Anthony D Rollett

List of Publications by Year in Descending Order

375 papers	12,962 citations	59 h-index	102 g-index
384 ext. papers	14,697 ext. citations	4.4 avg, IF	6.63 L-index

#	Paper	IF	Citations
375	Defects and anomalies in powder bed fusion metal additive manufacturing. *Current Opinion in Solid State and Materials Science*, **2022**, 26, 100974	12	16
374	Grain boundary mobility under a stored-energy driving force: a comparison to curvature-driven boundary migration. *International Journal of Materials Research*, **2022**, 96, 1166-1170	0.5	
373	An additively-manufactured molten salt-to-supercritical carbon di-oxide primary heat exchanger for solar thermal power generation Design and techno-economic performance. *Solar Energy*, **2022**, 234, 152-169	6.8	0
372	Interface characteristics and precipitation during the austenite-to-ferrite transformation of a Ti-Mo microalloyed steel. *Journal of Alloys and Compounds*, **2022**, 893, 162224	5.7	1
371	An Updated Index Including Toughness for Hot-Cracking Susceptibility. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2022**, 53, 1486-1498	2.3	1
370	Quantification of Alpha Lath in Ti-6Al-4V using OpenCV. *Materials Characterization*, **2022**, 186, 111802	3.9	
369	Plastic deformation mechanisms that explain hot-rolling textures in Nickel Titanium. *International Journal of Plasticity*, **2022**, 153, 103257	7.6	1
368	Laser-beam powder bed fusion of cost-effective non-spherical hydride-dehydride Ti-6Al-4V alloy. *Additive Manufacturing*, **2022**, 102875	6.1	
367	Time-Resolved Geometric Feature Tracking Elucidates Laser-Induced Keyhole Dynamics. *Integrating Materials and Manufacturing Innovation*, **2021**, 10, 677	2.9	0
366	In situ characterization of laser-generated melt pools using synchronized ultrasound and high-speed X-ray imaging. *Journal of the Acoustical Society of America*, **2021**, 150, 2409	2.2	3
365	A Brief Overview of Texture and Anisotropy. *IOP Conference Series: Materials Science and Engineering*, **2021**, 1121, 012001	0.4	0
364	Electron channeling contrast imaging characterization and crystal plasticity modelling of dislocation activity in Ti21S BCC material. *Materialia*, **2021**, 15, 100996	3.2	3
363	Grain-resolved temperature-dependent anisotropy in hexagonal Ti-7Al revealed by synchrotron X-ray diffraction. *Materials Characterization*, **2021**, 174, 110943	3.9	1
362	Elastoplastic transition in a metastable Titanium alloy, Timetal-18 An in-situ synchrotron X-ray diffraction study. *International Journal of Plasticity*, **2021**, 139, 102947	7.6	9
361	Entrapped Gas and Process Parameter-Induced Porosity Formation in Additively Manufactured 17-4 PH Stainless Steel. *Journal of Materials Engineering and Performance*, **2021**, 30, 5195-5202	1.6	2
360	The AFRL Additive Manufacturing Modeling Challenge: Predicting Micromechanical Fields in AM IN625 Using an FFT-Based Method with Direct Input from a 3D Microstructural Image. *Integrating Materials and Manufacturing Innovation*, **2021**, 10, 157-176	2.9	2
359	Solidification crack propagation and morphology dependence on processing parameters in AA6061 from ultra-high-speed x-ray visualization. *Additive Manufacturing*, **2021**, 42, 101959	6.1	4

358	Physics-based and phenomenological plasticity models for thermomechanical simulation in laser powder bed fusion additive manufacturing: A comprehensive numerical comparison. *Materials and Design*, **2021**, 204, 109658	8.1	6
357	Quantifying morphological variability and operating evolution in SOFC anode microstructures. *Journal of Power Sources*, **2021**, 498, 229846	8.9	0
356	Computer simulation of microstructure development in powder-bed additive manufacturing with crystallographic texture. *Modelling and Simulation in Materials Science and Engineering*, **2021**, 29, 055019	2	8
355	Statistical variations in predicted martensite variant volume fractions in superelastically deformed NiTi modeled using habit plane variants versus correspondence variants. *International Journal of Solids and Structures*, **2021**, 221, 60-76	3.1	3
354	Plastic behavior of the α phase in Ti-6Al-4V alloys. *Materials Letters*, **2021**, 283, 128719	3.3	2
