

# Christopher A Schuh

## List of Publications by Citations

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278  
papers

17,401  
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64  
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125  
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296  
ext. papers

19,369  
ext. citations

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L-index

#	Paper	IF	Citations
278	Mechanical behavior of amorphous alloys. <i>Acta Materialia</i> , <b>2007</b> , 55, 4067-4109	8.4	2539
277	Design of stable nanocrystalline alloys. <i>Science</i> , <b>2012</b> , 337, 951-4	33.3	571
276	A nanoindentation study of serrated flow in bulk metallic glasses. <i>Acta Materialia</i> , <b>2003</b> , 51, 87-99	8.4	549
275	Nanoindentation studies of materials. <i>Materials Today</i> , <b>2006</b> , 9, 32-40	21.8	468
274	Atomistic basis for the plastic yield criterion of metallic glass. <i>Nature Materials</i> , <b>2003</b> , 2, 449-52	27	417
273	The effect of solid solution W additions on the mechanical properties of nanocrystalline Ni. <i>Acta Materialia</i> , <b>2003</b> , 51, 431-443	8.4	373
272	New regime of homogeneous flow in the deformation map of metallic glasses: elevated temperature nanoindentation experiments and mechanistic modeling. <i>Acta Materialia</i> , <b>2004</b> , 52, 5879-5891	8.4	372
271	Quantitative insight into dislocation nucleation from high-temperature nanoindentation experiments. <i>Nature Materials</i> , <b>2005</b> , 4, 617-21	27	335
270	Six decades of the Hall-Petch effect: a survey of grain-size strengthening studies on pure metals. <i>International Materials Reviews</i> , <b>2016</b> , 61, 495-512	16.1	334
269	Deformation of metallic glasses: Recent developments in theory, simulations, and experiments. <i>Acta Materialia</i> , <b>2016</b> , 109, 375-393	8.4	315
268	Hall-Petch breakdown manifested in abrasive wear resistance of nanocrystalline nickel. <i>Scripta Materialia</i> , <b>2002</b> , 46, 735-740	5.6	275
267	Tailoring and patterning the grain size of nanocrystalline alloys. <i>Acta Materialia</i> , <b>2007</b> , 55, 371-379	8.4	252
266	Sliding wear of nanocrystalline NiW: Structural evolution and the apparent breakdown of Archard scaling. <i>Acta Materialia</i> , <b>2010</b> , 58, 4137-4148	8.4	226
265	Analysis of grain boundary networks and their evolution during grain boundary engineering. <i>Acta Materialia</i> , <b>2003</b> , 51, 687-700	8.4	224
264	A survey of instrumented indentation studies on metallic glasses. <i>Journal of Materials Research</i> , <b>2004</b> , 19, 46-57	2.5	222
263	Grain boundary segregation and thermodynamically stable binary nanocrystalline alloys. <i>Physical Review B</i> , <b>2009</b> , 79,	3.3	212
262	Initiation of shear bands near a stress concentration in metallic glass. <i>Acta Materialia</i> , <b>2007</b> , 55, 5348-5358	8.4	202

