

# Marko Knezevic

## List of Publications by Year in descending order

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180  
papers

9,427  
citations

23500

58  
h-index

48187

88  
g-index

183  
all docs

183  
docs citations

183  
times ranked

3094  
citing authors

#	ARTICLE	IF	CITATIONS
1	Effects of plasticity-induced martensitic transformation and grain refinement on the evolution of microstructure and mechanical properties of a metastable high entropy alloy. <i>Journal of Alloys and Compounds</i> , 2022, 891, 161871.	2.8	13
2	Physical simulations of heat-affected zone microstructures to compare weldability characteristics of additively manufactured and wrought 17-4 stainless steel. <i>Materials Characterization</i> , 2022, 185, 111714.	1.9	5
3	Crystal mechanics-based thermo-elastic constitutive modeling of orthorhombic uranium using generalized spherical harmonics and first-order bounding theories. <i>Journal of Nuclear Materials</i> , 2022, 560, 153472.	1.3	11
4	Predicting extreme anisotropy and shape variations in impact testing of tantalum single crystals. <i>International Journal of Solids and Structures</i> , 2022, 241, 111466.	1.3	8
5	In-situ high-energy X-ray diffraction and crystal plasticity modeling to predict the evolution of texture, twinning, lattice strains and strength during loading and reloading of beryllium. <i>International Journal of Plasticity</i> , 2022, 150, 103217.	4.1	19
6	Fatigue strength of additive manufactured Mar-M-509 superalloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 840, 142913.	2.6	9
7	Experimental characterization and crystal plasticity modeling of dual-phase steels subjected to strain path reversals. <i>Mechanics of Materials</i> , 2022, 168, 104293.	1.7	18
8	Multi-strain path deformation behavior of AA6016-T4: Experiments and crystal plasticity modeling. <i>International Journal of Solids and Structures</i> , 2022, 244-245, 111536.	1.3	6
9	Experimental characterization and crystal plasticity modeling for predicting load reversals in AA6016-T4 and AA7021-T79. <i>International Journal of Plasticity</i> , 2022, 153, 103292.	4.1	27
10	Coupling of a multi-GPU accelerated elasto-visco-plastic fast Fourier transform constitutive model with the implicit finite element method. <i>Computational Materials Science</i> , 2022, 208, 111348.	1.4	13
11	Inducing <math>\alpha</math> texture in AA5182-O through continuous-bending-under-tension and recovery heat treatment processes to influence r-values. <i>CIRP Annals - Manufacturing Technology</i> , 2022, , .	1.7	3
12	Additive manufacturing of functionally graded inconel 718: Effect of heat treatment and building orientation on microstructure and fatigue behaviour. <i>Journal of Materials Processing Technology</i> , 2022, 306, 117573.	3.1	23
13	Effect of powder reuse on tensile, compressive, and creep strength of Inconel 718 fabricated via laser powder bed fusion. <i>Materials Characterization</i> , 2022, 190, 112023.	1.9	12
14	Crystal plasticity modeling of strain-induced martensitic transformations to predict strain rate and temperature sensitive behavior of 304L steels: Applications to tension, compression, torsion, and impact. <i>International Journal of Plasticity</i> , 2022, 156, 103367.	4.1	23
15	Material modeling and simulation of continuous-bending-under-tension of AA6022-T4. <i>Journal of Materials Processing Technology</i> , 2021, 287, 116658.	3.1	7
16	A full-field crystal plasticity model including the effects of precipitates: Application to monotonic, load reversal, and low-cycle fatigue behavior of Inconel 718. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 803, 140478.	2.6	27
17	Stress-assisted ( $\dot{\epsilon} > \dot{\epsilon}_c$ ) and strain-induced ( $\dot{\epsilon} < \dot{\epsilon}_c$ ) phase transformation kinetics laws implemented in a crystal plasticity model for predicting strain path sensitive deformation of austenitic steels. <i>International Journal of Plasticity</i> , 2021, 136, 102807.	4.1	40
18	Coupling kinetic Monte Carlo and finite element methods to model the strain path sensitivity of the isothermal stress-assisted martensite nucleation in TRIP-assisted steels. <i>Mechanics of Materials</i> , 2021, 154, 103707.	1.7	5