353	Microscale Observation via High-Speed X-ray Diffraction of Alloy 718 During In Situ Laser Melting. *Jom*, **2021**, 73, 212-222	2.1	4
352	Study of Powder Gas Entrapment and Its Effects on Porosity in 17-4 PH Stainless Steel Parts Fabricated in Laser Powder Bed Fusion. *Jom*, **2021**, 73, 177-188	2.1	4
351	Microstructure Generation via Generative Adversarial Network for Heterogeneous, Topologically Complex 3D Materials. *Jom*, **2021**, 73, 90-102	2.1	16
350	Influence of material constitutive models on thermomechanical behaviors in the laser powder bed fusion of Ti-6Al-4V. *Additive Manufacturing*, **2021**, 37, 101680	6.1	4
349	Non-destructive characterization of additively manufactured components with x-ray computed tomography for part qualification: A study with laboratory and synchrotron x-rays. *Materials Characterization*, **2021**, 173, 110894	3.9	4
348	Evaluating the grain-scale deformation behavior of a single-phase FCC high entropy alloy using synchrotron high energy diffraction microscopy. *Acta Materialia*, **2021**, 215, 117120	8.4	2
347	Simulation Study of Hatch Spacing and Layer Thickness Effects on Microstructure in Laser Powder Bed Fusion Additive Manufacturing using a Texture-Aware Solidification Potts Model. *Journal of Materials Engineering and Performance*, **2021**, 30, 7007-7018	1.6	1
346	The role of thermomechanical processing routes on the grain boundary network of martensite in Ti-6Al-4V. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 822, 141665	5.3	1
345	High speed synchrotron X-ray diffraction experiments resolve microstructure and phase transformation in laser processed Ti-6Al-4V. *Materials Research Letters*, **2021**, 9, 429-436	7.4	7
344	Interpretable Machine Learning for Texture-Dependent Constitutive Models with Automatic Code Generation for Topological Optimization. *Integrating Materials and Manufacturing Innovation*, **2021**, 10, 373-392	2.9	1
343	Study of printability and porosity formation in laser powder bed fusion built hydride-dehydride (HDH) Ti-6Al-4V. *Additive Manufacturing*, **2021**, 47, 102323	6.1	0
342	Quantifying primary recrystallization from EBSD maps of partially recrystallized states of an IF steel. *Materials Characterization*, **2021**, 171, 110773	3.9	16
341	Effect of heat treatment on microstructural evolution and hardness homogeneity in laser powder bed fusion of alloy 718. *Additive Manufacturing*, **2020**, 35, 101282	6.1	3

340	High-Energy X-Ray Diffraction Microscopy in Materials Science. *Annual Review of Materials Research* , **2020**, 50, 395-436	12.8	28
339	Distributions of local electrochemistry in heterogeneous microstructures of solid oxide fuel cells using high-performance computations. *Electrochimica Acta*, **2020**, 345, 136191	6.7	5
338	High performance modeling of heterogeneous SOFC electrode microstructures using the MOOSE framework: ERMINE (Electrochemical Reactions in MIcrostructural NEtworks). *MethodsX*, **2020**, 7, 100822	1.9	2
337	Use of Non-Spherical Hydride-Dehydride (HDH) Powder in Powder Bed Fusion Additive Manufacturing. *Additive Manufacturing*, **2020**, 34, 101188	6.1	10
336	Synchrotron Capabilities to Understand Microstructure of Additively Manufactured Materials: Challenges and Opportunities for Modeling and Simulations **2020**, 1173-1191		
335	Additive Manufacturing of Cobalt Alloys **2020**, 374-379		1
334	Powder Characterization for Metal Additive Manufacturing **2020**, 172-179		2
333	Spectral methods for full-field micromechanical modelling of polycrystalline materials. *Computational Materials Science*, **2020**, 173, 109336	3.2	26
332	Quantitative Analysis of Multi-Scale Heterogeneities in Complex Electrode Microstructures. *Journal of the Electrochemical Society*, **2020**, 167, 054506	3.9	6
331	Defect structure process maps for laser powder bed fusion additive manufacturing. *Additive Manufacturing*, **2020**, 36, 101552	6.1	26
330	Critical instability at moving keyhole tip generates porosity in laser melting. *Science*, **2020**, 370, 1080-1086	39.3	106
329	In situ/operando synchrotron x-ray studies of metal additive manufacturing. *MRS Bulletin*, **2020**, 45, 927-933	3.3	11
