# Aleksey Drozdov

List of Publications by Year
in descending order

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| 220 | 2,850 | 201674 | 302126 |
|---|---|---|---|
| papers | citations | 27 h-index | 39 g-index |

| 220 | 220 | 220 | 2072 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Model for anomalous moisture diffusion through a polymer-clay nanocomposite. Journal of Polymer Science, Part B: Polymer Physics, 2003, 41, 476-492. | 2.1 | 90 |
| 2 | Viscoelasticity, viscoplasticity, and creep failure of polypropylene/clay nanocomposites. Composites Science and Technology, 2009, 69, 2596-2603. | 7.8 | 61 |
| 3 | Relationships between Structure and Rheology in Model Nanocomposites of Ethyleneâ^'Vinyl-Based Copolymers and Organoclays. Macromolecules, 2005, 38, 3765-3775. | 4.8 | 60 |
| 4 | The payne effect for particle-reinforced elastomers. Polymer Engineering and Science, 2002, 42, 591-604. | 3.1 | 59 |
| 5 | Modeling the effects of pH and ionic strength on swelling of polyelectrolyte gels. Journal of Chemical Physics, 2015, 142, 114904. | 3.0 | 59 |
| 6 | Mullinsâ€™ effect in semicrystalline polymers. International Journal of Solids and Structures, 2009, 46, 3336-3345. | 2.7 | 57 |
| 7 | Cyclic viscoelastoplasticity and low-cycle fatigue of polymer composites. International Journal of Solids and Structures, 2011, 48, 2026-2040. | 2.7 | 57 |
| 8 | Stressâ€“strain relations for hydrogels under multiaxial deformation. International Journal of Solids and Structures, 2013, 50, 3570-3585. | 2.7 | 55 |
| 9 | Cyclic viscoplasticity of high-density polyethylene: Experiments and modeling. Computational Materials Science, 2007, 39, 465-480. | 3.0 | 54 |
| 10 | Constitutive equations in finite elasticity of swollen elastomers. International Journal of Solids and Structures, 2013, 50, 1494-1504. | 2.7 | 52 |
| 11 | Thermo-viscoelastic and viscoplastic behavior of high-density polyethylene. International Journal of Solids and Structures, 2008, 45, 4274-4288. | 2.7 | 49 |
| 12 | Creep rupture and viscoelastoplasticity of polypropylene. Engineering Fracture Mechanics, 2010, 77, 2277-2293. | 4.3 | 47 |
| 13 | The effect of annealing on the time-dependent behavior of isotactic polypropylene at finite strains. Polymer, 2002, 43, 4745-4761. | 3.8 | 42 |
| 14 | Viscoelasticity and viscoplasticity of semicrystalline polymers: Structureâ€“property relations for high-density polyethylene. Computational Materials Science, 2007, 39, 729-751. | 3.0 | 39 |
| 15 | Constitutive equations in finite elasticity of rubbers. International Journal of Solids and Structures, 2007, 44, 272-297. | 2.7 | 39 |
| 16 | A micro-mechanical model for the response of filled elastomers at finite strains. International Journal of Plasticity, 2003, 19, 1037-1067. | 8.8 | 38 |
| 17 | Non-linear viscoelasticity and viscoplasticity of isotactic polypropylene. International Journal of Engineering Science, 2003, 41, 2335-2361. | 5.0 | 36 |
| 18 | Viscoplastic response of electrode particles in Li-ion batteries driven by insertion of lithium. International Journal of Solids and Structures, 2014, 51, 690-705. | 2.7 | 36 |

| # | Article | IF | Citations |
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| 19 | Volume phase transition in thermo-responsive hydrogels: constitutive modeling and structureâ€“property relations. Acta Mechanica, 2015, 226, 1283-1303. | 2.1 | 36 |
| 20 | Constitutive equations for the kinetics of swelling of hydrogels. Mechanics of Materials, 2016, 102, 61-73. | 3.2 | 36 |
