Julie M Schoenung

List of Publications by Year
in descending order

213	10,520	34016	39575
papers	citations	52 h-index	94 g-index

217	217	217	7674
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Mechanical behavior and strengthening mechanisms in ultrafine grain precipitation-strengthened aluminum alloy. Acta Materialia, 2014, 62, 141-155.	3.8	1,131
2	On the limitations of Volumetric Energy Density as a design parameter for Selective Laser Melting. Materials and Design, 2017, 113, 331-340.	3.3	490
3	Electronic waste recycling: A review of U.S. infrastructure and technology options. Resources, Conservation and Recycling, 2005, 45, 368-400.	5.3	431
4	Directed energy deposition (DED) additive manufacturing: Physical characteristics, defects, challenges and applications. Materials Today, 2021, 49, 271-295.	8.3	351
5	In-situ characterization of laser-powder interaction and cooling rates through high-speed imaging of powder bed fusion additive manufacturing. Materials and Design, 2017, 135, 385-396.	3.3	273
6	Toughening of aluminum matrix nanocomposites via spatial arrays of boron carbide spherical nanoparticles. Acta Materialia, 2016, 103, 128-140.	3.8	210
7	The Electronics Revolution: From E-Wonderland to E-Wasteland. Science, 2009, 326, 670-671.	6.0	209
8	Cold spray deposition of nanocrystalline aluminum alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2005, 36, 657-666.	1.1	194
9	A tri-modal aluminum based composite with super-high strength. Scripta Materialia, 2005, 53, 481-486.	2.6	191
10	Coupling of dislocations and precipitates: Impact on the mechanical behavior of ultrafine grained Alâ€“Znâ€“Mg alloys. Acta Materialia, 2016, 103, 153-164.	3.8	189
11	Mechanical behavior of ultrafine-grained Al composites reinforced with B4C nanoparticles. Scripta Materialia, 2011, 65, 652-655.	2.6	182
12	Strengthening mechanisms in directed energy deposited austenitic stainless steel. Acta Materialia, 2019, 164, 728-740.	3.8	171
13	Nanostructured coatings. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2002, 336, 274-319.	2.6	157
14	Oxidation behavior of HVOF sprayed nanocrystalline NiCrAlY powder. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2002, 338, 33-43.	2.6	157
15	Human health and ecological toxicity potentials due to heavy metal content in waste electronic devices with flat panel displays. Journal of Hazardous Materials, 2010, 177, 251-259.	6.5	156
16	Aluminum with dispersed nanoparticles by laser additive manufacturing. Nature Communications, 2019, 10, 4124.	5.8	148
17	Dry sliding friction and wear properties of B4C particulate-reinforced Al-5083 matrix composites. Wear, 2008, 264, 555-561.	1.5	145
18	Potential Environmental Impacts of Light-Emitting Diodes (LEDs): Metallic Resources, Toxicity, and Hazardous Waste Classification. Environmental Science & Technology, 2011, 45, 320-327.	4.6	122

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19	Potential Environmental Impacts from the Metals in Incandescent, Compact Fluorescent Lamp (CFL), and Light-Emitting Diode (LED) Bulbs. Environmental Science & Technology, 2013, 47, 1040-1047.	4.6	120
20	Influence of length-scales on spatial distribution and interfacial characteristics of B4C in a nanostructured Al matrix. Acta Materialia, 2015, 89, 327-343.	3.8	119
21	3D Microstructure-based finite element modeling of deformation and fracture of SiCp/Al composites. Composites Science and Technology, 2016, 123, 1-9.	3.8	111
22	Stability of cellular microstructure in laser powder bed fusion of 316L stainless steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 739, 109-117.	2.6	108
23	A review on nanostructured WCâ€“Co coatings. Surface and Coatings Technology, 2002, 157, 72-79.	2.2	105
24	Yield symmetry and reduced strength differential in Mg-2.5Y alloy. Acta Materialia, 2016, 120, 75-85.	3.8	102
25	In situ oxide dispersion strengthened tungsten alloys with high compressive strength and high strain-to-failure. Acta Materialia, 2017, 122, 19-31.	3.8	96
