Zhimin Yin

List of Publications by Year in Descending Order

47 papers	1,696 citations	21 h-index	41 g-index
47 ext. papers	1,936 ext. citations	4.3 avg, IF	4.79 L-index

#	Paper	IF	Citations
47	On the role of Sc or Er micro-alloying in the microstructure evolution of Al-Mg alloy sheets during annealing. *Materials Characterization*, **2019**, 157, 109918	3.9	16
46	Effect of ageing treatment on fatigue crack growth of die forged Al-5.87Zn-2.07Mg-2.42Cu alloy. *Engineering Fracture Mechanics*, **2019**, 215, 251-260	4.2	11
45	Influence of equal channel angular pressing on the evolution of microstructures, aging behavior and mechanical properties of as-quenched Al-6.6Zn-1.25Mg alloy. *Materials Characterization*, **2019**, 153, 1-13	3.9	14
44	Microstructure and Mechanical Behavior of Friction Stir-Welded Sc-Modified Al-Zn-Mg Alloys Made Using Different Base Metal Tempers. *Journal of Materials Engineering and Performance*, **2019**, 28, 916-925	1.6	13
43	Effects of Quench Rate on Mechanical Properties and Microstructures of High-Strength 7046A Aluminum Alloy. *Jom*, **2019**, 71, 1722-1730	2.1	7
42	Effect of Precipitate State on Mechanical Properties, Corrosion Behavior, and Microstructures of Al□Zn□Mg□Cu Alloy. *Metals and Materials International*, **2018**, 24, 1046-1057	2.4	15
41	Mechanical Properties and Microstructure of an Al-Zn-Mg-Sc-Zr Alloy Processed by Warm Equal Channel Angular Pressing and Subsequent Aging. *Jom*, **2018**, 70, 2684-2691	2.1	5
40	Precipitate behavior and mechanical properties of enhanced solution treated Al-Zn-Mg-Cu alloy during non-isothermal ageing. *Journal of Alloys and Compounds*, **2018**, 735, 964-974	5.7	38
39	Mechanical properties, corrosion behavior and microstructures of a non-isothermal ageing treated Al-Zn-Mg-Cu alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 688, 146-154	5.3	90
38	Research on constitutive models and hot workability of as-homogenized Al-Zn-Mg-Cu alloy during isothermal compression. *Metals and Materials International*, **2017**, 23, 591-602	2.4	9
37	Excellent high strain rate superplasticity of Al-Mg-Sc-Zr alloy sheet produced by an improved asymmetrical rolling process. *Journal of Alloys and Compounds*, **2017**, 715, 311-321	5.7	16
36	Nano-structure evolution of secondary Al3(Sc1□xZrx) particles during superplastic deformation and their effects on deformation mechanism in Al-Zn-Mg alloys. *Journal of Alloys and Compounds*, **2017**, 695, 142-153	5.7	21
35	Study on Hot Workability of Al-5.87Zn-2.07Mg-2.28Cu Alloy Using Processing Map. *Jom*, **2017**, 69, 725-733	2.1	4
34	Achieving high strain rate superplasticity of an Al-Mg-Sc-Zr alloy by a new asymmetrical rolling technology. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2016**, 672, 98-107	5.3	32
33	Mechanical Properties, Corrosion Behavior, and Microstructures of a MIG-Welded 7020 Al Alloy. *Journal of Materials Engineering and Performance*, **2016**, 25, 1028-1040	1.6	11
32	Effects of solution treatment on microstructural and mechanical properties of Al□Zn□Mg alloy by microalloying with Sc and Zr. *Journal of Alloys and Compounds*, **2016**, 664, 553-564	5.7	48
31	Microstructure and mechanical properties of 7005 aluminum alloy processed by room temperature ECAP and subsequent annealing. *Journal of Alloys and Compounds*, **2016**, 664, 518-529	5.7	53