328	In-situ high energy X-ray diffraction study of the elastic response of a metastable β titanium alloy. *Acta Materialia*, **2020**, 197, 300-308	8.4	7
327	Exploring the fabrication limits of thin-wall structures in a laser powder bed fusion process. *International Journal of Advanced Manufacturing Technology*, **2020**, 110, 191-207	3.2	21
326	Microstructure and Texture Evolution During Thermomechanical Processing of Al0.25CoCrFeNi High-Entropy Alloy. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2019**, 50, 5433-5444	2.3	4
325	Origin of an unusual systematic variation in the heteroepitaxy of Ag on Ni □ The roles of twinning and step alignment. *Acta Materialia*, **2019**, 168, 121-132	8.4	4
324	Effect of Laser-Matter Interaction on Molten Pool Flow and Keyhole Dynamics. *Physical Review Applied*, **2019**, 11,	4.3	65
323	Post-processing to Modify the β Phase Micro-Texture and β Phase Grain Morphology in Ti-6Al-4V Fabricated by Powder Bed Electron Beam Melting. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2019**, 50, 3429-3439	2.3	13

322	Varied heat treatments and properties of laser powder bed printed Inconel 718. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2019**, 755, 170-180	5.3	44
321	High-speed Synchrotron X-ray Imaging of Laser Powder Bed Fusion Process. *Synchrotron Radiation News*, **2019**, 32, 4-8	0.6	12
320	In Situ Characterization of Hot Cracking Using Dynamic X-Ray Radiography. *Minerals, Metals and Materials Series*, **2019**, 77-85	0.3	3
319	In situ Characterization of Laser Powder Bed Fusion Using High-Speed Synchrotron X-ray Imaging Technique. *Microscopy and Microanalysis*, **2019**, 25, 2566-2567	0.5	2
318	Design of an interpretable Convolutional Neural Network for stress concentration prediction in rough surfaces. *Materials Characterization*, **2019**, 158, 109961	3.9	9
317	Real time observation of binder jetting printing process using high-speed X-ray imaging. *Scientific Reports*, **2019**, 9, 2499	4.9	46
316	Keyhole threshold and morphology in laser melting revealed by ultrahigh-speed x-ray imaging. *Science*, **2019**, 363, 849-852	33.3	348
315	An Investigation of Process Parameter Modifications on Additively Manufactured Inconel 718 Parts. *Journal of Materials Engineering and Performance*, **2019**, 28, 620-626	1.6	13
314	A multi-scale, multi-physics modeling framework to predict spatial variation of properties in additive-manufactured metals. *Modelling and Simulation in Materials Science and Engineering*, **2019**, 27, 025009	2	17
313	Numerical modeling and experimental validation of thermal history and microstructure for additive manufacturing of an Inconel 718 product. *Progress in Additive Manufacturing*, **2018**, 3, 15-32	5	35
312	Characterization of metal additive manufacturing surfaces using synchrotron X-ray CT and micromechanical modeling. *Computational Mechanics*, **2018**, 61, 575-580	4	34
311	Optimal microstructural design for high thermal stability of pure FCC metals based on studying effect of twin boundaries character and network of grain boundaries. *Materials and Design*, **2018**, 151, 60-73	8.1	2
310	The Role of Grain Orientation and Grain Boundary Characteristics in the Mechanical Twinning Formation in a High Manganese Twinning-Induced Plasticity Steel. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2018**, 49, 2597-2611	2.3	14
309	Mesoscale characterization of local property distributions in heterogeneous electrodes. *Journal of Power Sources*, **2018**, 386, 1-9	8.9	18
308	Strength of nanoscale metallic multilayers. *Scripta Materialia*, **2018**, 145, 132-136	5.6	37
307	Location specific solidification microstructure control in electron beam melting of Ti-6Al-4V. *Additive Manufacturing*, **2018**, 19, 160-166	6.1	30
306	Defects-dictated tensile properties of selective laser melted Ti-6Al-4V. *Materials and Design*, **2018**, 158, 113-126	8.1	105
305	Austenite Reconstruction Elucidates Prior Grain Size Dependence of Toughness in a Low Alloy Steel. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2018**, 49, 4521-4535	2.3	10

304	Ultrafast X-ray imaging of laser-metal additive manufacturing processes. *Journal of Synchrotron Radiation*, **2018**, 25, 1467-1477	2.4	97