26	Microstructure and tensile properties of bulk nanostructured Al-5083/SiCp composites prepared by cryomilling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 407, 306-314.	2.6	91
27	Bulk nanocrystalline aluminum 5083 alloy fabricated by a novel technique: Cryomilling and spark plasma sintering. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2006, 37, 2569-2579.	1.1	90
28	Influence of particle size and spatial distribution of B4C reinforcement on the microstructure and mechanical behavior of precipitation strengthened Al alloy matrix composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 675, 421-430.	2.6	89
29	Economic Analysis of Electronic Waste Recycling:Â Modeling the Cost and Revenue of a Materials Recovery Facility in California. Environmental Science & Technology, 2006, 40, 1672-1680.	4.6	86
30	Laser-based directed energy deposition (DED-LB) of advanced materials. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 840, 142967.	2.6	82
31	Isothermal oxidation behavior of cryomilled NiCrAlY bond coat: Homogeneity and growth rate of TGO. Surface and Coatings Technology, 2011, 205, 5178-5185.	2.2	81
32	Reinforcement size effects on the abrasive wear of boron carbide reinforced aluminum composites. Wear, 2017, 390-391, 228-235.	1.5	81
33	Effects of surface oxidation during HVOF processing on the primary stage oxidation of a CoNiCrAlY coating. Surface and Coatings Technology, 2004, 185, 228-233.	2.2	74
34	Evolution of Youngâ€™s modulus of air plasma sprayed yttria-stabilized zirconia in thermally cycled thermal barrier coatings. Scripta Materialia, 2006, 54, 1587-1592.	2.6	72
35	Fabrication of WCâ€“Co cermets by laser engineered net shaping. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 493, 261-266.	2.6	72
36	Tensile behavior and strengthening mechanisms in a submicron B4C-reinforced Al trimodal composite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 616, 35-43.	2.6	71

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37	Working distance passive stability in laser directed energy deposition additive manufacturing. Materials and Design, 2019, 161, 86-94.	3.3	69
38	Synthesis and Oxidation Behavior of Nanocrystalline MCrAlY Bond Coatings. Journal of Thermal Spray Technology, 2005, 14, 23-30.	1.6	65
39	Grain size dependence of fracture toughness for fine grained alumina. Scripta Materialia, 2011, 65, 143-146.	2.6	65
40	Metal/ceramic interface structures and segregation behavior in aluminum-based composites. Acta Materialia, 2015, 95, 254-263.	3.8	64
41	Process-Structure-Property Relationships for 316L Stainless Steel Fabricated by Additive Manufacturing and Its Implication for Component Engineering. Journal of Thermal Spray Technology, 2017, 26, 610-626.	1.6	63
42	Waste Management of Printed Wiring Boards: A Life Cycle Assessment of the Metals Recycling Chain from Liberation through Refining. Environmental Science & Technology, 2015, 49, 940-947.	4.6	62
43	Toxicity potentials from waste cellular phones, and a waste management policy integrating consumer, corporate, and government responsibilities. Waste Management, 2010, 30, 1653-1660.	3.7	61
44	Estimation of future outflows and infrastructure needed to recycle personal computer systems in California. Journal of Hazardous Materials, 2006, 137, 1165-1174.	6.5	60
45	Influence of interfaces on the mechanical behavior of SiC particulate-reinforced Alâ€“Znâ€“Mgâ€“Cu composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 644, 79-84.	2.6	60
46	Reuse of powder feedstock for directed energy deposition. Powder Technology, 2018, 338, 819-829.	2.1	60
47	Entropic phase transformation in nanocrystalline high entropy oxides. Materials Research Letters, 2019, 7, 60-67.	4.1	60
48	Mechanisms of microstructure evolution during cryomilling in the presence of hard particles. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 356, 23-31.	2.6	58
