Said Ahzi

List of Publications by Year
in descending order

246 papers	8,755 citations	46918 47 h-index	53109 85 g-index
261 all docs	261 docs citations	261 times ranked	6788 citing authors

#	Article	IF	Citations
1	A self consistent approach of the large deformation polycrystal viscoplasticity. Acta Metallurgica, 1987, 35, 2983-2994.	2.1	922
2	Influence of temperature and strain rate on the mechanical behavior of three amorphous polymers: Characterization and modeling of the compressive yield stress. International Journal of Solids and Structures, 2006, 43, 2318-2335.	1.3	451
3	Thermal conductivity and tensile response of defective graphene: A molecular dynamics study. Carbon, 2013, 63, 460-470.	5.4	229
4	A formulation of the cooperative model for the yield stress of amorphous polymers for a wide range of strain rates and temperatures. Polymer, 2005, 46, 6035-6043.	1.8	220
5	Modeling and validation of the large deformation inelastic response of amorphous polymers over a wide range of temperatures and strain rates. International Journal of Solids and Structures, 2007, 44, 7938-7954.	1.3	201
6	Micromechanical modeling of large plastic deformation and texture evolution in semi-crystalline polymers. Journal of the Mechanics and Physics of Solids, 1993, 41, 1651-1687.	2.3	178
7	Three-dimensional transient finite element analysis of the selective laser sintering process. Journal of Materials Processing Technology, 2009, 209, 700-706.	3.1	176
8	Simulation of large strain plastic deformation and texture evolution in high density polyethylene. Polymer, 1993, 34, 3555-3575.	1.8	172
9	Polycrystalline plastic deformation and texture evolution for crystals lacking five independent slip systems. Journal of the Mechanics and Physics of Solids, 1990, 38, 701-724.	2.3	159
10	A unified model for stiffness modulus of amorphous polymers across transition temperatures and strain rates. Polymer, 2005, 46, 8194-8201.	1.8	149
11	On the self-consistent modeling of elastic-plastic behavior of polycrystals. Mechanics of Materials, 1997, 26, 43-62.	1.7	146
12	Interphase effect on the elastic and thermal conductivity response of polymer nanocomposite materials: 3D finite element study. Computational Materials Science, 2013, 69, 100-106.	1.4	145
13	Modeling of two-phase random composite materials by finite element, Moriâ€“Tanaka and strong contrast methods. Composites Part B: Engineering, 2013, 45, 1117-1125.	5.9	140
14	Combined molecular dynamics-finite element multiscale modeling of thermal conduction in graphene epoxy nanocomposites. Carbon, 2013, 60, 356-365.	5.4	133
15	A model for microstructure evolution in adiabatic shear bands. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1998, 29, 191-203.	1.1	128
16	Review of PV soiling particle mechanics in desert environments. Renewable and Sustainable Energy Reviews, 2017, 76, 872-881.	8.2	126
17	Flat borophene films as anode materials for Mg, Na or Li-ion batteries with ultra high capacities: A first-principles study. Applied Materials Today, 2017, 8, 60-67.	2.3	122
18	Modeling of deformation behavior and strain-induced crystallization in poly(ethylene terephthalate) above the glass transition temperature. Mechanics of Materials, 2003, 35, 1139-1148.	1.7	113

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19	Hydroxyapatite Modified with Carbonâ€Nanotubeâ€Reinforced Poly(methyl methacrylate): A Nanocomposite Material for Biomedical Applications. Advanced Functional Materials, 2008, 18, 694-700.	7.8	109
20	A new smoothed particle hydrodynamics non-Newtonian model for friction stir welding: Process modeling and simulation of microstructure evolution in a magnesium alloy. International Journal of Plasticity, 2013, 48, 189-204.	4.1	102
21	Adsorption of phosphate on iron oxide doped halloysite nanotubes. Scientific Reports, 2019, 9, 3232.	1.6	99
22	Nitrogen doping and curvature effects on thermal conductivity of graphene: A non-equilibrium molecular dynamics study. Solid State Communications, 2012, 152, 261-264.	0.9	97
23	Investigation of factors affecting condensation on soiled PV modules. Solar Energy, 2018, 159, 488-500.	2.9	92
24	Molecular dynamics study on the thermal conductivity and mechanical properties of boron doped graphene. Solid State Communications, 2012, 152, 1503-1507.	0.9	89