| 21 | Constitutive equations in finite viscoplasticity of semicrystalline polymers. International Journal of Solids and Structures, 2003, 40, 6217-6243. | 2.7 | 35 |
| 22 | The effect of annealing on the elastoplastic response of isotactic polypropylene. European Polymer Journal, 2003, 39, 21-31. | 5.4 | 34 |
| 23 | Cyclic viscoplasticity of semicrystalline polymers with finite deformations. Mechanics of Materials, 2013, 56, 53-64. | 3.2 | 34 |
| 24 | The viscoelastic and viscoplastic behavior of low-density polyethylene. International Journal of Solids and Structures, 2003, 40, 2321-2342. | 2.7 | 33 |
| 25 | Cyclic thermo-viscoplasticity of high density polyethylene. International Journal of Solids and Structures, 2010, 47, 1592-1602. | 2.7 | 32 |
| 26 | Properties and Semicrystalline Structure Evolution of Polypropylene/Montmorillonite Nanocomposites under Mechanical Load. Macromolecules, 2012, 45, 962-973. | 4.8 | 31 |
| 27 | Modeling the effects of temperature and pH on swelling of stimuli-responsive gels. European Polymer Journal, 2015, 73, 278-296. | 5.4 | 31 |
| 28 | Effect of temperature on the viscoelastic and viscoplastic behavior of polypropylene. Mechanics of Time-Dependent Materials, 2010, 14, 411-434. | 4.4 | 29 |
| 29 | A model for ultradian oscillations of insulin and glucose. Mathematical and Computer Modelling, 1995, 22, 23-38. | 2.0 | 28 |
| 30 | Mechanical behavior of temperature-sensitive gels under equilibrium and transient swelling. International Journal of Engineering Science, 2018, 128, 79-100. | 5.0 | 28 |
| 31 | A constitutive model in thermoviscoelasticity. Mechanics Research Communications, 1996, 23, 543-548. | 1.8 | 25 |
| 32 | Constitutive equations for the nonlinear viscoelastic and viscoplastic behavior of thermoplastic elastomers. International Journal of Engineering Science, 2006, 44, 205-226. | 5.0 | 25 |
| 33 | Modelling the viscoplastic response of polyethylene in uniaxial loadingâ€“unloading tests. Mechanics Research Communications, 2003, 30, 431-442. | 1.8 | 24 |
| 34 | A model for the mechanical response of electrode particles induced by lithium diffusion in Li-ion batteries. Acta Mechanica, 2014, 225, 2987-3005. | 2.1 | 24 |
| 35 | Thermo-viscoplasticity of carbon black-reinforced thermoplastic elastomers. International Journal of Solids and Structures, 2009, 46, 2298-2308. | 2.7 | 22 |
| 36 | Time-dependent response of polypropylene after strain reversal. International Journal of Solids and Structures, 2010, 47, 3221-3233. | 2.7 | 22 |

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| 37 | Inhomogeneous swelling of pH-responsive gels. International Journal of Solids and Structures, 2016, 87, 11-25. | 2.7 | 22 |
| 38 | Constitutive equations for the viscoplastic response of isotactic polypropylene in cyclic tests: The effect of strain rate. Polymer Engineering and Science, 2004, 44, 548-556. | 3.1 | 21 |
| 39 | Cyclic viscoplasticity of high-density polyethylene/montmorillonite clay nanocomposite. European Polymer Journal, 2007, 43, 10-25. | 5.4 | 21 |
| 40 | A model of adaptive links in finite viscoelastoplasticity of glassy polymers. Mathematical and Computer Modelling, 1998, 28, 19-40. | 2.0 | 20 |
| 41 | Mullinsâ€™ effect in thermoplastic elastomers: Experiments and modeling. Mechanics Research Communications, 2009, 36, 437-443. | 1.8 | 20 |
| 42 | Constitutive model of a viscoelastic material at finite strains. Mechanics Research Communications, 1992, 19, 535-540. | 1.8 | 19 |
| 43 | Cyclic strengthening of polypropylene under strain-controlled loading. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 8781-8789. | 5.6 | 19 |