49	Synthesis and mechanical behavior of nanostructured Al 5083/n-TiB 2 metal matrix composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 656, 241-248.	2.6	57
50	Investigation into the microstructure evolution caused by nanoscratch-induced room temperature deformation in M-plane sapphire. Acta Materialia, 2011, 59, 5181-5193.	3.8	55
51	On the thermal stability of ultrafine-grained Al stabilized by in-situ amorphous Al2O3 network. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 648, 61-71.	2.6	55
52	Sintering behavior of spark plasma sintered alumina with graphene nanoplatelet reinforcement. Ceramics International, 2015, 41, 5926-5936.	2.3	54
53	Characterization of oxide scales formed on HVOF NiCrAlY coatings with various oxygen contents introduced during thermal spraying. Scripta Materialia, 2004, 51, 25-29.	2.6	53
54	Influence of phase decomposition on mechanical behavior of an equiatomic CoCuFeMnNi high entropy alloy. Acta Materialia, 2019, 181, 25-35.	3.8	52

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55	Directed energy deposition of Al 5xxx alloy using Laser Engineered Net Shaping (LENSÂ®). Materials and Design, 2020, 192, 108763.	3.3	52
56	Microstructure and Strengthening Mechanisms in an Ultrafine Grained Al-Mg-Sc Alloy Produced by Powder Metallurgy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 6329-6343.	1.1	51
57	In situ thermal imaging and three-dimensional finite element modeling of tungsten carbideâ€“cobalt during laser deposition. Acta Materialia, 2009, 57, 5419-5429.	3.8	50
58	Formation of coarse-grained inter-particle regions during hot isostatic pressing of nanocrystalline powder. Scripta Materialia, 2005, 53, 619-624.	2.6	49
59	Effects of variations in coating materials and process conditions on the thermal cycle properties of NiCrAlY/YSZ thermal barrier coatings. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 425, 94-106.	2.6	49
60	Strengthening mechanisms and deformation behavior of cryomilled Alâ€“Cuâ€“Mgâ€“Ag alloy. Journal of Alloys and Compounds, 2015, 632, 591-603.	2.8	49
61	Field assisted sintering of graphene reinforced zirconia ceramics. Ceramics International, 2015, 41, 6113-6116.	2.3	48
62	Observations of particle-melt pool impact events in directed energy deposition. Additive Manufacturing, 2018, 22, 368-374.	1.7	48
63	Flow battery production: Materials selection and environmental impact. Journal of Cleaner Production, 2020, 269, 121740.	4.6	48
64	An integrated impact assessment and weighting methodology: Evaluation of the environmental consequences of computer display technology substitution. Journal of Environmental Management, 2007, 83, 1-24.	3.8	47
65	Relationship between manufacturing defects and fatigue properties of additive manufactured austenitic stainless steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 765, 138268.	2.6	46
66	Modelling particle impact on the melt pool and wettability effects in laser directed energy deposition additive manufacturing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 761, 138052.	2.6	46
67	The Microstructural Design of Trimodal Aluminum Composites. Jom, 2014, 66, 898-908.	0.9	45
68	Bulk ultrafine grained/nanocrystalline metals via slow cooling. Science Advances, 2019, 5, eaaw2398.	4.7	45
69	Strain softening in nanocrystalline or ultrafine-grained metals: A mechanistic explanation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 493, 101-103.	2.6	44
70	The influence of working distance on laser deposited WCâ€“Co. Journal of Materials Processing Technology, 2009, 209, 4935-4941.	3.1	44
71	Reinforcement Size Dependence of Load Bearing Capacity in Ultrafine-Grained Metal Matrix Composites. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 4385-4392.	1.1	44
72	Two-stage ball milling of recycled machining chips to create an alternative feedstock powder for metal additive manufacturing. Powder Technology, 2019, 342, 562-571.	2.1	44