30	Mechanical Properties and Microstructure of TIG and FSW Joints of a New Al-Mg-Mn-Sc-Zr Alloy. *Journal of Materials Engineering and Performance*, **2016**, 25, 1249-1256	1.6	9
29	Synergetic effects of Sc and Zr microalloying and heat treatment on mechanical properties and exfoliation corrosion behavior of Al-Mg-Mn alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2016**, 666, 61-71	5.3	33
28	Microstructure, mechanical properties and stress corrosion cracking of Al□Zn□Mg□Zr alloy sheet with trace amount of Sc. *Journal of Alloys and Compounds*, **2015**, 650, 805-820	5.7	34
27	Effects of Sc and Zr on mechanical property and microstructure of tungsten inert gas and friction stir welded aerospace high strength Al□Zn□Mg alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2015**, 639, 500-513	5.3	45
26	Achieving high superplasticity of a traditional thermal□mechanical processed non-superplastic Al□Zn□Mg alloy sheet by low Sc additions. *Journal of Alloys and Compounds*, **2015**, 638, 364-373	5.7	18
25	Stress corrosion cracking of a high-strength friction-stir-welded joint of an Al□Zn□Mg□Zr alloy containing 0.25 wt.% Sc. *Corrosion Science*, **2015**, 100, 57-72	6.8	38
24	Achieving high superplasticity of a new Al□Mg□Sc□Zr alloy sheet prepared by a simple thermal□mechanical process. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2015**, 647, 333-343	5.3	21
23	Corrosion behaviour and mechanism of new aerospace Al□Zn□Mg alloy friction stir welded joints and the effects of secondary Al 3 Sc x Zr 1□x nanoparticles. *Corrosion Science*, **2015**, 90, 359-374	6.8	49
22	Microstructures and mechanical properties of Gas Tungsten Arc Welded joints of new Al□Mg□Sc and Al□Mg□Er alloy plates. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2015**, 620, 149-154	5.3	11
21	Effect of minor Sc on microstructure and mechanical properties of Al□Zn□Mg□Zr alloy metal□inert gas welds. *Journal of Alloys and Compounds*, **2015**, 629, 197-207	5.7	27
20	Tungsten Inert Gas and Friction Stir Welding Characteristics of 4-mm-Thick 2219-T87 Plates at Room Temperature and □196 °C. *Journal of Materials Engineering and Performance*, **2014**, 23, 2149-2158	1.6	16
19	Microstructural evolution and constitutive relationship of Al□Zn□Mg alloy containing small amount of Sc and Zr during hot deformation based on Arrhenius-type and artificial neural network models. *Journal of Alloys and Compounds*, **2014**, 584, 406-416	5.7	62
18	Microstructures and properties of Al□Zn□Mg□Mn alloy with trace amounts of Sc and Zr. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2014**, 616, 219-228	5.3	55
17	Characterization of hot deformation behavior of as-homogenized Al□Cu□Li□Sc□Zr alloy using processing maps. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2014**, 614, 199-206	5.3	80
16	Microstructure and Properties of TIG/FSW Welded Joints of a New Al-Zn-Mg-Sc-Zr Alloy. *Journal of Materials Engineering and Performance*, **2013**, 22, 2723-2729	1.6	15
15	Effects of Sc and Zr microalloying additions on the recrystallization texture and mechanism of Al□Zn□Mg alloys. *Journal of Alloys and Compounds*, **2013**, 580, 412-426	5.7	53
14	Intermetallic phase evolution of 7050 aluminum alloy during homogenization. *Intermetallics*, **2012**, 26, 114-121	3.5	97
13	Evolution of microstructure and properties in a new type 2mm Al□Zn□Mg□Sc□Zr alloy sheet. *Journal of Alloys and Compounds*, **2012**, 517, 118-126	5.7	37

12	Effects of Sc and Zr microalloying additions on the microstructure and mechanical properties of new Al□Zn□Mg alloys. *Journal of Alloys and Compounds*, **2012**, 530, 71-80	5.7	113
11	Effects of Sc and Zr microalloying additions and aging time at 120□C on the corrosion behaviour of an Al□Zn□Mg alloy. *Corrosion Science*, **2012**, 65, 288-298	6.8	133
10	Comparison study of single direction and friction assisted compaction of multiple alloy powders by finite element simulation. *Powder Metallurgy and Metal Ceramics*, **2012**, 50, 586-595	0.8	
9	Hot deformation behavior and microstructural evolution of homogenized 7050 aluminum alloy during compression at elevated temperature. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2011**, 528, 1780-1786	5.3	115
8	Microstructure and Property of Ni76Cr19AlTi Side in Inertia Friction Weld Joint of the Superalloy Ni76Cr19AlTi and the Martensite Stainless Steel 4Cr10Si2Mo. *ISIJ International*, **2010**, 50, 1666-1670	1.7	4
7	Preparation, microstructure and properties of Al-Zn-Mg-Sc alloy tubes. *Journal of Rare Earths*, **2010**, 28, 641-646	3.7	20
6	Structure and performance of TiC-containing diamond-like carbon nanocomposite coatings deposited by rectangular cathodic arc ion-plating. *Journal Wuhan University of Technology, Materials Science Edition*, **2009**, 24, 383-386	1	
5	First-principles study on the lattice stability of elemental Co, Rh, and Ir in the VIIIB group. *Rare Metals*, **2009**, 28, 212-220	5.5	3
4	Microstructural evolution in 4Cr10Si2Mo at the 4Cr10Si2Mo/Nimonic 80A weld joint by inertia friction welding. *Journal of Alloys and Compounds*, **2009**, 476, 341-347	5.7	16
3	High cycle fatigue characteristics of 2124-T851 aluminum alloy. *Frontiers of Materials Science in China*, **2007**, 1, 168-172		4
2	Biomimetic strengthening polylactide scaffold materials for bone tissue engineering. *Frontiers of Chemistry in China: Selected Publications From Chinese Universities*, **2007**, 2, 27-30		3
1	Effect of minor Sc and Zr on the microstructure and mechanical properties of Al□Mg based alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2000**, 280, 151-155	5.3	182