John Sweeney

List of Publications by Year
in descending order

		687363	752698
36 papers	450 citations	13 h-index	20 g-index
51 all docs	51 docs citations	51 times ranked	375 citing authors

#	Article	IF	Citations
1	Application of an elastic model to the large deformation, high temperature stretching of polypropylene. Polymer, 1997, 38, 5991-5999.	3.8	42
2	A shape memory polymer concrete crack closure system activated by electrical current. Smart Materials and Structures, 2018, 27, 075016.	3.5	40
3	Simulation of the plug-assisted thermoforming of polypropylene using a large strain thermally coupled constitutive model. Journal of Materials Processing Technology, 2013, 213, 1588-1600.	6.3	37
4	High-temperature large strain viscoelastic behavior of polypropylene modeled using an inhomogeneously strained network. Journal of Applied Polymer Science, 1999, 72, 563-575.	2.6	28
5	A unified model of stress relaxation and creep applied to oriented polyethylene. Journal of Materials Science, 1990, 25, 697-705.	3.7	27
6	Enhanced concrete crack closure with hybrid shape memory polymer tendons. Engineering Structures, 2021, 226, 111330.	5.3	26
7	A constitutive model for large multiaxial deformations of solid polypropylene at high temperature. Polymer Engineering and Science, 2009, 49, 1902-1908.	3.1	24
8	Application of a large deformation model to unstable tensile stretching of polyethylene. International Journal of Plasticity, 2002, 18, 399-414.	8.8	23
9	Modelling of loading, stress relaxation and stress recovery in a shape memory polymer. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 37, 12-23.	3.1	17
10	Unified model of necking and shear banding in amorphous and semicrystalline polymers. Journal of Applied Polymer Science, 2007, 106, 1095-1105.	2.6	16
11	Application of a necking criterion to PET fibers in tension. Journal of Applied Polymer Science, 1999, 74, 3331-3341.	2.6	15
12	Development of high shrinkage polyethylene terephthalate (PET) shape memory polymer tendons for concrete crack closure. Smart Materials and Structures, 2017, 26, 045006.	3.5	14
13	Finite-Width correction factors for sen testing of orthotropic materials in opening mode. Journal of Strain Analysis for Engineering Design, 1986, 21, 99-107.	1.8	13
14	Analysis of the essential work of fracture method as applied to UHMWPE. Journal of Materials Science, 2010, 45, 448-459.	3.7	12
15	Modelling the large strain solid phase deformation behaviour of polymer nanoclay composites. Mechanics of Time-Dependent Materials, 2008, 12, 313-327.	4.4	11
16	Modelling the Mechanical and Strain Recovery Behaviour of Partially Crystalline PLA. Polymers, 2019, 11, 1342.	4.5	10
17	Viscoplastic constitutive modeling of polymersâ€"Flow rules and the plane strain response. Journal of Applied Polymer Science, 2009, 111, 1190-1198.	2.6	9
18	The modelling of large deformations of pre-oriented polyethylene. Polymer, 2002, 43, 899-907.	3.8	8

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19	A material model for multiaxial stretching and stress relaxation of polypropylene under process conditions. Mechanics of Materials, 2012, 54, 55-69.	3.2	8
20	Nanoindentation analysis of oriented polypropylene: Influence of elastic properties in tension and compression. Polymer, 2018, 151, 197-207.	3.8	8
21	Finite element simulation of geogrid manufacture using large deformation elastic formulation. Plastics, Rubber and Composites, 2000, 29, 51-58.	2.0	7
22	Suppression of necking in polyethylene. Journal of Applied Polymer Science, 2002, 86, 3135-3147.	2.6	6
23	Applications and Life Cycle Assessment of Shape Memory Polyethylene Terephthalate in Concrete for Crack Closure. Polymers, 2022, 14, 933.	4.5	6
24	Analysis of a proposed method for toughness measurments using torsion testing. Journal of Strain Analysis for Engineering Design, 1985, 20, 1-5.	1.8	4
25	Modeling the large-strain constitutive behavior of polycarbonate under isothermal and anisothermal conditions. Journal of Applied Polymer Science, 2005, 96, 2105-2116.	2.6	4
26	Modeling the tensile behavior of ultraâ€highâ€molecularâ€weight polyethylene with a novel flow rule. Journal of Applied Polymer Science, 2011, 121, 2936-2944.	2.6	4
27	Surface profiling of micro-scale structures using partial differential equations. International Journal of Material Forming, 2010, 3, 415-418.	2.0	2
28	A multiprocess eyring model for large strain plastic deformation. Journal of Applied Polymer Science, 2011, 119, 2246-2260.	2.6	2
29	Development of a Constitutive Model of Polypropylene for Thermoforming. , 2011, , .		2
30	The Use of a New Viscous Process in Constitutive Models of Polymers. Key Engineering Materials, 2015, 651-653, 812-817.	0.4	2
31	Constitutive Modelling of Polylactic Acid at Large Deformation Using Multiaxial Strains. Polymers, 2021, 13, 2967.	4.5	2
32	The strain energy released when a crack grows normally from its tip. International Journal of Fracture, 1991, 47, 69-79.	2.2	1
33	The large strain response of polypropylene in multiaxial stretching and stress relaxation. , 2011, , .		1
34	Application of activated barrier hopping theory to viscoplastic modeling of glassy polymers. Mechanics of Time-Dependent Materials, 2018, 22, 145-165.	4.4	1
35	Revised values of finite width correction factors for sen testing of orthotropic materials. Journal of Strain Analysis for Engineering Design, 1988, 23, 227-228.	1.8	0
36	The large strain response of polypropylene in multiaxial stretching and stress relaxation. International Journal of Material Forming, 2013, 6, 519-525.	2.0	0