# Wenbo Luo

List of Publications by Year
in descending order



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|---|---|---|---|
| 49 papers | 685 citations | 567144 15 h-index | 580701 25 g-index |
| 49 all docs | 49 docs citations | 49 times ranked | 570 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Application of timeâ€“stress equivalence to nonlinear creep of polycarbonate. Polymer Testing, 2005, 24, 463-467. | 2.3 | 82 |
| 2 | Frequency- and strain-amplitude-dependent dynamical mechanical properties and hysteresis loss of CB-filled vulcanized natural rubber. International Journal of Mechanical Sciences, 2010, 52, 168-174. | 3.6 | 68 |
| 3 | Fracture surface analysis on nano-SiO2/epoxy composite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 483-484, 313-315. | 2.6 | 40 |
| 4 | Long-term creep assessment of viscoelastic polymer by time-temperature-stress superposition. Acta Mechanica Solida Sinica, 2012, 25, 571-578. | 1.0 | 39 |
| 5 | Nonlinear creep behavior of viscoelastic polycarbonate. Journal of Materials Science, 2006, 41, 531-536. | 1.7 | 36 |
| 6 | Modeling of the heat build-up of carbon black filled rubber. Polymer Testing, 2018, 69, 116-124. | 2.3 | 32 |
| 7 | Incubation time to crazing in stressed poly(methyl methacrylate). Polymer Testing, 2007, 26, 413-418. | 2.3 | 28 |
| 8 | Water-absorptivity and mechanical behaviors of PTFE/PA6 and PTFE/PA66 blends. Transactions of Nonferrous Metals Society of China, 2006, 16, s498-s503. | 1.7 | 27 |
| 9 | Application of Time-Temperature-Stress Superposition Principle to Nonlinear Creep of Poly(methyl) Tj ETQq1 1 0.784314 rgBT /Overlo | 0.4 | 26 |
| 10 | Effect of Temperature on the Tear Fracture and Fatigue Life of Carbon-Black-Filled Rubber. Polymers, 2019, 11, 768. | 2.0 | 26 |
| 11 | Fatigue Life Assessment of Filled Rubber by Hysteresis Induced Self-Heating Temperature. Polymers, 2020, 12, 846. | 2.0 | 25 |
| 12 | Temperature and frequency dependent rheological behaviour of carbon black filled natural rubber. Plastics, Rubber and Composites, 2013, 42, 416-420. | 0.9 | 24 |
| 13 | Time-dependent craze zone growth at a crack tip in polymer solids. Polymer, 2004, 45, 3519-3525. | 1.8 | 23 |
| 14 | Changes in tensile and tearing fracture properties of carbonâ€black filled rubber vulcanizates by thermal aging. Polymers for Advanced Technologies, 2015, 26, 1331-1335. | 1.6 | 16 |
| 15 | Modelling of nonlinear viscoelastic creep behaviour of hot-mix asphalt. Construction and Building Materials, 2015, 95, 329-336. | 3.2 | 16 |
| 16 | Fractional differential constitutive model for linear viscoelasticity of asphalt and asphalt mastic. Construction and Building Materials, 2021, 306, 124886. | 3.2 | 15 |
| 17 | Creep behavior of poly(methyl methacrylate) with growing damage. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 483-484, 580-582. | 2.6 | 14 |
| 18 | A method to predict the dynamical behaviors of carbon black filled natural rubber at different temperatures. Polymer Testing, 2019, 79, 106067. | 2.3 | 14 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Experimental studies on the temperature fluctuations in deformed thermoplastics with defects. International Journal of Solids and Structures, 2000, 37, 887-897. | 1.3 | 13 |
| 20 | A Creep Model of Asphalt Mixture Based on Variable Order Fractional Derivative. Applied Sciences (Switzerland), 2020, 10, 3862. | 1.3 | 13 |
| 21 | Computer simulation of conic-shaped patterns on fracture surfaces of polymers. Journal of Applied Polymer Science, 2003, 89, 1722-1725. | 1.3 | 10 |
| 22 | Effects of stress and physical ageing on nonlinear creep behavior of poly(methyl methacrylate). Central South University, 2008, 15, 582-588. | 0.5 | 10 |
| 23 | Time-stress equivalence: Application to nonlinear creep of polypropylene. Central South University, 2007, 14, 310-313. | 0.5 | 9 |
| 24 | Characteristic Tearing Energy and Fatigue Crack Propagation of Filled Natural Rubber. Polymers, 2021, 13, 3891. | 2.0 | 8 |
| 25 | Application of Time-Ageing Time and Time-Temperature-Stress Equivalence to Nonlinear Creep of Polymeric Materials. Materials Science Forum, 2008, 575-578, 1151-1156. | 0.3 | 6 |
| 26 | Application of fractional calculus methods to asymmetric dynamical response of CB-Filled rubber. Polymer Testing, 2017, 61, 416-420. | 2.3 | 6 |
| 27 | Creep Lifetime Assessment of Pressure-Tight Pe100 Pipes Based on a Slow Fatigue Crack Growth. Strength of Materials, 2018, 50, 781-787. | 0.2 | 5 |
| 28 | Application of time-temperature-stress equivalence to nonlinear creep in poly(methyl methacrylate). Materials Today Communications, 2019, 21, 100710. | 0.9 | 5 |
| 29 | Experimental studies on the dynamic viscoelastic properties of basalt fiber-reinforced asphalt mixtures. Science and Engineering of Composite Materials, 2021, 28, 489-498. | 0.6 | 5 |
| 30 | A Nonlinear Fractional Viscoelastic-Plastic Creep Model of Asphalt Mixture. Polymers, 2021, 13, 1278. | 2.0 | 5 |
| 31 | Structural Mechanical Characteristics and Instability Law of Roof Key Block Breaking in Gob-Side Roadway. Advances in Civil Engineering, 2020, 2020, 1-12. | 0.4 | 5 |
| 32 | Strain Rate-Dependent Hyperbolic Constitutive Model for Tensile Behavior of PE100 Pipe Material. Polymers, 2022, 14, 1357. | 2.0 | 5 |
| 33 | Effect of Stress-Induced Damage Evolution on Long-Term Creep Behavior of Nonlinear Viscoelastic Polymer. Key Engineering Materials, 2006, 324-325, 731-734. | 0.4 | 4 |
| 34 | Modeling of Nonlinear Viscoelastic Creep of Polycarbonate. E-Polymers, 2007, 7, . | 1.3 | 4 |
| 35 | Comparison of Two Hyperelastic Models for Carbon Black Filled Rubber. Applied Mechanics and Materials, 2013, 275-277, 28-32. | 0.2 | 4 |
| 36 | Analysis of dynamic viscoelastic properties of chloroprene rubber considering pre-strain effect. Materials Research Express, 2019, 6, 105324. | 0.8 | 4 |