261	Effect of a controlled volume fraction of dendritic phases on tensile and compressive ductility in La-based metallic glass matrix composites. <i>Acta Materialia</i> , <b>2004</b> , 52, 4121-4131	8.4	202
260	The Hall-Petch breakdown in nanocrystalline metals: A crossover to glass-like deformation. <i>Acta Materialia</i> , <b>2007</b> , 55, 5948-5958	8.4	201
259	Nanoscale shape-memory alloys for ultrahigh mechanical damping. <i>Nature Nanotechnology</i> , <b>2009</b> , 4, 415-418	8.7	197
258	Application of nucleation theory to the rate dependence of incipient plasticity during nanoindentation. <i>Journal of Materials Research</i> , <b>2004</b> , 19, 2152-2158	2.5	191
257	Grain boundary segregation, chemical ordering and stability of nanocrystalline alloys: Atomistic computer simulations in the NiW system. <i>Acta Materialia</i> , <b>2007</b> , 55, 4221-4232	8.4	185
256	Shape memory and superelastic ceramics at small scales. <i>Science</i> , <b>2013</b> , 341, 1505-8	33.3	175
255	Stability of binary nanocrystalline alloys against grain growth and phase separation. <i>Acta Materialia</i> , <b>2013</b> , 61, 2121-2132	8.4	173
254	Microstructural evolution during the heat treatment of nanocrystalline alloys. <i>Journal of Materials Research</i> , <b>2007</b> , 22, 3233-3248	2.5	170
253	Enhanced solid solution effects on the strength of nanocrystalline alloys. <i>Acta Materialia</i> , <b>2011</b> , 59, 1619-1631	8.31	161
252	Yield surface of a simulated metallic glass. <i>Acta Materialia</i> , <b>2003</b> , 51, 5399-5411	8.4	159
251	Distribution of thermally activated plastic events in a flowing glass. <i>Physical Review Letters</i> , <b>2009</b> , 102, 235503	7.4	155
250	Adiabatic shear instability is not necessary for adhesion in cold spray. <i>Acta Materialia</i> , <b>2018</b> , 158, 430-438	8.4	143
249	Estimation of grain boundary segregation enthalpy and its role in stable nanocrystalline alloy design. <i>Journal of Materials Research</i> , <b>2013</b> , 28, 2154-2163	2.5	128
248	Size effects in shape memory alloy microwires. <i>Acta Materialia</i> , <b>2011</b> , 59, 537-553	8.4	127
247	Superelasticity and Shape Memory in Micro- and Nanometer-scale Pillars. <i>Advanced Materials</i> , <b>2008</b> , 20, 272-278	24	127
246	Grain boundary relaxation strengthening of nanocrystalline NiW alloys. <i>Journal of Materials Research</i> , <b>2012</b> , 27, 1285-1294	2.5	120
245	Shear transformation zone dynamics model for metallic glasses incorporating free volume as a state variable. <i>Acta Materialia</i> , <b>2013</b> , 61, 3347-3359	8.4	117
244	Mesoscale modeling of amorphous metals by shear transformation zone dynamics. <i>Acta Materialia</i> , <b>2009</b> , 57, 2823-2833	8.4	116

243	Experimental assessment and simulation of surface nanocrystallization by severe shot peening. <i>Acta Materialia</i> , <b>2015</b> , 97, 105-115	8.4	115
242	Strength asymmetry in nanocrystalline metals under multiaxial loading. <i>Acta Materialia</i> , <b>2005</b> , 53, 3193-3205	3.4	115
241	In-situ observations of single micro-particle impact bonding. <i>Scripta Materialia</i> , <b>2018</b> , 145, 9-13	5.6	114
240	Densification and strain hardening of a metallic glass under tension at room temperature. <i>Physical Review Letters</i> , <b>2013</b> , 111, 135504	7.4	109
239	Strain rate-dependent deformation in bulk metallic glasses. <i>Intermetallics</i> , <b>2002</b> , 10, 1177-1182	3.5	104
238	Solid-state foaming of titanium by superplastic expansion of argon-filled pores. <i>Journal of Materials Research</i> , <b>2001</b> , 16, 1508-1519	2.5	101
237	Connectivity and percolation in simulated grain-boundary networks. <i>Philosophical Magazine</i> , <b>2003</b> , 83, 711-726	1.6	99
236	Effect of solid solution elements on nanoindentation hardness, rate dependence, and incipient plasticity in fine grained magnesium alloys. <i>Acta Materialia</i> , <b>2011</b> , 59, 7554-7563	8.4	97
235	Oligocrystalline Shape Memory Alloys. <i>Advanced Functional Materials</i> , <b>2012</b> , 22, 2094-2099	15.6	96
234	Corrosion of nanocrystalline Ni <sub>40</sub> W alloys in alkaline and acidic 3.5wt.% NaCl solutions. <i>Corrosion Science</i> , <b>2011</b> , 53, 1066-1071	6.8	95
233	Stability criteria for nanocrystalline alloys. <i>Acta Materialia</i> , <b>2017</b> , 132, 128-137	8.4	93
232	Nanoindentation and contact-mode imaging at high temperatures. <i>Journal of Materials Research</i> , <b>2006</b> , 21, 725-736	2.5	91
231	The Mohr-Coulomb criterion from unit shear processes in metallic glass. <i>Intermetallics</i> , <b>2004</b> , 12, 1159-1165	1.5	86
230	Superelasticity and fatigue in oligocrystalline shape memory alloy microwires. <i>Acta Materialia</i> , <b>2012</b> , 60, 282-292	8.4	80
229	Nanoscale segregation behavior and high-temperature stability of nanocrystalline W <sub>20</sub> at.% Ti. <i>Acta Materialia</i> , <b>2014</b> , 73, 128-138	8.4	79
228	Hot nanoindentation in inert environments. <i>Review of Scientific Instruments</i> , <b>2010</b> , 81, 073901	1.7	78
227	Solute distribution in nanocrystalline Ni <sub>40</sub> W alloys examined through atom probe tomography. <i>Philosophical Magazine</i> , <b>2006</b> , 86, 4459-4475	1.6	76
226	Towards an integrated materials characterization toolbox. <i>Journal of Materials Research</i> , <b>2011</b> , 26, 1341-1383	4.3	75

