Thomas BÃ¶hlke

List of Publications by Year
in descending order

220	3,748	136740	182168
papers	citations	32 h-index	51 g-index

226	226	226	2164
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Periodic three-dimensional mesh generation for crystalline aggregates based on Voronoi tessellations. Computational Mechanics, 2009, 43, 701-713.	2.2	162
2	Computational homogenization of elasto-plastic porous metals. International Journal of Plasticity, 2012, 29, 102-119.	4.1	157
3	Efficient fixed point and Newtonâ€“Krylov solvers for FFT-based homogenization of elasticity at large deformations. Computational Mechanics, 2014, 54, 1497-1514.	2.2	148
4	Review on slip transmission criteria in experiments and crystal plasticity models. Journal of Materials Science, 2016, 51, 2243-2258.	1.7	138
5	A gradient plasticity grain boundary yield theory. International Journal of Plasticity, 2013, 51, 33-46.	4.1	97
6	Strain gradient plasticity modeling of the cyclic behavior of laminate microstructures. Journal of the Mechanics and Physics of Solids, 2015, 79, 1-20.	2.3	88
7	Geometrically non-linear modeling of the Portevinâ€“Le Chatelier effect. Computational Materials Science, 2009, 44, 1076-1088.	1.4	73
8	Phase-field elasticity model based on mechanical jump conditions. Computational Mechanics, 2015, 55, 887-901.	2.2	70
9	Virtual process chain of sheet molding compound: Development, validation and perspectives. Composites Part B: Engineering, 2019, 169, 133-147.	5.9	69
10	Mechanisms of toughening in silicon nitrides: The roles of crack bridging and microstructure. Acta Materialia, 2011, 59, 3978-3989.	3.8	64
11	Numerical modeling of carbon/carbon composites with nanotextured matrix and 3D pores of irregular shapes. International Journal of Solids and Structures, 2011, 48, 2447-2457.	1.3	63
12	Threeâ€dimensional finite element implementation of the nonuniform transformation field analysis. International Journal for Numerical Methods in Engineering, 2010, 84, 803-829.	1.5	61
13	Periodic three-dimensional mesh generation for particle reinforced composites with application to metal matrix composites. International Journal of Solids and Structures, 2011, 48, 706-718.	1.3	60
14	Equivalent plastic strain gradient enhancement of single crystal plasticity: theory and numerics. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2012, 468, 2682-2703.	1.0	59
15	Reduced basis homogenization of viscoelastic composites. Composites Science and Technology, 2013, 76, 84-91.	3.8	59
16	Thermomechanical characterization of Portevinâ€“Le ChÃ¢telier bands in AlMg3 (AA5754) and modeling based on a modified Estrinâ€“McCormick approach. International Journal of Plasticity, 2015, 67, 192-216.	4.1	59
17	The evolution of Hooke's law due to texture development in FCC polycrystals. International Journal of Solids and Structures, 2001, 38, 9437-9459.	1.3	58
18	Partitioned Fluidâ€“Solid Coupling for Cardiovascular Blood Flow. Annals of Biomedical Engineering, 2010, 38, 1426-1441.	1.3	57

