

Julie M Schoenung

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/4355600/julie-m-schoenung-publications-by-year.pdf>

Version: 2024-04-25

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

210
papers

7,249
citations

46
h-index

78
g-index

217
ext. papers

8,804
ext. citations

5.5
avg, IF

6.31
L-index

#	Paper	IF	Citations
210	Directed energy deposition of metal matrix composites: Computational and experimental comparison of powder particle flow behavior. <i>Journal of Materials Research and Technology</i> , 2022 , 16, 516-529	5.5	1
209	Visualization and validation of twin nucleation and early-stage growth in magnesium.. <i>Nature Communications</i> , 2022 , 13, 20	17.4	0
208	Growth of nanoporous high-entropy oxide thin films by pulsed laser deposition. <i>Journal of Materials Research</i> , 2022 , 37, 124-135	2.5	0
207	Potential Health Impact Assessment of Large-Scale Production of Batteries for the Electric Grid. <i>Minerals, Metals and Materials Series</i> , 2022 , 417-425	0.3	0
206	Techno-Economic Analysis of Material Costs for Emerging Flow Batteries. <i>Minerals, Metals and Materials Series</i> , 2022 , 449-460	0.3	0
205	Room Temperature Deformation-induced Solute Segregation and its Impact on Twin Boundary Mobility in a Mg-Y Alloy. <i>Scripta Materialia</i> , 2022 , 209, 114375	5.6	0
204	The influence of laser directed energy deposition (DED) processing parameters for Al5083 studied by central composite design. <i>Journal of Materials Research and Technology</i> , 2022 , 17, 3157-3171	5.5	2
203	Laser-based directed energy deposition (DED-LB) of advanced materials. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022 , 840, 142967	5.3	5
202	Orientation-dependent superelasticity of a metastable high-entropy alloy. <i>Applied Physics Letters</i> , 2021 , 119, 161908	3.4	0
201	Thickness-Dependent Microstructure in Additively Manufactured Stainless Steel. <i>Journal of Materials Engineering and Performance</i> , 2021 , 30, 6606-6617	1.6	0
200	Manipulating deformation mechanisms with Y alloying of Mg. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021 , 817, 141373	5.3	2
199	Directed energy deposition (DED) additive manufacturing: Physical characteristics, defects, challenges and applications. <i>Materials Today</i> , 2021 , 49, 271-271	21.8	49
198	Morphology, microstructure, and phase states in selective laser sintered lithium ion battery cathodes. <i>Journal of Materials Processing Technology</i> , 2021 , 288, 116827	5.3	5
197	Accommodation and formation of {100} twins in Mg-Y alloys. <i>Acta Materialia</i> , 2021 , 204, 116514	8.4	7
196	Microstructural development in DED stainless steels: applying welding models to elucidate the impact of processing and alloy composition. <i>Journal of Materials Science</i> , 2021 , 56, 762-780	4.3	7
195	Nano-scale imaging and spectroscopy of interfaces in (Co,Cu,Mg,Ni,Zn)O high entropy oxides. <i>Microscopy and Microanalysis</i> , 2021 , 27, 2872-2874	0.5	
194	Understanding the effect of cellular structures on mechanical behavior of additively manufactured 316L stainless steel. <i>Microscopy and Microanalysis</i> , 2021 , 27, 2678-2680	0.5	0