225	Atomistic simulation of strain-induced amorphization. <i>Applied Physics Letters</i> , <b>2003</b> , 82, 2017-2019	3.4	74
224	3D printing metals like thermoplastics: Fused filament fabrication of metallic glasses. <i>Materials Today</i> , <b>2018</b> , 21, 697-702	21.8	73
223	Diffusion on grain boundary networks: Percolation theory and effective medium approximations. <i>Acta Materialia</i> , <b>2006</b> , 54, 4709-4720	8.4	72
222	Thermodynamics of stable nanocrystalline alloys: A Monte Carlo analysis. <i>Physical Review B</i> , <b>2014</b> , 89,	3.3	71
221	Hardening of a metallic glass during cyclic loading in the elastic range. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 171911	3.4	71
220	Electrodeposited AlMn alloys with microcrystalline, nanocrystalline, amorphous and nano-quasicrystalline structures. <i>Acta Materialia</i> , <b>2009</b> , 57, 3810-3822	8.4	70
219	Incipient plasticity during nanoindentation at elevated temperatures. <i>Applied Physics Letters</i> , <b>2004</b> , 85, 1362-1364	3.4	68
218	Grain boundary and triple junction constraints during martensitic transformation in shape memory alloys. <i>Journal of Applied Physics</i> , <b>2013</b> , 114, 053503	2.5	67
217	The Hall-Petch breakdown at high strain rates: Optimizing nanocrystalline grain size for impact applications. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 171916	3.4	66
216	Improved representations of misorientation information for grain boundary science and engineering. <i>Progress in Materials Science</i> , <b>2012</b> , 57, 1383-1425	42.2	65
215	Segregation-induced changes in grain boundary cohesion and embrittlement in binary alloys. <i>Acta Materialia</i> , <b>2015</b> , 95, 145-155	8.4	64
214	Cyclic hardening of metallic glasses under Hertzian contacts: Experiments and STZ dynamics simulations. <i>Philosophical Magazine</i> , <b>2010</b> , 90, 1373-1390	1.6	63
213	Mechanics of indentation of plastically graded materialsII: Experiments on nanocrystalline alloys with grain size gradients. <i>Journal of the Mechanics and Physics of Solids</i> , <b>2008</b> , 56, 172-183	5	62
212	Driven alloys in the athermal limit. <i>Physical Review Letters</i> , <b>2003</b> , 91, 235505	7.4	62
211	Yield stress in metallic glasses: The jamming-unjamming transition studied through Monte Carlo simulations based on the activation-relaxation technique. <i>Physical Review B</i> , <b>2009</b> , 80,	3.3	60
210	Shape memory and superelasticity in polycrystalline Cu <sub>3</sub> Ni microwires. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 171906	3.4	58
209	Characterization of the microstructure and texture of nanostructured electrodeposited NiCo using electron backscatter diffraction (EBSD). <i>Acta Materialia</i> , <b>2006</b> , 54, 2451-2462	8.4	58
208	Kinetic Monte Carlo study of activated states and correlated shear-transformation-zone activity during the deformation of an amorphous metal. <i>Physical Review B</i> , <b>2010</b> , 81,	3.3	57