#	Article	IF	Citations
19	Gradient crystal plasticity including dislocation-based work-hardening and dislocation transport. International Journal of Plasticity, 2015, 69, 152-169.	4.1	56
20	Prediction of effective elastic properties of fiber reinforced composites using fiber orientation tensors. Composites Science and Technology, 2016, 130, 36-45.	3.8	56
21	Homogenization of linear elastic properties of short-fiber reinforced composites â€“ A comparison of mean field and voxel-based methods. International Journal of Solids and Structures, 2015, 67-68, 56-70.	1.3	53
22	Microstructural analysis of short glass fiber reinforced thermoplastics based on x-ray micro-computed tomography. Composites Science and Technology, 2019, 183, 107752.	3.8	51
23	On the micromechanics of deep material networks. Journal of the Mechanics and Physics of Solids, 2020, 142, 103984.	2.3	46
24	On the stress calculation within phase-field approaches: a model for finite deformations. Computational Mechanics, 2017, 60, 203-217.	2.2	44
25	Nonuniform transformation field analysis of materials with morphological anisotropy. Composites Science and Technology, 2011, 71, 433-442.	3.8	43
26	Fast implicit solvers for phase-field fracture problems on heterogeneous microstructures. Computer Methods in Applied Mechanics and Engineering, 2020, 363, 112793.	3.4	41
27	Elastic properties of polycrystalline microcomponents. Mechanics of Materials, 2010, 42, 11-23.	1.7	40
28	Homogenization of elastic properties of short-fiber reinforced composites based on measured microstructure data. Journal of Composite Materials, 2016, 50, 297-312.	1.2	40
29	An FEâ€“DMN method for the multiscale analysis of short fiber reinforced plastic components. Computer Methods in Applied Mechanics and Engineering, 2021, 384, 113952.	3.4	37
30	Modeling of deformation induced anisotropy in free-end torsion. International Journal of Plasticity, 2003, 19, 1867-1884.	4.1	36
31	Computational homogenization of porous materials of Green type. Computational Mechanics, 2013, 52, 121-134.	2.2	36
32	Anisotropic meanfield modeling of debonding and matrix damage in SMC composites. Composites Science and Technology, 2018, 161, 143-158.	3.8	36
33	Application of the maximum entropy method in texture analysis. Computational Materials Science, 2005, 32, 276-283.	1.4	33
34	Finite element simulation of metal forming operations with texture based material models. Modelling and Simulation in Materials Science and Engineering, 2006, 14, 365-387.	0.8	33
35	Crystallographic texture approximation by quadratic programming. Acta Materialia, 2006, 54, 1359-1368.	3.8	31
36	Two-scale structural mechanical modeling of long fiber reinforced thermoplastics. Composites Science and Technology, 2015, 117, 159-167.	3.8	31

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37	On Quasiâ€Newton methods in fast Fourier transformâ€based micromechanics. International Journal for Numerical Methods in Engineering, 2020, 121, 1665-1694.	1.5	31
38	Computational homogenization of sheet molding compound composites based on high fidelity representative volume elements. Computational Materials Science, 2020, 174, 109456.	1.4	30
39	Anisotropic hyperelastic constitutive models for finite deformations combining material theory and data-driven approaches with application to cubic lattice metamaterials. Computational Mechanics, 2021, 67, 653-677.	2.2	30
40	Tensionâ€“compression anisotropy of in-plane elastic modulus for pyrolytic carbon. Carbon, 2011, 49, 2145-2147.	5.4	29
41	Flow-induced anisotropic viscosity in short FRPs. Mechanics of Advanced Materials and Modern Processes, 2017, 3, .	2.2	29
42	On polarization-based schemes for the FFT-based computational homogenization of inelastic materials. Computational Mechanics, 2019, 64, 1073-1095.	2.2	29
43	An efficient solution scheme for small-strain crystal-elasto-viscoplasticity in a dual framework. Computer Methods in Applied Mechanics and Engineering, 2020, 358, 112611.	3.4	29
44	Texture simulation based on tensorial Fourier coefficients. Computers and Structures, 2006, 84, 1086-1094.	2.4	27
45	Equivalent plastic strain gradient crystal plasticity â€“ Enhanced power law subroutine. GAMM Mitteilungen, 2013, 36, 134-148.	2.7	27
46	Representation of Hashinâ€“Shtrikman bounds of cubic crystal aggregates in terms of texture coefficients with application in materials design. Acta Materialia, 2014, 67, 324-334.	3.8	27
47	Physically motivated model for creep of directionally solidified eutectics evaluated for the intermetallic NiAlâ€“9Mo. Acta Materialia, 2016, 110, 377-385.	3.8	26
48	Equivalent plastic strain gradient plasticity with grain boundary hardening and comparison to discrete dislocation dynamics. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2015, 471, 20150388.	1.0	25
49	Deformation patterns in cross-sections of twisted bamboo-structured Au microwires. Acta Materialia, 2015, 97, 216-222.	3.8	25
50	Damage evolution and fracture events sequence in various composites by acoustic emission technique. Composites Science and Technology, 2007, , .	3.8	24
51	An FE-DMN method for the multiscale analysis of thermomechanical composites. Computational Mechanics, 2022, 69, 1087-1113.	2.2	24
52	Fracture characterization of C/C composites under various stress modes by monitoring both mechanical and acoustic responses. Carbon, 2008, 46, 618-630.	5.4	23
53	A texture component model for anisotropic polycrystal plasticity. Computational Materials Science, 2005, 32, 284-293.	1.4	22
54	On the Rank 1 Convexity of Stored Energy Functions of Physically Linear Stress-Strain Relations. Journal of Elasticity, 2007, 86, 235-243.	0.9	21