303	Generation of statistically representative synthetic three-dimensional microstructures. *Scripta Materialia*, **2018**, 146, 128-132	5.6	13
302	Effect of microstructure on the elasto-viscoplastic deformation of dual phase titanium structures. *Computational Mechanics*, **2018**, 61, 55-70	4	19
301	Synchrotron Capabilities to Understand Microstructure of Additively Manufactured Materials: Challenges and Opportunities for Modeling and Simulations **2018**, 1-18		
300	One crystal out of many. *Science*, **2018**, 362, 996-997	33.3	3
299	Validation of micro-mechanical FFT-based simulations using High Energy Diffraction Microscopy on Ti-7Al. *Acta Materialia*, **2018**, 154, 273-283	8.4	36
298	Computer Vision and Machine Learning for Autonomous Characterization of AM Powder Feedstocks. *Jom*, **2017**, 69, 456-465	2.1	68
297	Synchrotron-Based X-ray Microtomography Characterization of the Effect of Processing Variables on Porosity Formation in Laser Power-Bed Additive Manufacturing of Ti-6Al-4V. *Jom*, **2017**, 69, 479-484	2.1	159
296	On the crystallographic characteristics of nanobainitic steel. *Acta Materialia*, **2017**, 127, 426-437	8.4	32
295	Simulation of plastic deformation in Ti-5553 alloy using a self-consistent viscoplastic model. *International Journal of Plasticity*, **2017**, 94, 57-73	7.6	35
294	Real-time monitoring of laser powder bed fusion process using high-speed X-ray imaging and diffraction. *Scientific Reports*, **2017**, 7, 3602	4.9	278
293	Austenite-ferrite interface crystallography dependence of sigma phase precipitation using the five-parameter characterization approach. *Materials Letters*, **2017**, 196, 264-268	3.3	26
292	Mesoscopic coupled modeling of texture formation during recrystallization considering stored energy decomposition. *Computational Materials Science*, **2017**, 129, 55-65	3.2	16
291	Extension of the Mechanical Threshold Stress Model to Static and Dynamic Strain Aging: Application to AA5754-O. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2017**, 48, 5591-5607	2.3	1
290	Towards Quantification of Local Electrochemical Parameters in Microstructures of Solid Oxide Fuel Cell Electrodes using High Performance Computations. *ECS Transactions*, **2017**, 78, 2711-2722	1	7
289	A Method for Quantitative 3D Mesoscale Analysis of Solid Oxide Fuel Cell Microstructures Using Xe-plasma Focused Ion Beam (PFIB) Coupled with SEM. *ECS Transactions*, **2017**, 78, 2159-2170	1	11
288	Data analytics using canonical correlation analysis and Monte Carlo simulation. *Npj Computational Materials*, **2017**, 3,	10.9	15
287	Investigation of the aging behavior and orientation relationships in Fe□1.4Mn□1.4Al□0.89C low-density steel. *Journal of Alloys and Compounds*, **2017**, 723, 146-156	5.7	13

286	Analyzing the effects of powder and post-processing on porosity and properties of electron beam melted Ti-6Al-4V. *Materials Research Letters*, **2017**, 5, 516-525	7.4	121
285	Application of canonical correlation analysis to a sensitivity study of constitutive model parameter fitting. *Materials and Design*, **2017**, 132, 30-43	8.1	12
284	Roles of texture and latent hardening on plastic anisotropy of face-centered-cubic materials during multi-axial loading. *Journal of the Mechanics and Physics of Solids*, **2017**, 99, 50-50	5	20
283	A Comprehensive Comparison of the Analytical and Numerical Prediction of the Thermal History and Solidification Microstructure of Inconel 718 Products Made by Laser Powder-Bed Fusion. *Engineering*, **2017**, 3, 685-694	9.7	96
282	MTS model based force prediction for machining of Ti-6Al-4V. *Journal of Advanced Mechanical Design, Systems and Manufacturing*, **2017**, 11, JAMDSM0033-JAMDSM0033	0.6	2
281	Parsing abnormal grain growth. *Acta Materialia*, **2016**, 103, 681-687	8.4	25
280	Effects of Deformation Texture and Microstructure on Recrystallization and Grain Growth in Twip Steels **2016**, 137-145		1
279	Crystal plasticity-based modeling for predicting anisotropic behaviour and formability of metallic materials. *Journal of Physics: Conference Series*, **2016**, 734, 032138	0.3	
278	Crystal plasticity analysis of constitutive behavior of 5754 aluminum sheet **2016**,		1