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19	An automated procedure built on MTEX for reconstructing deformation twin hierarchies from electron backscattered diffraction datasets of heavily twinned microstructures. <i>Materials Characterization</i> , 2021, 171, 110808.	1.9	6
20	Modeling the role of local crystallographic correlations in microstructures of Ti-6Al-4V using a correlated structure visco-plastic self-consistent polycrystal plasticity formulation. <i>Acta Materialia</i> , 2021, 203, 116502.	3.8	28
21	A numerical study into element type and mesh resolution for crystal plasticity finite element modeling of explicit grain structures. <i>Computational Mechanics</i> , 2021, 67, 33-55.	2.2	29
22	Adjustment of the Mechanical Properties of Mg <sub>2</sub> Nd and Mg <sub>2</sub> Yb by Optimizing Their Microstructures. <i>Metals</i> , 2021, 11, 377.	1.0	3
23	Towards Manufacturing of Ultrafine-Laminated Structures in Metallic Tubes by Accumulative Extrusion Bonding. <i>Metals</i> , 2021, 11, 389.	1.0	5
24	Thermo-hydrogen refinement of microstructure to improve mechanical properties of Ti-6Al-4V fabricated via laser powder bed fusion. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 809, 140980.	2.6	20
25	Dislocation-induced plastic instability in a rare earth containing magnesium alloy. <i>Materialia</i> , 2021, 15, 101038.	1.3	9
26	Modeling of plasticity-induced martensitic transformation to achieve hierarchical, heterogeneous, and tailored microstructures in stainless steels. <i>CIRP Journal of Manufacturing Science and Technology</i> , 2021, 33, 389-397.	2.3	14
27	Identification of crystal plasticity model parameters by multi-objective optimization integrating microstructural evolution and mechanical data. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2021, 379, 113747.	3.4	31
28	Viscoplastic self-consistent formulation as generalized material model for solid mechanics applications. <i>Applications in Engineering Science</i> , 2021, 6, 100040.	0.5	6
29	Modelling dynamic recrystallisation in magnesium alloy AZ31. <i>International Journal of Plasticity</i> , 2021, 142, 102995.	4.1	29
30	Role of interface-affected dislocation motion on the strength of Mg/Nb nanolayered composites inferred by dual-mode confined layer slip crystal plasticity. <i>Journal of the Mechanics and Physics of Solids</i> , 2021, 152, 104421.	2.3	14
31	Plasticity and structure evolution of ferrite and martensite in DP 1180 during tension and cyclic bending under tension to large strains. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 820, 141536.	2.6	18
32	A crystal plasticity finite element model embedding strain-rate sensitivities inherent to deformation mechanisms: Application to alloy AZ31. <i>International Journal of Plasticity</i> , 2021, 143, 103031.	4.1	35
33	Modeling cyclic plasticity of additively manufactured alloy Mar-M-509 using a high-performance spectral-based micromechanical model. <i>Applications in Engineering Science</i> , 2021, 7, 100065.	0.5	4
34	Micromechanical origins of remarkable elongation-to-fracture in AHSS TRIP steels via continuous bending under tension. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 825, 141876.	2.6	5
35	Origins of high ductility exhibited by an extruded magnesium alloy Mg-1.8Zn-0.2Ca: Experiments and crystal plasticity modeling. <i>Journal of Materials Science and Technology</i> , 2021, 84, 27-42.	5.6	39
36	Effect of microstructure induced anisotropy on fatigue behaviour of functionally graded Inconel 718 fabricated by additive manufacturing. <i>Materials Characterization</i> , 2021, 179, 111350.	1.9	35