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73	Thermal Stability of Nanostructured Cr₃C₂-NiCr Coatings. Journal of Thermal Spray Technology, 2001, 10, 293-300.	1.6	42
74	Elevated temperature wear behavior of thermally sprayed WC-Co/nanodiamond composite coatings. Surface and Coatings Technology, 2017, 315, 283-293.	2.2	42
75	Spark Plasma Sintering of Cryomilled Nanocrystalline Al Alloy - Part II: Influence of Processing Conditions on Densification and Properties. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 340-350.	1.1	41
76	Adopting Lead-Free Electronics: Policy Differences and Knowledge Gaps. Journal of Industrial Ecology, 2004, 8, 59-85.	2.8	40
77	Directed energy deposition of AlSi10Mg: Single track nonscalability and bulk properties. Materials and Design, 2020, 194, 108847.	3.3	39
78	Environmental and economic evaluation of cathode ray tube (CRT) funnel glass waste management options in the United States. Resources, Conservation and Recycling, 2013, 78, 92-104.	5.3	38
79	Influence of grain boundaries with dispersed nanoscale Al2O3 particles on the strength of Al for a wide range of homologous temperatures. Journal of Alloys and Compounds, 2019, 772, 472-481.	2.8	37
80	A Statistical Analysis of Powder Flowability in Metal Additive Manufacturing. Advanced Engineering Materials, 2020, 22, 2000022.	1.6	37
81	Environmental and risk screening for prioritizing pollution prevention opportunities in the U.S. printed wiring board manufacturing industry. Journal of Hazardous Materials, 2011, 189, 315-322.	6.5	36
82	Cryomilling for the fabrication of a particulate B4C reinforced Al nanocomposite: Part II. Mechanisms for microstructural evolution. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2006, 37, 3111-3117.	1.1	33
83	Investigation into the effects of Fe additions on the equilibrium phase compositions, phase fractions and phase stabilities in the Niâ€“Crâ€“Al system. Acta Materialia, 2010, 58, 1518-1529.	3.8	33
84	Degassing Behavior of Nanostructured Al and Its Composites. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2010, 41, 532-541.	1.1	32
85	Quasi-static and high-rate mechanical behavior of aluminum-based MMC reinforced with boron carbide of various length scales. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 650, 305-316.	2.6	31
86	Exceptional combination of soft magnetic and mechanical properties in a heterostructured high-entropy composite. Applied Materials Today, 2019, 15, 590-598.	2.3	31
87	Creep deformation mechanism of cryomilled NiCrAlY bond coat material. Surface and Coatings Technology, 2007, 201, 9462-9467.	2.2	29
88	Quantity-based and toxicity-based evaluation of the U.S. Toxics Release Inventory. Journal of Hazardous Materials, 2010, 178, 49-56.	6.5	29
89	Spark Plasma Sintering of Cryomilled Nanocrystalline Al Alloy - Part I: Microstructure Evolution. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 327-339.	1.1	29
90	A streamlined life cycle assessment on the fabrication of WCâ€“Co cermets. Journal of Cleaner Production, 2008, 16, 1118-1126.	4.6	28

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91	Synthesis of Î± silicon nitride single-crystalline nanowires by nitriding cryomilled nanocrystalline silicon powder. Scripta Materialia, 2009, 60, 737-740.	2.6	28
92	Comparative alternative materials assessment to screen toxicity hazards in the life cycle of CIGS thin film photovoltaics. Journal of Hazardous Materials, 2013, 260, 534-542.	6.5	28
93	Stabilized plasticity in ultrahigh strength, submicron Al crystals. Acta Materialia, 2015, 94, 46-58.	3.8	28
94	Microscale tribological behavior and in vitro biocompatibility of graphene nanoplatelet reinforced alumina. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 61, 122-134.	1.5	28
95	Scratch-induced deformation in fine- and ultrafine-grained bulk alumina. Scripta Materialia, 2010, 63, 528-531.	2.6	27