| 44 | Thermal conductivity of highly filled polymer nanocomposites. Composites Science and Technology, 2019, 182, 107717. | 7.8 | 19 |
| 45 | Multi-cycle viscoplastic deformation of polypropylene. Computational Materials Science, 2011, 50, 1991-2000. | 3.0 | 18 |
| 46 | Constitutive equations for self-limiting lithiation of electrode nanoparticles in Li-ion batteries. Mechanics Research Communications, 2014, 57, 67-73. | 1.8 | 18 |
| 47 | Stability of a class of stochastic integro-differential equations. Stochastic Analysis and Applications, 1995, 13, 517-530. | 1.5 | 17 |
| 48 | Ogden-type constitutive equations in finite elasticity of elastomers. Acta Mechanica, 2006, 183, 231-252. | 2.1 | 17 |
| 49 | Cyclic viscoplasticity of solid polymers: The effects of strain rate and amplitude of deformation. Polymer, 2007, 48, 3003-3012. | 3.8 | 17 |
| 50 | Modelling an anomalous stress relaxation in glassy polymers (the Kitagawa effect). Mathematical and Computer Modelling, 1998, 27, 45-67. | 2.0 | 16 |
| 51 | The effect of strain rate on the viscoplastic behavior of isotactic polypropylene at finite strains. Polymer, 2003, 44, 1211-1228. | 3.8 | 16 |
| 52 | Creep failure of polypropylene: experiments and constitutive modeling. International Journal of Fracture, 2009, 159, 63-79. | 2.2 | 16 |
| 53 | Mullinsâ€™ effect in semicrystalline polymers: experiments andÂmodeling. Meccanica, 2011, 46, 359-370. | 2.0 | 16 |
| 54 | Self-limiting lithiation of electrode nanoparticles in Li-ion batteries. Journal of Applied Physics, 2013, 114, . | 2.5 | 16 |

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| 55 | Time-dependent response of hydrogels under multiaxial deformation accompanied by swelling. Acta Mechanica, 2018, 229, 5067-5092. | 2.1 | 16 |
| 56 | Stochasic stability of viscoewtic bars. Stochastic Analysis and Applications, 1992, 10, 265-276. | 1.5 | 15 |
| 57 | A model of cooperative relaxation in finite viscoelasticity of amorphous polymers. International Journal of Non-Linear Mechanics, 2000, 35, 897-909. | 2.6 | 15 |
| 58 | The nonlinear viscoelastic response of carbon black-filled natural rubbers. International Journal of Solids and Structures, 2002, 39, 5699-5717. | 2.7 | 15 |
| 59 | Swelling-induced bending of bilayer gel beams. Composite Structures, 2016, 153, 961-971. | 5.8 | 15 |
| 60 | Tensionâ€“compression asymmetry in the mechanical response of hydrogels. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 110, 103851. | 3.1 | 15 |
| 61 | Optimization problems in the mechanics of growing solids. Mechanics of Composite Materials, 1988, 24, 359-369. | 1.4 | 14 |
| 62 | The stressâ€“strain response and ultimate strength of filled elastomers. Computational Materials Science, 2001, 21, 395-417. | 3.0 | 14 |
| 63 | A model for the viscoelastic and viscoplastic responses of glassy polymers. International Journal of Solids and Structures, 2001, 38, 8285-8304. | 2.7 | 14 |
| 64 | The effect of annealing on the viscoplastic response of semicrystalline polymers at finite strains. International Journal of Solids and Structures, 2003, 40, 1337-1367. | 2.7 | 14 |
| 65 | Finite elasticity of thermoplastic elastomers. Polymer, 2006, 47, 3650-3660. | 3.8 | 14 |
| 66 | Constitutive model for cyclic deformation ofÂperfluoroelastomers. Mechanics of Time-Dependent Materials, 2009, 13, 275-299. | 4.4 | 14 |
| 67 | Model for the viscoelastic and viscoplastic responses of semicrystalline polymers. Journal of Applied Polymer Science, 2003, 88, 1438-1450. | 2.6 | 13 |
