn-Zr alloy. *Journal of Alloys and Compounds*, **2017**, 691, 961-969	5.7	68
293	Reconsidering the Clapeyron equation in the freezing of colloidal suspensions: From macroscale to the microscale. *European Physical Journal E*, **2017**, 40, 113	1.5	
292	Microstructure and mechanical properties of laser additive repaired Ti17 titanium alloy. *Transactions of Nonferrous Metals Society of China*, **2017**, 27, 2613-2621	3.3	13
291	A cellular automaton simulation of WNi alloy solidification in laser solid forming process. *Journal of Micromechanics and Molecular Physics*, **2017**, 02, 1750016	1.4	3
290	Electrochemical Machining Properties of the Laser Rapid Formed Inconel 718 Alloy in NaNO3Solution. *Journal of the Electrochemical Society*, **2017**, 164, E548-E559	3.9	21
289	Characteristics of the Dynamic Recrystallization Behavior of Ti-45Al-8.5Nb-0.2W-0.2B-0.3Y Alloy during High Temperature Deformation. *Metals*, **2017**, 7, 261	2.3	11
288	Fast and Large-Scale Anodizing Synthesis of Pine-Cone TiO2 for Solar-Driven Photocatalysis. *Catalysts*, **2017**, 7, 229	4	8
287	Medical Nutrition Therapy Is Effective in the Management of Hypoglycemia Caused by Insulin Antibodies: A Case Report and Literature Review. *Journal of the American College of Nutrition*, **2016**, 35, 86-90	3.5	7
286	Low artificial anisotropy cellular automaton model and its applications to the cell-to-dendrite transition in directional solidification. *Materials Discovery*, **2016**, 3, 17-28		5
285	Grain morphology control and texture characterization of laser solid formed Ti6Al2Sn2Zr3Mo1.5Cr2Nb titanium alloy. *Journal of Materials Processing Technology*, **2016**, 238, 202-211	5.3	55
284	Effect of tempering temperature on microstructure and mechanical properties of laser solid formed 300M steel. *Journal of Alloys and Compounds*, **2016**, 689, 225-232	5.7	53
283	A simplified chemical reduction method for preparation of graphene: Dispersity, reducibility and mechanism. *Ceramics International*, **2016**, 42, 19042-19046	5.1	10
282	Adsorption Characteristics of Pb(2+) onto Wine Lees-Derived Biochar. *Bulletin of Environmental Contamination and Toxicology*, **2016**, 97, 294-9	2.7	17
281	The effect of Cu rejection in laser forming of AlCoCrCuFeNi/Mg composite coating. *Materials and Design*, **2016**, 108, 157-167	8.1	21
280	Effects of cooling condition on microstructure and mechanical properties in laser rapid forming of 34CrNiMo6 thin-wall component. *International Journal of Advanced Manufacturing Technology*, **2016**, 82, 1269-1279	3.2	18
279	Microstructure and high temperature oxidation resistance of Ti-Ni gradient coating on TA2 titanium alloy fabricated by laser cladding. *Optics and Laser Technology*, **2016**, 83, 140-147	4.2	44
278	Facile synthesis of a narrow-gap titanium dioxide anatase/rutile nanofiber film on titanium foil with high photocatalytic activity under sunlight. *International Journal of Hydrogen Energy*, **2016**, 41, 10327-10334	6.7	12
277	Microstructure and Mechanical Properties of Al2O3/ZrO2 Directionally Solidified Eutectic Ceramic Prepared by Laser 3D Printing. *Journal of Materials Science and Technology*, **2016**, 32, 320-325	9.1	54

276	Laser additive manufacture of titanium alloys. *Materials Technology*, **2016**, 1-8	2.1	6
275	Solidification Microstructure of Laser Additive Manufactured Ti6Al2Zr2Sn3Mo1.5Cr2Nb Titanium Alloy. *Journal of Materials Science and Technology*, **2016**, 32, 381-386	9.1	24
274	Effect of environmental oxygen content on the oxide inclusion in laser solid formed AISI 420 stainless steel. *Materials and Design*, **2016**, 90, 459-467	8.1	22
273	Research on the Grain Boundary Liquation Mechanism in Heat Affected Zones of Laser Forming Repaired K465 Nickel-Based Superalloy. *Metals*, **2016**, 6, 64	2.3	14
272	Effect of heat input on cracking in laser solid formed DZ4125 superalloy. *Optics and Laser Technology*, **2016**, 86, 1-7	4.2	33
271	A combined tuned damper and an optimal design method for wind-induced vibration control for super tall buildings. *Structural Design of Tall and Special Buildings*, **2016**, 25, 468-502	1.8	11
270	Influence of powder size on the crystallization behavior during laser solid forming Zr 55 Cu 30 Al 10 Ni 5 bulk amorphous alloy. *Intermetallics*, **2016**, 76, 1-9	3.5	13
269	MicroRNA 152 regulates hepatic glycogenesis by targeting PTEN. *FEBS Journal*, **2016**, 283, 1935-46	5.7	27
268	Morphology evolution of γ′ phase in K465 nickel-base superalloy during laser forming repairing. *Journal of Laser Applications*, **2016**, 28, 022301	2.1	2
267	Interface instability modes in freezing colloidal suspensions: revealed from onset of planar instability. *Scientific Reports*, **2016**, 6, 23358	4.9	9
266	SIRT1 alleviates senescence of degenerative human intervertebral disc cartilage endo-plate cells via the p53/p21 pathway. *Scientific Reports*, **2016**, 6, 22628	4.9	36
265	Interfacial undercooling in solidification of colloidal suspensions: analyses with quantitative measurements. *Scientific Reports*, **2016**, 6, 28434	4.9	23
264	Can secondary nucleation exist in ice banding of freezing colloidal suspensions?. *Chinese Physics B*, **2016**, 25, 128202	1.2	5
263	Influence of solution treatment on microstructure evolution of TC21 titanium alloy with near equiaxed α grains fabricated by laser additive manufacture. *Journal of Alloys and Compounds*, **2016**, 666, 380-386	5.7	19
262	Molecular dynamics simulation of melt structure evolution during cooling process for lead on nickel substrate surface. *Materials Letters*, **2016**, 175, 20-22	3.3	4
261	Reinforcement and substrate interaction in laser surface forming of AlCoCrCuFeNi particle reinforced AZ91D matrix composites. *Journal of Alloys and Compounds*, **2016**, 672, 660-667	5.7	23
260	Effect of Ba and Mn doping on microstructure and multiferroic properties of BiFeO3 ceramics. *Journal of Alloys and Compounds*, **2016**, 678, 511-517	5.7	46
259	The purification of AISI 420 stainless steel in laser solid forming. *Materials and Design*, **2016**, 89, 1035-1041	8.1	10