193	Multiscale phase homogeneity in bulk nanocrystalline high entropy oxides. <i>Journal of the European Ceramic Society</i> , 2021 , 41, 4850-4858	6	2
192	Environmental benefit-detriment thresholds for flow battery energy storage systems: A case study in California. <i>Applied Energy</i> , 2021 , 300, 117354	10.7	2
191	The role of cell boundary orientation on mechanical behavior: A site-specific micro-pillar characterization study. <i>Additive Manufacturing</i> , 2021 , 46, 102154	6.1	1
190	Hidden transformations in entropy-stabilized oxides. <i>Journal of the European Ceramic Society</i> , 2021 , 41, 6660-6669	6	1
189	Embracing the Chaos: Alloying Adds Stochasticity to Twin Embryo Growth. <i>Physical Review Letters</i> , 2020 , 125, 205503	7.4	4
188	Directed energy deposition of Al 5xxx alloy using Laser Engineered Net Shaping (LENS [®]). <i>Materials and Design</i> , 2020 , 192, 108763	8.1	22
187	A Statistical Analysis of Powder Flowability in Metal Additive Manufacturing. <i>Advanced Engineering Materials</i> , 2020 , 22, 2000022	3.5	19
186	Toughening magnesium with gradient twin meshes. <i>Acta Materialia</i> , 2020 , 195, 468-481	8.4	6
185	Flow battery production: Materials selection and environmental impact. <i>Journal of Cleaner Production</i> , 2020 , 269, 121740	10.3	22
184	Directed energy deposition of AlSi10Mg: Single track nonscalability and bulk properties. <i>Materials and Design</i> , 2020 , 194, 108847	8.1	12
183	Disconnection-mediated twin embryo growth in Mg. <i>Acta Materialia</i> , 2020 , 194, 437-451	8.4	11
182	High temperature compressive properties and microstructure of WC-Ni3Al cermets prepared by spark plasma sintering. <i>Vacuum</i> , 2020 , 175, 109281	3.7	6
181	Revealing the deformation mechanisms for room-temperature compressive superplasticity in nanocrystalline magnesium. <i>Materialia</i> , 2020 , 11, 100731	3.2	4
180	Study on Strain Rate Dependent Deformation Mechanism of WC10 wt% Ni3Al Cemented Carbide by Micropillar Compression. <i>Advanced Engineering Materials</i> , 2020 , 22, 1900953	3.5	1
179	Study on high temperature deformation behavior of WC-10 wt %Ni3Al cemented carbide. <i>Journal of Alloys and Compounds</i> , 2020 , 820, 153156	5.7	6
178	Bulk ultrafine grained/nanocrystalline metals via slow cooling. <i>Science Advances</i> , 2019 , 5, eaaw2398	14.3	30
177	Aluminum with dispersed nanoparticles by laser additive manufacturing. <i>Nature Communications</i> , 2019 , 10, 4124	17.4	70
176	Influence of phase decomposition on mechanical behavior of an equiatomic CoCuFeMnNi high entropy alloy. <i>Acta Materialia</i> , 2019 , 181, 25-35	8.4	28

175	Modelling particle impact on the melt pool and wettability effects in laser directed energy deposition additive manufacturing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019 , 761, 138052	5.3	19
174	Revealing deformation mechanisms in Mg ₂ alloy by in situ deformation of nano-pillars with mediated lateral stiffness. <i>Journal of Materials Research</i> , 2019 , 34, 1542-1554	2.5	3
173	Exceptional combination of soft magnetic and mechanical properties in a heterostructured high-entropy composite. <i>Applied Materials Today</i> , 2019 , 15, 590-598	6.6	19
172	Twin formation from a twin boundary in Mg during in-situ nanomechanical testing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019 , 759, 142-153	5.3	11
171	Consolidation and Behavior of FeCoV Soft Magnetic Materials via Spark Plasma Sintering 2019 , 473-491		
170	In situ transmission electron microscopy investigation on <c + a> slip in Mg. <i>Journal of Materials Research</i> , 2019 , 34, 1499-1508	2.5	4
169	Relationship between manufacturing defects and fatigue properties of additive manufactured austenitic stainless steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019 , 765, 138268	5.3	22
168	Multicriteria Decision Analysis Characterization of Chemical Hazard Assessment Data Sources. <i>Integrated Environmental Assessment and Management</i> , 2019 , 15, 895-908	2.5	1
167	Design parameters and environmental impact of printed wiring board manufacture. <i>Journal of Cleaner Production</i> , 2019 , 238, 117807	10.3	3
166	Improving build quality in Directed Energy Deposition by cross-hatching. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019 , 765, 138269	5.3	15
165	From Recycled Machining Waste to Useful Powders for Metal Additive Manufacturing. <i>Minerals, Metals and Materials Series</i> , 2019 , 3-7	0.3	8
164	Entropic phase transformation in nanocrystalline high entropy oxides. <i>Materials Research Letters</i> , 2019 , 7, 60-67	7.4	40
163	Strengthening mechanisms in directed energy deposited austenitic stainless steel. <i>Acta Materialia</i> , 2019 , 164, 728-740	8.4	100
162	Working distance passive stability in laser directed energy deposition additive manufacturing. <i>Materials and Design</i> , 2019 , 161, 86-94	8.1	32
161	The role of data source selection in chemical hazard assessment: A case study on organic photovoltaics. <i>Journal of Hazardous Materials</i> , 2019 , 365, 227-236	12.8	3
160	Two-stage ball milling of recycled machining chips to create an alternative feedstock powder for metal additive manufacturing. <i>Powder Technology</i> , 2019 , 342, 562-571	5.2	23
159	Stability of cellular microstructure in laser powder bed fusion of 316L stainless steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019 , 739, 109-117	5.3	57
158	Influence of grain boundaries with dispersed nanoscale Al ₂ O ₃ particles on the strength of Al for a wide range of homologous temperatures. <i>Journal of Alloys and Compounds</i> , 2019 , 772, 472-481	5.7	22