| 68 | Cyclic viscoplasticity of thermoplastic elastomers. Acta Mechanica, 2007, 194, 47-65. | 2.1 | 13 |
| 69 | Viscoelasticity and viscoplasticity of polypropylene/polyethylene blends. International Journal of Solids and Structures, 2010, 47, 2498-2507. | 2.7 | 13 |
| 70 | Mechanical response of HEMA gel under cyclic deformation: Viscoplasticity and swelling-induced recovery. International Journal of Solids and Structures, 2015, 52, 220-234. | 2.7 | 13 |
| 71 | The effect of porosity on elastic moduli of polymer foams. Journal of Applied Polymer Science, 2020, 137, 48449. | 2.6 | 13 |
| 72 | Thermo-mechanical behavior of elastomers with dynamic covalent bonds. International Journal of Engineering Science, 2020, 147, 103200. | 5.0 | 13 |

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| 73 | Stability of viscoelastic shells under periodic and stochastic loading. Mechanics Research Communications, 1993, 20, 481-486. | 1.8 | 12 |
| 74 | The effect of temperature on the viscoelastic response of rubbery polymers at finite strains. Acta Mechanica, 2002, 154, 189-214. | 2.1 | 12 |
| 75 | The viscoelastic and viscoplastic behavior of polymer composites: polycarbonate reinforced with short glass fibers. Computational Materials Science, 2003, 28, 16-30. | 3.0 | 12 |
| 76 | The effect of thermal oxidative degradation of polymers on their viscoelastic response. International Journal of Engineering Science, 2007, 45, 882-904. | 5.0 | 12 |
| 77 | Multi-cycle deformation of semicrystalline polymers: Observations and constitutive modeling. Mechanics Research Communications, 2013, 48, 70-75. | 1.8 | 12 |
| 78 | Unusual mechanical response of carbon black-filled thermoplastic elastomers. Mechanics of Materials, 2014, 69, 116-131. | 3.2 | 12 |
| 79 | Swelling of thermo-responsive gels under hydrostatic pressure. Meccanica, 2016, 51, 1419-1434. | 2.0 | 12 |
| 80 | A constitutive model in finite viscoelasticity. Rheologica Acta, 1995, 34, 562-577. | 2.4 | 11 |
| 81 | A constitutive model in viscoelastoplasticity of glassy polymers. Polymer, 1999, 40, 3711-3727. | 3.8 | 11 |
| 82 | Time-dependent response of hydrogels under constrained swelling. Journal of Applied Physics, 2014, 115, 233517. | 2.5 | 11 |
| 83 | Equilibrium swelling of coreâ€“shell composite microgels. Meccanica, 2015, 50, 1579-1592. | 2.0 | 11 |
| 84 | A simplified model for equilibrium and transient swelling of thermo-responsive gels. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 75, 20-32. | 3.1 | 11 |
| 85 | Mechanical response and equilibrium swelling of temperature-responsive gels. European Polymer Journal, 2017, 94, 56-67. | 5.4 | 11 |
| 86 | Mechanical response and equilibrium swelling of thermoresponsive copolymer hydrogels. Polymer International, 2020, 69, 974-984. | 3.1 | 11 |
| 87 | Phase transitions in nonhomogeneous, aging, viscoelastic bodies. International Journal of Solids and Structures, 1992, 29, 783-797. | 2.7 | 10 |
| 88 | Optimization of winding process for composite pressure vessels. International Journal of Pressure Vessels and Piping, 1995, 62, 69-81. | 2.6 | 10 |
| 89 | Viscoelastoplasticity of amorphous glassy polymers. European Polymer Journal, 2000, 36, 2063-2074. | 5.4 | 10 |
| 90 | Finite viscoplasticity of polycarbonate reinforced with short glass fibers. Mechanics of Materials, 2005, 37, 473-491. | 3.2 | 10 |

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| 91 | The effect of temperature on the viscoelastic response of polymer melts. International Journal of Engineering Science, 2005, 43, 304-320. | 5.0 | 10 |