258	Crystalline structure and dielectric properties of multiferroic Cr-doped YMnO3. *Journal of Materials Science: Materials in Electronics*, **2016**, 27, 3082-3087	2.1	14
257	System development, formability quality and microstructure evolution of selective laser-melted magnesium. *Virtual and Physical Prototyping*, **2016**, 11, 173-181	10.1	47
256	Microstructure evolution and mechanical properties of laser additive manufactured Ti□Al□Sn□Zr□Mo□Cr alloy. *Transactions of Nonferrous Metals Society of China*, **2016**, 26, 2058-2066	3.3	28
255	Pellagra Secondary to Medication and Alcoholism: A Case Report and Review of the Literature. *Nutrition in Clinical Practice*, **2016**, 31, 785-789	3.6	21
254	Microstructure and anisotropic tensile behavior of laser additive manufactured TC21 titanium alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2016**, 673, 204-212	5.3	50
253	Effects of surfactant on capillary evaporation process with thick films. *International Journal of Heat and Mass Transfer*, **2015**, 88, 406-410	4.9	6
252	Modeling of the temperature field in the amorphous Ge2Sb2Te5 film induced by a picosecond laser with a body heat source. *Applied Surface Science*, **2015**, 343, 188-193	6.7	7
251	Design of a solar-driven TiO2 nanofilm on Ti foil by self-structure modifications. *RSC Advances*, **2015** , 5, 41437-41444	3.7	10
250	Laser surface forming of AlCoCrCuFeNi particle reinforced AZ91D matrix composites. *Optics and Laser Technology*, **2015**, 70, 119-127	4.2	42
249	One-step breaking and separating emulsion by tungsten oxide coated mesh. *ACS Applied Materials & Interfaces*, **2015**, 7, 8108-13	9.5	54
248	Fabrication of a coral/double-wall TiO2 nanotube array film electrode with higher photoelectrocatalytic activity under sunlight. *New Journal of Chemistry*, **2015**, 39, 3923-3928	3.6	14
247	Construction of a triple gene-deleted Chinese Pseudorabies virus variant and its efficacy study as a vaccine candidate on suckling piglets. *Vaccine*, **2015**, 33, 2432-7	4.1	49
246	Effects of physical parameters on the cell-to-dendrite transition in directional solidification. *Chinese Physics B*, **2015**, 24, 078108	1.2	1
245	Structural, Ferroelectric and Ferromagnetic Properties of Single-Phase Bi0.95Ba0.05FeO3 Thin Film Prepared by Pulsed Laser Deposition. *Journal of Superconductivity and Novel Magnetism*, **2015**, 28, 3707-3712	1.5	2
244	Structural and magnetic characterization of ZnCo2O4 thin film prepared by pulsed laser deposition. *Applied Surface Science*, **2015**, 357, 1212-1216	6.7	11
243	Effect of the Sn dopant on the crystallization of amorphous Ge 2 Sb 2 Te 5 films induced by an excimer laser. *Optics and Laser Technology*, **2015**, 74, 11-15	4.2	8
242	Microstructural analysis of Zr55Cu30Al10Ni5 bulk metallic glasses by laser surface remelting and laser solid forming. *Intermetallics*, **2015**, 66, 22-30	3.5	53
241	Thermomechanical response of 3D laser-deposited Ti□Al□V alloy over a wide range of strain rates and temperatures. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2015**, 647, 34-42	5.3	63

240	In situ observation the interface undercooling of freezing colloidal suspensions with differential visualization method. *Review of Scientific Instruments*, **2015**, 86, 084901	1.7	19
239	Electricity-induced switchable wettability and controllable water permeation based on 3D copper foam. *Chemical Communications*, **2015**, 51, 16237-40	5.8	43
238	Overexpression of a miR393-resistant form of transport inhibitor response protein 1 (mTIR1) enhances salt tolerance by increased osmoregulation and Na+ exclusion in Arabidopsis thaliana. *Plant and Cell Physiology*, **2015**, 56, 73-83	4.9	69
237	Biochar produced from oak sawdust by Lanthanum (La)-involved pyrolysis for adsorption of ammonium (NH4(+)), nitrate (NO3(-)), and phosphate (PO4(3-)). *Chemosphere*, **2015**, 119, 646-653	8.4	270
236	Microstructure and mechanical properties of laser solid formed 300M steel. *Journal of Alloys and Compounds*, **2015**, 621, 35-41	5.7	39
235	Microstructure and interface characteristics of laser-clad cobalt-base coating on the surface of a nickel-base alloy. *Materials Research Innovations*, **2015**, 19, S8-948-S8-952	1.9	0
234	Microstructure and hardness of laser forming repaired 300M steel **2015**,		1
233	Construction of a gE-Deleted Pseudorabies Virus and Its Efficacy to the New-Emerging Variant PRV Challenge in the Form of Killed Vaccine. *BioMed Research International*, **2015**, 2015, 684945	3	13
232	Protective effect of pretreatment with propofol against tumor necrosis factor-□nduced hepatic insulin resistance. *Experimental and Therapeutic Medicine*, **2015**, 10, 289-294	2.1	3
231	Remelting-induced anomalous eutectic formation during solidification of deeply undercooled eutectic alloy melts. *Acta Materialia*, **2015**, 95, 44-56	8.4	50
230	Phytotoxicity assessment on corn stover biochar, derived from fast pyrolysis, based on seed germination, early growth, and potential plant cell damage. *Environmental Science and Pollution Research*, **2015**, 22, 9534-43	5.1	22
229	Three-dimensional reconstruction of anomalous eutectic in laser remelted Ni-30 wt.% Sn alloy. *Science and Technology of Advanced Materials*, **2015**, 16, 065007	7.1	12
228	Texture and microstructure characterization in laser additive manufactured Ti□Al□Zr□Sn□Mo□1.5Cr□Nb titanium alloy. *Materials and Design*, **2015**, 88, 550-557	8.1	40
227	Effect of Biochar on Heavy Metal Speciation of Paddy Soil. *Water, Air, and Soil Pollution*, **2015**, 226, 1	2.6	44
226	??????????????. *Scientia Sinica Informationis*, **2015**, 45, 1111-1126	2.3	8
225	Dietary or enteral medium-chain triglyceride usage in a Chinese general hospital. *Asia Pacific Journal of Clinical Nutrition*, **2015**, 24, 387-93	1	5
224	Microstructural evolution of laser surface remelting remolten Ni-28 wt%Sn alloy under liquid nitrogen cooling. *Wuli Xuebao/Acta Physica Sinica*, **2015**, 64, 108103	0.6	
223	Influence of powdered state on crystallization during laser solid forming Zr55Cu30Al10Ni5 bulk metallic glasses. *Wuli Xuebao/Acta Physica Sinica*, **2015**, 64, 166402	0.6	