96	Influence of cryomilling on the microstructural features in HVOF-sprayed NiCrAlY bond coats for thermal barrier coatings: Creation of a homogeneous distribution of nanoscale dispersoids. Philosophical Magazine Letters, 2010, 90, 739-751.	0.5	27
97	An integrated approach for probing the structure and mechanical properties of diatoms: Toward engineered nanotemplates. Acta Biomaterialia, 2015, 25, 313-324.	4.1	27
98	Advancing Alternative Analysis: Integration of Decision Science. Environmental Health Perspectives, 2017, 125, 066001.	2.8	27
99	Anomalous Annealing Response of Directed Energy Deposited Type 304L Austenitic Stainless Steel. Jom, 2018, 70, 358-363.	0.9	27
100	Reversed compressive yield anisotropy in magnesium with microlaminated structure. Acta Materialia, 2018, 146, 12-24.	3.8	27
101	Toughening magnesium with gradient twin meshes. Acta Materialia, 2020, 195, 468-481.	3.8	27
102	Two-Step SPD Processing of a Trimodal Al-Based Nano-Composite. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 5877-5886.	1.1	26
103	Improving build quality in Directed Energy Deposition by cross-hatching. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 765, 138269.	2.6	26
104	Disconnection-mediated twin embryo growth in Mg. Acta Materialia, 2020, 194, 437-451.	3.8	26
105	Accommodation and formation of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si22.svg"><mml:mrow><mml:mo>{</mml:mo><mml:mover accent="true"><mml:mn>1</mml:mn><mml:mo>Â¯</mml:mo></mml:mover><mml:mn>012</mml:mn><mml:mo>}</mml:mo></mml:mrow></mml:math> twins in Mg-Y alloys. Acta Materialia, 2021, 204, 116514.	3.8	26
106	Linking Material Flow Analysis with Environmental Impact Potential. Journal of Industrial Ecology, 2013, 17, 299-309.	2.8	25
107	TEM study on relationship between stacking faults and non-basal dislocations in Mg. Philosophical Magazine, 2015, 95, 3823-3844.	0.7	25
108	Spark Plasma Sintering and Densification Mechanisms of Conductive Ceramics under Coupled Thermal/Electric Fields. Journal of the American Ceramic Society, 2015, 98, 732-740.	1.9	25

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109	Environmental Sustainability of Laser Metal Deposition: The Role of Feedstock Powder and Feedstock Utilization Factor. Procedia Manufacturing, 2017, 7, 198-204.	1.9	23
110	Twin formation from a twin boundary in Mg during in-situ nanomechanical testing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 759, 142-153.	2.6	23
111	Visualization and validation of twin nucleation and early-stage growth in magnesium. Nature Communications, 2022, 13, 20.	5.8	23
112	Simultaneous synthesis by spark plasma sintering of a thermal barrier coating system with a NiCrAlY bond coat. Surface and Coatings Technology, 2010, 205, 1241-1244.	2.2	22
113	Spark plasma sintering and mechanical behavior of magnesiaâ€“yttria (50:50vol.%) nanocomposites. Scripta Materialia, 2014, 75, 18-21.	2.6	22
114	Microstructural development in DED stainless steels: applying welding models to elucidate the impact of processing and alloy composition. Journal of Materials Science, 2021, 56, 762-780.	1.7	22
115	The influence of laser directed energy deposition (DED) processing parameters for Al5083 studied by central composite design. Journal of Materials Research and Technology, 2022, 17, 3157-3171.	2.6	21
116	Thermodynamic investigation into the equilibrium phases in the NiCoCrAl system at elevated temperatures. Surface and Coatings Technology, 2010, 205, 2273-2280.	2.2	20
117	Human health and ecotoxicological considerations in materials selection for sustainable product development. MRS Bulletin, 2012, 37, 356-363.	1.7	20
118	Metal/ceramic Interface Structures and Segregation Behavior in Aluminum-based Composites. Microscopy and Microanalysis, 2015, 21, 1053-1054.	0.2	20
119	A comparative analysis of solubility, segregation, and phase formation in atomized and cryomilled Alâ€“Fe alloy powders. Journal of Materials Science, 2015, 50, 4683-4697.	1.7	20