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37	Role of microstructural heterogeneities in damage formation and fracture of oligocrystalline Mg under tensile loading. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 827, 142096.	2.6	10
38	Polycrystal plasticity modeling for load reversals in commercially pure titanium. <i>International Journal of Plasticity</i> , 2020, 125, 294-313.	4.1	37
39	High-performance full-field crystal plasticity with dislocation-based hardening and slip system back-stress laws: Application to modeling deformation of dual-phase steels. <i>Journal of the Mechanics and Physics of Solids</i> , 2020, 134, 103750.	2.3	40
40	Fabrication of a low alloy ultra-high strength (>1500 MPa yield) steel using powder bed fusion additive manufacturing. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 770, 138512.	2.6	23
41	Processing of Dilute Mg-Zn-Mn-Ca Alloy/Nb Multilayers by Accumulative Roll Bonding. <i>Advanced Engineering Materials</i> , 2020, 22, 1900673.	1.6	11
42	Experimental characterization and crystal plasticity modeling of anisotropy, tension-compression asymmetry, and texture evolution of additively manufactured Inconel 718 at room and elevated temperatures. <i>International Journal of Plasticity</i> , 2020, 125, 63-79.	4.1	111
43	Experimental studies into the role of cyclic bending during stretching of dual-phase steel sheets. <i>International Journal of Material Forming</i> , 2020, 13, 393-408.	0.9	18
44	Elastic constants of pure body-centered cubic Mg in nanolaminates. <i>Computational Materials Science</i> , 2020, 174, 109501.	1.4	18
45	Microstructure and texture evolution in Mg/Nb layered materials made by accumulative roll bonding. <i>International Journal of Plasticity</i> , 2020, 125, 1-26.	4.1	50
46	Effects of environmental temperature and sample pre-straining on high cycle fatigue strength of WE43-T5 magnesium alloy. <i>International Journal of Fatigue</i> , 2020, 141, 105903.	2.8	18
47	Rare-earth- and aluminum-free, high strength dilute magnesium alloy for Biomedical Applications. <i>Scientific Reports</i> , 2020, 10, 15839.	1.6	16
48	Modeling material behavior during continuous bending under tension for inferring the post-necking strain hardening response of ductile sheet metals: Application to DP 780 steel. <i>International Journal of Mechanical Sciences</i> , 2020, 174, 105508.	3.6	22
49	A comparative study between elasto-plastic self-consistent crystal plasticity and anisotropic yield function with distortional hardening formulations for sheet metal forming. <i>Mechanics of Materials</i> , 2020, 148, 103422.	1.7	34
50	Effects of heat treatment and build orientation on the evolution of $\mu$ and $\epsilon^2$ martensite and strength during compressive loading of additively manufactured 304L stainless steel. <i>Acta Materialia</i> , 2020, 195, 59-70.	3.8	29
51	Non-acid, alcohol-based electropolishing enables high-quality electron backscatter diffraction characterization of titanium and its alloys: Application to pure Ti and Ti-6Al-4V. <i>Materials Characterization</i> , 2020, 166, 110406.	1.9	28
52	Modelling the temperature and texture effects on the deformation mechanisms of magnesium alloy AZ31. <i>International Journal of Mechanical Sciences</i> , 2020, 182, 105727.	3.6	36
53	Mechanical behavior and texture evolution of WE43 magnesium-rare earth alloy in Split-Hopkinson Pressure Bar and Taylor Impact Cylinder Testing. <i>International Journal of Impact Engineering</i> , 2020, 143, 103589.	2.4	19
54	Strain-Rate Sensitivity, Tension-Compression Asymmetry, r-Ratio, Twinning, and Texture Evolution of a Rolled Magnesium Alloy Mg-1.3Zn-0.4Ca-0.4Mn. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2020, 51, 3858-3868.	1.1	13