25	Recycling effects on the rheological and thermomechanical properties of polypropylene-based composites. Materials & Design, 2012, 33, 451-458.	5.1	87
26	High performance hydroxyiron modified montmorillonite nanoclay adsorbent for arsenite removal. Chemical Engineering Journal, 2018, 335, 1-12.	6.6	87
27	Statistical continuum theory for large plastic deformation of polycrystalline materials. Journal of the Mechanics and Physics of Solids, 2001, 49, 589-607.	2.3	84
28	Synergistic reinforcement of polyamide-based composites by combination of short and continuous carbon fibers via fused filament fabrication. Composite Structures, 2019, 207, 232-239.	3.1	83
29	Three-phase solid oxide fuel cell anode microstructure realization using two-point correlation functions. Acta Materialia, 2011, 59, 30-43.	3.8	82
30	Nitrogen doping and vacancy effects on the mechanical properties of graphene: A molecular dynamics study. Physics Letters, Section A: General, Atomic and Solid State Physics, 2012, 376, 1146-1153.	0.9	79
31	Effect of talc content on the degradation of re-extruded polypropylene/talc composites. Polymer Degradation and Stability, 2013, 98, 1275-1286.	2.7	79
32	PV panel single and double diode models: Optimization of the parameters and temperature dependence. Solar Energy Materials and Solar Cells, 2016, 148, 87-98.	3.0	78
33	Finite elements simulations of thin copper sheets blanking: Study of blanking parameters on sheared edge quality. Journal of Materials Processing Technology, 2008, 199, 74-83.	3.1	74
34	Experimental and multiscale modeling of thermal conductivity and elastic properties of PLA/expanded graphite polymer nanocomposites. Thermochimica Acta, 2013, 552, 106-113.	1.2	74
35	Thickness and chirality effects on tensile behavior of few-layer graphene by molecular dynamics simulations. Computational Materials Science, 2012, 53, 298-302.	1.4	70
36	A two-phase self-consistent model for the deformation and phase transformation behavior of polymers above the glass transition temperature: application to PET. International Journal of Plasticity, 2005, 21, 741-758.	4.1	69

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37	Micromechanical modeling and characterization of the effective properties in starch-based nano-biocomposites. Acta Biomaterialia, 2008, 4, 1707-1714.	4.1	66
38	A simple model to simulate electromagnetic sheet free bulging process. International Journal of Mechanical Sciences, 2008, 50, 1466-1475.	3.6	65
39	Analysis of thermomechanical reprocessing effects on polypropylene/ethylene octene copolymer blends. Polymer Degradation and Stability, 2012, 97, 1475-1484.	2.7	61
40	A new three-phase model to estimate the effective elastic properties of semi-crystalline polymers: Application to PET. Mechanics of Materials, 2010, 42, 1-10.	1.7	59
41	A computational analysis of coupled thermal and electrical behavior of PV panels. Solar Energy Materials and Solar Cells, 2016, 148, 73-86.	3.0	59
42	Renewable biocomposites of dimer fatty acid-based polyamides with cellulose fibres: Thermal, physical and mechanical properties. Composites Science and Technology, 2010, 70, 504-509.	3.8	58
43	Flexure Behaviors of ABS-based Composites Containing Carbon and Kevlar Fibers by Material Extrusion 3D Printing. Polymers, 2019, 11, 1878.	2.0	56
44	Influence of the material constitutive models on the adiabatic shear band spacing: MTS, power law and Johnsonâ€“Cook models. International Journal of Solids and Structures, 2004, 41, 3109-3124.	1.3	55
45	Dominant environmental parameters for dust deposition and resuspension in desert climates. Aerosol Science and Technology, 2018, 52, 788-798.	1.5	52
46	Using energy balance method to study the thermal behavior of PV panels under time-varying field conditions. Energy Conversion and Management, 2018, 175, 246-262.	4.4	52
47	Elastic-plastic crystal mechanics for low symmetry crystals. Journal of the Mechanics and Physics of Solids, 1995, 43, 415-446.	2.3	49
48	Impact response of recycled polypropylene-based composites under a wide range of temperature: Effect of filler content and recycling. Composites Science and Technology, 2014, 95, 89-99.	3.8	49