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55	DMA based characterization of stiffness reduction in long fiber reinforced polypropylene. Polymer Testing, 2018, 66, 296-302.	2.3	21
56	Identifying material parameters in crystal plasticity by Bayesian optimization. Optimization and Engineering, 2022, 23, 1489-1523.	1.3	21
57	Large strain elasto-plasticity for diffuse interface models. Modelling and Simulation in Materials Science and Engineering, 2014, 22, 034008.	0.8	20
58	Small strain elasto-plastic multiphase-field model. Computational Mechanics, 2015, 55, 27-35.	2.2	20
59	Representation of Hashinâ€“Shtrikman Bounds in Terms of Texture Coefficients for Arbitrarily Anisotropic Polycrystalline Materials. Journal of Elasticity, 2019, 134, 1-38.	0.9	19
60	Design charts for reliability assessment of rock bedding slopes stability against bi-planar sliding: SRLEM and BPNN approaches. Georisk, 2022, 16, 360-375.	2.6	19
61	Asymptotic and numerical homogenization methods applied to fibrous viscoelastic composites using Pronyâ€™sÂseries. Acta Mechanica, 2020, 231, 2761-2771.	1.1	19
62	Mean-field homogenization of thermoelastic material properties of a long fiber-reinforced thermoset and experimental investigation. Journal of Composite Materials, 2020, 54, 3777-3799.	1.2	19
63	Homogenization of the thermoelastic properties of silicon nitride. Acta Materialia, 2011, 59, 6029-6038.	3.8	18
64	Variety of fiber orientation tensors. Mathematics and Mechanics of Solids, 2022, 27, 1185-1211.	1.5	18
65	Fast methods for computing centroidal Laguerre tessellations for prescribed volume fractions with applications to microstructure generation of polycrystalline materials. Computer Methods in Applied Mechanics and Engineering, 2020, 369, 113175.	3.4	17
66	Mathematical modeling of the elastic properties of cubic crystals at small scales based on the Toupinâ€“Mindlin anisotropic first strain gradient elasticity. Continuum Mechanics and Thermodynamics, 2022, 34, 107-136.	1.4	17
67	Plastic deformation behaviour of Feâ€“Cu composites predicted by 3D finite element simulations. Computational Materials Science, 2010, 48, 456-465.	1.4	16
68	Cruciform Specimen Design for Biaxial Tensile Testing of SMC. Journal of Composites Science, 2018, 2, 12.	1.4	16
69	Power-law defect energy in a single-crystal gradient plasticity framework: a computational study. Computational Mechanics, 2016, 58, 13-27.	2.2	15
70	Hashinâ€“Shtrikman type mean field model for the two-scale simulation of the thermomechanical processing of steel. International Journal of Plasticity, 2016, 77, 1-29.	4.1	15
71	A gradient crystal plasticity theory for large deformations with a discontinuous accumulated plastic slip. Computational Mechanics, 2017, 60, 923-942.	2.2	15
72	A gradient plasticity creep model accounting for slip transfer/activation at interfaces evaluated for the intermetallic NiAl-9Mo. International Journal of Plasticity, 2019, 113, 291-311.	4.1	15