157	Calorimetric Study with Uncertainty Analysis to Investigate the Precipitation Kinetics in a Nanostructured Al Composite. <i>Advanced Engineering Materials</i> , 2018 , 20, 1700728	3.5	2
156	Microstructure and Mechanical Behavior of Cryomilled AlMg Composites Reinforced with Nanometric Yttria Partially Stabilized Zirconia. <i>Minerals, Metals and Materials Series</i> , 2018 , 71-86	0.3	3
155	Anomalous Annealing Response of Directed Energy Deposited Type 304L Austenitic Stainless Steel. <i>Jom</i> , 2018 , 70, 358-363	2.1	16
154	Reversed compressive yield anisotropy in magnesium with microlaminated structure. <i>Acta Materialia</i> , 2018 , 146, 12-24	8.4	20
153	Observations of particle-melt pool impact events in directed energy deposition. <i>Additive Manufacturing</i> , 2018 , 22, 368-374	6.1	32
152	Reuse of powder feedstock for directed energy deposition. <i>Powder Technology</i> , 2018 , 338, 819-829	5.2	40
151	An open framework for automated chemical hazard assessment based on GreenScreen for Safer Chemicals: A proof of concept. <i>Integrated Environmental Assessment and Management</i> , 2017 , 13, 167-176	2.5	5
150	Elevated temperature wear behavior of thermally sprayed WC-Co/nanodiamond composite coatings. <i>Surface and Coatings Technology</i> , 2017 , 315, 283-293	4.4	28
149	Iron in solution with aluminum matrix after non-equilibrium processing: an atom probe tomography study. <i>Philosophical Magazine Letters</i> , 2017 , 97, 118-124	1	6
148	Process-Structure-Property Relationships for 316L Stainless Steel Fabricated by Additive Manufacturing and Its Implication for Component Engineering. <i>Journal of Thermal Spray Technology</i> , 2017 , 26, 610-626	2.5	40
147	Environmental Sustainability of Laser Metal Deposition: The Role of Feedstock Powder and Feedstock Utilization Factor. <i>Procedia Manufacturing</i> , 2017 , 7, 198-204	1.5	11
146	In-situ characterization of laser-powder interaction and cooling rates through high-speed imaging of powder bed fusion additive manufacturing. <i>Materials and Design</i> , 2017 , 135, 385-396	8.1	167
145	Advancing Alternative Analysis: Integration of Decision Science. <i>Environmental Health Perspectives</i> , 2017 , 125, 066001	8.4	18
144	Synthesis and Multi Scale Tribological Behavior of WC-Co/Nanodiamond Nanocomposites. <i>Scientific Reports</i> , 2017 , 7, 7060	4.9	7
143	Reinforcement Size Dependence of Load Bearing Capacity in Ultrafine-Grained Metal Matrix Composites. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2017 , 48, 4385-4392	2.3	25
142	Reinforcement size effects on the abrasive wear of boron carbide reinforced aluminum composites. <i>Wear</i> , 2017 , 390-391, 228-235	3.5	52
141	On the limitations of Volumetric Energy Density as a design parameter for Selective Laser Melting. <i>Materials and Design</i> , 2017 , 113, 331-340	8.1	290
140	In situ oxide dispersion strengthened tungsten alloys with high compressive strength and high strain-to-failure. <i>Acta Materialia</i> , 2017 , 122, 19-31	8.4	58