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55	Experimental verification of a crystal plasticity-based simulation framework for predicting microstructure and geometric shape changes: Application to bending and Taylor impact testing of Zr. <i>International Journal of Impact Engineering</i> , 2020, 144, 103655.	2.4	11
56	Determining volume fractions of $\beta$ , $\beta_2$ , $\beta_3$ , $\gamma$ , and MC-carbide phases in Inconel 718 as a function of its processing history using an advanced neutron diffraction procedure. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 781, 139228.	2.6	74
57	Inferring Post-Necking Strain Hardening Behavior of Sheets by a Combination of Continuous Bending Under Tension Testing and Finite Element Modeling. <i>Experimental Mechanics</i> , 2020, 60, 459-473.	1.1	17
58	A multi-GPU implementation of a full-field crystal plasticity solver for efficient modeling of high-resolution microstructures. <i>Computer Physics Communications</i> , 2020, 254, 107231.	3.0	30
59	Predicting deformation behavior of $\delta$ -uranium during tension, compression, load reversal, rolling, and sheet forming using elasto-plastic, multi-level crystal plasticity coupled with finite elements. <i>Journal of the Mechanics and Physics of Solids</i> , 2020, 138, 103924.	2.3	34
60	Modeling of the thermo-mechanical response and texture evolution of WE43 Mg alloy in the dynamic recrystallization regime using a viscoplastic self-consistent formulation. <i>International Journal of Plasticity</i> , 2020, 130, 102705.	4.1	50
61	Mesoscale, Microstructure-Sensitive Modeling for Interface-Dominated, Nanostructured Materials. , 2020, , 1111-1152.		1
62	Structure and properties of pseudomorphically transformed bcc Mg in Mg/Nb multilayered nanolaminates studied using synchrotron X-ray diffraction. <i>Journal of Applied Physics</i> , 2019, 126, 025302.	1.1	10
63	Effect of hot working and aging heat treatments on monotonic, cyclic, and fatigue behavior of WE43 magnesium alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 747, 27-41.	2.6	43
64	An implicit formulation of the elasto-plastic self-consistent polycrystal plasticity model and its implementation in implicit finite elements. <i>Mechanics of Materials</i> , 2019, 136, 103065.	1.7	59
65	A shape interpolation procedure: Application to creating explicit grain structure models based on partial data sets. <i>Computational Materials Science</i> , 2019, 167, 42-51.	1.4	3
66	Deep drawing simulations using the finite element method embedding a multi-level crystal plasticity constitutive law: Experimental verification and sensitivity analysis. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2019, 354, 245-270.	3.4	65
67	Effects of build orientation and heat treatment on the evolution of microstructure and mechanical properties of alloy Mar-M-509 fabricated via laser powder bed fusion. <i>International Journal of Plasticity</i> , 2019, 121, 116-133.	4.1	54
68	Mechanical response, twinning, and texture evolution of WE43 magnesium-rare earth alloy as a function of strain rate: Experiments and multi-level crystal plasticity modeling. <i>International Journal of Plasticity</i> , 2019, 120, 180-204.	4.1	88
69	A generalized spherical harmonics-based procedure for the interpolation of partial datasets of orientation distributions to enable crystal mechanics-based simulations. <i>Materialia</i> , 2019, 6, 100328.	1.3	28
70	Strengthening of alloy AA6022-T4 by continuous bending under tension. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 758, 47-55.	2.6	22
71	Low-cycle fatigue behavior of rolled WE43 magnesium alloy. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2019, 42, 1357-1372.	1.7	35
72	Role of grain structure, grain boundaries, crystallographic texture, precipitates, and porosity on fatigue behavior of Inconel 718 at room and elevated temperatures. <i>Materials Characterization</i> , 2019, 149, 184-197.	1.9	93

