Motohiro Yuasa

List of Publications by Citations

62 papers	797 citations	13 h-index	25 g-index
62 ext. papers	930 ext. citations	3.1 avg, IF	4.34 L-index

#	Paper	IF	Citations
62	Discharge properties of Mg–Al–Mn–Ca and Mg–Al–Mn alloys as anode materials for primary magnesium–air batteries. *Journal of Power Sources*, **2015**, 297, 449-456	8.9	96
61	Effects of group II elements on the cold stretch formability of Mg–Zn alloys. *Acta Materialia*, **2015**, 83, 294-303	8.4	92
60	Improved plastic anisotropy of Mg–Zn–Ca alloys exhibiting high-stretch formability: A first-principles study. *Acta Materialia*, **2014**, 65, 207-214	8.4	68
59	Microstructure and mechanical properties of AZX912 magnesium alloy extruded at different temperatures. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 679, 162-171	5.3	41
58	Bond mobility mechanism in grain boundary embrittlement: First-principles tensile tests of Fe with a P-segregated Σ3 grain boundary. *Physical Review B*, **2010**, 82,	3.3	39
57	Effects of Microstructure on Discharge Behavior of AZ91 Alloy as Anode for Mg–Air Battery. *Materials Transactions*, **2014**, 55, 1202-1207	1.3	31
56	Mechanical properties of a nanocrystalline Co–Cu alloy with a high-density fine nanoscale lamellar structure. *Scripta Materialia*, **2008**, 58, 731-734	5.6	28
55	Effects of segregated Cu on an Fe grain boundary by first-principles tensile tests. *Journal of Physics Condensed Matter*, **2010**, 22, 505705	1.8	27
54	Effects of initial microstructure on the microstructural evolution and stretch formability of warm rolled Mg–3Al–1Zn alloy sheets. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2013**, 587, 150-160	5.3	23
53	Interaction mechanisms of screw dislocations with and twin boundaries in Mg. *Philosophical Magazine*, **2014**, 94, 285-305	1.6	22
52	Corrosion Behavior of Severely Deformed Pure and Single-Phase Materials. *Materials Transactions*, **2019**, 60, 1243-1255	1.3	20
51	Interactions of a screw dislocation with a {101}⟨10$\bar{2}$⟩ double twin in Mg. *Acta Materialia*, **2013**, 61, 4714-4725	8.4	18
50	Effect of segregated elements on the interactions between twin boundaries and screw dislocations in Mg. *Journal of Applied Physics*, **2015**, 118, 034304	2.5	13
49	First-principles study in Fe grain boundary with Al segregation: variation in electronic structures with straining. *Philosophical Magazine*, **2013**, 93, 635-647	1.6	13
48	Texture Formation and Room-Temperature Formability of Rolled Mg–Zn–Ce Alloys. *Materials Transactions*, **2014**, 55, 1190-1195	1.3	12
47	Mechanical and chemical effects of solute elements on generalized stacking fault energy of Mg. *Journal of Materials Research*, **2014**, 29, 2576-2586	2.5	12
46	({rm{}}10$\bar{1}$2{rm{}}) twins in the rolled Mg–Zn–Ca alloy with high formability. *Journal of Materials Research*, **2014**, 29, 3024-3031	2.5	12

45	Age-hardening mechanism for nanocrystalline NiP alloys synthesized by electrodeposition. *Surface and Coatings Technology*, **2014**, 253, 154-160	4.4	11
44	First-Principles Study on Enhanced Grain Boundary Embrittlement of Iron by Phosphorus Segregation. *Materials Transactions*, **2011**, 52, 1369-1373	1.3	11
43	Deformation behavior of an ultrafine grained two phase CoCu alloy processed by electrodeposition. *Scripta Materialia*, **2010**, 63, 132-135	5.6	11
42	Atomic simulation of grain boundary sliding in Co/Cu two-phase bicrystals. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2010**, 527, 2629-2636	5.3	11
41	Atomic simulations of dislocation emission from Cu/Cu and Co/Cu grain boundaries. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2010**, 528, 260-267	5.3	11
40	Microstructural and textural evolution of pure titanium during differential speed rolling and subsequent annealing. *Journal of Materials Science*, **2014**, 49, 3166-3176	4.3	10
39	Effect of segregated Al on (left{{10bar 12} right}) and (left{{10bar 11} right}) twinning in Mg. *Journal of Materials Research*, **2015**, 30, 3629-3641	2.5	10
38	Hot compression deformation behavior of MgZn alloys containing LPSO phase. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2020**, 792, 139777	5.3	10
37	Ferromagnetic Properties of Co-Cu Alloy with Nanoscale Lamellar Structure. *Materials Transactions*, **2009**, 50, 419-422	1.3	9
36	Effects of Vacancies on Deformation Behavior in Nanocrystalline Nickel. *Materials Transactions*, **2008**, 49, 2315-2321	1.3	9
35	Enhanced Corrosion Resistance of Ultrafine-Grained Fe-Cr Alloys with Subcritical Cr Contents for Passivity. *Metals*, **2018**, 8, 149	2.3	8
34	First-principles Study of Hydrogen-induced Embrittlement in Fe Grain Boundary with Cr Segregation. *ISIJ International*, **2015**, 55, 1131-1134	1.7	8
33	Hydrogen embrittlement in a magnesium grain boundary: a first-principles study. *Journal of Physics Condensed Matter*, **2012**, 24, 085701	1.8	8
32	Saturation magnetization in supersaturated solid solution of CoCu alloy. *Applied Physics Letters*, **2009**, 95, 162502	3.4	8
31	Enhanced Room-Temperature Stretch Formability of Mg–0.2 mass%Ce Alloy Sheets Processed by Combination of High-Temperature Pre-Annealing and Warm Rolling. *Materials Transactions*, **2015**, 56, 1096-1101	1.3	7
30	Enhanced grain boundary embrittlement of an Fe grain boundary segregated by hydrogen (H). *Journal of Materials Research*, **2012**, 27, 1589-1597	2.5	7
29	Numerical Analysis of a New Nonlinear Twist Extrusion Process. *Metals*, **2019**, 9, 513	2.3	6
28	Fabrication of dense ZrB2/B4C composites using pulsed electric current pressure sintering and evaluation of their high-temperature bending strength. *Ceramics International*, **2020**, 46, 18478-18486	5.1	6