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73	On mean field homogenization schemes for short fiber reinforced composites: Unified formulation, application and benchmark. International Journal of Solids and Structures, 2021, 230-231, 111141.	1.3	15
74	Microstructure-induced thermal stresses in pyrolytic carbon matrices at temperatures up to 2900Â°C. Journal of the European Ceramic Society, 2007, 27, 4813-4820.	2.8	14
75	Microstructure based prediction and homogenization of the strain hardening behavior of dual-phase steel. Archive of Applied Mechanics, 2015, 85, 1439-1458.	1.2	14
76	Andersonâ€accelerated polarization schemes for fast Fourier transformâ€based computational homogenization. International Journal for Numerical Methods in Engineering, 2021, 122, 2287-2311.	1.5	14
77	Simulation of sheet metal forming incorporating EBSD data. Journal of Materials Processing Technology, 2012, 212, 2659-2668.	3.1	13
78	Isotropic orientation distributions of cubic crystals. Journal of the Mechanics and Physics of Solids, 2001, 49, 2459-2470.	2.3	12
79	An algorithm for the generation of silicon nitride structures. Journal of the European Ceramic Society, 2012, 32, 589-602.	2.8	12
80	Conceptual Difficulties in Plasticity including the Gradient of one Scalar Plastic Field Variable. Proceedings in Applied Mathematics and Mechanics, 2014, 14, 317-318.	0.2	12
81	Materials design for the anisotropic linear elastic properties of textured cubic crystal aggregates using zeroth-, first- and second-order bounds. International Journal of Mechanics and Materials in Design, 2015, 11, 59-78.	1.7	12
82	Homogenization and Materials Design of Anisotropic Multiphase Linear Elastic Materials Using Central Model Functions. Journal of Elasticity, 2017, 128, 17-60.	0.9	12
83	Dynamic mechanical analysis of pure and fiberâ€reinforced thermosetâ€and thermoplasticâ€based polymers and free volumeâ€based viscoelastic modeling. GAMM Mitteilungen, 2018, 41, e201800007.	2.7	12
84	Stability analysis of soil slopes based on strain information. Acta Geotechnica, 2020, 15, 3121-3134.	2.9	12
85	On the Generation of Discrete Isotropic Orientation Distributions for Linear Elastic Cubic Crystals. Journal of Elasticity, 2000, 58, 233-248.	0.9	11
86	A micromechanically motivated finite element approach to the fracture toughness of silicon nitride. Journal of the European Ceramic Society, 2013, 33, 1729-1736.	2.8	11
87	Modeling contrary size effects of tensile- and torsion-loaded oligocrystalline gold microwires. Journal of Materials Science, 2016, 51, 7451-7470.	1.7	11
88	On optimal zeroth-order bounds of linear elastic properties of multiphase materials and application in materials design. International Journal of Solids and Structures, 2016, 84, 40-48.	1.3	11
89	Coupled simulation of flow-induced viscous and elastic anisotropy of short-fiber reinforced composites. Acta Mechanica, 2021, 232, 2249-2268.	1.1	11
90	Asymptotic fiber orientation states of the quadratically closed Folgarâ€“Tucker equation and a subsequent closure improvement. Journal of Rheology, 2021, 65, 999-1022.	1.3	11

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91	A novel random angular bend (RAB) algorithm and DEM modeling of thermal cracking responses of sandstone. Geomechanics for Energy and the Environment, 2022, 32, 100335.	1.2	11
92	On the dependence of orientation averaging mean field homogenization on planar fourth-order fiber orientation tensors. Mechanics of Materials, 2022, 170, 104307.	1.7	11
93	A micro-mechanically based quadratic yield condition for textured polycrystals. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2008, 88, 379-387.	0.9	10
94	Application of the Micro-Computed Tomography for Analyses of the Mechanical Behavior of Brittle Porous Materials. Mechanics of Advanced Materials and Structures, 2008, 15, 467-473.	1.5	10
95	Micromechanical Simulation of the Hall-Petch Effect with a Crystal Gradient Theory including a Grain Boundary Yield Criterion. Proceedings in Applied Mathematics and Mechanics, 2013, 13, 15-18.	0.2	10
96	Twoâ€Scale Modeling of Grain Size and Phase Transformation Effects. Steel Research International, 2014, 85, 1018-1034.	1.0	10
97	Quality Control in the Production Process of SMC Lightweight Material. Procedia CIRP, 2014, 17, 772-777.	1.0	10
98	Mechanism based mean-field modeling of the work-hardening behavior of dual-phase steels. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 682, 126-138.	2.6	10
99	Phase-specific residual stresses induced by deep drawing of lean duplex steel: measurement vs. simulation. Production Engineering, 2019, 13, 227-237.	1.1	10
100	A convex anisotropic damage model based on the compliance tensor. International Journal of Damage Mechanics, 2022, 31, 43-86.	2.4	10
101	Finite element simulation of texture evolution and Swift effect in NiAl under torsion. Modelling and Simulation in Materials Science and Engineering, 2007, 15, 619-637.	0.8	9
102	A pseudoelastic model for mechanical twinning on the microscale. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2010, 90, 565-594.	0.9	9
103	On interface conditions on a material singular surface. Continuum Mechanics and Thermodynamics, 2020, 32, 1417-1434.	1.4	9
104	Computing the effective response of heterogeneous materials with thermomechanically coupled constituents by an implicit fast Fourier transformâ€based approach. International Journal for Numerical Methods in Engineering, 2021, 122, 1307-1332.	1.5	9
105	Effective viscoelastic behavior of polymer composites with regular periodic microstructures. International Journal of Solids and Structures, 2021, 216, 167-181.	1.3	9
106	Prediction of Texture Evolution in Rolled Sheet Metals by Using Homogenization Schemes. Key Engineering Materials, 2012, 504-506, 649-654.	0.4	8
107	Representative reduction of crystallographic orientation data. Journal of Applied Crystallography, 2013, 46, 960-971.	1.9	8
108	Parametric shape optimization of biaxial tensile specimen. Proceedings in Applied Mathematics and Mechanics, 2016, 16, 159-160.	0.2	8