207	Contribution of triple junctions to the diffusion anomaly in nanocrystalline materials. <i>Scripta Materialia</i> , <b>2007</b> , 57, 253-256	5.6	57
206	Grain boundary networks: Scaling laws, preferred cluster structure, and their implications for grain boundary engineering. <i>Acta Materialia</i> , <b>2005</b> , 53, 4323-4335	8.4	57
205	Nanoscale strength distribution in amorphous versus crystalline metals. <i>Journal of Materials Research</i> , <b>2010</b> , 25, 2251-2263	2.5	56
204	Whisker alignment of Ti <sub>3</sub> Al <sub>2</sub> V/TiB composites during deformation by transformation superplasticity. <i>International Journal of Plasticity</i> , <b>2001</b> , 17, 317-340	7.6	56
203	Size effects and shape memory properties in ZrO <sub>2</sub> ceramic micro- and nano-pillars. <i>Scripta Materialia</i> , <b>2015</b> , 101, 40-43	5.6	52
202	Nanocrystalline Materials at Equilibrium: A Thermodynamic Review. <i>Jom</i> , <b>2015</b> , 67, 2834-2843	2.1	52
201	Superelastic cycling of Cu <sub>30</sub> Ni <sub>70</sub> shape memory alloy micropillars. <i>Acta Materialia</i> , <b>2012</b> , 60, 4093-4106	8.4	52
200	Atomistic simulation of slow grain boundary motion. <i>Physical Review Letters</i> , <b>2011</b> , 106, 045503	7.4	52
199	Abrasive wear response of nanocrystalline Ni <sub>3</sub> W alloys across the Hall-Petch breakdown. <i>Wear</i> , <b>2013</b> , 298-299, 120-126	3.5	51
198	Accelerated sintering in phase-separating nanostructured alloys. <i>Nature Communications</i> , <b>2015</b> , 6, 6858	17.4	51
197	Percolation and statistical properties of low- and high-angle interface networks in polycrystalline ensembles. <i>Physical Review B</i> , <b>2004</b> , 69,	3.3	48
196	Materials selection considerations for high entropy alloys. <i>Scripta Materialia</i> , <b>2017</b> , 138, 145-150	5.6	47
195	Traditional and additive manufacturing of a new Tungsten heavy alloy alternative. <i>International Journal of Refractory Metals and Hard Materials</i> , <b>2018</b> , 73, 22-28	4.1	47
194	Nanoindentation behavior and deformed microstructures in coarse-grained magnesium alloys. <i>Scripta Materialia</i> , <b>2013</b> , 68, 416-419	5.6	47
193	Temperature, strain rate and reinforcement volume fraction dependence of plastic deformation in metallic glass matrix composites. <i>Acta Materialia</i> , <b>2007</b> , 55, 3059-3071	8.4	47
192	Atomistic mechanisms of cyclic hardening in metallic glass. <i>Applied Physics Letters</i> , <b>2012</b> , 100, 251909	3.4	46
191	Mechanically driven grain boundary relaxation: a mechanism for cyclic hardening in nanocrystalline Ni. <i>Philosophical Magazine Letters</i> , <b>2012</b> , 92, 20-28	1	46
190	Mesoscale structure and segregation in electrodeposited nanocrystalline alloys. <i>Scripta Materialia</i> , <b>2008</b> , 59, 1218-1221	5.6	46