139	Orientation Effects on Fatigue Behavior of Additively Manufactured Stainless Steel 2017 ,		7
138	Yield symmetry and reduced strength differential in Mg-2.5Y alloy. <i>Acta Materialia</i> , 2016 , 120, 75-85	8.4	77
137	Influence of particle size and spatial distribution of B4C reinforcement on the microstructure and mechanical behavior of precipitation strengthened Al alloy matrix composites. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016 , 675, 421-430	5.3	72
136	Waste Management of Printed Wiring Boards: A Life Cycle Assessment of the Metals Recycling Chain from Liberation Through Refining 2016 , 287-288		
135	Synthesis and mechanical behavior of nanostructured Al 5083/n-TiB 2 metal matrix composites. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016 , 656, 241-248	5.3	50
134	Coupling of dislocations and precipitates: Impact on the mechanical behavior of ultrafine grained AlZnMg alloys. <i>Acta Materialia</i> , 2016 , 103, 153-164	8.4	130
133	Microscale tribological behavior and in vitro biocompatibility of graphene nanoplatelet reinforced alumina. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2016 , 61, 122-134	4.1	21
132	3D Microstructure-based finite element modeling of deformation and fracture of SiCp/Al composites. <i>Composites Science and Technology</i> , 2016 , 123, 1-9	8.6	69
131	Toughening of aluminum matrix nanocomposites via spatial arrays of boron carbide spherical nanoparticles. <i>Acta Materialia</i> , 2016 , 103, 128-140	8.4	136
130	Quasi-static and high-rate mechanical behavior of aluminum-based MMC reinforced with boron carbide of various length scales. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016 , 650, 305-316	5.3	23
129	Graphene Nano-Platelets Reinforced ZrO2 Consolidated by Spark Plasma Sintering. <i>Science of Advanced Materials</i> , 2016 , 8, 312-317	2.3	6
128	Waste Management of Printed Wiring Boards: A Life Cycle Assessment of the Metals Recycling Chain from Liberation through Refining 2016 , 287-288		2
127	Environmental and economic evaluation of cathode ray tube (CRT) funnel glass waste management options in the United States 2016 , 309-310		2
126	Strategies to Approach Stabilized Plasticity in Metals with Diminutive Volume: A Brief Review. <i>Crystals</i> , 2016 , 6, 92	2.3	2
125	Environmental and Economic Evaluation of Cathode Ray Tube (CRT) Funnel Glass Waste Management Options in the United States 2016 , 309-310		
124	Microstructure and mechanical behavior of NS/UFG aluminum prepared by cryomilling and spark plasma sintering. <i>Journal of Alloys and Compounds</i> , 2016 , 679, 426-435	5.7	11
123	Mechanistic investigation into the role of aluminum diffusion in the oxidation behavior of cryomilled NiCrAlY bond coat. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2016 , 31, 35-43	1	2
122	Deformation of a ceramic/metal interface at the nanoscale. <i>Nanoscale</i> , 2016 , 8, 10541-7	7.7	7

121	Influence of length-scales on spatial distribution and interfacial characteristics of B ₄ C in a nanostructured Al matrix. <i>Acta Materialia</i> , 2015 , 89, 327-343	8.4	80
120	An integrated approach for probing the structure and mechanical properties of diatoms: Toward engineered nanotemplates. <i>Acta Biomaterialia</i> , 2015 , 25, 313-24	10.8	16
119	Influence of interfaces on the mechanical behavior of SiC particulate-reinforced Al ₇₀ Mg ₁₀ Ti ₂₀ composites. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015 , 644, 79-84	5.3	48
118	Metal/ceramic interface structures and segregation behavior in aluminum-based composites. <i>Acta Materialia</i> , 2015 , 95, 254-263	8.4	47
117	Novel fabrication of bulk Al with gradient grain size distributions via powder metallurgy. <i>Philosophical Magazine Letters</i> , 2015 , 95, 177-186	1	4
116	Effects of Sb oxidation state on the densification and electrical properties of antimony-doped tin oxide ceramics. <i>Journal of Materials Science: Materials in Electronics</i> , 2015 , 26, 4015-4020	2.1	4
115	A comparative analysis of solubility, segregation, and phase formation in atomized and cryomilled AlBe alloy powders. <i>Journal of Materials Science</i> , 2015 , 50, 4683-4697	4.3	16
114	Two-Step SPD Processing of a Trimodal Al-Based Nano-Composite. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2015 , 46, 5877-5886	2.3	22
113	On the thermal stability of ultrafine-grained Al stabilized by in-situ amorphous Al ₂ O ₃ network. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015 , 648, 61-71	5.3	48
112	Spark Plasma Sintering and Densification Mechanisms of Conductive Ceramics under Coupled Thermal/Electric Fields. <i>Journal of the American Ceramic Society</i> , 2015 , 98, 732-740	3.8	19
111	An Efficient and Cost-Effective Method for Preparing Transmission Electron Microscopy Samples from Powders. <i>Microscopy and Microanalysis</i> , 2015 , 21, 1184-94	0.5	6
110	Metal/ceramic Interface Structures and Segregation Behavior in Aluminum-based Composites. <i>Microscopy and Microanalysis</i> , 2015 , 21, 1053-1054	0.5	16
109	Determination of Reliable Grain Boundary Orientation using Automated Crystallographic Orientation Mapping in the Transmission Electron Microscope. <i>Microscopy and Microanalysis</i> , 2015 , 21, 1663-1664	0.5	4
108	The Influence of Grain Size Determination Method on Grain Growth Kinetics Analysis. <i>Advanced Engineering Materials</i> , 2015 , 17, 1598-1607	3.5	12
107	Stabilized plasticity in ultrahigh strength, submicron Al crystals. <i>Acta Materialia</i> , 2015 , 94, 46-58	8.4	26
106	TEM study on relationship between stacking faults and non-basal dislocations in Mg. <i>Philosophical Magazine</i> , 2015 , 95, 3823-3844	1.6	18
105	Micro-strain Evolution and Toughening Mechanisms in a Trimodal Al-Based Metal Matrix Composite. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2015 , 46, 1196-1204	2.3	15
104	Sintering behavior of spark plasma sintered alumina with graphene nanoplatelet reinforcement. <i>Ceramics International</i> , 2015 , 41, 5926-5936	5.1	49