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109	Maximum-Entropy Based Estimates of Stress and Strain in Thermoelastic Random Heterogeneous Materials. Journal of Elasticity, 2020, 141, 321-348.	0.9	8
110	A computational investigation of the effective viscosity of short-fiber reinforced thermoplastics by an FFT-based method. European Journal of Mechanics, B/Fluids, 2021, 90, 99-113.	1.2	8
111	Fiber orientation distributions based on planar fiber orientation tensors of fourth order. Mathematics and Mechanics of Solids, 2023, 28, 773-794.	1.5	8
112	A Minimum Problem Defining Effective Isotropic Elastic Properties. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2000, 80, 419-420.	0.9	7
113	Nonlinear homogenization using the nonuniform transformation field analysis. Proceedings in Applied Mathematics and Mechanics, 2011, 11, 519-522.	0.2	7
114	ON THE SOLVABILITY OF MAXIMUM ENTROPY MOMENT PROBLEMS IN TEXTURE ANALYSIS. Mathematical Models and Methods in Applied Sciences, 2012, 22, .	1.7	7
115	Homogenization of the elastic properties of pyrolytic carbon based on an image processing technique. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2013, 93, 313-328.	0.9	7
116	Phase-Specific Strain Hardening and Load Partitioning of Cold Rolled Duplex Stainless Steel X2CrNiN23-4. Crystals, 2020, 10, 976.	1.0	7
117	Simulation of texture induced elastic anisotropy of polycrystalline copper. Computational Materials Science, 1999, 16, 2-9.	1.4	6
118	Influence of the Crystallographic and the Morphological Texture on the Elastic Properties of Fcc Crystal Aggregates. Solid State Phenomena, 0, 160, 83-86.	0.3	6
119	Micromechanical estimate of the elastic properties of the coherent domains in pyrolytic carbon. Archive of Applied Mechanics, 2014, 84, 133-148.	1.2	6
120	Two-scale simulation of the hot stamping process based on a Hashinâ€“Shtrikman type mean field model. Journal of Materials Processing Technology, 2019, 267, 124-140.	3.1	6
121	On invariance properties of an extended energy balance. Continuum Mechanics and Thermodynamics, 2020, 32, 843-859.	1.4	6
122	Numerical studies of the influence of textural gradients on the local stress concentrations around fibers in carbon/carbon composites. Communications in Numerical Methods in Engineering, 2008, 24, 2194-2205.	1.3	5
123	Numerical methods for the quantification of the mechanical properties of crystal aggregateswith morphologic and crystallographic texture. International Journal of Material Forming, 2009, 2, 915-917.	0.9	5
124	Structure and fracture property relation for silicon nitride on the microscale. Computational Materials Science, 2012, 64, 234-238.	1.4	5
125	Parameter Identification by Inverse Modelling of Biaxial Tensile Tests for Discontinous Fiber Reinforced Polymers. Proceedings in Applied Mathematics and Mechanics, 2015, 15, 355-356.	0.2	5
126	Hashin-Shtrikman bounds with eigenfields in terms of texture coefficients for polycrystalline materials. Acta Materialia, 2019, 165, 686-697.	3.8	5