189	Crystal orientation dependence of the stress-induced martensitic transformation in zirconia-based shape memory ceramics. <i>Acta Materialia</i> , <b>2016</b> , 116, 124-135	8.4	46
188	Melt-driven erosion in microparticle impact. <i>Nature Communications</i> , <b>2018</b> , 9, 5077	17.4	45
187	Melting Can Hinder Impact-Induced Adhesion. <i>Physical Review Letters</i> , <b>2017</b> , 119, 175701	7.4	44
186	High-strain-rate nanoindentation behavior of fine-grained magnesium alloys. <i>Journal of Materials Research</i> , <b>2012</b> , 27, 1295-1302	2.5	44
185	Superelasticity in micro-scale shape memory ceramic particles. <i>Acta Materialia</i> , <b>2017</b> , 123, 255-263	8.4	42
184	Mechanical properties of metallic glass matrix composites: Effects of reinforcement character and connectivity. <i>Scripta Materialia</i> , <b>2007</b> , 56, 617-620	5.6	42
183	Measuring grain-boundary segregation in nanocrystalline alloys: direct validation of statistical techniques using atom probe tomography. <i>Philosophical Magazine Letters</i> , <b>2007</b> , 87, 581-587	1	42
182	Non-isothermal transformation-mismatch plasticity: modeling and experiments on Ti <sub>6</sub> Al <sub>4</sub> V. <i>Acta Materialia</i> , <b>2001</b> , 49, 199-210	8.4	41
181	Role of topological constraints on the statistical properties of grain boundary networks. <i>Physical Review B</i> , <b>2002</b> , 66,	3.3	41
180	Temperature dependence of the indentation size effect. <i>Journal of Materials Research</i> , <b>2010</b> , 25, 1225-1229	12.9	40
179	The generalized Mackenzie distribution: Disorientation angle distributions for arbitrary textures. <i>Acta Materialia</i> , <b>2009</b> , 57, 4186-4197	8.4	40
178	Interplay between thermodynamic and kinetic stabilization mechanisms in nanocrystalline Fe-Mg alloys. <i>Acta Materialia</i> , <b>2018</b> , 144, 447-458	8.4	40
177	Achieving Ultralow Wear with Stable Nanocrystalline Metals. <i>Advanced Materials</i> , <b>2018</b> , 30, e1802026	24	40
176	Duplex nanocrystalline alloys: Entropic nanostructure stabilization and a case study on WCr. <i>Journal of Materials Research</i> , <b>2015</b> , 30, 151-163	2.5	39
175	Impact-bonding with aluminum, silver, and gold microparticles: Toward understanding the role of native oxide layer. <i>Applied Surface Science</i> , <b>2019</b> , 476, 528-532	6.7	39
174	Spectrum of grain boundary segregation energies in a polycrystal. <i>Acta Materialia</i> , <b>2019</b> , 181, 228-237	8.4	38
173	Phase strength effects on chemical mixing in extensively deformed alloys. <i>Acta Materialia</i> , <b>2015</b> , 82, 123-136	8.4	37
172	Response to Comment on $\Delta$ adiabatic shear instability is not necessary for adhesion in cold spray $\square$ <i>Scripta Materialia</i> , <b>2019</b> , 162, 515-519	5.6	37