103	Field assisted sintering of graphene reinforced zirconia ceramics. <i>Ceramics International</i> , 2015 , 41, 6113-6116	6.1	40
102	Waste management of printed wiring boards: a life cycle assessment of the metals recycling chain from liberation through refining. <i>Environmental Science & Technology</i> , 2015 , 49, 940-7	10.3	48
101	Strengthening mechanisms and deformation behavior of cryomilled AlCuMgAg alloy. <i>Journal of Alloys and Compounds</i> , 2015 , 632, 591-603	5.7	33
100	Mechanical behavior and strengthening mechanisms in ultrafine grain precipitation-strengthened aluminum alloy. <i>Acta Materialia</i> , 2014 , 62, 141-155	8.4	658
99	Nanoscratch-induced deformation behaviour in B4C particle reinforced ultrafine grained Al alloy composites: a novel diagnostic approach. <i>Philosophical Magazine</i> , 2014 , 94, 1754-1763	1.6	6
98	Tensile behavior and strengthening mechanisms in a submicron B4C-reinforced Al trimodal composite. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014 , 616, 35-43	5.3	57
97	Distinct Hardening Behavior of Ultrafine-Grained Al-Zn-Mg-Cu Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2014 , 45, 4762-4765	2.3	15
96	The Microstructural Design of Trimodal Aluminum Composites. <i>Jom</i> , 2014 , 66, 898-908	2.1	37
95	Spark plasma sintering and mechanical behavior of magnesia/yttria (50:50 vol.%) nanocomposites. <i>Scripta Materialia</i> , 2014 , 75, 18-21	5.6	20
94	Multiple and extended shear band formation in MgCuGd metallic glass during high-pressure torsion. <i>Scripta Materialia</i> , 2014 , 86, 24-27	5.6	12
93	Microstructure and Strengthening Mechanisms in an Ultrafine Grained Al-Mg-Sc Alloy Produced by Powder Metallurgy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2014 , 45, 6329-6343	2.3	38
92	Stress-enhanced grain growth in a nanostructured aluminium alloy during spark plasma sintering. <i>Philosophical Magazine Letters</i> , 2014 , 94, 741-748	1	11
91	Effect of Oxygen Flow Rate on Electrical and Optical Properties of ATO Thin Films Prepared by RF Magnetron Sputtering. <i>Key Engineering Materials</i> , 2014 , 616, 178-182	0.4	1
90	Potential environmental impacts from the metals in incandescent, compact fluorescent lamp (CFL), and light-emitting diode (LED) bulbs. <i>Environmental Science & Technology</i> , 2013 , 47, 1040-7	10.3	89
89	Comparative alternative materials assessment to screen toxicity hazards in the life cycle of CIGS thin film photovoltaics. <i>Journal of Hazardous Materials</i> , 2013 , 260, 534-42	12.8	20
88	Environmental and economic evaluation of cathode ray tube (CRT) funnel glass waste management options in the United States. <i>Resources, Conservation and Recycling</i> , 2013 , 78, 92-104	11.9	32
87	Integrating toxicity reduction strategies for materials and components into product design: a case study on utility meters. <i>Integrated Environmental Assessment and Management</i> , 2013 , 9, 319-28	2.5	1
86	Linking Material Flow Analysis with Environmental Impact Potential. <i>Journal of Industrial Ecology</i> , 2013 , 17, 299-309	7.2	24