27	Electrodeposition of nanocrystalline nickel embedded with inert nanoparticles formed via inverse hydrolysis. *Applied Surface Science*, **2018**, 458, 612-618	6.7	6
26	Quantitative kink boundaries strengthening effect of Mg-Y-Zn alloy containing LPSO phase. *Materials Letters*, **2021**, 292, 129625	3.3	6
25	Fabrication and anisotropic electronic property for oriented Li1+Nb1Ti+4O3 solid solution by slip casting in a high magnetic field. *Advanced Powder Technology*, **2017**, 28, 2373-2379	4.6	5
24	Atomic simulations of (101 2), (101 1) twinning and (101 2) detwinning in magnesium. *Journal of Physics Condensed Matter*, **2014**, 26, 015003	1.8	5
23	Changes in the grain boundaries of a nanolamellar structured CoCu alloy by annealing. *Scripta Materialia*, **2009**, 61, 371-374	5.6	5
22	Anomalous mechanical characteristics of Au/Cu nanocomposite processed by Cu electroplating. *Philosophical Magazine*, **2015**, 95, 1499-1510	1.6	4
21	Visible-light photocatalysis of ZnO deposited on nanoporous Au. *Applied Physics A: Materials Science and Processing*, **2014**, 114, 1061-1066	2.6	4
20	Grain Boundary Embrittlement of Fe Induced by P Segregation: First-Principles Tensile Tests. *Advanced Materials Research*, **2011**, 409, 455-460	0.5	4
19	A superelastic nanocrystalline CuSn alloy thin film processed by electroplating. *Materials Letters*, **2008**, 62, 4473-4475	3.3	4
18	Corrosion Behavior of Ultrafine-Grained CoCrFeMnNi High-Entropy Alloys Fabricated by High-Pressure Torsion.. *Materials*, **2022**, 15,	3.5	4
17	Effects of stacking fault energy and solute atoms on microstructural evolution of Cu, Ag and CuAl alloys processed by equal channel angular pressing. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 803, 140716	5.3	4
16	Effect of Annealing on Mechanical Properties and Nanoscale Lamellar Structure in Co-Cu Alloy. *Materials Transactions*, **2009**, 50, 570-578	1.3	3
15	Potential of High Compressive Ductility of Ultrafine Grained Copper Fabricated by Severe Plastic Deformation. *Metals*, **2020**, 10, 1503	2.3	3
14	Softening due to disordered grain boundaries in nanocrystalline Co. *Journal of Physics Condensed Matter*, **2013**, 25, 345702	1.8	2
13	Microstructural Characterization of Mechanically Alloyed FeCoNiMnV High Entropy Alloy Consolidated by Spark Plasma Sintering. *Advanced Engineering Materials*, **2020**, 22, 1901311	3.5	2
12	Grain Refinement of Pure Magnesium Using Nonlinear Twist Extrusion. *Materials Science Forum*, **2018**, 939, 54-62	0.4	2
11	Nanocrystalline Nickel Dispersed with Hydrolyzed Nano-Size Tungsten Oxide Particles by Electrodeposition. *Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals*, **2015**, 80, 109-113	0.4	1
10	Atomic simulations of GB sliding in pure and segregated bicrystals. *Materials Research Society Symposia Proceedings*, **2013**, 1515, 1		1

9	Grain boundary sliding in pure and segregated bicrystals: a molecular dynamics and first principles study. *Journal of Physics Condensed Matter*, **2012**, 24, 265703	1.8	1
8	Effect of solute Mn on microstructural evolution of Cu–Mn alloys processed by equal channel angular pressing. *Journal of Materials Research*, **2021**, 36, 2890-2902	2.5	1
7	Improvement of the Mechanical Properties of Magnesium Alloy AZ31 Using Non-linear Twist Extrusion (NTE). *Procedia Structural Integrity*, **2019**, 21, 73-82	1	1
6	Kink bands strengthening of Mg-Y-Zn alloy via various wrought-processing. *Materials Letters*, **2021**, 304, 130653	3.3	1
5	Molecular dynamics and first-principles study of grain boundary sliding in metals. *Transactions of the Materials Research Society of Japan*, **2014**, 39, 31-34	0.2	0
4	Extraordinary diffusion in Co/Cu grain boundaries. *Scripta Materialia*, **2015**, 101, 52-55	5.6	
3	Effect of Thermomechanical Processing on Grain Size, Texture and Mechanical Properties of Pure Magnesium. *Materials Science Forum*, **2020**, 985, 97-108	0.4	
2	Deformation behavior of nanocrystalline Co-Cu alloys. *Materials Research Society Symposia Proceedings*, **2009**, 1224, 1		
1	Development of Nanocrystalline Co–Cu Alloys for Energy Applications. *Green Energy and Technology*, **2010**, 191-194	0.6	