171	Geometric considerations for diffusion in polycrystalline solids. <i>Journal of Applied Physics</i> , <b>2007</b> , 101, 063524	2.5	36
170	Melt-driven mechanochemical phase transformations in moderately exothermic powder mixtures. <i>Nature Materials</i> , <b>2016</b> , 15, 1280-1286	27	35
169	Transition from many domain to single domain martensite morphology in small-scale shape memory alloys. <i>Acta Materialia</i> , <b>2013</b> , 61, 5618-5625	8.4	35
168	Diffusive-to-ballistic transition in grain boundary motion studied by atomistic simulations. <i>Physical Review B</i> , <b>2011</b> , 84,	3.3	35
167	Symmetries in the representation of grain boundary-plane distributions. <i>Philosophical Magazine</i> , <b>2013</b> , 93, 524-573	1.6	34
166	Hyperspherical harmonics for the representation of crystallographic texture. <i>Acta Materialia</i> , <b>2008</b> , 56, 6141-6155	8.4	34
165	Enhanced densification of metal powders by transformation-mismatch plasticity. <i>Acta Materialia</i> , <b>2000</b> , 48, 1639-1653	8.4	34
164	Thermomechanical behavior at the nanoscale and size effects in shape memory alloys. <i>Journal of Materials Research</i> , <b>2011</b> , 26, 2461-2469	2.5	33
163	Three-dimensional shear transformation zone dynamics model for amorphous metals. <i>Modelling and Simulation in Materials Science and Engineering</i> , <b>2010</b> , 18, 065009	2	32
162	Solute interaction effects on grain boundary segregation in ternary alloys. <i>Acta Materialia</i> , <b>2018</b> , 161, 285-294	8.4	31
161	Rapid assessment of anisotropic surface processes: experiments on the corrosion of Inconel 600. <i>Surface Science</i> , <b>2003</b> , 544, 183-192	1.8	30
160	Combination rule for deviant CSL grain boundaries at triple junctions. <i>Acta Materialia</i> , <b>2003</b> , 51, 3731-3744	3.4	30
159	Nonrandom percolation behavior of grain boundary networks in high-Tc superconductors. <i>Applied Physics Letters</i> , <b>2003</b> , 83, 3755-3757	3.4	30
158	Sputtered HfTi nanostructures: A segregation and high-temperature stability study. <i>Acta Materialia</i> , <b>2016</b> , 108, 8-16	8.4	29
157	A survey of ab-initio calculations shows that segregation-induced grain boundary embrittlement is predicted by bond-breaking arguments. <i>Scripta Materialia</i> , <b>2016</b> , 113, 55-58	5.6	29
156	Solid-state foaming of titanium by hydrogen-induced internal-stress superplasticity. <i>Scripta Materialia</i> , <b>2003</b> , 49, 879-883	5.6	29
155	In situ measurements of surface tension-driven shape recovery in a metallic glass. <i>Scripta Materialia</i> , <b>2009</b> , 60, 1145-1148	5.6	27
154	Preferred nanocrystalline configurations in ternary and multicomponent alloys. <i>Scripta Materialia</i> , <b>2017</b> , 127, 136-140	5.6	26