49	Micromechanically based formulation of the cooperative model for the yield behavior of semi-crystalline polymers. Acta Materialia, 2008, 56, 1650-1655.	3.8	48
50	Electro-hydraulic forming of sheet metals: Free-forming vs. conical-die forming. Journal of Materials Processing Technology, 2012, 212, 1070-1079.	3.1	47
51	An interfacial debonding-induced damage model for graphite nanoplatelet polymer composites. Computational Materials Science, 2015, 96, 191-199.	1.4	46
52	Crack Growth in Solid Oxide Fuel Cell Materials: From Discrete to Continuum Damage Modeling. Journal of the American Ceramic Society, 2006, 89, 1358-1368.	1.9	45
53	Experimental investigation and micromechanical modeling of high strain rate compressive yield stress of a melt mixing polypropylene organoclay nanocomposites. Mechanics of Materials, 2012, 52, 58-68.	1.7	43
54	Effective conductivity in isotropic heterogeneous media using a strong-contrast statistical continuum theory. Journal of the Mechanics and Physics of Solids, 2009, 57, 76-86.	2.3	41

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55	Mechanical and thermal behavior of nanoclay based polymer nanocomposites using statistical homogenization approach. Composites Science and Technology, 2011, 71, 1930-1935.	3.8	41
56	Three-dimensional reconstruction and homogenization of heterogeneous materials using statistical correlation functions and FEM. Computational Materials Science, 2012, 51, 372-379.	1.4	41
57	An adaptive modelling technique for parameters extraction of photovoltaic devices under varying sunlight and temperature conditions. Applied Energy, 2019, 236, 728-742.	5.1	41
58	Asymmetric rolling of thin AA-5182 sheets: Modelling and experiments. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 603, 150-159.	2.6	39
59	Composite modeling for the effective elastic properties of semicrystalline polymers. Journal of Mechanics of Materials and Structures, 2007, 2, 1-21.	0.4	37
60	New approximate solution for N-point correlation functions for heterogeneous materials. Journal of the Mechanics and Physics of Solids, 2012, 60, 104-119.	2.3	37
61	3D Reconstruction of Carbon Nanotube Composite Microstructure Using Correlation Functions. Journal of Computational and Theoretical Nanoscience, 2010, 7, 1462-1468.	0.4	36
62	High strain rate behaviour of renewable biocomposites based on dimer fatty acid polyamides and cellulose fibres. Composites Science and Technology, 2011, 71, 674-682.	3.8	36
63	On the plasticity of low symmetry crystals lacking five independent slip systems. Mechanics of Materials, 1995, 20, 1-8.	1.7	35
64	A new intermediate model for polycrystalline viscoplastic deformation and texture evolution. Acta Materialia, 2008, 56, 5359-5369.	3.8	35
65	Thermodynamic assessment of an integrated renewable energy multigeneration system including ammonia as hydrogen carrier and phase change material energy storage. Energy Conversion and Management, 2019, 198, 111809.	4.4	35
66	Plasticity and anisotropy evolution in crystalline polymers. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1994, 189, 35-44.	2.6	33
67	Two-dimensional finite difference-based model for coupled irradiation and heat transfer in photovoltaic modules. Solar Energy Materials and Solar Cells, 2018, 180, 289-302.	3.0	33
68	Assessing the three-dimensional collagen network in soft tissues using contrast agents and high resolution micro-CT: Application to porcine iliac veins. Comptes Rendus - Biologies, 2015, 338, 425-433.	0.1	32
69	Modeling of thermal shock-induced damage in a borosilicate glass. Mechanics of Materials, 2010, 42, 863-872.	1.7	31
70	Asymmetric rolling of interstitial free steel sheets: Microstructural evolution and mechanical properties. Journal of Manufacturing Processes, 2018, 31, 583-592.	2.8	31
71	Effect of physical and environmental factors on the performance of a photovoltaic panel. Solar Energy Materials and Solar Cells, 2019, 200, 109948.	3.0	31
72	Modeling the mechanical behavior of tantalum. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1997, 28, 113-122.	1.1	30

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73	Thermodynamic investigation of yield-stress models for amorphous polymers. Philosophical Magazine, 2007, 87, 3629-3643.	0.7	30