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73	Effect of Hot Working on the High Cycle Fatigue Behavior of WE43 Rare Earth Magnesium Alloy. Minerals, Metals and Materials Series, 2019, , 219-225.	0.3	1
74	Predicting elastic anisotropy of dual-phase steels based on crystal mechanics and microstructure. International Journal of Mechanical Sciences, 2019, 151, 639-649.	3.6	40
75	Over five-times improved elongation-to-fracture of dual-phase 1180 steel by continuous-bending-under-tension. Materials and Design, 2019, 161, 95-105.	3.3	38
76	A crystallographic extension to the Olson-Cohen model for predicting strain path dependence of martensitic transformation. Acta Materialia, 2019, 166, 386-401.	3.8	56
77	Modelling recrystallization textures driven by intragranular fluctuations implemented in the viscoplastic self-consistent formulation. Acta Materialia, 2019, 164, 530-546.	3.8	57
78	Experimental study of continuous-bending-under-tension of AA6022-T4. Journal of Materials Processing Technology, 2019, 266, 707-714.	3.1	24
79	Modeling of trans-grain twin transmission in AZ31 via a neighborhood-based viscoplastic self-consistent model. International Journal of Plasticity, 2019, 117, 21-32.	4.1	26
80	Latent hardening within the elasto-plastic self-consistent polycrystal homogenization to enable the prediction of anisotropy of AA6022-T4 sheets. International Journal of Plasticity, 2018, 105, 141-163.	4.1	68
81	A new approach to fluid-structure interaction within graphics hardware accelerated smooth particle hydrodynamics considering heterogeneous particle size distribution. Computational Particle Mechanics, 2018, 5, 387-409.	1.5	10
82	Multiscale Modeling of Microstructure-Property Relationships of Polycrystalline Metals during Thermo-Mechanical Deformation. Advanced Engineering Materials, 2018, 20, 1700956.	1.6	44
83	Origin of plastic anisotropy in (ultra)-fine-grained Mg-Zn-Zr alloy processed by isothermal multi-step forging and rolling: Experiments and modeling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 713, 81-93.	2.6	29
84	Deformation and fracture mechanisms in WE43 magnesium-rare earth alloy fabricated by direct-chill casting and rolling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 726, 194-207.	2.6	60
85	Effect of Grain Shape on Texture Formation during Severe Plastic Deformation of Pure Copper. Advanced Engineering Materials, 2018, 20, 1600829.	1.6	8
86	Graphics processing unit accelerated phase field dislocation dynamics: Application to bi-metallic interfaces. Advances in Engineering Software, 2018, 115, 248-267.	1.8	15
87	An automated procedure for geometry creation and finite element mesh generation: Application to explicit grain structure models and machining distortion. Computational Materials Science, 2018, 141, 269-281.	1.4	34
88	Rate and temperature dependent deformation behavior of as-cast WE43 magnesium-rare earth alloy manufactured by direct-chill casting. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 712, 50-64.	2.6	43
89	Activity of pyramidal I and II slip in Mg alloys as revealed by texture development. Journal of the Mechanics and Physics of Solids, 2018, 111, 290-307.	2.3	61
90	Formability Improvements of DP 1180 Subjected to Continuous-Bending-Under-Tension. IOP Conference Series: Materials Science and Engineering, 2018, 418, 012043.	0.3	0

