

# Qiang Yang

## List of Publications by Year in descending order

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63  
papers

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citations

236925

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315739

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docs citations

64  
times ranked

644  
citing authors

#	ARTICLE	IF	CITATIONS
1	New insights on the different corrosion mechanisms of Mg alloys with solute-enriched stacking faults or long period stacking ordered phase. <i>Corrosion Science</i> , 2022, 198, 110163.	6.6	91
2	Development of high mechanical properties and moderate thermal conductivity cast Mg alloy with multiple RE via heat treatment. <i>Journal of Materials Science and Technology</i> , 2018, 34, 1076-1084.	10.7	89
3	Study on the mutual effect of La and Gd on microstructure and mechanical properties of Mg-Al-Zn extruded alloy. <i>Journal of Alloys and Compounds</i> , 2016, 688, 1241-1250.	5.5	66
4	Effects of samarium content on microstructure and mechanical properties of Mg-0.5Zn-0.5Zr alloy. <i>Journal of Materials Science and Technology</i> , 2019, 35, 1368-1377.	10.7	66
5	Microstructures and mechanical properties of a high-strength Mg-3.5Sm-0.6Zn-0.5Zr alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 703, 97-107.	5.6	60
6	Excellent ductility and strong work hardening effect of as-cast Mg-Zn-Zr-Yb alloy at room temperature. <i>Journal of Alloys and Compounds</i> , 2017, 728, 404-412.	5.5	53
7	Effects of 1.5 wt% samarium (Sm) addition on microstructures and tensile properties of a Mg-6.0Zn-0.5Zr alloy. <i>Journal of Alloys and Compounds</i> , 2018, 735, 1737-1749.	5.5	53
8	Microstructure and mechanical properties of high-performance Mg-Y-Er-Zn extruded alloy. <i>Materials &amp; Design</i> , 2014, 54, 256-263.	5.1	52
9	Strengthening effect of nano-scale precipitates in a die-cast Mg-4Al-5.6Sm-0.3Mn alloy. <i>Journal of Alloys and Compounds</i> , 2016, 665, 240-250.	5.5	52
10	A high-strength low-rare-earth-alloyed magnesium alloy via traditional hot-extrusion. <i>Journal of Alloys and Compounds</i> , 2019, 810, 151967.	5.5	49
11	Microstructures and tensile properties of a high-strength die-cast Mg-4Al-2RE-2Ca-0.3Mn alloy. <i>Materials Characterization</i> , 2016, 113, 180-188.	4.4	48
12	Influence of Nd addition on microstructures and mechanical properties of a hot-extruded Mg-6.0Zn-0.5Zr (wt.%) alloy. <i>Journal of Alloys and Compounds</i> , 2019, 806, 1166-1179.	5.5	48
13	Microstructures and mechanical properties of a hot-extruded Mg-8Gd-3Yb-1.2Zn-0.5Zr (wt%) alloy. <i>Journal of Alloys and Compounds</i> , 2019, 776, 666-678.	5.5	48
14	Effects of minor Sr addition on the microstructure, mechanical properties and creep behavior of high pressure die casting AZ91-0.5RE based alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 693, 51-59.	5.6	43
15	Developing a die casting magnesium alloy with excellent mechanical performance by controlling intermetallic phase. <i>Journal of Alloys and Compounds</i> , 2019, 795, 436-445.	5.5	43
16	Development of extruded Mg-6Er-3Y-1.5Zn-0.4Mn (wt.%) alloy with high strength at elevated temperature. <i>Journal of Materials Science and Technology</i> , 2019, 35, 2365-2374.	10.7	39
17	Effects of 0.5 wt% Ce addition on microstructures and mechanical properties of a wrought Mg-8Gd-1.2Zn-0.5Zr alloy. <i>Journal of Alloys and Compounds</i> , 2018, 763, 120-133.	5.5	36
18	Microstructures and mechanical properties in a Gd-modified high-pressure die casting Mg-4Al-3La-0.3Mn alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 773, 138725.	5.6	35