222	Cellular automaton simulation of the molten pool of laser solid forming process. *Wuli Xuebao/Acta Physica Sinica*, **2015**, 64, 018103	0.6	3
221	Solidification behaviour in laser cladding of AlCoCrCuFeNi high-entropy alloy on magnesium substrates. *Journal of Alloys and Compounds*, **2014**, 587, 588-593	5.7	122
220	Anomalous overgrowth of converging dendrites during directional solidification. *Journal of Crystal Growth*, **2014**, 402, 210-214	1.6	25
219	Effects of the preparation method and humic-acid modification on the mobility and contaminant-mobilizing capability of fullerene nanoparticles (nC60). *Environmental Sciences: Processes and Impacts*, **2014**, 16, 1282-9	4.3	9
218	Progress and development trends in the numerical modeling of solidification. *Science Bulletin*, **2014** , 59, 1709-1718		4
217	Safe and efficient pH sensitive tumor targeting modified liposomes with minimal cytotoxicity. *Colloids and Surfaces B: Biointerfaces*, **2014**, 123, 395-402	6	21
216	Novel multi-layer cross-linked TiO2/C nanosheets and their photocatalytic properties. *New Journal of Chemistry*, **2014**, 38, 1647	3.6	18
215	Molecular evolutionary and structural analysis of the cytosolic DNA sensor cGAS and STING. *Nucleic Acids Research*, **2014**, 42, 8243-57	20.1	96
214	A study on the crystallization behavior of Sn-doped amorphous Ge2Sb2Te5 by ultraviolet laser radiation. *Applied Surface Science*, **2014**, 316, 202-206	6.7	19
213	Estimation of rod-like phase spacing in melt-grown eutectic composites. *Science China Technological Sciences*, **2014**, 57, 1794-1801	3.5	4
212	A facile solvent-manipulated mesh for reversible oil/water separation. *ACS Applied Materials & Interfaces*, **2014**, 6, 12821-6	9.5	122
211	Influence of forming atmosphere on the deposition characteristics of 2Cr13 stainless steel during laser solid forming. *Journal of Materials Processing Technology*, **2014**, 214, 701-709	5.3	23
210	Transmission electron microscopy study of amorphous Ge2Sb2Te5 films induced by an ultraviolet single-pulse laser. *Applied Surface Science*, **2014**, 311, 83-88	6.7	4
209	Morphology and crystalline phase characteristics of □GST films irradiated by a picosecond laser. *Applied Surface Science*, **2014**, 289, 160-166	6.7	15
208	Numerical simulation on the temperature field induced by a nanosecond pulsed excimer laser in the phase-change film. *Thin Solid Films*, **2014**, 551, 102-109	2.2	15
207	Microstructures and mechanical properties of vacuum counter-pressure casting A357 alloys solidified under grade-pressurising: effects of melt temperature. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2014**, 611, 9-14	5.3	7
206	A new magnetic expanded graphite for removal of oil leakage. *Marine Pollution Bulletin*, **2014**, 81, 185-90	6.7	30
205	High glucose reduces hepatic glycogenesis by suppression of microRNA-152. *Molecular Medicine Reports*, **2014**, 10, 2073-8	2.9	9

204	Enhanced ferroelectricity and ferromagnetism in Bi 0.9 Ba 0.1 FeO 3 /La 2/3 Sr 1/3 MnO 3 heterostructure grown by pulsed laser deposition. *Chinese Physics B*, **2014**, 23, 117703	1.2	
203	Decline of nucleation in the heating process with a high heating rate. *Chinese Physics B*, **2014**, 23, 086401	1.2	2
202	Orientation-dependent morphological stability of grain boundary groove. *Chinese Physics B*, **2014**, 23, 124702	1.2	2
201	Anisotropic solid□quid interfacial energy measurement by grain boundary groove method. *Journal of Crystal Growth*, **2014**, 406, 85-93	1.6	7
200	Microstructure and Wear Resistance of AlFeCuCoNiCrTi1.5 High Entropy Alloy Coating on AZ91D Magnesium Alloys by Laser Cladding. *Applied Mechanics and Materials*, **2014**, 644-650, 4766-4771	0.3	
199	Microstructure and Wear Resistance of Cu0.9NiAlCoCrFe High Entropy Alloy Coating on AZ91D Magnesium Alloys by Laser Cladding. *Advanced Materials Research*, **2014**, 989-994, 246-250	0.5	4
198	Influence of Heat Treatment on Microhardness and Microstructure of the Joining Interface for Ti-24Al-15Nb-1.5Mo/TC11. *Advanced Materials Research*, **2014**, 941-944, 2030-2034	0.5	
197	Preparation and characterisation of carbon-modified TiO2 composite. *Micro and Nano Letters*, **2014**, 9, 471-474	0.9	3
196	Research Progress in Laser Solid Forming of High-Performance Metallic Components at the State Key Laboratory of Solidification Processing of China. *3D Printing and Additive Manufacturing*, **2014**, 1, 156-165	4	32
195	Microstructure and corrosion resistance of Cu0□9NiAlCoCrFe high entropy alloy coating on AZ91D magnesium alloys by laser cladding. *Materials Research Innovations*, **2014**, 18, S2-1008-S2-1011	1.9	17
194	Microstructure and mechanical properties of Al2O3/Y3Al5O12/ZrO2 hypereutectic directionally solidified ceramic prepared by laser floating zone. *Journal of the European Ceramic Society*, **2014**, 34, 3051-3059	6	30
193	Quasi-two-dimensional equilibrium solid/liquid interface of colloids at low osmotic pressure. *Journal of Crystal Growth*, **2014**, 385, 106-110	1.6	0
192	Virus-induced gene silencing of PEAM4 affects floral morphology by altering the expression pattern of PsSOC1a and PsPVP in pea. *Journal of Plant Physiology*, **2014**, 171, 148-53	3.6	2
191	Characteristic scale selection of lamellar spacings in binary eutectic solidification. *Wuli Xuebao/Acta Physica Sinica*, **2014**, 63, 068104	0.6	1
190	An explanation of the crystallization of amorphous Ge2Sb2Te5 films induced by a short Gaussian laser pulse. *Applied Physics Letters*, **2013**, 103, 051905	3.4	18
189	Laser cladding of Zr-based coating on AZ91D magnesium alloy for improvement of wear and corrosion resistance. *Bulletin of Materials Science*, **2013**, 36, 99-105	1.7	11
188	Electrochemical synthesis of a novel thiazole-based copolymer and its use for the simultaneous determination of dopamine, uric acid and nitrite. *Electrochimica Acta*, **2013**, 111, 9-17	6.7	24
187	Poly(2-amino-5-(4-pyridinyl)-1, 3, 4-thiadiazole) film modified electrode for the simultaneous determinations of dopamine, uric acid and nitrite. *Journal of Solid State Electrochemistry*, **2013**, 17, 691-700	2.6	23