| 92 | An unusual elastoplastic response of thermoplastic elastomers at cyclic deformation. International Journal of Engineering Science, 2007, 45, 660-678. | 5.0 | 10 |
| 93 | Cyclic thermo-viscoplasticity of carbon black-reinforced thermoplastic elastomers. Composites Science and Technology, 2008, 68, 3114-3122. | 7.8 | 10 |
| 94 | Nonlinear time-dependent response of polypropylene/nanoclay melts: Experiments and modeling. Computational Materials Science, 2010, 47, 807-816. | 3.0 | 10 |
| 95 | Cyclic viscoelastoplasticity of polypropylene/nanoclay hybrids. Computational Materials Science, 2012, 53, 396-408. | 3.0 | 10 |
| 96 | Structureâ€“property relations for temperature-responsive gels. Polymer, 2017, 132, 164-173. | 3.8 | 10 |
| 97 | Equilibrium Swelling of Biocompatible Thermo-Responsive Copolymer Gels. Gels, 2021, 7, 40. | 4.5 | 10 |
| 98 | Modulation of the volume phase transition temperature for multi-stimuli-responsive copolymer hydrogels. International Journal of Mechanical Sciences, 2021, 211, 106753. | 6.7 | 10 |
| 99 | A constitutive model for physical ageing in amorphous glassy polymers. Modelling and Simulation in Materials Science and Engineering, 1999, 7, 1045-1060. | 2.0 | 9 |
| 100 | Effect of annealing on the viscoelastic and viscoplastic responses of low-density polyethylene. Journal of Polymer Science, Part B: Polymer Physics, 2003, 41, 1638-1655. | 2.1 | 9 |
| 101 | The effect of annealing on the elastoplastic and viscoelastic responses of isotactic polypropylene. Computational Materials Science, 2003, 27, 403-422. | 3.0 | 9 |
| 102 | Non-entropic theory of rubber elasticity: Flexible chains grafted on a rigid surface. International Journal of Engineering Science, 2005, 43, 1121-1137. | 5.0 | 9 |
| 103 | Cyclic elastoplasticity of solid polymers. Computational Materials Science, 2008, 42, 27-35. | 3.0 | 9 |
| 104 | Modeling the response of double-network gels with sacrificial junctions under swelling. International Journal of Solids and Structures, 2017, 122-123, 175-188. | 2.7 | 9 |
| 105 | Electromagnetic properties and EMI shielding effectiveness of polymer composites reinforced with ferromagnetic particles at microwave frequencies. Journal of Applied Physics, 2020, 127, 125101. | 2.5 | 9 |
| 106 | Tuning the viscoelastic response of hydrogel scaffolds with covalent and dynamic bonds. Journal of the Mechanical Behavior of Biomedical Materials, 2022, 130, 105179. | 3.1 | 9 |
| 107 | A new model for an aging thermoviscoelastic material. Mechanics Research Communications, 1995, 22, 441-446. | 1.8 | 8 |
| 108 | Modelling nonlinear viscoelasticity and damage in amorphous glassy polymers. Mathematical and Computer Modelling, 2001, 33, 883-893. | 2.0 | 8 |

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| 109 | The effect of temperature on physical aging of glassy polymers. Journal of Applied Polymer Science, 2001, 81, 3309-3320. | 2.6 | 8 |
| 110 | Finite viscoelasticity of filled rubber: experiments and numerical simulation. Archive of Applied Mechanics, 2003, 72, 651-672. | 2.2 | 8 |
| 111 | Thermo-Viscoelastic Response of Polycarbonate Reinforced with Short Glass Fibers. Macromolecular Theory and Simulations, 2003, 12, 354-366. | 1.4 | 8 |
| 112 | A model for thermal degradation of hybrid nanocomposites. European Polymer Journal, 2007, 43, 1681-1690. | 5.4 | 8 |
| 113 | Fractional oscillator driven by a Gaussian noise. Physica A: Statistical Mechanics and Its Applications, 2007, 376, 237-245. | 2.6 | 8 |
| 114 | Thermo-viscoelastic response of nanocomposite melts. International Journal of Engineering Science, 2008, 46, 87-104. | 5.0 | 8 |