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19	The improved effects by the combinative addition of lanthanum and samarium on the microstructures and the tensile properties of high-pressure die-cast Mg-4Al-based alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 628, 319-326.	5.6	34
20	Modifying microstructures and tensile properties of Mg-Sm based alloy via extrusion ratio. <i>Journal of Magnesium and Alloys</i> , 2021, 9, 1098-1098.	11.9	34
21	Deteriorated tensile creep resistance of a high-pressure die-cast Mg-4Al-4RE-0.3Mn alloy induced by substituting part RE with Ca. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 716, 120-128.	5.6	32
22	Improvement on both strength and ductility of Mg-Sm-Zn-Zr casting alloy via Yb addition. <i>Journal of Alloys and Compounds</i> , 2019, 805, 811-821.	5.5	32
23	Microstructure and mechanical properties of high-strength high-pressure die-cast Mg-4Al-3La-1Ca-0.3Mn alloy. <i>Rare Metals</i> , 2021, 40, 2956-2963.	7.1	31
24	Characterization of elevated-temperature high strength and decent thermal conductivity extruded Mg-Er-Y-Zn alloy containing nano-spaced stacking faults. <i>Materials Characterization</i> , 2019, 155, 109823.	4.4	29
25	Microstructural characterization of intermetallic phases in a solution-treated Mg-5.0Sm-0.6Zn-0.5Zr (wt%) alloy. <i>Materials Characterization</i> , 2018, 145, 329-336.	4.4	27
26	Microstructure and mechanical properties of a peak-aged Mg-5Y-2.5Nd-1.5Gd-0.5Zr casting alloy. <i>Journal of Alloys and Compounds</i> , 2018, 731, 704-713.	5.5	26
27	Coexistence of 14H and 18R-type long-period stacking ordered (LPSO) phases following a novel orientation relationship in a cast Mg-Al-RE-Zn alloy. <i>Journal of Alloys and Compounds</i> , 2018, 766, 902-907.	5.5	26
28	Multiplex intermetallic phases in a gravity die-cast Mg-6.0Zn-1.5Nd-0.5Zr (wt%) alloy. <i>Journal of Magnesium and Alloys</i> , 2022, 10, 209-223.	11.9	25
29	Microstructures and mechanical properties of as-cast Mg-Sm-Zn-Zr alloys with varying Gd contents. <i>Journal of Magnesium and Alloys</i> , 2022, 10, 1220-1234.	11.9	25
30	Microstructures and mechanical properties of a newly developed high-pressure die casting Mg-Zn-RE alloy. <i>Journal of Materials Science and Technology</i> , 2020, 53, 174-184.	10.7	24
31	Structures of Al <sub>2</sub> Sm phase in a high-pressure die-cast Mg-4Al-4Sm-0.3Mn alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 675, 396-402.	5.6	23
32	Influence of trace Sr additions on the microstructures and the mechanical properties of Mg-Al-La-based alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 619, 256-264.	5.6	22
33	Creep behavior of high-pressure die-cast Mg-4Al-4La-0.4Mn alloy under medium stresses and at intermediate temperatures. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 650, 190-196.	5.6	22
34	Achieving high strength-ductility in a wrought Mg-9Gd-3Y-0.5Zr alloy by modifying with minor La addition. <i>Journal of Alloys and Compounds</i> , 2021, 884, 161062.	5.5	22
35	Microstructural evolution and aging behavior of Mg-4.5Y-2.5Nd-1.0Gd-0.5Zr alloys with different Zn additions. <i>Rare Metals</i> , 2021, 40, 2188-2196.	7.1	21
36	Nano-steps in long-period stacking ordered structures for ductility asymmetry of a strong-textured Mg-Gd-Zn alloy. <i>Materials and Design</i> , 2021, 201, 109482.	7.0	21