186	pH-sensitive IPN hydrogel based on poly (aspartic acid) and poly (vinyl alcohol) for controlled release. *Polymer Bulletin*, **2013**, 70, 2815-2827	2.4	12
185	Two natural recombinant highly pathogenic porcine reproductive and respiratory syndrome viruses with different pathogenicities. *Virus Genes*, **2013**, 46, 473-8	2.3	26
184	Microstructure and Corrosion Properties of AlCoCrFeNi High Entropy Alloy Coatings Deposited on AISI 1045 Steel by the Electrospark Process. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2013**, 44, 1767-1778	2.3	114
183	Evaluating the relationships among economic growth, energy consumption, air emissions and air environmental protection investment in China. *Renewable and Sustainable Energy Reviews*, **2013**, 18, 259-270	16.2	95
182	Crystallization of amorphous Ge2Sb2Te5 films induced by an ultraviolet laser. *Applied Surface Science*, **2013**, 285, 97-101	6.7	16
181	Contaminant-mobilizing capability of fullerene nanoparticles (nC60): Effect of solvent-exchange process in nC60 formation. *Environmental Toxicology and Chemistry*, **2013**, 32, 329-36	3.8	19
180	Solid□iquid interfacial energy and its anisotropy measurement from double grain boundary grooves. *Scripta Materialia*, **2013**, 69, 1-4	5.6	6
179	Calculation of crystal-melt interfacial free energies of fcc metals. *Journal of Crystal Growth*, **2013**, 366, 82-87	1.6	12
178	Effects of Ag addition on crystallization, microstructure and mechanical properties of Zr□uNiAl□Ag bulk metallic glasses. *Journal of Alloys and Compounds*, **2013**, 552, 102-106	5.7	14
177	Microstructure evolution in laser surface remelting of Ni□3wt.%Sn alloy. *Journal of Alloys and Compounds*, **2013**, 577, 309-314	5.7	13
176	Calculation of solid□iquid interfacial free energy of Cu by two different methods. *Journal of Crystal Growth*, **2013**, 377, 107-111	1.6	11
175	Glass forming ability and crystallization behavior of Al□NiRE metallic glasses. *Intermetallics*, **2013**, 42, 23-31	3.5	31
174	Microstructural changes in a laser solid forming Inconel 718 superalloy thin wall in the deposition direction. *Optics and Laser Technology*, **2013**, 45, 330-335	4.2	76
173	Effect of overlap rate on recrystallization behaviors of Laser Solid Formed Inconel 718 superalloy. *Optics and Laser Technology*, **2013**, 45, 228-235	4.2	71
172	An analytical model to optimize rotation speed and travel speed of friction stir welding for defect-free joints. *Scripta Materialia*, **2013**, 68, 175-178	5.6	59
171	Experimental investigation on phase transformation of Cu□NiSi alloy melts during cooling. *Materials Science and Technology*, **2013**, 29, 995-999	1.5	5
170	miR-200s contribute to interleukin-6 (IL-6)-induced insulin resistance in hepatocytes. *Journal of Biological Chemistry*, **2013**, 288, 22596-606	5.4	45
169	Microstructure of Laser Re-Melted AlCoCrCuFeNi High Entropy Alloy Coatings Produced by Plasma Spraying. *Entropy*, **2013**, 15, 2833-2845	2.8	65

168	Adsorption of phenanthrene, 2-naphthol, and 1-naphthylamine to colloidal oxidized multiwalled carbon nanotubes: effects of humic acid and surfactant modification. *Environmental Toxicology and Chemistry*, **2013**, 32, 493-500	3.8	43
167	Settling velocity of equiaxed dendrites in a tube. *Chinese Physics B*, **2013**, 22, 018101	1.2	
166	Efficient delivery of miR-122 to regulate cholesterol metabolism using a non-covalent peptide-based strategy. *Molecular Medicine Reports*, **2013**, 8, 1472-8	2.9	15
165	Inhibition of extracellular signal-regulated kinase activity by sorafenib increases sensitivity to DNR in K562 cells. *Oncology Reports*, **2013**, 29, 1895-901	3.5	4
164	INFLUENCE OF MIXING ENTHALPY ON THE MICROSTRUCTURE OF LASER MULTI--LAYER DEPOSITED Ti--6Al--4V ALLOY. *Jinshu Xuebao/Acta Metallurgica Sinica*, **2013**, 48, 159-163		1
163	FORMATION MECHANISM OF ANOMALOUS EUTECTIC AND MICROSTRUCTURE EVOLUTION IN HIGHLY UNDERCOOLED SOLIDIFICATION OF Ni-30%Sn ALLOY. *Jinshu Xuebao/Acta Metallurgica Sinica*, **2013**, 49, 475		3
162	MICROSTRUCTURE OF HEAT-AFFECTED ZONE OFLASER FORMING REPAIRED 2Cr13STAINLESS STEEL. *Jinshu Xuebao/Acta Metallurgica Sinica*, **2013**, 49, 605		4
161	Molecular dynamics simulation of the wetting behavior of Pb droplet on Ni substrate. *Wuli Xuebao/Acta Physica Sinica*, **2013**, 62, 120203	0.6	6
160	Effect of interface energy anisotropy on the dendritic growth in directional solidification. *Wuli Xuebao/Acta Physica Sinica*, **2013**, 62, 178105	0.6	4
159	Experimental study of the settling and melting characteristics of equiaxed crystals in a falling tube. *Wuli Xuebao/Acta Physica Sinica*, **2013**, 62, 018105	0.6	
158	Effect of crystallographic orientation on dendrite growth in directional solidification. *Wuli Xuebao/Acta Physica Sinica*, **2013**, 62, 108103	0.6	1
157	Influence of liquid flow on cellular and dendritic spacings. *Wuli Xuebao/Acta Physica Sinica*, **2013**, 62, 078102	0.6	
156	Abnormal improvement on electrical conductivity of CuNiSi alloys resulting from semi-solid isothermal treatment. *Materials Letters*, **2012**, 77, 107-109	3.3	12
155	In situ synthesizing Al3Ni for fabrication of intermetallic-reinforced aluminum alloy composites by friction stir processing. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2012**, 550, 279-285	5.3	106
154	Phase evolution in calcium phosphate coatings obtained by in situ laser cladding. *Materials Science and Engineering C*, **2012**, 32, 872-877	8.3	11
153	Orientation selection of equiaxed dendritic growth by three-dimensional cellular automaton model. *Physica B: Condensed Matter*, **2012**, 407, 2471-2475	2.8	25
152	New genomic characteristics of highly pathogenic porcine reproductive and respiratory syndrome viruses do not lead to significant changes in pathogenicity. *Veterinary Microbiology*, **2012**, 158, 291-9	3.3	37
151	Solidification researches using transparent model materials □A review. *Science China Technological Sciences*, **2012**, 55, 377-386	3.5	19