74	Improving diamond coating on Ti6Al4V substrate using a diamond like carbon interlayer: Raman residual stress evaluation and AFM analyses. Diamond and Related Materials, 2012, 22, 105-112.	1.8	30
75	Application of crystal plasticity theory for mechanically processed BSCCO superconductors. Mechanics of Materials, 1993, 15, 201-222.	1.7	29
76	Modeling and Simulation of Thin Sheet Blanking Using Damage and Rupture Criteria. International Journal of Forming Processes, 2005, 8, 29-47.	0.3	28
77	Semi-inverse Monte Carlo reconstruction of two-phase heterogeneous material using two-point functions. International Journal of Theoretical and Applied Multiscale Mechanics, 2009, 1, 134.	0.5	27
78	Compressive behaviors of 3D printed polypropylene-based composites at low and high strain rates. Polymer Testing, 2021, 103, 107321.	2.3	27
79	Micromechanical modeling of the elastic behavior of polypropylene based organoclay nanocomposites under a wide range of temperatures and strain rates/frequencies. Mechanics of Materials, 2013, 64, 56-68.	1.7	26
80	Processing path optimization to achieve desired texture in polycrystalline materials. Acta Materialia, 2007, 55, 647-654.	3.8	25
81	Statistical continuum theory for the effective conductivity of carbon nanotubes filled polymer composites. Thermochimica Acta, 2011, 520, 33-37.	1.2	25
82	Application of machine learning methods on dynamic strength analysis for additive manufactured polypropylene-based composites. Polymer Testing, 2022, 110, 107580.	2.3	25
83	Prediction of the Mechanical Properties of Hydroxyapatite/Polymethyl Methacrylate/Carbon Nanotubes Nanocomposite. Journal of Nanoscience and Nanotechnology, 2008, 8, 4279-4284.	0.9	24
84	Bicrystal-Based Modeling of Plasticity in FCC Metals. Journal of Engineering Materials and Technology, Transactions of the ASME, 2002, 124, 27-40.	0.8	23
85	A new approximation for the three-point probability function. International Journal of Solids and Structures, 2009, 46, 3782-3787.	1.3	23
86	Yield behaviour of renewable biocomposites of dimer fatty acid-based polyamides with cellulose fibres. Composites Science and Technology, 2010, 70, 525-529.	3.8	23
87	Dynamic Compressive Behavior of a Melt Mixed Polypropylene/Organoclay Nanocomposites. Journal of Engineering Materials and Technology, Transactions of the ASME, 2012, 134, .	0.8	23
88	Groundwater recharge estimation and its spatial distribution in arid regions using GIS: a case study from Qatar karst aquifer. Modeling Earth Systems and Environment, 2018, 4, 1319-1329.	1.9	23
89	Statistical continuum theory for the effective conductivity of fiber filled polymer composites: Effect of orientation distribution and aspect ratio. Composites Science and Technology, 2010, 70, 510-517.	3.8	22
90	Microstructure, property and processing relation in gradient porous cathode of solid oxide fuel cells using statistical continuum mechanics. Journal of Power Sources, 2011, 196, 6325-6331.	4.0	22

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91	Mechanical processing of highj_cbscco superconductors. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1992, 66, 517-538.	0.8	21
92	Micromechanical characterization of the interphase layer in semiâ€crystalline polyethylene. Journal of Polymer Science, Part B: Polymer Physics, 2013, 51, 1228-1243.	2.4	21
93	Rate Dependent Deformation of Semi-Crystalline Polypropylene Near Room Temperature. Journal of Engineering Materials and Technology, Transactions of the ASME, 1997, 119, 216-222.	0.8	20
94	Modeling of deformation behavior and texture evolution in magnesium alloy using the intermediate Ï•-model. International Journal of Plasticity, 2014, 52, 77-94.	4.1	20
95	Finite element simulations of temperature distribution and of densification of a titanium powder during metal laser sintering. Additive Manufacturing, 2017, 13, 37-48.	1.7	20
96	Using SAXS approach to estimate thermal conductivity of polystyrene/zirconia nanocomposite by exploiting strong contrast technique. Acta Materialia, 2011, 59, 2742-2748.	3.8	19
97	An Optimal Air-Conditioner On-Off Control Scheme under Extremely Hot Weather Conditions. Energies, 2020, 13, 1021.	1.6	19
98	Thermoforming process of amorphous polymeric sheets: Modeling and finite element simulations. Journal of Applied Polymer Science, 2007, 106, 1718-1724.	1.3	18
