Ryan T Ott

List of Publications by Year
in descending order

47 papers	3,766 citations	257450 24 h-index	243625 44 g-index
49 all docs	49 docs citations	49 times ranked	3474 citing authors

#	Article	IF	Citations
1	Design of an additively manufactured functionally graded material of 316 stainless steel and Ti-6Al-4V with Ni-20Cr, Cr, and V intermediate compositions. Additive Manufacturing, 2022, 51, 102649.	3.0	7
2	Manufacturing Processes for Permanent Magnets: Part Iâ€"Sintering and Casting. Jom, 2022, 74, 1279-1295.	1.9	40
3	Manufacturing Processes for Permanent Magnets: Part IIâ€"Bonding and Emerging Methods. Jom, 2022, 74, 2492-2506.	1.9	12
4	Microstructural evolutions, phase transformations and hard magnetic properties in polycrystalline Ceâ€"Coâ€"Feâ€"Cu alloys. Materials Chemistry and Physics, 2022, 286, 126179.	4.0	0
5	Additively Manufactured High-Performance Elastocaloric Materials with Long Fatigue Life. , 2022, , .		0
6	Enhanced mechanical performance via laser induced nanostructure formation in an additively manufactured lightweight aluminum alloy. Applied Materials Today, 2021, 22, 100972.	4.3	10
7	Enhanced thermal coarsening resistance in a nanostructured aluminum-cerium alloy produced by additive manufacturing. Materials and Design, 2021, 209, 109988.	7.0	31
8	Anodization Compatibility of Eutectic Aluminumâ€"Cerium Alloys. Minerals, Metals and Materials Series, 2021, , 79-84.	0.4	2
9	Atomic cooperation in enhancing magnetism: (Fe, Cu)-doped CeCo5. Journal of Alloys and Compounds, 2020, 839, 155549.	5.5	6
10	Subsurface Cooling Rates and Microstructural Response during Laser Based Metal Additive Manufacturing. Scientific Reports, 2020, 10, 1981.	3.3	64
11	Laserâ€Induced Keyhole Defect Dynamics during Metal Additive Manufacturing. Advanced Engineering Materials, 2019, 21, 1900455.	3.5	45
12	Tracking Metastable Phase Selection during Devitrification in a Metallic Glass. Microscopy and Microanalysis, 2019, 25, 1874-1875.	0.4	0
13	Ideal maximum strengths and defect-induced softening in nanocrystalline-nanotwinned metals. Nature Materials, 2019, 18, 1207-1214.	27.5	87
14	Fatigue-resistant high-performance elastocaloric materials made by additive manufacturing. Science, 2019, 366, 1116-1121.	12.6	229
15	An abnormal meta-stable nanoscale eutectic reaction revealed by in-situ observations. Acta Materialia, 2019, 164, 697-703.	7.9	7
16	Magnetostrictive performance of additively manufactured CoFe rods using the LENSTMsystem. AIP Advances, 2018, 8, 056403.	1.3	3
17	Additively manufactured hierarchical stainless steels with high strength and ductility. Nature Materials, 2018, 17, 63-71.	27.5	1,517
18	Ageless Aluminum-Cerium-Based Alloys in High-Volume Die Casting for Improved Energy Efficiency. Jom, 2018, 70, 866-871.	1.9	26