150	Microstructural evolution of AZ61 magnesium alloy predeformed by ECAE during semisolid isothermal treatment. *Transactions of Nonferrous Metals Society of China*, **2012**, 22, 555-563	3.3	22
149	Effect of Substrate Surface Microstructure on Heterogeneous Nucleation Behavior. *Journal of Materials Science and Technology*, **2012**, 28, 67-72	9.1	19
148	Transport of fullerene nanoparticles (nC60) in saturated sand and sandy soil: controlling factors and modeling. *Environmental Science & Technology*, **2012**, 46, 7230-8	10.3	76
147	Anodization formation of through-hole nanoporous layers on TixNb1 (x = 0.3 0.7) alloys in nitric acid electrolytes. *Applied Surface Science*, **2012**, 258, 3260-3263	6.7	16
146	Microstructure and mechanical properties of laser forming repaired 17-4PH stainless steel. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2012**, 553, 80-88	5.3	78
145	Laser solid forming Zr-based bulk metallic glass. *Intermetallics*, **2012**, 22, 110-115	3.5	95
144	Microstructure development in laser forming of zirconium coatings on AZ91D magnesium alloy substrates. *Journal of Alloys and Compounds*, **2012**, 512, 328-331	5.7	6
143	A cellular automaton model for a pure substance solidification with interface reconstruction method. *Computational Materials Science*, **2012**, 54, 66-74	3.2	17
142	Wenzel model based investigation of heterogeneous nucleation on a coarse substrate. *IOP Conference Series: Materials Science and Engineering*, **2012**, 27, 012006	0.4	2
141	Effect of Substrate Wettability and Surface Structure on Nucleation of Crystal. *Journal of Materials Science and Technology*, **2012**, 28, 859-864	9.1	7
140	Investigation of the Heterogeneous Nucleation on Fractal Surfaces. *Journal of Materials Science and Technology*, **2012**, 28, 1169-1174	9.1	10
139	Enhanced transport of 2,2',5,5'-polychlorinated biphenyl by natural organic matter (NOM) and surfactant-modified fullerene nanoparticles (nC60). *Environmental Science & Technology*, **2012**, 46, 5422-9	10.3	47
138	Laser Cladding of Ni60/WC/TiN Composite Coatings on 00Cr13Ni4Mo Hydro Turbine Blade Stainless Steel for Improvement of Wear Resistance. *Advanced Materials Research*, **2012**, 430-432, 101-105	0.5	
137	The effect of two-dimensional shear flow on the stability of a crystal interface in a supercooled melt. *Chinese Physics B*, **2012**, 21, 086401	1.2	1
136	Complete genome sequence of an overattenuated highly pathogenic porcine reproductive and respiratory syndrome virus. *Journal of Virology*, **2012**, 86, 6381-2	6.6	6
135	The effect of interfacial energy anisotropy on planar interface instability in a succinonitrile alloy under a small temperature gradient. *Chinese Physics B*, **2012**, 21, 066801	1.2	4
134	Linear stability analysis on a spherical particle growing from a binary melt under the far-field flow. *Chinese Physics B*, **2012**, 21, 056401	1.2	1
133	Periodic variation of torque and its relations to interfacial sticking and slipping during friction stir welding. *Science and Technology of Welding and Joining*, **2012**, 17, 338-341	3.7	31

132	Electrochemical synthesis of a polyaniline network on a poly(o-aminophenol) modified glassy carbon electrode and its use for the simultaneous determination of ascorbic acid and uric acid. *Analytical Sciences*, **2012**, 28, 1001-7	1.7	5
131	Measurement of Solid-Liquid Interfacial Energy and Its Anisotropy of Succinonitrile. *IOP Conference Series: Materials Science and Engineering*, **2012**, 27, 012083	0.4	1
130	Eutectic Growth in Laser Cladding of Zr-Coating on AZ91D Magnesium Substrate. *Materials Transactions*, **2012**, 53, 1119-1123	1.3	1
129	Effect of surface tension anisotropy on the growth patterns of cellulars in directional solidification. *Wuli Xuebao/Acta Physica Sinica*, **2012**, 61, 228106	0.6	4
128	Microstructure evolution of laser solid forming of Ti-Al-V ternary system alloys from blended elemental powders. *Chinese Optics Letters*, **2011**, 9, 051403-51406	2.2	3
127	The effect of laser scanning path on microstructures and mechanical properties of laser solid formed nickel-base superalloy Inconel 718. *Journal of Alloys and Compounds*, **2011**, 509, 4505-4509	5.7	168
126	Phase evolution and dendrite growth in laser cladding of aluminium on zirconium. *Journal of Alloys and Compounds*, **2011**, 509, 3705-3710	5.7	8
125	Effects of bias voltage and gas pressure on orientation and microstructure of iridium coating by double glow plasma. *Vacuum*, **2011**, 86, 429-437	3.7	18
124	The epidemic status and genetic diversity of 14 highly pathogenic porcine reproductive and respiratory syndrome virus (HP-PRRSV) isolates from China in 2009. *Veterinary Microbiology*, **2011**, 150, 257-69	3.3	51
123	Microstructural Characterization and Mechanical Property of Iridium Coating Produced by Double Glow Plasma. *Plasma Chemistry and Plasma Processing*, **2011**, 31, 465-475	3.6	21
122	A cellular automaton model for the solidification of a pure substance. *Applied Physics A: Materials Science and Processing*, **2011**, 103, 123-133	2.6	32
121	The effect of 3-dimensional shear flow on the stability of a crystal interface in the supercooled binary melt. *Journal of Crystal Growth*, **2011**, 327, 140-145	1.6	2
120	Recrystallization and its influence on microstructures and mechanical properties of laser solid formed nickel base superalloy Inconel 718. *Rare Metals*, **2011**, 30, 433-438	5.5	35
119	Effect of intermediate heat treatment temperature on microstructure and notch sensitivity of laser solid formed Inconel 718 superalloy. *Journal Wuhan University of Technology, Materials Science Edition*, **2011**, 26, 908-913	1	17
118	Fabrication and microstructure of CaTiO3 coating by laser cladding. *Journal Wuhan University of Technology, Materials Science Edition*, **2011**, 26, 1093-1097	1	
117	Facilitated transport of 2,2',5,5'-polychlorinated biphenyl and phenanthrene by fullerene nanoparticles through sandy soil columns. *Environmental Science & Technology*, **2011**, 45, 1341-8	10.3	64
116	Influence of laser deposition patterns on part distortion, interior quality and mechanical properties by laser solid forming (LSF). *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2011**, 528, 1094-1104	5.3	49
115	Microstructure and residual stress of laser rapid formed Inconel 718 nickel-base superalloy. *Optics and Laser Technology*, **2011**, 43, 208-213	4.2	199

