John E Allison

List of Publications by Year
in descending order

28	924	471509 17	552781 26
papers	citations	h-index	g-index

32	32	32	654
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Simulated effects of sample size and grain neighborhood on the modeling of extreme value fatigue response. Acta Materialia, 2022, 224, 117524.	7.9	24
2	Measuring and Modeling Microsegregation in High-Pressure Die Cast Mgâ€“Al Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2022, 53, 2730-2742.	2.2	2
3	The dynamics of recrystallized grains during static recrystallization in a hot-compressed Mg-3.2Zn-0.1Ca wt.% alloy using in-situ far field high-energy diffraction microscopy. Acta Materialia, 2022, 234, 118039.	7.9	9
4	Deformation twinning and detwinning in extruded Mg-4Al: In-situ experiment and crystal plasticity simulation. International Journal of Plasticity, 2022, 155, 103345.	8.8	26
5	Dislocation cross-slip in precipitation hardened Mgâ€“Nd alloys. Journal of Alloys and Compounds, 2021, 859, 157858.	5.5	11
6	The effects of heat treatment on the response of WE43 Mg alloy: crystal plasticity finite element simulation and SEM-DIC experiment. International Journal of Plasticity, 2021, 137, 102917.	8.8	56
7	Understanding Twinning-Detwinning Behavior of Unalloyed Mg During Low-Cycle Fatigue Using High Energy X-ray Diffraction. Minerals, Metals and Materials Series, 2021, , 71-72.	0.4	0
8	PRISMS-Fatigue computational framework for fatigue analysis in polycrystalline metals and alloys. Npj Computational Materials, 2021, 7, .	8.7	34
9	Effects of Boundary Conditions on Microstructure-Sensitive Fatigue Crystal Plasticity Analysis. Integrating Materials and Manufacturing Innovation, 2021, 10, 393-412.	2.6	24
10	Crystal Plasticity Finite Element Modeling of Extension Twinning in WE43 Mg Alloys: Calibration and Validation. Integrating Materials and Manufacturing Innovation, 2021, 10, 488-507.	2.6	16
11	Multiscale modeling of twinning and detwinning behavior of HCP polycrystals. International Journal of Plasticity, 2020, 127, 102653.	8.8	44
12	PRISMS-Plasticity: An open-source crystal plasticity finite element software. Computational Materials Science, 2019, 169, 109078.	3.0	86
13	Effects of alloying and processing on ultrasonic fatigue behavior in binary Ti-Al alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 756, 564-577.	5.6	13
14	Quantification of cyclic twinning-detwinning behavior during low-cycle fatigue of pure magnesium using high energy X-ray diffraction. International Journal of Fatigue, 2019, 125, 314-323.	5.7	39
15	Dislocation pile-ups at Î²1 precipitate interfaces in Mg-rare earth (RE) alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 742, 278-286.	5.6	32
16	The Recrystallization Behavior of Unalloyed Mg and a Mg-Al Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 1492-1508.	2.2	16
17	Interaction of Glide Dislocations with Extended Precipitates in Mg-Nd alloys. Scientific Reports, 2018, 8, 3570.	3.3	11
18	The Influence of Al Content and Thickness on the Microstructure and Tensile Properties in High-Pressure Die Cast Magnesium Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 1999-2014.	2.2	17

#	Article	IF	Citations
19	Misfit-driven Î²â€²â€² precipitate composition and morphology in Mg-Nd alloys. Acta Materialia, 2017, 136, 378-389.	7.9	36
20	Early precipitate morphologies in Mg-Nd-(Zr) alloys. Scripta Materialia, 2017, 128, 14-17.	5.2	34
21	The Materials Commons: A Collaboration Platform and Information Repository for the Global Materials Community. Jom, 2016, 68, 2035-2044.	1.9	57
22	The effects of heat treatment on very high cycle fatigue behavior in hot-rolled WE43 magnesium. International Journal of Fatigue, 2016, 93, 372-386.	5.7	52
23	Using quality mapping to predict spatial variation in local properties and component performance in Mg alloy thin-walled high-pressure die castings: an ICME approach and case study. Integrating Materials and Manufacturing Innovation, 2015, 4, 81-118.	2.6	10
24	Small fatigue crack growth in metallic materials: A model and its application to engineering alloys. Acta Materialia, 2007, 55, 6606-6616.	7.9	67
25	The Role of Microstructure on Ductility of Die-Cast AM50 and AM60 Magnesium Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2007, 38, 286-297.	2.2	41
26	Potential Magnesium Alloys for High Temperature Die Cast Automotive Applications: A Review. Materials and Manufacturing Processes, 2003, 18, 687-717.	4.7	125
27	Die Castability Assessment of Magnesium Alloys for High Temperature Applications: Part 1 of 2. , 2000, , .		19
28	Creep and Bolt Load Retention Behavior of Die Cast Magnesium Alloys for High Temperature Applications: Part 2 of 2. , 0, , .		7