277	Developing constitutive model parameters via a multi-scale approach. *Integrating Materials and Manufacturing Innovation*, **2016**, 5, 212-231	2.9	5
276	Evolution of Texture and Microstructure in Deformed and Annealed Copper-Iron Multilayer. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2016**, 47, 852-868	2.3	6
275	Evaluating the Effect of Processing Parameters on Porosity in Electron Beam Melted Ti-6Al-4V via Synchrotron X-ray Microtomography. *Jom*, **2016**, 68, 765-771	2.1	98
274	Simulation domain size requirements for elastic response of 3D polycrystalline materials. *Modelling and Simulation in Materials Science and Engineering*, **2016**, 24, 015006	2	13
273	Measurement and Analysis of Porosity in Al-10Si-1Mg Components Additively Manufactured by Selective Laser Melting. *Materials Performance and Characterization*, **2016**, 5, 20160037	0.5	5
272	Nucleation Stage During IF Steel Recrystallization and Internal Misorientation Parameters **2016**, 79-84		
271	Evolution of the Annealing Twin Density during Supersolvus Grain Growth in the Nickel-Based Superalloy Inconel 718. *Metals*, **2016**, 6, 5	2.3	18
270	Experimental study of an aerospace titanium alloy under various thermal and tensile loading rate conditions. *Integrating Materials and Manufacturing Innovation*, **2016**, 5, 245-258	2.9	8
269	Fast Fourier transform discrete dislocation dynamics. *Modelling and Simulation in Materials Science and Engineering*, **2016**, 24, 085005	2	17

268	Grain-boundary character distribution and correlations with electrical and optoelectronic properties of CuInSe2 thin films. *Acta Materialia*, **2016**, 118, 244-252	8.4	20
267	Microstructural effects on damage evolution in shocked copper polycrystals. *Acta Materialia*, **2016**, 116, 270-280	8.4	35
266	Implementation and verification of a microstructure-based capability for modeling microcrack nucleation in LSHR at room temperature. *Modelling and Simulation in Materials Science and Engineering*, **2015**, 23, 035006	2	30
265	The effect of deformation twinning on stress localization in a three dimensional TWIP steel microstructure. *Modelling and Simulation in Materials Science and Engineering*, **2015**, 23, 045010	2	17
264	2D finite element modeling of misorientation dependent anisotropic grain growth in polycrystalline materials: Level set versus multi-phase-field method. *Computational Materials Science*, **2015**, 104, 108-123	3.2	23
263	Calculation of grain boundary normals directly from 3D microstructure images. *Modelling and Simulation in Materials Science and Engineering*, **2015**, 23, 035005	2	18
262	In-situ observation of bulk 3D grain evolution during plastic deformation in polycrystalline Cu. *International Journal of Plasticity*, **2015**, 67, 217-234	7.6	67
261	Crystal plasticity finite element analysis for Ren88DT statistical volume element generation. *Modelling and Simulation in Materials Science and Engineering*, **2015**, 23, 035003	2	5
260	Orientation gradients in relation to grain boundaries at varying strain level and spatial resolution. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2015**, 638, 348-356	5.3	18
259	Importance of interfacial step alignment in hetero-epitaxy and orientation relationships: the case of Ag equilibrated on Ni substrates. Part 2 experiments. *Journal of Materials Science*, **2015**, 50, 5276-5285	4.3	9
258	Observation of annealing twin nucleation at triple lines in nickel during grain growth. *Acta Materialia*, **2015**, 99, 63-68	8.4	58
257	Simulation of residual stress and elastic energy density in thermal barrier coatings using fast Fourier transforms. *Acta Materialia*, **2015**, 96, 212-228	8.4	28
256	Thermally-activated constitutive model including dislocation interactions, aging and recovery for strain path dependence of solid solution strengthened alloys: Application to AA5754-O. *International Journal of Plasticity*, **2015**, 75,	7.6	25
255	Understanding materials microstructure and behavior at the mesoscale. *MRS Bulletin*, **2015**, 40, 951-960	3.2	18
254	Abnormal grain growth in the Potts model incorporating grain boundary complexion transitions that increase the mobility of individual boundaries. *Acta Materialia*, **2015**, 96, 390-398	8.4	36