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91	Review of microstructure and micromechanism-based constitutive modeling of polycrystals with a low-symmetry crystal structure. <i>Journal of Materials Research</i> , 2018, 33, 3711-3738.	1.2	29
92	OpenMP and MPI implementations of an elasto-viscoplastic fast Fourier transform-based micromechanical solver for fast crystal plasticity modeling. <i>Advances in Engineering Software</i> , 2018, 126, 46-60.	1.8	39
93	Deformation-induced surface roughening of an Al-Mg alloy. <i>Journal of Physics: Conference Series</i> , 2018, 1063, 012132.	0.3	3
94	Mesoscale, Microstructure-Sensitive Modeling for Interface-Dominated, Nanostructured Materials. , 2018, , 1-42.		3
95	Room temperature deformation mechanisms of Mg/Nb nanolayered composites. <i>Journal of Materials Research</i> , 2018, 33, 1311-1332.	1.2	43
96	Explicit modeling of double twinning in AZ31 using crystal plasticity finite elements for predicting the mechanical fields for twin variant selection and fracture analyses. <i>Acta Materialia</i> , 2018, 157, 339-354.	3.8	64
97	A new visco-plastic self-consistent formulation implicit in dislocation-based hardening within implicit finite elements: Application to high strain rate and impact deformation of tantalum. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2018, 341, 888-916.	3.4	53
98	Validation of recent analytical dilatational models for porous polycrystals using crystal plasticity finite element models with Schmid and non-Schmid activation laws. <i>Mechanics of Materials</i> , 2018, 126, 148-162.	1.7	16
99	Modeling of intragranular misorientation and grain fragmentation in polycrystalline materials using the viscoplastic self-consistent formulation. <i>International Journal of Plasticity</i> , 2018, 109, 193-211.	4.1	46
100	Compact reconstruction of orientation distributions using generalized spherical harmonics to advance large-scale crystal plasticity modeling: Verification using cubic, hexagonal, and orthorhombic polycrystals. <i>Acta Materialia</i> , 2018, 155, 418-432.	3.8	41
101	Modeling Tensile, Compressive, and Cyclic Response of Inconel 718 Using a Crystal Plasticity Model Incorporating the Effects of Precipitates. <i>Minerals, Metals and Materials Series</i> , 2018, , 655-668.	0.3	3
102	Spectral database constitutive representation within a spectral micromechanical solver for computationally efficient polycrystal plasticity modelling. <i>Computational Mechanics</i> , 2018, 61, 89-104.	2.2	31
103	Coupled texture and non-Schmid effects on yield surfaces of body-centered cubic polycrystals predicted by a crystal plasticity finite element approach. <i>International Journal of Solids and Structures</i> , 2017, 109, 22-32.	1.3	39
104	Formability of Magnesium Alloy AZ31B from Room Temperature to 125°C Under Biaxial Tension. <i>Minerals, Metals and Materials Series</i> , 2017, , 661-667.	0.3	0
105	Characterization of microstructure in Nb rods processed by rolling: Effect of grooved rolling die geometry on texture uniformity. <i>International Journal of Refractory Metals and Hard Materials</i> , 2017, 66, 44-51.	1.7	20
106	Crystal Plasticity Modeling of Microstructure Evolution and Mechanical Fields During Processing of Metals Using Spectral Databases. <i>Jom</i> , 2017, 69, 830-838.	0.9	17
107	Microstructure metrics for quantitative assessment of particle size and dispersion: Application to metal-matrix composites. <i>Powder Technology</i> , 2017, 311, 226-238.	2.1	20
108	Dilatational Response of Voided Polycrystals. <i>Jom</i> , 2017, 69, 942-947.	0.9	6

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109	Elevated Temperature Effects on the Plastic Anisotropy of an Extruded Mg-4 Wt Pct Li Alloy: Experiments and Polycrystal Modeling. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 446-458.	1.1	39
110	Modeling of Sheet Metal Forming Based on Implicit Embedding of the Elasto-Plastic Self-Consistent Formulation in Shell Elements: Application to Cup Drawing of AA6022-T4. Jom, 2017, 69, 922-929.	0.9	48
111	Microstructure Correlation with Formability for Biaxial Stretching of Magnesium Alloy AZ31B at Mildly Elevated Temperatures. Jom, 2017, 69, 907-914.	0.9	6
112	Deformation twinning in rolled WE43-T5 rare earth magnesium alloy: Influence on strain hardening and texture evolution. Acta Materialia, 2017, 131, 221-232.	3.8	138
113	Effects of Pressure and Number of Turns on Microstructural Homogeneity Developed in High-Pressure Double Torsion. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 1249-1263.	1.1	14
114	Predicting intragranular misorientation distributions in polycrystalline metals using the viscoplastic self-consistent formulation. Acta Materialia, 2017, 140, 398-410.	3.8	43
115	Effect of dislocation density-twin interactions on twin growth in AZ31 as revealed by explicit crystal plasticity finite element modeling. International Journal of Plasticity, 2017, 99, 81-101.	4.1	96
116	A crystal plasticity model incorporating the effects of precipitates in superalloys: Application to tensile, compressive, and cyclic deformation of Inconel 718. International Journal of Plasticity, 2017, 99, 162-185.	4.1	127
117	Efficient rolling texture predictions and texture-sensitive thermomechanical properties of $\delta$ -uranium foils. Journal of Nuclear Materials, 2017, 495, 234-243.	1.3	3
118	Coupling elasto-plastic self-consistent crystal plasticity and implicit finite elements: Applications to compression, cyclic tension-compression, and bending to large strains. International Journal of Plasticity, 2017, 93, 187-211.	4.1	92
119	Residual Ductility and Microstructural Evolution in Continuous-Bending-under-Tension of AA-6022-T4. Materials, 2016, 9, 130.	1.3	45
120	Texture formation in orthorhombic alpha-uranium under simple compression and rolling to high strains. Journal of Nuclear Materials, 2016, 473, 143-156.	1.3	66
121	Transitioning rate sensitivities across multiple length scales: Microstructure-property relationships in the Taylor cylinder impact test on zirconium. International Journal of Plasticity, 2016, 84, 138-159.	4.1	47
122	Origin of texture development in orthorhombic uranium. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 665, 108-124.	2.6	44
123	Strain rate and temperature sensitive multi-level crystal plasticity model for large plastic deformation behavior: Application to AZ31 magnesium alloy. International Journal of Plasticity, 2016, 83, 90-109.	4.1	177
124	Dual-phase steel sheets under cyclic tension-compression to large strains: Experiments and crystal plasticity modeling. Journal of the Mechanics and Physics of Solids, 2016, 96, 65-87.	2.3	115
125	A numerical procedure enabling accurate descriptions of strain rate-sensitive flow of polycrystals within crystal visco-plasticity theory. Computer Methods in Applied Mechanics and Engineering, 2016, 308, 468-482.	3.4	67
126	Low cycle fatigue behavior of direct metal laser sintered Inconel alloy 718. International Journal of Fatigue, 2016, 93, 156-167.	2.8	132