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127	Determining water mass flow control strategies for a turbocharged SI engine using a two-stage calculation method. Applied Thermal Engineering, 2019, 146, 386-395.	3.0	5
128	Prediction of residual stresses of second kind in deep drawing using an incremental two-scale material model. Philosophical Magazine, 2020, 100, 2836-2856.	0.7	5
129	Asymptotic values of elastic anisotropy in polycrystalline copper for uniaxial tension and compression. Computational Materials Science, 2003, 26, 13-19.	1.4	4
130	Crystallographic texture induced anisotropy inÂcopper: AnÂapproach based on a tensorial Fourier expansion of the CODF. European Physical Journal Special Topics, 2003, 105, 167-174.	0.2	4
131	Homogenization of Linear Elastic Properties of Silicon Nitride. Proceedings in Applied Mathematics and Mechanics, 2008, 8, 10535-10536.	0.2	4
132	Analysis of the effective thermoelastic properties and stress fields in silicon nitride based on EBSD data. Journal of the European Ceramic Society, 2016, 36, 1109-1125.	2.8	4
133	Motivating the development of a virtual process chain for sheet molding compound composites. Proceedings in Applied Mathematics and Mechanics, 2019, 19, e201900124.	0.2	4
134	A microâ€mechanically motivated phenomenological yield function for cubic crystal aggregates. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2020, 100, e202000061.	0.9	4
135	On the effective elastic properties based on mean-field homogenization of sheet molding compound composites. Composites Part C: Open Access, 2021, 4, 100089.	1.5	4
136	The role of dissipation regarding the concept of purely mechanical theories in plasticity. Mechanics Research Communications, 2022, 119, 103832.	1.0	4
137	On the impact of the mesostructure on the creep response of cellular NiAl-Mo eutectics. Acta Materialia, 2022, 226, 117626.	3.8	4
138	Generating polycrystalline microstructures with prescribed tensorial texture coefficients. Computational Mechanics, 0, , .	2.2	4
139	Estimation of mechanical properties of polycrystalline microcomponents. International Journal of Material Forming, 2008, 1, 447-450.	0.9	3
140	Periodic three-dimensional mesh-generation for Voronoi tessellations with application to cubic crystal aggregates. Proceedings in Applied Mathematics and Mechanics, 2008, 8, 10545-10546.	0.2	3
141	Bounds for the Elastic Properties of Pyrolytic Carbon. Proceedings in Applied Mathematics and Mechanics, 2009, 9, 431-434.	0.2	3
142	Texture Based Finite Element Simulation of a Two-Step Can Forming Process. Key Engineering Materials, 2012, 504-506, 655-660.	0.4	3
143	Coupling of Mold Flow Simulations with Two-Scale Structural Mechanical Simulations for Long Fiber Reinforced Thermoplastics. Materials Science Forum, 0, 825-826, 655-662.	0.3	3
144	Stress-strain characterization and damage modeling of glass-fiber-reinforced polymer composites with vinylester matrix. Journal of Composite Materials, 2017, 51, 547-562.	1.2	3

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145	Mean and full field homogenization of artificial long fiber reinforced thermoset polymers. Proceedings in Applied Mathematics and Mechanics, 2017, 17, 603-604.	0.2	3
146	Effective transport properties for periodic multiphase fiber-reinforced composites with complex constituents and parallelogram unit cells. International Journal of Solids and Structures, 2020, 204-205, 96-113.	1.3	3
147	Residual stresses in deep-drawn cups made of duplex stainless steel X2CrNiN23-4. Forschung Im Ingenieurwesen/Engineering Research, 2021, 85, 795-806.	1.0	3
148	Efficient twoâ€scale simulations of microstructured materials using deep material networks. Proceedings in Applied Mathematics and Mechanics, 2021, 21, .	0.2	3
149	Nonlinear Schapery viscoelastic material model for thermoplastic polymers. Journal of Applied Polymer Science, 2022, 139, .	1.3	3
150	FFT-based investigation of the shear stress distribution in face-centered cubic polycrystals. International Journal of Plasticity, 2022, 157, 103369.	4.1	3
151	Texture Development of Aluminum Polycrystals Under Finite Plastic Deformations. , 1999, , 127-136.		2
152	Finite element simulation of sheet metal forming and springback using a crystal plasticity approach. AIP Conference Proceedings, 2007, , .	0.3	2
153	On estimates for the effective shear modulus of cubic crystal aggregates. Proceedings in Applied Mathematics and Mechanics, 2008, 8, 10551-10552.	0.2	2
154	Modelling and Simulation of the Portevin-Le Chatelier Effect. , 2008, , 53-61.		2
155	Representation of effective flow potentials for polycrystals based on texture data. International Journal of Material Forming, 2009, 2, 451-454.	0.9	2
156	Deep Drawing Simulations Based on Microstructural Data. Proceedings in Applied Mathematics and Mechanics, 2010, 10, 69-70.	0.2	2
157	Study of Experimental Methods for Interface Problems Based on Virtual Testing. Proceedings in Applied Mathematics and Mechanics, 2010, 10, 109-110.	0.2	2
158	Thermal Residual Stresses and Triaxiality Measures. Proceedings in Applied Mathematics and Mechanics, 2010, 10, 137-138.	0.2	2
159	Estimate of the Thermoelastic Properties of Pyrolytic Carbon based on an Image Segmentation Technique. Proceedings in Applied Mathematics and Mechanics, 2010, 10, 281-282.	0.2	2
160	Gradient Plasticity for Single Crystals. Proceedings in Applied Mathematics and Mechanics, 2010, 10, 351-352.	0.2	2
161	Numerical Studies of the Influence of the Porosity on Macroscopic Elastic Properties of Carbon/Carbon Composites. Proceedings in Applied Mathematics and Mechanics, 2010, 10, 719-720.	0.2	2
162	Influence of micro-structure on fibre push-out tests. Proceedings in Applied Mathematics and Mechanics, 2011, 11, 141-142.	0.2	2