85	Spark plasma sintering of antimony-doped tin oxide (ATO) nanoceramics with high density and enhanced electrical conductivityPeer review under responsibility of The Ceramic Society of Japan and the Korean Ceramic Society.View all notes. <i>Journal of Asian Ceramic Societies</i> , 2013 , 1, 114-119	2.4	6
84	Spark Plasma Sintering of Nanostructured Aluminum: Influence of Tooling Material on Microstructure. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2013 , 44, 1908-1916	2.3	9
83	Effect of post-annealing on the electrical conductivity of spark plasma sintered antimony-doped tin oxide (ATO) ceramics. <i>Scripta Materialia</i> , 2013 , 68, 297-300	5.6	19
82	Spark Plasma Sintering and Densification Mechanisms of Antimony-Doped Tin Oxide Nanoceramics. <i>Journal of Nanomaterials</i> , 2013 , 2013, 1-7	3.2	8
81	Translating the materials genome into safer consumer products. <i>Environmental Science & Technology</i> , 2013 , 47, 12625-7	10.3	2
80	Absorption of Nitrogen at Al/Al ₂ O ₃ Interfaces in Al Nanocomposites: A Computational Analysis. <i>Advanced Engineering Materials</i> , 2012 , 14, 77-84	3.5	8
79	Spark Plasma Sintering of Cryomilled Nanocrystalline Al Alloy - Part II: Influence of Processing Conditions on Densification and Properties. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012 , 43, 340-350	2.3	36
78	Spark Plasma Sintering of Cryomilled Nanocrystalline Al Alloy - Part I: Microstructure Evolution. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012 , 43, 327-339	2.3	27
77	Strain Energy During Mechanical Milling: Part I. Mathematical Modeling. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012 , 43, 4247-4257	2.3	11
76	Strain Energy During Mechanical Milling: Part II. Experimental. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012 , 43, 4258-4265	2.3	3
75	Critical grain size for nanocrystalline-to-amorphous phase transition in Al solid solution. <i>Philosophical Magazine Letters</i> , 2012 , 92, 235-244	1	4
74	International harmonization of models for selecting less toxic chemical alternatives: Effect of regulatory disparities in the United States and Europe. <i>Integrated Environmental Assessment and Management</i> , 2012 , 8, 723-30	2.5	6
73	Improved Mechanical Behavior and Plastic Deformation Capability of Ultrafine Grain Alumina Ceramics. <i>Journal of the American Ceramic Society</i> , 2012 , 95, 379-385	3.8	14
72	Investigation of atypical molten pool dynamics in tungsten carbide-cobalt during laser deposition using in-situ thermal imaging. <i>Applied Physics Letters</i> , 2012 , 100, 034101	3.4	7
71	Human health and ecotoxicological considerations in materials selection for sustainable product development. <i>MRS Bulletin</i> , 2012 , 37, 356-363	3.2	17
70	Potential environmental impacts of light-emitting diodes (LEDs): metallic resources, toxicity, and hazardous waste classification. <i>Environmental Science & Technology</i> , 2011 , 45, 320-7	10.3	100
69	Grain size dependence of fracture toughness for fine grained alumina. <i>Scripta Materialia</i> , 2011 , 65, 143-146	5.6	50
68	Mechanical behavior of ultrafine-grained Al composites reinforced with B ₄ C nanoparticles. <i>Scripta Materialia</i> , 2011 , 65, 652-655	5.6	152

67	Measurement and analysis of product energy efficiency to assist energy star criteria development: An example for desktop computers. <i>Energy Policy</i> , 2011 , 39, 8003-8010	7.2	7
66	Investigation into the microstructure evolution caused by nanoscratch-induced room temperature deformation in M-plane sapphire. <i>Acta Materialia</i> , 2011 , 59, 5181-5193	8.4	40
65	Transition to Lead-Free Products in the US Electronics Industry: A Model of Environmental, Technical, and Economic Preferences. <i>Environmental Modeling and Assessment</i> , 2011 , 16, 107-118	2	4
64	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. <i>Journal of Environmental Management</i> , 2011 , 92, 2235-40	7.9	14
63	Isothermal oxidation behavior of cryomilled NiCrAlY bond coat: Homogeneity and growth rate of TGO. <i>Surface and Coatings Technology</i> , 2011 , 205, 5178-5185	4.4	69
62	High temperature microstructure and microhardness evolution in dense NiCrAlY bulk material fabricated by spark plasma sintering. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011 , 528, 3210-3217	5.3	12
61	Environmental and risk screening for prioritizing pollution prevention opportunities in the U.S. printed wiring board manufacturing industry. <i>Journal of Hazardous Materials</i> , 2011 , 189, 315-22	12.8	30
60	Toxicity potentials from waste cellular phones, and a waste management policy integrating consumer, corporate, and government responsibilities. <i>Waste Management</i> , 2010 , 30, 1653-60	8.6	54
59	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. <i>Philosophical Magazine Letters</i> , 2010 , 90, 739-751	1	23
58	Influence of Cryomilling on Microstructure, Phase Stability and Oxidation Behavior of NiCrAlY Bond Coat in Thermal Barrier Coatings: Experimentation and Mechanistic Investigation. <i>Materials Science Forum</i> , 2010 , 654-656, 1940-1943	0.4	3
57	Investigation into the effects of Fe additions on the equilibrium phase compositions, phase fractions and phase stabilities in the NiCrAl system. <i>Acta Materialia</i> , 2010 , 58, 1518-1529	8.4	29
56	Simultaneous synthesis by spark plasma sintering of a thermal barrier coating system with a NiCrAlY bond coat. <i>Surface and Coatings Technology</i> , 2010 , 205, 1241-1244	4.4	19
55	Degassing Behavior of Nanostructured Al and Its Composites. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2010 , 41, 532-541	2.3	32
54	Scratch-induced deformation in fine- and ultrafine-grained bulk alumina. <i>Scripta Materialia</i> , 2010 , 63, 528-531	5.6	22
53	Process Cost Comparison for Conventional and Near-Net-Shape Cermet Fabrication. <i>Advanced Engineering Materials</i> , 2010 , 12, 235-241	3.5	6
52	Human health and ecological toxicity potentials due to heavy metal content in waste electronic devices with flat panel displays. <i>Journal of Hazardous Materials</i> , 2010 , 177, 251-9	12.8	125
51	Quantity-based and toxicity-based evaluation of the U.S. Toxics Release Inventory. <i>Journal of Hazardous Materials</i> , 2010 , 178, 49-56	12.8	23
50	Thermodynamic investigation into the equilibrium phases in the NiCoCrAl system at elevated temperatures. <i>Surface and Coatings Technology</i> , 2010 , 205, 2273-2280	4.4	19