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|---|---|---|---|
| 37 | Time-Temperature-Stress Equivalence Applied to Accelerated Characterization of Creep Behavior of Viscoelastic Polymer. Key Engineering Materials, 2007, 353-358, 1386-1389. | 0.4 | 3 |
| 38 | Time-Dependent Mechanical Behaviors of Polyamide 6/Nano-SiO<sub>2</sub> Composite. Key Engineering Materials, 0, 368-372, 1080-1083. | 0.4 | 2 |
| 39 | Fatigue Damage Analysis of an Asphalt Mixture Based on Pseudostiffness. Strength of Materials, 2018, 50, 764-771. | 0.2 | 2 |
| 40 | A Time Dependent Process Zone Model for Slow Crack Growth of Polyethylene Pipe Material. Journal of Physics: Conference Series, 2020, 1634, 012140. | 0.3 | 2 |
| 41 | An investigation on craze growth at a crack tip in polymers. Polymer Engineering and Science, 2001, 41, 1171-1176. | 1.5 | 1 |
| 42 | Numerical simulation and experimental study on rheological properties of polypropylene. Central South University, 2007, 14, 151-153. | 0.5 | 1 |
| 43 | Effects of gamma irradiation and moisture absorption on mechanical properties of PA6/PTFE blends. Central South University, 2008, 15, 560-563. | 0.5 | 1 |
| 44 | Mechanism of the Modulus Increase of Carbon-Black-Filled Rubber at Small Extension. Advanced Materials Research, 0, 284-286, 1969-1973. | 0.3 | 1 |
| 45 | Plastic Dissipation and Temperature Field around a Steady Running Crack. Key Engineering Materials, 2006, 324-325, 895-898. | 0.4 | 0 |
| 46 | Effect of Dimensional Tolerance on Displacements and Stresses of Wedged-Ring Joint Structure. Key Engineering Materials, 2007, 340-341, 1443-1448. | 0.4 | 0 |
| 47 | Changes in Elastic and Viscoelastic Properties of Poly(<i>Methyl methacrylate</i>) by Physical Aging. Advanced Materials Research, 0, 314-316, 914-917. | 0.3 | 0 |
| 48 | Acoustic emission hysteresis effect of polyvinylchloride under multi-step mechanical loads. Materials Research Innovations, 2015, 19, S8-861-S8-863. | 1.0 | 0 |
| 49 | OS15-2-3 Effect of gamma irradiation on mechanical properties of PA6/PTFE blends. The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics, 2007, 2007.6, _OS15-2-3--_OS15-2-3-. | 0.0 | 0 |