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127	Microstructure and mechanical properties of carbon nanotubes reinforced aluminum matrix composites synthesized via equal-channel angular pressing. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 670, 205-216.	2.6	58
128	Compressive, shear, and fracture behavior of CNT reinforced Al matrix composites manufactured by severe plastic deformation. <i>Materials and Design</i> , 2016, 106, 112-119.	3.3	75
129	Modeling discrete twin lamellae in a microstructural framework. <i>Scripta Materialia</i> , 2016, 121, 84-88.	2.6	52
130	The plasticity of highly oriented nano-layered Zr/Nb composites. <i>Acta Materialia</i> , 2016, 115, 189-203.	3.8	60
131	Average intragranular misorientation trends in polycrystalline materials predicted by a viscoplastic self-consistent approach. <i>Acta Materialia</i> , 2016, 104, 228-236.	3.8	60
132	Anisotropic modeling of structural components using embedded crystal plasticity constructive laws within finite elements. <i>International Journal of Mechanical Sciences</i> , 2016, 105, 227-238.	3.6	74
133	Microstructure and mechanical behavior of direct metal laser sintered Inconel alloy 718. <i>Materials Characterization</i> , 2016, 113, 1-9.	1.9	130
134	Delineation of First-Order Elastic Property Closures for Hexagonal Metals Using Fast Fourier Transforms. <i>Materials</i> , 2015, 8, 6326-6345.	1.3	30
135	In situ X-ray diffraction and crystal plasticity modeling of the deformation behavior of extruded Mg-Li (Al) alloys: An uncommon tension-compression asymmetry. <i>Acta Materialia</i> , 2015, 86, 254-268.	3.8	123
136	High-Pressure Double Torsion as a Severe Plastic Deformation Process: Experimental Procedure and Finite Element Modeling. <i>Journal of Materials Engineering and Performance</i> , 2015, 24, 1471-1482.	1.2	59
137	Strain rate and temperature effects on the selection of primary and secondary slip and twinning systems in HCP Zr. <i>Acta Materialia</i> , 2015, 88, 55-73.	3.8	216
138	Effect of age hardening on the deformation behavior of an Mg-Y-Nd alloy: In-situ X-ray diffraction and crystal plasticity modeling. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 628, 396-409.	2.6	76
139	Characterization of Crystallographic Texture and Intra-Grain Morphology in Cross-Rolled Tantalum. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2015, 46, 1085-1096.	1.1	39
140	Explicit incorporation of deformation twins into crystal plasticity finite element models. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2015, 295, 396-413.	3.4	133
141	An elasto-plastic self-consistent model with hardening based on dislocation density, twinning and de-twinning: Application to strain path changes in HCP metals. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 638, 262-274.	2.6	104
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