49	Synthesis of Silicon nitride single-crystalline nanowires by nitriding cryomilled nanocrystalline silicon powder. <i>Scripta Materialia</i> , 2009 , 60, 737-740	5.6	27
48	A test-rework process yield performance model for estimation of printed wiring board assembly cost. <i>International Journal of Production Economics</i> , 2009 , 119, 161-173	9.3	2
47	Combining U.S.-based prioritization tools to improve screening level accountability for environmental impact: the case of the chemical manufacturing industry. <i>Journal of Hazardous Materials</i> , 2009 , 172, 423-31	12.8	15
46	The influence of working distance on laser deposited WC ₁₀ . <i>Journal of Materials Processing Technology</i> , 2009 , 209, 4935-4941	5.3	34
45	In situ thermal imaging and three-dimensional finite element modeling of tungsten carbide/cobalt during laser deposition. <i>Acta Materialia</i> , 2009 , 57, 5419-5429	8.4	40
44	Science and regulation. The electronics revolution: from e-wonderland to e-wasteland. <i>Science</i> , 2009 , 326, 670-1	33.3	168
43	Research and Education in Green Materials: A multi-disciplinary program to bridge the gaps 2009 ,		2
42	Preparation of pore gradient silicon nitride ceramics by a high-velocity oxy-fuel spraying technique. <i>Journal of the Ceramic Society of Japan</i> , 2009 , 117, 445-448	1	1
41	An integrated impact assessment and weighting methodology: Evaluation of the environmental consequences of lead-free solder alternatives 2008 ,		2
40	Environmental and health assessment for California printed circuit board manufacturing: Providing guidance for pollution prevention opportunities 2008 ,		1
39	A streamlined life cycle assessment on the fabrication of WC ₁₀ cermets. <i>Journal of Cleaner Production</i> , 2008 , 16, 1118-1126	10.3	19
38	Strain softening in nanocrystalline or ultrafine-grained metals: A mechanistic explanation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008 , 493, 101-103	5.3	40
37	Dry sliding friction and wear properties of B ₄ C particulate-reinforced Al-5083 matrix composites. <i>Wear</i> , 2008 , 264, 555-561	3.5	120
36	Fabrication of WC ₁₀ cermets by laser engineered net shaping. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008 , 493, 261-266	5.3	61
35	Sintering behavior in zirconium phosphate bonded silicon nitride porous ceramics. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008 , 497, 495-500	5.3	8
34	Synthesis and Pressureless Sintering of Zirconium Phosphate Ceramics. <i>Journal of the American Ceramic Society</i> , 2008 , 91, 3173-3180	3.8	13
33	Lead Compounds 2008 , 151-167		3
32	A comparative hierarchical decision framework on toxics use reduction effectiveness for electronic and electrical industries. <i>Environmental Science & Technology</i> , 2007 , 41, 373-9	10.3	7