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163	In-depth online monitoring of the sheet metal process state derived from multi-scale simulations. International Journal of Advanced Manufacturing Technology, 2013, 68, 2625-2636.	1.5	2
164	A two-scale weakest link model based on a micromechanical approach. Computational Materials Science, 2013, 80, 43-50.	1.4	2
165	Incremental Scheme to Homogenize Anisotropic Elastic Properties of Multi-Phase Composites. Proceedings in Applied Mathematics and Mechanics, 2014, 14, 553-554.	0.2	2
166	Application of Strain Gradient Plasticity to Microâ€torsion Experiments. Proceedings in Applied Mathematics and Mechanics, 2014, 14, 313-314.	0.2	2
167	One-dimensional simulation of the creep behavior of directionally solidified NiAl-9Mo. Proceedings in Applied Mathematics and Mechanics, 2015, 15, 269-270.	0.2	2
168	Materials design of elastic properties of multiphase polycrystalline composites using model functions. Proceedings in Applied Mathematics and Mechanics, 2015, 15, 459-460.	0.2	2
169	Sensitivity Analysis of Fiber-Matrix Interface Parameters in an SMC Composite Damage Model. Proceedings (mdpi), 2018, 2, .	0.2	2
170	Investigations of Cruciform Specimen Designs for Biaxial Tensile Testing of SMC. Proceedings (mdpi), 2018, 2, .	0.2	2
171	Fast algorithms for generating thermal boundary conditions in combustion chambers. Applied Thermal Engineering, 2018, 141, 101-113.	3.0	2
172	Numerical characterization of residual stresses in a four-point-bending experiment of textured duplex stainless steel. Archive of Applied Mechanics, 2021, 91, 3541-3555.	1.2	2
173	The averaging bias â€•A standard miscalculation, which extensively underestimates real CO 2 emissions. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2021, 101, e202100205.	0.9	2
174	A computational multiscale model for anisotropic failure of sheet molding compound composites. Composite Structures, 2022, 288, 115322.	3.1	2
175	Computing the effective crack energy of microstructures via quadratic cone solvers. Proceedings in Applied Mathematics and Mechanics, 2021, 21, .	0.2	2
176	Three-dimensional continuum mechanical modeling of the Portevin-Le ChÃƒÂ¢telier effect. Proceedings in Applied Mathematics and Mechanics, 2007, 7, 4060035-4060036.	0.2	1
177	A micro-mechanically based quadratic yield condition for textured polycrystals. International Journal of Material Forming, 2008, 1, 209-212.	0.9	1
178	Prediction of the Elastic Properties of Polycrystalline Microcomponents by Numerical Homogenization. Advanced Engineering Materials, 2009, 11, 158-161.	1.6	1
179	Analytical inversion of the Jacobian for a class of generalized standard materials. Proceedings in Applied Mathematics and Mechanics, 2009, 9, 407-408.	0.2	1
180	Influence of the number of grains in a polycrystal on the prediction of texture during rolling by using the Taylor approach. Proceedings in Applied Mathematics and Mechanics, 2010, 10, 415-416.	0.2	1

#	ARTICLE	IF	CITATIONS
181	Estimate of the Domain Orientation Distribution Function and the Thermoelastic Properties of Pyrolytic Carbon Based on an Image Processing Technique. Proceedings in Applied Mathematics and Mechanics, 2011, 11, 537-538.	0.2	1
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