253	Particle-assisted abnormal grain growth. *IOP Conference Series: Materials Science and Engineering*, **2015**, 89, 012005	0.4	12
252	Comparison in 3D of Experiments on, and Simulations of Plastic Deformation of Polycrystals. *Microscopy and Microanalysis*, **2015**, 21, 2371-2372	0.5	3
251	Thermo-mechanical factors influencing annealing twin development in nickel during recrystallization. *Journal of Materials Science*, **2015**, 50, 5191-5203	4.3	34

250	Consistent representations of and conversions between 3D rotations. *Modelling and Simulation in Materials Science and Engineering*, **2015**, 23, 083501	2	41
249	Calculating probability densities associated with grain-size distributions. *Computational Materials Science*, **2015**, 101, 211-215	3.2	4
248	Grain boundary energies in body-centered cubic metals. *Acta Materialia*, **2015**, 88, 346-354	8.4	141
247	Three-dimensional digital approximations of grain boundary networks in polycrystals. *Modelling and Simulation in Materials Science and Engineering*, **2014**, 22, 025017	2	7
246	The distribution of intervariant crystallographic planes in a lath martensite using five macroscopic parameters. *Acta Materialia*, **2014**, 63, 86-98	8.4	64
245	Annealing twin development during recrystallization and grain growth in pure nickel. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2014**, 597, 295-303	5.3	127
244	Interfacial orientation and misorientation relationships in nanolamellar Cu/Nb composites using transmission-electron-microscope-based orientation and phase mapping. *Acta Materialia*, **2014**, 64, 333-344	8.4	37
243	Polycrystal Plasticity: Comparison Between Grain - Scale Observations of Deformation and Simulations. *Annual Review of Condensed Matter Physics*, **2014**, 5, 317-346	19.7	106
242	Fatigue crack initiation, slip localization and twin boundaries in a nickel-based superalloy. *Current Opinion in Solid State and Materials Science*, **2014**, 18, 244-252	12	67
241	Crystallography of Interfaces and Grain Size Distributions in Sr-Doped LaMnO3. *Journal of the American Ceramic Society*, **2014**, 97, 2623-2630	3.8	6
240	Comparison of crystal orientation mapping-based and image-based measurement of grain size and grain size distribution in a thin aluminum film. *Acta Materialia*, **2014**, 79, 138-145	8.4	13
239	Orientation Mapping **2014**, 1113-1141		2
238	Tensile twin nucleation events coupled to neighboring slip observed in three dimensions. *Acta Materialia*, **2014**, 76, 213-220	8.4	58
237	Crystallographic texture evolution in 1008 steel sheet during multi-axial tensile strain paths. *Integrating Materials and Manufacturing Innovation*, **2014**, 3, 1-19	2.9	59
236	The Population of Twin Related Boundaries in High Purity Nickel as Measured with Near-Field High Energy X-Ray Diffraction Microscopy **2014**, 885-896		2
235	Crystal Plasticity Finite Element Method Simulations for a Polycrystalline Ni Micro-Specimen Deformed in Tension. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2014**, 45, 6352-6359	2.3	19
234	Constitutive Modeling Based on Evolutionary Multi-Junctions of Dislocations. *Key Engineering Materials*, **2014**, 611-612, 1771-1776	0.4	3
233	Validation of a numerical method based on Fast Fourier Transforms for heterogeneous thermoelastic materials by comparison with analytical solutions. *Computational Materials Science*, **2014**, 87, 209-217	3.2	52

232	Accelerated Potts model for grain growth Application to an IF steel. *Computational Materials Science*, **2013**, 68, 189-197	3.2	20
231	Plastic Flow and Microstructure Evolution during Thermomechanical Processing of a PM Nickel-Base Superalloy. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2013**, 44, 2778-2798	2.3	44
230	Grain boundary character distribution of nanocrystalline Cu thin films using stereological analysis of transmission electron microscope orientation maps. *Microscopy and Microanalysis*, **2013**, 19, 111-9	0.5	36
229	Caught in the act: Grain-switching and quadrijunction formation in annealed aluminum. *Scripta Materialia*, **2013**, 69, 37-40	5.6	2