| 115 | Enhancement of mechanical properties of polypropylene by blending with styrene-(ethylene-butylene)-styrene tri-block copolymer. Journal of Polymer Engineering, 2014, 34, 765-774. | 1.4 | 8 |
| 116 | Modeling the response of polymerâ€“ionic liquid electromechanical actuators. Acta Mechanica, 2016, 227, 437-465. | 2.1 | 8 |
| 117 | Selfâ€recovery and fatigue of doubleâ€network gels with permanent and reversible bonds. Journal of Polymer Science, Part B: Polymer Physics, 2019, 57, 438-453. | 2.1 | 8 |
| 118 | Intelligent composite structures: General theory and applications. International Journal of Solids and Structures, 1996, 33, 4411-4429. | 2.7 | 7 |
| 119 | Physical aging and nonlinear viscoelasticity of amorphous glassy polymers. Computational Materials Science, 2001, 21, 197-213. | 3.0 | 7 |
| 120 | Finite viscoplasticity of semicrystalline polymers. Archive of Applied Mechanics, 2003, 72, 779-803. | 2.2 | 7 |
| 121 | A Constitutive Model in Finite Viscoelasticity of Particle-reinforced Rubbers. Meccanica, 2004, 39, 245-270. | 2.0 | 7 |
| 122 | Linear thermo-viscoelasticity of isotactic polypropylene. Computational Materials Science, 2004, 29, 195-213. | 3.0 | 7 |
| 123 | Constitutive equations for the nonlinear elastic response of rubbers. Acta Mechanica, 2006, 185, 31-65. | 2.1 | 7 |
| 124 | Linear thermo-viscoelasticity of polypropylene. Mechanics Research Communications, 2010, 37, 690-695. | 1.8 | 7 |
| 125 | Modeling the effect of ionic strength on swelling of pH-sensitive macro- and nanogels. Materials Today Communications, 2016, 6, 92-101. | 1.9 | 7 |
| 126 | Macroporous temperatureâ€sensitive gels with fast response: Comparison of preparation methods. Journal of Applied Polymer Science, 2018, 135, 46353. | 2.6 | 7 |

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| 127 | Modeling dielectric permittivity of polymer composites at microwave frequencies. Materials Research Bulletin, 2020, 126, 110818. | 5.2 | 7 |
| 128 | Modulation of the volume phase transition temperature of thermo-responsive gels. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 114, 104215. | 3.1 | 7 |
| 129 | Equilibrium swelling of thermo-responsive copolymer microgels. RSC Advances, 2020, 10, 42718-42732. | 3.6 | 7 |
| 130 | Accretion of viscoelastic bodies at finite strains. Mechanics Research Communications, 1994, 21, 329-334. | 1.8 | 6 |
| 131 | A constitutive model in finite viscoelasticity with an entropy-driven material clock. Mathematical and Computer Modelling, 1997, 25, 45-66. | 2.0 | 6 |
| 132 | Physical aging in amorphous polymers: comparison of observations in calorimetric and mechanical tests. European Polymer Journal, 2001, 37, 1379-1389. | 5.4 | 6 |
| 133 | A model for the mechanical response of composites with thermoplastic-elastomer matrices. Composites Science and Technology, 2006, 66, 2648-2663. | 7.8 | 6 |
| 134 | Cyclic deformation of ternary nanocomposites: Experiments and modeling. International Journal of Solids and Structures, 2007, 44, 2677-2694. | 2.7 | 6 |
| 135 | Finite viscoelasticity and viscoplasticity of semicrystalline polymers. Continuum Mechanics and Thermodynamics, 2007, 19, 111-132. | 2.2 | 6 |
| 136 | Cyclic viscoelastoplasticity of polypropylene/nanoclay composites. Mechanics of Time-Dependent Materials, 2012, 16, 397-425. | 4.4 | 6 |
| 137 | Multi-cycle deformation of silicone elastomer: observations and constitutive modeling with finite strains. Meccanica, 2013, 48, 2061-2074. | 2.0 | 6 |