99	Polymer composites for the automotive industry: characterisation of the recycling effect on the strain rate sensitivity. International Journal of Crashworthiness, 2008, 13, 411-424.	1.1	18
100	Modeling of the effective elastic and thermal properties of glass-ceramic solid oxide fuel cell seal materials. Materials & Design, 2009, 30, 1667-1673.	5.1	18
101	A comparison of viscoplastic intermediate approaches for deformation texture evolution in face-centered cubic polycrystals. Acta Materialia, 2009, 57, 2496-2508.	3.8	18
102	Incorporation of electron tunnelling phenomenon into 3D Monte Carlo simulation of electrical percolation in graphite nanoplatelet composites. Journal Physics D: Applied Physics, 2011, 44, 455306.	1.3	18
103	A windable and stretchable three-dimensional all-inorganic membrane for efficient oil/water separation. Scientific Reports, 2017, 7, 16081.	1.6	18
104	Preparation, Structural Characterization, and Thermomechanical Properties of Poly(methyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 227 Tc Nanotechnology, 2009, 9, 2923-2930.	0.9	17
105	Numerical simulation of residual stresses in diamond coating on Ti-6Al-4V substrate. Thin Solid Films, 2010, 518, 3260-3266.	0.8	17
106	Microstructural effects on yield surface evolution in cubic metals using the viscoplastic Ï•-model. International Journal of Plasticity, 2011, 27, 102-120.	4.1	17
107	Modeling and Simulation of the Cooling Process of Borosilicate Glass. Journal of Engineering Materials and Technology, Transactions of the ASME, 2012, 134, .	0.8	17
108	Yield asymmetry design of magnesium alloys by integrated computational materials engineering. Computational Materials Science, 2013, 79, 448-455.	1.4	17

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109	Coupled effects of the lattice rotation definition, twinning and interaction strength on the FCC rolling texture evolution using the viscoplastic Ï•-model. International Journal of Plasticity, 2013, 46, 23-36.	4.1	17
110	Novel dry cleaning machine for photovoltaic and solar panels. , 2015, , .		17
111	Review of PV soiling measurement methods. , 2016, , .		17
112	A numerical model to simulate electromagnetic sheet metal forming process. International Journal of Material Forming, 2008, 1, 1387-1390.	0.9	16
113	Investigation of the Stiffness and Yield Behaviour of Melt-Intercalated Poly(methyl) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 587 Td and Nanotechnology, 2010, 10, 2956-2961.	0.9	16
114	Does Texturing of UHMWPE Increase Strength and Toughness?: A Pilot Study. Clinical Orthopaedics and Related Research, 2011, 469, 2318-2326.	0.7	16
115	A statistical approach for the evaluation of mechanical properties of silica/epoxy nanocomposite: Verification by experiments. Computational Materials Science, 2012, 59, 108-113.	1.4	16
116	Composition of two-point correlation functions of subcomposites in heterogeneous materials. Mechanics of Materials, 2012, 51, 88-96.	1.7	16
117	An optimum approximation of n-point correlation functions of random heterogeneous material systems. Journal of Chemical Physics, 2014, 140, 074905.	1.2	16
118	Efficient oil/saltwater separation using a highly permeable and fouling-resistant all-inorganic nanocomposite membrane. Environmental Science and Pollution Research, 2020, 27, 15488-15497.	2.7	16
119	A Review on the Modeling of the Elastic Modulus and Yield Stress of Polymers and Polymer Nanocomposites: Effect of Temperature, Loading Rate and Porosity. Polymers, 2022, 14, 360.	2.0	16
120	A New Formulation for the Elastic-Viscoplastic Lower Bound and Intermediate Modeling for Polycrystalline Plasticity. Materials Science Forum, 2002, 408-412, 463-468.	0.3	15
121	Dynamic Mechanical Properties of PMMA/Organoclay Nanocomposite: Experiments and Modeling. Journal of Engineering Materials and Technology, Transactions of the ASME, 2011, 133, .	0.8	15
122	Modeling of large plastic deformation behavior and anisotropy evolution in cold rolled bcc steels using the viscoplastic Ï•-model-based grain-interaction. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 5840-5853.	2.6	15
123	Effect of straining graphene on nanopore creation using Si cluster bombardment: A reactive atomistic investigation. Journal of Applied Physics, 2016, 120, .	1.1	15