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37	Microstructures and tensile properties of Mg <sup>90</sup> Zn <sup>10</sup> (Gd) <sup>1</sup> Zr alloys extruded at various temperatures. Rare Metals, 2017, 36, 962-970.	7.1	20
38	Interphase boundary segregation induced phase transformation in a high-pressure die casting Mg-Al-La-Ca-Mn alloy. Materials and Design, 2020, 190, 108566.	7.0	20
39	Microstructure and mechanical properties of Mg <sup>90</sup> Zn <sup>10</sup> (Nd) <sup>1</sup> Zr alloys with different extrusion processes. Rare Metals, 2016, 35, 841-849.	7.1	19
40	Thermodynamic stability of Al 11 RE 3 intermetallic compounds from first-principles calculations. Computational Materials Science, 2017, 131, 28-34.	3.0	19
41	Microstructures and mechanical properties of a high pressure die-cast Mg <sup>90</sup> Al <sup>4</sup> Gd <sup>3</sup> 0.3Mn alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 764, 138254.	5.6	19
42	Interfacial precipitation in {100} twin boundaries of a Mg-Gd-Zn-Zr alloy. Journal of Materials Science and Technology, 2021, 93, 103-109.	10.7	19
43	Microstructures, mechanical properties and creep behavior of a Mg <sup>90</sup> Yb <sup>5</sup> 0.6Zn <sup>1</sup> 0.4Zr casting alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 745, 360-368.	5.6	18
44	Microstructures and mechanical properties of a Mg <sup>90</sup> Gd <sup>3</sup> Y <sup>3</sup> 0.6Zn <sup>1</sup> 0.4Zr (wt.%) alloy modified by Y-rich misch metal. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 806, 140609.	5.6	18
45	Atomic study on phase transformation of the strengthening phase in a die-casting Mg <sup>90</sup> Al <sup>4</sup> La alloy via an intermediate phase. Materials and Design, 2021, 208, 109904.	7.0	18
46	Microstructures and tensile properties of Mg <sup>90</sup> Al <sup>4</sup> La <sup>4</sup> 0.4Mn <sup>x</sup> (x=0, 0.01, 0.02, 0.03) alloy. Journal of Alloys and Compounds, 2013, 572, 129-136.	5.5	17
47	Effects of Sm addition on microstructure evolutions and mechanical properties of high-strength Mg <sup>90</sup> Gd <sup>3</sup> Sm <sup>1</sup> Zr extruded alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 831, 142264.	5.6	16
48	Effects of substitution of Nd in a sand-cast Mg-2.5Nd-0.6Zn-0.5Zr alloy with x wt.% Sm (x = 2.5, 4, and) Tj ETQq0.0.0 rgBT /Overlock 15	4.8	15
49	Microstructures and mechanical properties of a hot-extruded Mg <sup>90</sup> Zn <sup>8</sup> Al <sup>6</sup> 1Gd (wt%) alloy. Journal of Alloys and Compounds, 2022, 904, 164040.	5.5	15
50	Microstructural characterizations on Mn-containing intermetallic phases in a high-pressure die-casting Mg <sup>90</sup> Al <sup>4</sup> RE <sup>1</sup> 0.3Mn alloy. Materials Characterization, 2017, 132, 381-387.	4.4	14
51	Influence of various Yb additions on microstructures of a casting Mg <sup>90</sup> Gd <sup>3</sup> 1.2Zn <sup>1</sup> 0.5Zr alloy. Journal of Alloys and Compounds, 2019, 789, 720-729.	5.5	14
52	Microstructures and mechanical properties of a hot-extruded Mg <sup>90</sup> Ho <sup>5</sup> 0.6Zn <sup>1</sup> 0.5Zr alloy. Journal of Alloys and Compounds, 2019, 774, 926-938.	5.5	14
53	Microstructural evolution of the as-cast and the peak-aged Mg <sup>90</sup> Yb <sup>x</sup> 0.5Zn <sup>1</sup> 0.4Zr (x = 0.5, 1, 2, and) Tj ETQq1.1 0.784314 rgBT 13	5.5	13
54	Abnormal creep stress exponents in a high-pressure die casting Mg <sup>90</sup> Al <sup>4</sup> RE alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 831, 142203.	5.6	13

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55	The types and structures of the intermetallic phases in a cast Mg <sup>4</sup> Al <sup>15</sup> Gd <sup>4</sup> Y <sup>1</sup> Zn alloy. <i>Journal of Alloys and Compounds</i> , 2018, 731, 612-619.	5.5	11
56	Detailed Structures and Formation Mechanisms of Well-Known Al <sub>10</sub> RE <sub>2</sub> Mn <sub>7</sub> Phase in Die-Cast Mg <sup>4</sup> Al <sup>4</sup> RE <sup>0.3</sup> Mn Alloy. <i>Acta Metallurgica Sinica (English Letters)</i> , 2019, 32, 178-186.	2.9	11
57	Development of Hot-Extruded Mg <sup>4</sup> RE <sup>4</sup> Zn Alloy Bar with High Mechanical Properties. <i>Materials</i> , 2019, 12, 1722.	2.9	10
58	Complex internal faults of MgZn <sub>2</sub> in Mg-Zn binary alloy. <i>Materials Characterization</i> , 2020, 169, 110659.	4.4	9
59	Bi <sub>2</sub> -CuGaO <sub>2</sub> : a ferroelectric semiconductor with narrow band gap as degradation catalyst for wastewater environmental remediation. <i>Rare Metals</i> , 2022, 41, 972-981.	7.1	7
60	Crystallographic orientation relationships between the aggregated intermetallic phases in a casting Mg-Ag-Al alloy. <i>Materials and Design</i> , 2020, 190, 108561.	7.0	6
61	Characterizations on the instantaneously formed Ni-containing intermetallics in magnesium alloys. <i>Journal of Magnesium and Alloys</i> , 2023, 11, 2991-2998.	11.9	5
62	Effect of electron doping on the magnetic properties and electronic structures of Ba <sub>2</sub> MnMoO <sub>6</sub> . <i>Journal of Alloys and Compounds</i> , 2019, 774, 618-624.	5.5	4
63	Interphase precipitation in an Ag-modified Mg-Al-La casting alloy. <i>Materials Characterization</i> , 2020, 161, 110144.	4.4	2