114	Numerical simulation and defect elimination in the casting of truck rear axle using a nodular cast iron. *Materials & Design*, **2011**, 32, 1623-1629		27
113	In Vitro Degradation and Biocompatibility of WE43, ZK60, and AZ91 Biodegradable Magnesium Alloys. *Advanced Materials Research*, **2011**, 287-290, 2008-2014	0.5	3
112	Emergence of novel European genotype porcine reproductive and respiratory syndrome virus in mainland China. *Journal of General Virology*, **2011**, 92, 880-92	4.9	80
111	Microstructure and Phase Composition of Iridium Coating on Molybdenum after Heat Treatment at 1400℃. *Advanced Materials Research*, **2011**, 189-193, 688-691	0.5	5
110	Oxidation of double glow plasma discharge coatings of iridium on molybdenum for liquid fuelled rocket motor casings. *Corrosion Engineering Science and Technology*, **2011**, 46, 732-736	1.7	7
109	Effects of Solution Treatment Temperature on Microstructures and Properties of Laser Solid Forming GH4169 Superalloy. *Rare Metal Materials and Engineering*, **2010**, 39, 1519-1524		32
108	Researches on the Nucleation Behaviors of NH4Cl Crystal on Coarse Aluminum Surfaces. *Materials Science Forum*, **2010**, 654-656, 1343-1346	0.4	2
107	Real time observation of nucleation and detachment of crystal from chilling surface Part I：effects of vibration. *International Journal of Cast Metals Research*, **2010**, 23, 344-348	1	2
106	In situ nucleation and detachment of dendrites to form equiaxed grains stirred by vibration. *International Journal of Cast Metals Research*, **2010**, 23, 65-68	1	2
105	A Cellular Automaton Model with the Lower Mesh-Induced Anisotropy for Dendritic Solidification of Pure Substance. *Materials Science Forum*, **2010**, 654-656, 1528-1531	0.4	5
104	PREPARATION OF ULTRAPURE PIVALIC ACID BY RECTIFICATION. *Chemical Engineering Communications*, **2010**, 197, 1357-1365	2.2	4
103	In-situ observation of crystal detachment behavior in NH4Cl-H2O system from chilling metal surface with vibration. *Transactions of Nonferrous Metals Society of China*, **2010**, 20, s821-s825	3.3	5
102	Morphological evolution of non-dendritic microstructure during solidification under stirring. *Transactions of Nonferrous Metals Society of China*, **2010**, 20, s826-s831	3.3	4
101	Estimation of laser solid forming process based on temperature measurement. *Optics and Laser Technology*, **2010**, 42, 47-54	4.2	31
100	Evaluation of mechanical properties and porcelain bonded strength of nickel-chromium dental alloy fabricated by laser rapid forming. *Lasers in Medical Science*, **2010**, 25, 799-804	3.1	10
99	Microstructure and Phase Evolution in Laser Cladding of Ni/Cu/Al Multilayer on Magnesium Substrates. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2010**, 41, 212-223	2.3	17
98	Process analysis for laser solid forming of thin-wall structure. *International Journal of Machine Tools and Manufacture*, **2010**, 50, 1-8	9.4	38
97	In situ synthesis and fabrication of tricalcium phosphate bioceramic coating on commercially pure titanium by laser rapid forming. *Surface and Coatings Technology*, **2010**, 204, 3833-3837	4.4	12

96	Mechanics and energy analysis on molten pool spreading during laser solid forming. *Applied Surface Science*, **2010**, 256, 4612-4620	6.7	33
95	Adsorption of single-ringed N- and S-heterocyclic aromatics on carbon nanotubes. *Carbon*, **2010**, 48, 3906-3915	6.2	70
94	NUMERICAL MICROSTRUCTURE SIMULATION OF LASER RAPID FORMING 316L STAINLESS STEEL. *Jinshu Xuebao/Acta Metallurgica Sinica*, **2010**, 2010, 135-140		8
93	MICROSTRUCTURES AND MECHANICAL PROPERTIES OF LASER SOLID FORMED NICKLE BASE SUPERALLOY INCONEL 718 PREPARED IN DIFFERENT ATMOSPHERES. *Jinshu Xuebao/Acta Metallurgica Sinica*, **2010**, 46, 1047-1054		13
92	INFLUENCE OF T6I6 TEMPER ON TENSILE AND INTERGRANULAR CORROSION PROPERTIES OF 6061 ALUMINUM ALLOY. *Jinshu Xuebao/Acta Metallurgica Sinica*, **2010**, 46, 494-499		1
91	MICROSTRUCTURE AND MECHANICAL PROPERTY OF Ti--80%Ni ALLOY PREPARED BY LASER SOLID FORMING. *Jinshu Xuebao/Acta Metallurgica Sinica*, **2010**, 46, 1081-1085		
90	Phase Evolution in Laser Rapid Forming of Compositionally Graded TiNi Alloys. *Journal of Engineering Materials and Technology, Transactions of the ASME*, **2009**, 131,	1.8	13
89	Microstructure and properties of laser cladding TiC/TiAl composite coatings on TiAl intermetallic alloy. *Surface Engineering*, **2009**, 25, 196-200	2.6	17
88	Coamplification at lower denaturation temperature-PCR increases mutation-detection selectivity of TaqMan-based real-time PCR. *Clinical Chemistry*, **2009**, 55, 748-56	5.5	51
87	Rapid differential detection of classical and highly pathogenic North American Porcine Reproductive and Respiratory Syndrome virus in China by a duplex real-time RT-PCR. *Journal of Virological Methods*, **2009**, 161, 192-8	2.6	39
86	Crystal nucleation and detachment from a chilling metal surface with vibration. *Materials Chemistry and Physics*, **2009**, 117, 199-203	4.4	5
85	Molecular mutations associated with the in vitro passage of virulent porcine reproductive and respiratory syndrome virus. *Virus Genes*, **2009**, 38, 276-84	2.3	55
84	Entropy as a selection rule for crystal growth in undercooled binary eutectic melts. *Science Bulletin*, **2009**, 54, 1012-1018	10.6	2
83	Heat-treated microstructure and mechanical properties of laser solid forming Ti-6Al-4V alloy. *Rare Metals*, **2009**, 28, 537-544	5.5	46
82	In-situ observation of nucleation on a rough chilling surface in NH4Cl-H2O solution. *Transactions of the Indian Institute of Metals*, **2009**, 62, 489-494	1.2	1
81	Microstructure and Mechanical Properties of Laser Solid Formed Ti-6Al-4V from Blended Elemental Powders. *Rare Metal Materials and Engineering*, **2009**, 38, 574-578		24
80	The effect of hot isostatic pressing on crack healing, microstructure, mechanical properties of Rene88DT superalloy prepared by laser solid forming. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2009**, 504, 129-134	5.3	88
79	Effectiveness of a discharge education program in reducing the severity of postpartum depression: a randomized controlled evaluation study. *Patient Education and Counseling*, **2009**, 77, 68-71	3.1	29