120	Morphology, microstructure, and phase states in selective laser sintered lithium ion battery cathodes. Journal of Materials Processing Technology, 2021, 288, 116827.	3.1	20
121	Improved Mechanical Behavior and Plastic Deformation Capability of Ultrafine Grain Alumina Ceramics. Journal of the American Ceramic Society, 2012, 95, 379-385.	1.9	19
122	Effect of post-annealing on the electrical conductivity of spark plasma sintered antimony-doped tin oxide (ATO) ceramics. Scripta Materialia, 2013, 68, 297-300.	2.6	19
123	Micro-strain Evolution and Toughening Mechanisms in a Trimodal Al-Based Metal Matrix Composite. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 1196-1204.	1.1	19
124	Priority screening of toxic chemicals and industry sectors in the U.S. toxics release inventory: A comparison of the life cycle impact-based and risk-based assessment tools developed by U.S. EPA. Journal of Environmental Management, 2011, 92, 2235-2240.	3.8	18
125	Room Temperature Deformation-induced Solute Segregation and its Impact on Twin Boundary Mobility in a Mg-Y Alloy. Scripta Materialia, 2022, 209, 114375.	2.6	18
126	Combined Hydrogen, Heat and Power (CHHP) pilot plant design. International Journal of Hydrogen Energy, 2013, 38, 4881-4888.	3.8	17

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127	The Influence of Grain Size Determination Method on Grain Growth Kinetics Analysis. Advanced Engineering Materials, 2015, 17, 1598-1607.	1.6	17
128	Combining U.S.-based prioritization tools to improve screening level accountability for environmental impact: The case of the chemical manufacturing industry. Journal of Hazardous Materials, 2009, 172, 423-431.	6.5	16
129	Nanocrystalline Ni coatings strengthened with ultrafine particles. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2003, 34, 673-683.	1.1	15
130	Distinct Hardening Behavior of Ultrafine-Grained Al-Zn-Mg-Cu Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 4762-4765.	1.1	15
131	Manipulating deformation mechanisms with Y alloying of Mg. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 817, 141373.	2.6	15
132	Directed energy deposition of metal matrix composites: Computational and experimental comparison of powder particle flow behavior. Journal of Materials Research and Technology, 2022, 16, 516-529.	2.6	15
133	Synthesis and Pressureless Sintering of Zirconium Phosphate Ceramics. Journal of the American Ceramic Society, 2008, 91, 3173-3180.	1.9	14
134	High temperature microstructure and microhardness evolution in dense NiCrAlY bulk material fabricated by spark plasma sintering. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 3210-3217.	2.6	14
135	Microstructure and mechanical behavior of NS/UFG aluminum prepared by cryomilling and spark plasma sintering. Journal of Alloys and Compounds, 2016, 679, 426-435.	2.8	14
136	Study on high temperature deformation behavior of WC-10Âwt %Ni3Al cemented carbide. Journal of Alloys and Compounds, 2020, 820, 153156.	2.8	14
137	Embracing the Chaos: Alloying Adds Stochasticity to Twin Embryo Growth. Physical Review Letters, 2020, 125, 205503.	2.9	13
138	Strain Energy During Mechanical Milling: Part I. Mathematical Modeling. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 4247-4257.	1.1	12
139	Stress-enhanced grain growth in a nanostructured aluminium alloy during spark plasma sintering. Philosophical Magazine Letters, 2014, 94, 741-748.	0.5	12
140	Multiple and extended shear band formation in MgCuGd metallic glass during high-pressure torsion. Scripta Materialia, 2014, 86, 24-27.	2.6	12
141	Sintering behavior in zirconium phosphate bonded silicon nitride porous ceramics. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 497, 495-500.	2.6	11
142	Deformation of a ceramic/metal interface at the nanoscale. Nanoscale, 2016, 8, 10541-10547.	2.8	11