153	Homogeneous flow of bulk metallic glass composites with a high volume fraction of reinforcement. <i>Journal of Materials Research</i> , <b>2007</b> , 22, 1564-1573	2.5	25
152	Adhesion strength of titanium particles to alumina substrates: A combined cold spray and LIPIT study. <i>Surface and Coatings Technology</i> , <b>2019</b> , 361, 403-412	4.4	24
151	Microstructure, crystallization and shape memory behavior of titania and yttria co-doped zirconia. <i>Journal of the European Ceramic Society</i> , <b>2016</b> , 36, 1277-1283	6	24
150	Effect of crystal orientation on incipient plasticity during nanoindentation of magnesium. <i>Acta Materialia</i> , <b>2017</b> , 139, 21-29	8.4	24
149	Material hardness at strain rates beyond $10^6$ s <sup>-1</sup> via high velocity microparticle impact indentation. <i>Scripta Materialia</i> , <b>2020</b> , 177, 198-202	5.6	24
148	Nanocrystalline Ag-W alloys lose stability upon solute desegregation from grain boundaries. <i>Acta Materialia</i> , <b>2018</b> , 161, 194-206	8.4	24
147	Tool steel coatings based on niobium carbide and carbonitride compounds. <i>Surface and Coatings Technology</i> , <b>2012</b> , 207, 472-479	4.4	23
146	Critical length scales for the deformation of amorphous metals containing nanocrystals. <i>Philosophical Magazine Letters</i> , <b>2007</b> , 87, 603-611	1	23
145	Topological and chemical arrangement of binary alloys during severe deformation. <i>Journal of Applied Physics</i> , <b>2004</b> , 95, 4815-4822	2.5	23
144	A coupled kinetic Monte Carlo finite element mesoscale model for thermoelastic martensitic phase transformations in shape memory alloys. <i>Acta Materialia</i> , <b>2015</b> , 83, 431-447	8.4	22
143	Validated numerical modeling of galvanic corrosion of zinc and aluminum coatings. <i>Corrosion Science</i> , <b>2014</b> , 88, 226-233	6.8	22
142	Ultrahigh superelastic damping at the nano-scale: A robust phenomenon to improve smart MEMS devices. <i>Acta Materialia</i> , <b>2019</b> , 166, 346-356	8.4	22
141	Combinatorial study of thermal stability in ternary nanocrystalline alloys. <i>Acta Materialia</i> , <b>2020</b> , 188, 40-48	8.4	21
140	A continuous and one-to-one coloring scheme for misorientations. <i>Acta Materialia</i> , <b>2011</b> , 59, 554-562	8.4	21
139	Thickness of Anodic Titanium Oxides as a Function of Crystallographic Orientation of the Substrate. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2008</b> , 39, 2143-2147 <sup>2-3</sup>	7.3	21
138	Learning grain boundary segregation energy spectra in polycrystals. <i>Nature Communications</i> , <b>2020</b> , 11, 6376	17.4	20
137	Residual stress in electrodeposited nanocrystalline nickel-tungsten coatings. <i>Journal of Materials Research</i> , <b>2012</b> , 27, 1271-1284	2.5	20
136	Pressure-induced transformation plasticity of H <sub>2</sub> O ice. <i>Physical Review Letters</i> , <b>2001</b> , 86, 668-71	7.4	20

135	Grain boundary segregation beyond the dilute limit: Separating the two contributions of site spectrality and solute interactions. <i>Acta Materialia</i> , <b>2020</b> , 199, 63-72	8.4	20
134	In-situ studies on martensitic transformation and high-temperature shape memory in small volume zirconia. <i>Acta Materialia</i> , <b>2017</b> , 134, 257-266	8.4	19
133	Effects of surface diffusion on high temperature selective emitters. <i>Optics Express</i> , <b>2015</b> , 23, 9979-93	3.3	19
132	Surface oxide and hydroxide effects on aluminum microparticle impact bonding. <i>Acta Materialia</i> , <b>2020</b> , 197, 28-39	8.4	19
131	The uncorrelated triple junction distribution function: Towards grain boundary network design. <i>Acta Materialia</i> , <b>2013</b> , 61, 2863-2873	8.4	19
130	Gallium-enhanced phase contrast in atom probe tomography of nanocrystalline and amorphous Al-Mn alloys. <i>Ultramicroscopy</i> , <b>2011</b> , 111, 1062-72	3.1	19
129	Grain boundary segregation in AlMn electrodeposits prepared from ionic liquid. <i>Journal of Materials Science</i> , <b>2016</b> , 51, 438-448	4.3	18
128	Computational design and optimization of multilayered and functionally graded corrosion coatings. <i>Corrosion Science</i> , <b>2013</b> , 77, 297-307	6.8	18
127	Molecular simulation of amorphization by mechanical alloying. <i>Acta Materialia</i> , <b>2004</b> , 52, 2123-2132	8.4	18
126	Particle flattening during cold spray: Mechanistic regimes revealed by single particle impact tests. <i>Surface and Coatings Technology</i> , <b>2020</b> , 403, 126386	4.4	18
125	Effect of Crystal Orientation on Nanoindentation Behavior in Magnesium. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2016</b> , 47, 3227-3234	2.3	18
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