78	Composition control for laser solid forming from blended elemental powders. *Optics and Laser Technology*, **2009**, 41, 601-607	4.2	17
77	First-principles study of the relaxation and energy of bcc-Fe, fcc-Fe and AISI-304 stainless steel surfaces. *Applied Surface Science*, **2009**, 255, 9032-9039	6.7	84
76	Response to Comment on "Adsorption of Hydroxyl- and Amino-Substituted Aromatics to Carbon Nanotubes" *Environmental Science & Technology*, **2009**, 43, 3400-3401	10.3	9
75	Formation of magnetic Fe-based bulk metallic glass under low vacuum. *Journal of Alloys and Compounds*, **2009**, 478, 226-228	5.7	24
74	Microstructure evolution in laser solid forming of Ti-50 wt% Ni alloy. *Journal of Alloys and Compounds*, **2009**, 480, 782-787	5.7	31
73	Controlled detection in composite nanoresonant array for surface plasmon resonance sensing. *Optics Express*, **2009**, 17, 14700-9	3.3	10
72	Chemical composition analysis for laser solid forming of titanium alloys from blended elemental powders. *Chinese Optics Letters*, **2009**, 7, 222-225	2.2	3
71	Effect of solution temperature and cooling rate on microstructure and mechanical properties of laser solid forming Ti-6Al-4V alloy. *Chinese Optics Letters*, **2009**, 7, 498-501	2.2	18
70	Replacing PCR with COLD-PCR enriches variant DNA sequences and redefines the sensitivity of genetic testing. *Nature Medicine*, **2008**, 14, 579-84	50.5	301
69	The relationship between effective entropy change and volume fraction of the eutectic phases in eutectic microstructures. *Materials Letters*, **2008**, 62, 984-987	3.3	12
68	Adsorption of hydroxyl- and amino-substituted aromatics to carbon nanotubes. *Environmental Science & Technology*, **2008**, 42, 6862-8	10.3	304
67	Interlamellar spacing and average interface undercooling of irregular eutectic in steady-state growth. *Transactions of Nonferrous Metals Society of China*, **2008**, 18, 405-409	3.3	5
66	Numerical Study of Liquid Core Solidification in Influence of Soft Reduction Deformation on Steel Slab Continuous Casting Process. *Materials Science Forum*, **2008**, 575-578, 80-86	0.4	3
65	The formation of quasiregular microstructure in highly undercooled Ni70.2Si29.8 eutectic alloy. *Journal of Applied Physics*, **2008**, 104, 013535	2.5	10
64	Direct joining of 2D carbon/carbon composites to Ti-6Al-4V alloy with a rectangular wave interface. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2008**, 488, 205-213	5.3	24
63	Overexpression of the cucumber LEAFY homolog CFL and hormone treatments alter flower development in gloxinia (Sinningia speciosa). *Plant Molecular Biology*, **2008**, 67, 419-27	4.6	25
62	Kinetic limit for incubation period of primary phase produced by the combination reaction between two solid heterogeneous pure metals. *Science in China Series D: Earth Sciences*, **2008**, 51, 2242-2253		
61	Microstructure and wear behaviour of laser-induced thermite reaction Al2O3 ceramic coatings on pure aluminum and AA7075 aluminum alloy. *Journal Wuhan University of Technology, Materials Science Edition*, **2008**, 23, 89-94	1	10

60	Study on microstructure and mechanical properties of laser rapid forming Inconel 718. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2008**, 478, 119-124	5.3	250
59	Research on molten pool temperature in the process of laser rapid forming. *Journal of Materials Processing Technology*, **2008**, 198, 454-462	5.3	86
58	Microstructural evolution in laser rapid forming of a graded titanium-nickel alloy **2007**,		1
57	Research on undercooled melt growth kinetics of benzophenone crystals. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2007**, 137, 45-48	3.1	2
56	The optical properties of benzophenone crystal grown from undercooled melt with oriented growth method. *Optical Materials*, **2007**, 29, 1063-1065	3.3	11
55	Microstructure evolution of laser surface remelted Zn-2.7 wt.%Cu hyperperitectic alloy. *Journal of Materials Science*, **2007**, 42, 4763-4771	4.3	2
54	Numerical model for nucleation of peritectic alloy during unidirectional solidification. *Journal of Materials Science*, **2007**, 42, 5360-5368	4.3	3
53	Preparation of metal alloy powder by semi-solid processing. *Journal of Materials Science*, **2007**, 42, 2669-2674	4.3	2
52	Solidification Behavior and the Evolution of Phase in Laser Rapid Forming of Graded Ti6Al4V-Rene88DT Alloy. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2007**, 38, 127-137	2.3	59
51	Study on the penetrability of PEP-1-P27mt for cell membranes in vitro. *Journal of Huazhong University of Science and Technology [Medical Sciences]*, **2007**, 27, 225-9		
50	An overlapping crisscross micromixer. *Chemical Engineering Science*, **2007**, 62, 711-720	4.4	37
49	s-RT-MELT for rapid mutation scanning using enzymatic selection and real time DNA-melting: new potential for multiplex genetic analysis. *Nucleic Acids Research*, **2007**, 35, e84	20.1	20
48	A New Growth Kinetics in Simulation of Dendrite Growth by Cellular Automaton Method. *Advanced Materials Research*, **2007**, 26-28, 957-962	0.5	5
47	Laser Rapid Forming of Ti-Ni Functionally Graded Alloy. *Materials Science Forum*, **2007**, 561-565, 227-230	0.4	3
46	The Effect of Heat Treatment on the Microstructure and Mechanical Properties of Laser Rapid Forming Ni-Based Alloy Rene88DT. *Materials Science Forum*, **2007**, 561-565, 1051-1054	0.4	1
45	Temperature Measurement and Microstructure Control for Rene88DT Superalloy during Laser Rapid Forming. *Materials Science Forum*, **2007**, 546-549, 2301-2306	0.4	1
44	Absolute stability of the solidification interface in a laser resolidified Zn□wt.%Cu hypoperitectic alloy. *Chinese Physics B*, **2006**, 15, 1631-1637		3
43	In Situ Observation of SSM Microstructure Formation during Cooling Slope Casting of an NH4Cl-H2O Alloy with Vibrating the Slope. *Solid State Phenomena*, **2006**, 116-117, 193-196	0.4	6