143	High temperature compressive properties and microstructure of WC-Ni3Al cermets prepared by spark plasma sintering. Vacuum, 2020, 175, 109281.	1.6	11
144	Growth of nanoporous high-entropy oxide thin films by pulsed laser deposition. Journal of Materials Research, 2022, 37, 124-135.	1.2	11

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145	Absorption of Nitrogen at Al/Al₂O₃ Interfaces in Al Nanocomposites: A Computational Analysis. Advanced Engineering Materials, 2012, 14, 77-84.	1.6	10
146	Spark plasma sintering of antimony-doped tin oxide (ATO) nanoceramics with high density and enhanced electrical conductivity. Journal of Asian Ceramic Societies, 2013, 1, 114-119.	1.0	10
147	Spark Plasma Sintering of Nanostructured Aluminum: Influence of Tooling Material on Microstructure. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 1908-1916.	1.1	10
148	Synthesis and Multi Scale Tribological Behavior of WC-Co/Nanodiamond Nanocomposites. Scientific Reports, 2017, 7, 7060.	1.6	10
149	From Recycled Machining Waste to Useful Powders for Metal Additive Manufacturing. Minerals, Metals and Materials Series, 2019, , 3-7.	0.3	10
150	Environmental benefit-detriment thresholds for flow battery energy storage systems: A case study in California. Applied Energy, 2021, 300, 117354.	5.1	10
151	International harmonization of models for selecting less toxic chemical alternatives: Effect of regulatory disparities in the United States and Europe. Integrated Environmental Assessment and Management, 2012, 8, 723-730.	1.6	9
152	Revealing the deformation mechanisms for room-temperature compressive superplasticity in nanocrystalline magnesium. Materialia, 2020, 11, 100731.	1.3	9
153	Graphene Nano-Platelets Reinforced ZrO₂ Consolidated by Spark Plasma Sintering. Science of Advanced Materials, 2016, 8, 312-317.	0.1	9
154	Process Cost Comparison for Conventional and Nearâ€Netâ€Shape Cermet Fabrication. Advanced Engineering Materials, 2010, 12, 235-241.	1.6	8
155	Investigation of atypical molten pool dynamics in tungsten carbide-cobalt during laser deposition usingin-situthermal imaging. Applied Physics Letters, 2012, 100, 034101.	1.5	8
156	Spark Plasma Sintering and Densification Mechanisms of Antimony-Doped Tin Oxide Nanoceramics. Journal of Nanomaterials, 2013, 2013, 1-7.	1.5	8
157	Nanoscratch-induced deformation behaviour in B₄C particle reinforced ultrafine grained Al alloy composites: a novel diagnostic approach. Philosophical Magazine, 2014, 94, 1754-1763.	0.7	8
158	An Efficient and Cost-Effective Method for Preparing Transmission Electron Microscopy Samples from Powders. Microscopy and Microanalysis, 2015, 21, 1184-1194.	0.2	8
159	Orientation Effects on Fatigue Behavior of Additively Manufactured Stainless Steel. , 2017, , .		8
160	Hidden transformations in entropy-stabilized oxides. Journal of the European Ceramic Society, 2021, 41, 6660-6669.	2.8	8
161	A Comparative Hierarchical Decision Framework on Toxics Use Reduction Effectiveness for Electronic and Electrical Industries. Environmental Science & Technology, 2007, 41, 373-379.	4.6	7
162	Measurement and analysis of product energy efficiency to assist energy star criteria development: An example for desktop computers. Energy Policy, 2011, 39, 8003-8010.	4.2	7

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163	Effects of Sb oxidation state on the densification and electrical properties of antimony-doped tin oxide ceramics. Journal of Materials Science: Materials in Electronics, 2015, 26, 4015-4020.	1.1	7
164	An open framework for automated chemical hazard assessment based on GreenScreen for Safer Chemicals: A proof of concept. Integrated Environmental Assessment and Management, 2017, 13, 167-176.	1.6	7
165	Iron in solution with aluminum matrix after non-equilibrium processing: an atom probe tomography study. Philosophical Magazine Letters, 2017, 97, 118-124.	0.5	7
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