| 138 | Mechanical response of polypropylene under multiple-step loading. International Journal of Solids and Structures, 2013, 50, 815-823. | 2.7 | 6 |
| 139 | Finite elasticity of nanocomposite hydrogels. Composite Interfaces, 2013, 20, 673-692. | 2.3 | 6 |
| 140 | Modeling the non-isothermal viscoelastic response of glassy polymers. Acta Mechanica, 2018, 229, 1137-1156. | 2.1 | 6 |
| 141 | Modeling Thermal Conductivity of Highly Filled Polymer Composites. Polymer Engineering and Science, 2019, 59, 2174-2179. | 3.1 | 6 |
| 142 | Modeling the elastic response of polymer foams at finite deformations. International Journal of Mechanical Sciences, 2020, 171, 105398. | 6.7 | 6 |
| 143 | The effects of pH and ionic strength on the volume phase transition temperature of thermo-responsive anionic copolymer gels. Polymer, 2021, 221, 123637. | 3.8 | 6 |
| 144 | Stability of a model for cell metabolism. Mathematical and Computer Modelling, 1996, 24, 23-37. | 2.0 | 5 |

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| 145 | Modelling the nonlinear viscoelastic behavior of amorphous glassy polymers. Mathematical and Computer Modelling, 1999, 30, 49-72. | 2.0 | 5 |
| 146 | The effects of temperature and molecular weight on the mechanical response and strength of elastomers. Polymer Bulletin, 2001, 46, 215-222. | 3.3 | 5 |
| 147 | A Model for the Elastoplastic Behavior of Isotactic Poly(propylene) Below the Yield Point. Macromolecular Materials and Engineering, 2003, 288, 164-174. | 3.6 | 5 |
| 148 | The effect of recycling on the time-dependent behavior of polycarbonate reinforced with short glass fibers. Composites Science and Technology, 2004, 64, 129-144. | 7.8 | 5 |
| 149 | Cyclic viscoplasticity of carbon black-filled thermoplastic elastomers: Experiments and modeling. Computational Materials Science, 2009, 45, 398-406. | 3.0 | 5 |
| 150 | Stress- and strain-controlled cyclic deformation of polypropylene. Computational Materials Science, 2012, 64, 198-202. | 3.0 | 5 |
| 151 | Volume changes in hydrogels subjected to finite deformations. Mechanics Research Communications, 2013, 50, 33-38. | 1.8 | 5 |
| 152 | Nonmonotonic swelling of agaroseâ€carbopol hybrid hydrogel: Experimental and theoretical analysis. Journal of Polymer Science, Part B: Polymer Physics, 2017, 55, 444-454. | 2.1 | 5 |
| 153 | Swelling of glucose-responsive gels functionalized with boronic acid. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 65, 533-541. | 3.1 | 5 |
| 154 | Modeling electrical conductivity of polymer nanocomposites with aggregated filler. Polymer Engineering and Science, 2020, 60, 1556-1565. | 3.1 | 5 |
| 155 | Structureâ€“property relations in linear viscoelasticity of supramolecular hydrogels. RSC Advances, 2021, 11, 16860-16880. | 3.6 | 5 |
| 156 | Thermo-Mechanical Behavior of Poly(ether ether ketone): Experiments and Modeling. Polymers, 2021, 13, 1779. | 4.5 | 5 |
| 157 | Mechanics of built-up viscoelastic bodies subjected to aging in final deformations. Mechanics of Composite Materials, 1986, 21, 394-405. | 1.4 | 4 |
| 158 | Detachment of an elastic beam from a viscoelastic support: A variational approach. International Journal of Mechanical Sciences, 1993, 35, 463-478. | 6.7 | 4 |
| 159 | Nonlinear viscoelasticity and fatigue of glassy polymers. Mechanics Research Communications, 2000, 27, 281-286. | 1.8 | 4 |
| 160 | Modelling structural recovery in amorphous polymers. Mathematical and Computer Modelling, 2000, 31, 79-95. | 2.0 | 4 |
| 161 | Viscoelasticity and viscoplasticity of glassy polymers in the vicinity of the yield point. Mechanics Research Communications, 2001, 28, 247-254. | 1.8 | 4 |