42	Influence of Rapid Shear-Rate Changes on Microstructure Formation during Semi-Solid Processing. *Solid State Phenomena*, **2006**, 116-117, 155-158	0.4	1
41	Microstructure Evolution during Semi-Solid Processing of SCN-Water and Sn-Pb Alloys. *Solid State Phenomena*, **2006**, 116-117, 437-440	0.4	
40	An overlapping crisscross micromixer using chaotic mixing principles. *Journal of Micromechanics and Microengineering*, **2006**, 16, 2684-2691	2	31
39	Methylation of the ATM promoter in glioma cells alters ionizing radiation sensitivity. *Biochemical and Biophysical Research Communications*, **2006**, 344, 821-6	3.4	53
38	Wrinkled petals and stamens 1, is required for the morphogenesis of petals and stamens in Lotus japonicus. *Cell Research*, **2006**, 16, 499-506	24.7	5
37	Microstructure and phase evolution in laser rapid forming of a functionally graded TiRene88DT alloy. *Acta Materialia*, **2006**, 54, 1901-1915	8.4	95
36	Morphological evolution during solidification under stirring. *Acta Materialia*, **2006**, 54, 4815-4824	8.4	54
35	Synergistic promotion of gibberellin and cytokinin on direct regeneration of floral buds from in vitro cultures of sepal segments in sinningia speciosa hiern. *In Vitro Cellular and Developmental Biology - Plant*, **2006**, 42, 450-454	2.3	6
34	Laser rapid forming technology of high-performance dense metal components with complex structure **2005**,		2
33	Influences of powder specifications and powder delivery on laser and powder particle interaction during the LRF process **2005**, 5629, 103		1
32	Rapid Mixing in an Overlapping Crisscross Micromixer **2005**, 269		
31	Laser rapid forming of SS316L/Rene88DT graded material. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2005**, 391, 325-336	5.3	81
30	Phase formation and microstructure evolution in laser rapid forming of graded SS316L/Rene88DT alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2005**, 402, 294-306	5.3	60
29	Microstructure Evolution of a Zn-4wt.% Cu Hyperperitectic Alloy under Laser Surface Remelting. *Materials Science Forum*, **2005**, 475-479, 2611-2614	0.4	
28	Lamellar structures in laser surface remelted Zn□Cu peritectic alloy under ultra-high temperature gradient. *Scripta Materialia*, **2004**, 51, 397-403	5.6	13
27	A novel growth method for organic nonlinear optical crystals. *Optical Materials*, **2004**, 27, 609-612	3.3	9
26	Researches on lamellar structures in the unidirectional solidified Zn□ wt.% Cu peritectic alloy. *Materials Letters*, **2004**, 58, 2670-2674	3.3	11
25	Columnar to equiaxed transition during alloy solidification. *Science in China Series D: Earth Sciences*, **2003**, 46, 475		27

24	The influences of processing parameters on forming characterizations during laser rapid forming. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2003**, 360, 18-25	5.3	78
23	Laser Multi-layer Cladding Experiment on the DD3 Single Crystal Using FGH95 Powder: Investigation on the Microstructure of Single Crystal Cladding Layer. *Chinese Journal of Aeronautics*, **2002**, 15, 121-127	3.7	6
22	Citric acid complex method of preparing inverse spinel LiNiVO4 cathode material for lithium batteries. *Journal of Power Sources*, **2002**, 108, 113-116	8.9	21
21	Laser direct forming of metal components: technical characterizations **2002**,		6
20	Morphological evolution model for unidirectional solidification of multicomponent alloys. *Science in China Series D: Earth Sciences*, **2002**, 45, 146		6
19	Self-consistent modeling of morphology evolution during unidirectional solidification. *Science and Technology of Advanced Materials*, **2001**, 2, 293-296	7.1	7
18	Direct observation of phase transformation layers in the undercooled hypoperitectic Ti47Al53 alloy. *Journal of Crystal Growth*, **2000**, 217, 211-216	1.6	10
17	A new treatment of interface condition in temperature field calculation during high energy beam processing of materials. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2000**, 292, 216-218	5.3	
16	On cellular spacing selection of Cu-Mn alloy under ultra-high temperature gradient and rapid solidification condition. *Scripta Materialia*, **2000**, 42, 543-548	5.6	14
15	Single Crystal Solidification of Undercooled Single-phase Alloys. *Materials Transactions, JIM*, **2000**, 41, 1569-1574		4
14	History-dependent selection of primary cellular/dendritic spacing during unidirectional solidification in aluminum alloys. *Acta Materialia*, **1999**, 47, 3271-3280	8.4	47
13	Microstructure evolution and metastable phase formation in undercooled Fe30 at.% Co melt. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **1999**, 268, 90-96	5.3	29
12	Primary cellular/dendritic spacing selection of Al2n alloy during unidirectional solidification. *Journal of Crystal Growth*, **1999**, 197, 393-395	1.6	25
11	Cellular Spacing Selection of AL-0.53Zn Alloy Under Rapid Unidirectional Solidification. *Journal of Materials Science Letters*, **1999**, 18, 29-31		4
10	Cellular Spacing Selection of Al-Zn Alloy Under Rapid Unidirectional Solidification. *Journal of Materials Science Letters*, **1998**, 17, 1499-1502		2
9	Microstructure evolution of Cu2Mn alloy under laser rapid solidification conditions. *Materials Research Bulletin*, **1998**, 33, 1621-1633	5.1	14
8	Nonequilibrium analysis of high gradient absolute stability during unidirectional solidification. *Materials Research Bulletin*, **1997**, 32, 669-677	5.1	1
7	Prediction of average spacing for constrained cellular/dendritic growth. *Journal of Crystal Growth*, **1997**, 177, 281-288	1.6	35

6	Primary spacing selection of Cu?Mn alloy under laser rapid solidification condition. *Journal of Crystal Growth*, **1997**, 181, 109-116	1.6	30
5	On primary dendritic spacing during unidirectional solidification. *Acta Materialia*, **1996**, 44, 3705-3709	8.4	37
4	The solidification microstructures and microsegregation behaviour of a nickel-base superalloy under ultra-high temperature gradient conditions produced by a laser beam. *Journal of Materials Science Letters*, **1996**, 15, 2112		10
3	Mitigation of residual stresses and microstructure homogenization in directed energy deposition processes. *Engineering With Computers*,1	4.5	2
2	Recent progress on additive manufacturing of multi-material structures with laser powder bed fusion. *Virtual and Physical Prototyping*,1-37	10.1	15
1	Simulation-assisted investigation on the formation of layer bands and the microstructural evolution in directed energy deposition of Ti6Al4V blocks. *Virtual and Physical Prototyping*,1-17	10.1	8