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19	Large-scale production of (GeTe) (AgSbTe2)100â^' (x=75, 80, 85, 90) with enhanced thermoelectric properties via gas-atomization and spark plasma sintering. Acta Materialia, 2017, 128, 43-53.	7.9	44
20	Evaluation of an Al-Ce alloy for laser additive manufacturing. Acta Materialia, 2017, 126, 507-519.	7.9	133
21	Thermally activated diffusion of copper into amorphous carbon. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2017, 35, 061401.	2.1	4
22	Elastocaloric cooling of additive manufactured shape memory alloys with large latent heat. Journal Physics D: Applied Physics, 2017, 50, 404001.	2.8	70
23	Casting Characteristics of High Cerium Content Aluminum Alloys. Minerals, Metals and Materials Series, 2017, , 205-211.	0.4	11
24	Thermodynamic database for the Co-Pr system. Data in Brief, 2016, 6, 492-494.	1.0	1
25	â€˜Crystal Genesâ€™ in Metallic Liquids and Glasses. Scientific Reports, 2016, 6, 23734.	3.3	52
26	Effect of reinforcement phase on the mechanical property of tungsten nanocomposite synthesized by spark plasma sintering. International Journal of Refractory Metals and Hard Materials, 2016, 54, 14-18.	3.8	20
27	Imprinting bulk amorphous alloy at room temperature. Scientific Reports, 2015, 5, 16540.	3.3	8
28	Soluteâ€“solute correlations responsible for the prepeak in structure factors of undercooled Al-rich liquids: a molecular dynamics study. Journal of Physics Condensed Matter, 2015, 27, 205701.	1.8	7
29	Effect of Temperature on the Nano/Microstructure and Mechanical Behavior of Nanotwinned Ag Films. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 4078-4085.	2.2	17
30	Discovery of a metastable Al20Sm4 phase. Applied Physics Letters, 2015, 106, .	3.3	18
31	Optimization of strength and ductility in nanotwinned ultra-fine grained Ag: Twin density and grain orientations. Acta Materialia, 2015, 96, 378-389.	7.9	50
32	Effect of geometrical constraint condition on the formation of nanoscale twins in the Ni-based metallic glass composite. Philosophical Magazine Letters, 2014, 94, 351-360.	1.2	3
33	Glass transition in a marginal glass-forming alloy studied by dynamic mechanical analysis. Journal of Applied Physics, 2014, 116, .	2.5	5
34	Systematic Mapping of Icosahedral Short-Range Order in a Melt-Spun<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>Zr</mml:mi><mml:mn>36</mml:mn></mml:msub><mml:msub><mml:mi>Cu</mml:mi><mml:m Glass. Physical Review Letters, 2013, 110, 205505.	7.8	93
35	Defective twin boundaries in nanotwinned metals. Nature Materials, 2013, 12, 697-702.	27.5	255
36	Achieving Large Uniform Tensile Ductility in Nanocrystalline Metals. Physical Review Letters, 2010, 105, 215502.	7.8	54

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37	Anelastic strain and structural anisotropy in homogeneously deformed Cu64.5Zr35.5 metallic glass. Acta Materialia, 2008, 56, 5575-5583.	7.9	18
38	Synthesis of high-strength Wâ€“Ta ultrafine-grain composites. Journal of Materials Research, 2008, 23, 133-139.	2.6	7
39	Deformation behavior of an amorphous Cu64.5Zr35.5 alloy: A combined computer simulation and experimental study. Journal of Applied Physics, 2008, 104, .	2.5	24
40	Anisotropic atomic structure in a homogeneously deformed metallic glass. Journal of Materials Research, 2007, 22, 382-388.	2.6	13
41	Isothermal nature of martensite formation in Pt-modified Î²-NiAl alloys. Acta Materialia, 2007, 55, 2433-2441.	7.9	32
42	High-energy X-ray measurements of structural anisotropy and excess free volume in a homogenously deformed Zr-based metallic glass. Acta Materialia, 2006, 54, 2463-2471.	7.9	32
43	Micromechanics of deformation of metallic-glassâ€“matrix composites from in situ synchrotron strain measurements and finite element modeling. Acta Materialia, 2005, 53, 1883-1893.	7.9	88
44	Characterization and modeling of a martensitic transformation in a platinum modified diffusion aluminide bond coat for thermal barrier coatings. Acta Materialia, 2003, 51, 4279-4294.	7.9	125
45	Structure and properties of Zrâ€“Taâ€“Cuâ€“Niâ€“Al bulk metallic glasses and metallic glass matrix composites. Journal of Non-Crystalline Solids, 2003, 317, 158-163.	3.1	31
46	Metallic glass matrix composite with precipitated ductile reinforcement. Applied Physics Letters, 2002, 81, 1020-1022.	3.3	330
47	Controlling shear band behavior in metallic glasses through microstructural design. Intermetallics, 2002, 10, 1163-1166.	3.9	130