| 162 | The viscoelastic behavior of melts of virgin and recycled polycarbonate reinforced with short glass fibers. Mechanics Research Communications, 2003, 30, 595-614. | 1.8 | 4 |

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|---|---|---|---|
| 163 | Kinetic equations for thermal degradation of polymers. Modelling and Simulation in Materials Science and Engineering, 2004, 12, 575-597. | 2.0 | 4 |
| 164 | The effect of temperature on the viscoelastic response of semicrystalline polymers. Journal of Applied Polymer Science, 2004, 94, 9-23. | 2.6 | 4 |
| 165 | Cyclic viscoplasticity of semicrystalline polymers. Mechanics Research Communications, 2010, 37, 28-31. | 1.8 | 4 |
| 166 | Cyclic viscoelastoplasticity of polypropylene: effects of crystalline structure. Acta Mechanica, 2011, 221, 201-222. | 2.1 | 4 |
| 167 | Structure-property relations for equilibrium swelling of cationic gels. European Polymer Journal, 2016, 79, 23-35. | 5.4 | 4 |
| 168 | Influence of temperature on viscoelasticâ€“viscoplastic behavior of poly(lactic acid) under loadingâ€“unloading. Polymer Engineering and Science, 2017, 57, 239-247. | 3.1 | 4 |
| 169 | Mechanical response of double-network gels with dynamic bonds under multi-cycle deformation. Polymer, 2018, 150, 95-108. | 3.8 | 4 |
| 170 | Bulk consolidation of inhomogeneously aging elastic bodies. Soviet Applied Mechanics, 1989, 25, 448-454. | 0.0 | 3 |
| 171 | A model for the non-linear viscoelastic response and physical aging in glassy polymers. Computational and Theoretical Polymer Science, 1999, 9, 73-87. | 1.1 | 3 |
| 172 | Kinetics of enthalpy relaxation in polymeric glasses. Polymer Bulletin, 2000, 45, 303-310. | 3.3 | 3 |
| 173 | The critical temperature for structural recovery of amorphous glassy polymers. Europhysics Letters, 2000, 49, 569-575. | 2.0 | 3 |
| 174 | A model for structural relaxation in amorphous glassy polymers based on the aggregation-fragmentation theory. Journal of Polymer Science, Part B: Polymer Physics, 2001, 39, 1312-1325. | 2.1 | 3 |
| 175 | Modeling the viscoelastoplastic behavior of amorphous glassy polymers. Polymer Engineering and Science, 2001, 41, 1762-1770. | 3.1 | 3 |
| 176 | Effect of high-temperature annealing on the elastoplastic response of isotactic polypropylene in loading-unloading tests. Journal of Applied Polymer Science, 2003, 90, 186-196. | 2.6 | 3 |
| 177 | Constitutive equations for non-affine polymer networks with slippage of chains. Continuum Mechanics and Thermodynamics, 2005, 17, 217-246. | 2.2 | 3 |
| 178 | Polymer Networks with Slip-links: 1. Constitutive Equations for an Uncross-linked Network. Continuum Mechanics and Thermodynamics, 2006, 18, 157-170. | 2.2 | 3 |
| 179 | Thermo-viscoelasticity of polymer melts: experiments and modeling. Acta Mechanica, 2008, 197, 211-245. | 2.1 | 3 |
| 180 | Viscoelasticity of polyethylene/montmorillonite nanocomposite melts. Computational Materials Science, 2008, 43, 1027-1035. | 3.0 | 3 |

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| 181 | Essential work of fracture and viscoplastic response of a carbon black-filled thermoplastic elastomer. Engineering Fracture Mechanics, 2009, 76, 1977-1995. | 4.3 | 3 |
| 182 | Inverse relaxation in polypropylene. Iranian Polymer Journal (English Edition), 2012, 21, 701-711. | 2.4 | 3 |
| 183 | Cyclic deformations of polypropylene with a strainâ€controlled program. Polymer Engineering and Science, 2012, 52, 2316-2326. | 3.1 | 3 |
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