124	Elastic and yield behaviors of recycled polypropylene-based composites: Experimental and modeling study. Composites Part B: Engineering, 2016, 99, 132-153.	5.9	15
125	Cooperative-VBO model for polymer/graphene nanocomposites. Mechanics of Materials, 2018, 125, 1-13.	1.7	15
126	Multiscale description and prediction of the thermomechanical behavior of multilayered plasticized PVC under a wide range of strain rate. Journal of Materials Science, 2018, 53, 14834-14849.	1.7	15

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127	Numerical analysis of the reliability of photovoltaic modules based on the fatigue life of the copper interconnects. Solar Energy, 2020, 212, 152-168.	2.9	15
128	Modeling of strain rates and temperature effects on the yield behavior of amorphous polymers. European Physical Journal Special Topics, 2003, 110, 39-44.	0.2	14
129	Non Linear Strain Rate Dependency and Unloading Behavior of Semi-Crystalline Polymers. Oil and Gas Science and Technology, 2006, 61, 743-749.	1.4	14
130	Mechanical behavior of composite based polypropylene: Recycling and strain rate effects. European Physical Journal Special Topics, 2006, 134, 1319-1323.	0.2	14
131	Finite Element Analysis of Temperature and Density Distributions in Selective Laser Sintering Process. Materials Science Forum, 2007, 553, 75-80.	0.3	14
132	A new multiscale model for the mechanical behavior of vein walls. Journal of the Mechanical Behavior of Biomedical Materials, 2013, 23, 32-43.	1.5	14
133	Evaluating the Effect of Mechanical Loading on the Electrical Percolation Threshold of Carbon Nanotube Reinforced Polymers: A 3D Monte-Carlo Study. Journal of Computational and Theoretical Nanoscience, 2011, 8, 2087-2099.	0.4	13
134	A constitutive model for stressâ€“strain response and mullins effect in filled elastomers. Journal of Applied Polymer Science, 2012, 125, 4368-4375.	1.3	13
135	Investigation of the human bridging veins structure using optical microscopy. Surgical and Radiologic Anatomy, 2013, 35, 331-337.	0.6	13
136	Rate mechanism and dislocation generation in high density polyethylene and other semicrystalline polymers. Polymer, 2014, 55, 1217-1222.	1.8	13
137	A fully transient novel thermal model for in-field photovoltaic modules using developed explicit and implicit finite difference schemes. Journal of Computational Science, 2018, 27, 357-369.	1.5	13
138	Multi-physics modeling and simulation of heat and electrical yield generation in photovoltaics. Solar Energy Materials and Solar Cells, 2018, 180, 358-372.	3.0	13
139	Investigation on dynamic strength of <scp>3D</scp>â€printed continuous ramie fiber reinforced biocomposites at various strain rates using machine learning methods. Polymer Composites, 2022, 43, 5235-5249.	2.3	13
140	Use of Functionalized Nanosilica to Improve Thermo-Mechanical Properties of Epoxy Adhesive Joint Bonding Aluminium Substrates. Journal of Nanoscience and Nanotechnology, 2010, 10, 2844-2849.	0.9	12
141	Analysis of shear deformation by slip and twinning in low and high/medium stacking fault energy fcc metals using the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mrow><mml:mi>Ï•</mml:mi></mml:mrow></mml:math>-model. International Journal of Plasticity, 2015, 68, 132-149.	4.1	12
142	A thermodynamic analysis of Argon's yield stress model: Extended influence of strain rate and temperature. Mechanics of Materials, 2019, 130, 20-28.	1.7	12
143	On the deformation mechanisms in lamellar Tiî—¸Al alloys. Scripta Metallurgica Et Materialia, 1993, 29, 823-828.	1.0	11
144	Simulation of cooling and solidification of three-dimensional bulk borosilicate glass: effect of structural relaxations. Mechanics of Time-Dependent Materials, 2014, 18, 81-96.	2.3	11

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145	Renewable biocomposites based on cellulose fibers and dimer fatty acid polyamide: Experiments and modeling of the stressâ€“strain behavior. Polymer Engineering and Science, 2017, 57, 95-104.	1.5	11
146	Simulation of Deformation Texture Evolution Using an Intermediate Model. Solid State Phenomena, 2005, 105, 251-258.	0.3	10
147	Simulation of the densification of semicrystalline polymer powders during the selective laser sintering process: Application to Nylon 12. Polymer Science - Series A, 2008, 50, 704-709.	0.4	10