228	Design of radiation tolerant materials via interface engineering. *Advanced Materials*, **2013**, 25, 6975-9	24	248
227	Extreme value analysis of tail departure from log-normality in experimental and simulated grain size distributions. *Acta Materialia*, **2013**, 61, 5595-5604	8.4	29
226	Back calculation of parent austenite orientation using a clustering approach. *Journal of Applied Crystallography*, **2013**, 46, 210-215	3.8	38
225	Grain growth and the puzzle of its stagnation in thin films: The curious tale of a tail and an ear. *Progress in Materials Science*, **2013**, 58, 987-1055	42.2	71
224	Evolution of Microstructure and Texture During Deformation and Recrystallization of Heavily Rolled Cu-Cu Multilayer. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2013**, 44, 3866-3881	2.3	13
223	Formation of Annealing Twins during Recrystallization and Grain Growth in 304L Austenitic Stainless Steel. *Materials Science Forum*, **2013**, 753, 113-116	0.4	45
222	Development of Boundary Misorientations During Grain Growth in Silicon Steels. *Materials Science Forum*, **2013**, 753, 311-316	0.4	3
221	Study of the Effect of Pinning Particles on Grain Size Distributions. *Materials Science Forum*, **2013**, 753, 361-366	0.4	2
220	The strain path dependence of plastic deformation response of AA5754: Experiment and modeling **2013**,		2
219	Comparison of grain size distributions in a Ni-based superalloy in three and two dimensions using the Saltykov method. *Scripta Materialia*, **2012**, 66, 554-557	5.6	24
218	A comparison of texture results obtained using precession electron diffraction and neutron diffraction methods at diminishing length scales in ordered bimetallic nanolamellar composites. *Scripta Materialia*, **2012**, 67, 336-339	5.6	46
217	A theoretical prediction of twin variants in extruded AZ31 Mg alloys using the microstructure based crystal plasticity finite element method. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2012**, 538, 190-201	5.3	23
216	Constitutive Relations for AA 5754 Based on Crystal Plasticity. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2012**, 43, 854-869	2.3	15
215	Crystal plasticity analysis of constitutive behavior of 5754 aluminum sheet deformed along bi-linear strain paths. *International Journal of Solids and Structures*, **2012**, 49, 3507-3516	3.1	20

214	Monte-Carlo Simulation of Goss Abnormal Grain Growth in Fe-3%Si Steel by Sub-Boundary Enhanced Solid-State Wetting. *Materials Science Forum*, **2012**, 715-716, 146-151	0.4	0
213	Three-dimensional plastic response in polycrystalline coppervianear-field high-energy X-ray diffraction microscopy. *Journal of Applied Crystallography*, **2012**, 45, 1098-1108	3.8	67
212	An Analysis of Fatigue Crack Initiation using 2D Orientation Mapping and Full-Field Simulation of Elastic Stress Response **2012**, 439-444		5
211	Distinguishing Dynamic Recrystallization (DRX) in Aluminum and Single Phase Alloys **2012**, 951-956		
210	Properties, Microstructure and Hot Deformation Behavior of Different Al-Zn-Mg (Zr) Alloys **2012**, 1635-1641		
209	Tail Departure of Log-Normal Grain Size Distributions in Synthetic Three-Dimensional Microstructures. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2012**, 43, 2810-2822	2.3	29
208	Microstructure Evolution during Supersolvus Heat Treatment of a Powder Metallurgy Nickel-Base Superalloy. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2012**, 43, 1649-1661	2.3	39
207	A calibrated Monte Carlo approach to quantify the impacts of misorientation and different driving forces on texture development. *Acta Materialia*, **2012**, 60, 1201-1210	8.4	22
206	The heterophase interface character distribution of physical vapor-deposited and accumulative roll-bonded Cu□Nb multilayer composites. *Acta Materialia*, **2012**, 60, 1747-1761	8.4	93
205	Observation of recovery and recrystallization in high-purity aluminum measured with forward modeling analysis of high-energy diffraction microscopy. *Acta Materialia*, **2012**, 60, 4311-4318	8.4	59
204	Mobility Driven Abnormal Grain Growth in the Presence of Particles. *Materials Science Forum*, **2012**, 715-716, 930-935	0.4	2
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