31	Creep deformation mechanism of cryomilled NiCrAlY bond coat material. <i>Surface and Coatings Technology</i> , 2007 , 201, 9462-9467	4.4	27
30	An integrated impact assessment and weighting methodology: evaluation of the environmental consequences of computer display technology substitution. <i>Journal of Environmental Management</i> , 2007 , 83, 1-24	7.9	40
29	Tensile Deformation and Fracture in a Bulk Nanostructured Al-5083/SiCp Composite at Elevated Temperatures. <i>Advanced Materials Research</i> , 2007 , 29-30, 245-248	0.5	
28	Cryomilling for the fabrication of a particulate B4C reinforced Al nanocomposite: Part II. Mechanisms for microstructural evolution. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2006 , 37, 3111-3117	2.3	29
27	Bulk nanocrystalline aluminum 5083 alloy fabricated by a novel technique: Cryomilling and spark plasma sintering. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2006 , 37, 2569-2579	2.3	77
26	Evolution of Young's modulus of air plasma sprayed yttria-stabilized zirconia in thermally cycled thermal barrier coatings. <i>Scripta Materialia</i> , 2006 , 54, 1587-1592	5.6	67
25	Economic analysis of electronic waste recycling: modeling the cost and revenue of a materials recovery facility in California. <i>Environmental Science & Technology</i> , 2006 , 40, 1672-80	10.3	72
24	Effects of variations in coating materials and process conditions on the thermal cycle properties of NiCrAlY/YSZ thermal barrier coatings. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2006 , 425, 94-106	5.3	43
23	Estimation of future outflows and infrastructure needed to recycle personal computer systems in California. <i>Journal of Hazardous Materials</i> , 2006 , 137, 1165-74	12.8	55
22	Electronic waste recycling: A review of U.S. infrastructure and technology options. <i>Resources, Conservation and Recycling</i> , 2005 , 45, 368-400	11.9	347
21	Microstructure and tensile properties of bulk nanostructured Al-5083/SiCp composites prepared by cryomilling. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2005 , 407, 306-314	5.3	88
20	Synthesis and oxidation behavior of nanocrystalline MCrAlY bond coatings. <i>Journal of Thermal Spray Technology</i> , 2005 , 14, 23-30	2.5	60
19	A tri-modal aluminum based composite with super-high strength. <i>Scripta Materialia</i> , 2005 , 53, 481-486	5.6	161
18	Formation of coarse-grained inter-particle regions during hot isostatic pressing of nanocrystalline powder. <i>Scripta Materialia</i> , 2005 , 53, 619-624	5.6	44
17	Cold spray deposition of nanocrystalline aluminum alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2005 , 36, 657-666	2.3	175
16	Mechanical Behavior of a Tri-modal Al Matrix Composite. <i>Materials Research Society Symposia Proceedings</i> , 2005 , 880, 1		5
15	Adopting Lead-Free Electronics: Policy Differences and Knowledge Gaps. <i>Journal of Industrial Ecology</i> , 2004 , 8, 59-85	7.2	30
14	Effects of surface oxidation during HVOF processing on the primary stage oxidation of a CoNiCrAlY coating. <i>Surface and Coatings Technology</i> , 2004 , 185, 228-233	4.4	58

13	Characterization of oxide scales formed on HVOF NiCrAlY coatings with various oxygen contents introduced during thermal spraying. <i>Scripta Materialia</i> , 2004 , 51, 25-29	5.6	44
12	Nanocrystalline Ni coatings strengthened with ultrafine particles. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2003 , 34, 673-683	2.3	14
11	Mechanisms of microstructure evolution during cryomilling in the presence of hard particles. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003 , 356, 23-31	5.3	53
10	Nanostructured coatings. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2002 , 336, 274-319	5.3	147
9	Oxidation behavior of HVOF sprayed nanocrystalline NiCrAlY powder. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2002 , 338, 33-43	5.3	144
8	A review on nanostructured WC ₁₀ Co coatings. <i>Surface and Coatings Technology</i> , 2002 , 157, 72-79	4.4	94
7	Thermal stability of nanostructured Cr ₃ C ₂ -NiCr coatings. <i>Journal of Thermal Spray Technology</i> , 2001 , 10, 293-300	2.5	40
6	Solidification of spray atomized silicon droplets. <i>Scripta Metallurgica Et Materialia</i> , 1995 , 32, 1203-1208		5
5	Microstructure, mechanical properties, and ionic conductivity of a solid-state electrolyte prepared using binderless laser powder bed fusion. <i>Journal of Materials Research</i> , 1	2.5	2
4	Advanced Silicon Nitride Components: A Cost Analysis. <i>Ceramic Engineering and Science Proceedings</i> , 497-504		1
3	The Economics of Silicon Carbide Whisker Fabrication 1943-1951		2
2	Bulk Nanostructured Metals from Ball Milling and Consolidation 273-291		3
1	Cost Modeling and Analysis for Advanced Structural Silicon Nitride Turbomachinery Ceramics. <i>Ceramic Engineering and Science Proceedings</i> , 208-216	0.1	