148	Cooperative viscoplasticity theory based on the overstress approach for modeling large deformation behavior of amorphous polymers. Polymer International, 2013, 62, 1560-1565.	1.6	10
149	Numerical implementation of an elastic-viscoplastic constitutive model to simulate the mechanical behaviour of amorphous polymers. International Journal of Material Forming, 2017, 10, 607-621.	0.9	10
150	Understanding the Nature of Capacity Decay and Interface Properties in Li//LiNi_{0.5}Mn_{1.5}O₄ Cells by Cycling Aging and Titration Techniques. ACS Applied Energy Materials, 2020, 3, 6400-6407.	2.5	10
151	The bulk processing of 2223 BSCCO powders II. Tape rolling. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1996, 73, 1591-1620.	0.8	9
152	A unified approach for pressure and temperature effects in dynamic failure criteria. International Journal of Plasticity, 2001, 17, 1215-1244.	4.1	9
153	Strain rate effects on the mechanical response of polypropylene-based composites deformed at small strains. Polymer Science - Series A, 2008, 50, 690-697.	0.4	9
154	An asymptotic method for the prediction of the anisotropic effective elastic properties of the cortical vein: superior sagittal sinus junction embedded within a homogenized cell element. Journal of Mechanics of Materials and Structures, 2012, 7, 593-611.	0.4	9
155	Numerical Simulation of Plug-Assisted Thermoforming Process: Application to Polystyrene. Key Engineering Materials, 0, 554-557, 1602-1610.	0.4	9
156	Irradiance, thermal and electrical coupled modeling of photovoltaic panels with long-term simulation periods under service in harsh desert conditions. Journal of Computational Science, 2018, 27, 118-129.	1.5	9
157	Modeling the large inelastic deformation response of non-filled and silica filled SL5170 cured resin. Journal of Materials Science, 2005, 40, 4605-4612.	1.7	8
158	Modelling on the mechanical properties of nanocomposite hydroxyapatite/PMMA/carbon nanotube coatings. International Journal of Nano and Biomaterials, 2007, 1, 107.	0.1	8
159	Characterization of contamination effects for two polypropyleneâ€based materials. Polymer Engineering and Science, 2010, 50, 1-9.	1.5	8
160	Atomistic-Continuum Modeling of the Mechanical Properties of Silica/Epoxy Nanocomposite. Journal of Engineering Materials and Technology, Transactions of the ASME, 2012, 134, .	0.8	8
161	Comparison of micromechanical models for the prediction of the effective elastic properties of semicrystalline polymers: Application to polyethylene. Polymer Science - Series A, 2008, 50, 523-532.	0.4	7
162	Thermoforming process of semicrystalline polymeric sheets: Modeling and finite element simulations. Polymer Science - Series A, 2008, 50, 550-557.	0.4	7

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163	Evolution of the three-dimensional collagen structure in vascular walls during deformation: an in situ mechanical testing under multiphoton microscopy observation. Biomechanics and Modeling in Mechanobiology, 2015, 14, 693-702.	1.4	7
164	Complex band structures of transition metal dichalcogenide monolayers with spinâ€“orbit coupling effects. Journal of Physics Condensed Matter, 2016, 28, 355301.	0.7	7
165	Prediction of crack propagation paths in the unit cell of SOFC stacks. International Journal of Mechanics and Materials in Design, 2009, 5, 217-230.	1.7	6
166	Micromechanically-Based Formulation of the Cooperative Model for the Yield Behavior of Starch-Based Nano-Biocomposites. Journal of Nanoscience and Nanotechnology, 2010, 10, 2949-2955.	0.9	6
167	Towards Optimization of Time Modulated Chemical Vapour Deposition for Nanostructured Diamond Films on Ti6Al4V. Journal of Nanoscience and Nanotechnology, 2010, 10, 2838-2843.	0.9	6
168	Electromagnetic Sheet Bulging: Analysis of Process Parameters by FE Simulations. Key Engineering Materials, 0, 554-557, 741-748.	0.4	6
169	An Efficient ELLAM Implementation for Modeling Solute Transport in Fractured Porous Media. Water, Air, and Soil Pollution, 2018, 229, 1.	1.1	6
170	An inverse method predicting thermal fluxes in nuclear waste glass canisters during vitrification and cooling. Nuclear Engineering and Design, 2020, 364, 110686.	0.8	6
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