

William Mars

List of Publications by Year in descending order

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39
papers

1,748
citations

361413

20
h-index

345221

36
g-index

40
all docs

40
docs citations

40
times ranked

672
citing authors

#	ARTICLE	IF	CITATIONS
1	Heat Build-Up and Rolling Resistance Analysis of a Solid Tire: Experimental Observation and Numerical Simulation with Thermo-Mechanical Coupling Method. <i>Polymers</i> , 2022, 14, 2210.	4.5	8
2	Incremental, Critical Plane Analysis of Standing Wave Development, Self-Heating, and Fatigue during Regulatory High-Speed Tire Testing Protocols. <i>Tire Science and Technology</i> , 2021, 49, 172-205.	0.4	6
3	Characterizing Distributions of Tensile Strength and Crack Precursor Size to Evaluate Filler Dispersion Effects and Reliability of Rubber. <i>Polymers</i> , 2020, 12, 203.	4.5	25
4	The Fatigue Threshold of Rubber and Its Characterization Using the Cutting Method. <i>Advances in Polymer Science</i> , 2020, , 57-83.	0.8	11
5	Finite Element Modeling and Critical Plane Analysis of a Cut-and-Chip Experiment for Rubber. <i>Tire Science and Technology</i> , 2020, , .	0.4	5
6	Characterisation of cut and chip behaviour for NR, SBR and BR compounds with an instrumented laboratory device. <i>Plastics, Rubber and Composites</i> , 2019, 48, 14-23.	2.0	8
7	Computing Tire Component Durability via Critical Plane Analysis. <i>Tire Science and Technology</i> , 2019, 47, 31-54.	0.4	13
8	Characterizing the Intrinsic Strength (Fatigue Threshold) of Natural Rubber/Butadiene Rubber Blends. <i>Tire Science and Technology</i> , 2019, 47, 292-307.	0.4	19
9	FINITELY SCOPED, HIGH RELIABILITY FATIGUE CRACK GROWTH MEASUREMENTS. <i>Rubber Chemistry and Technology</i> , 2018, 91, 644-650.	1.2	3
10	FATIGUE CHARACTERIZATION OF A THERMOPLASTIC ELASTOMER. <i>Rubber Chemistry and Technology</i> , 2017, 90, 367-380.	1.2	17
11	Crack precursor size for natural rubber inferred from relaxing and non-relaxing fatigue experiments. <i>International Journal of Fatigue</i> , 2015, 80, 50-57.	5.7	27
12	John R. Luchini â€” Tire Science Giant. <i>Tire Science and Technology</i> , 2013, 41, 228-231.	0.4	0
13	Energy release rate of small cracks in hyperelastic materials. <i>International Journal of Non-Linear Mechanics</i> , 2012, 47, 22-29.	2.6	35
14	ANALYSIS OF STIFFNESS VARIATIONS IN CONTEXT OF STRAIN-, STRESS-, AND ENERGY-CONTROLLED PROCESSES. <i>Rubber Chemistry and Technology</i> , 2011, 84, 178-186.	1.2	11
15	Fatigue Investigation of Elastomeric Structures. <i>Tire Science and Technology</i> , 2010, 38, 194-212.	0.4	13
16	Computed Dependence of Rubber'S Fatigue Behavior on Strain Crystallization. <i>Rubber Chemistry and Technology</i> , 2009, 82, 51-61.	1.2	30
17	Fatigue crack orientation in NR and SBR under variable amplitude and multiaxial loading conditions. <i>Journal of Materials Science</i> , 2008, 43, 1783-1794.	3.7	16
18	Comparison of Test Specimens for Characterizing the Dynamic Properties of Rubber. <i>Experimental Mechanics</i> , 2008, 48, 1-8.	2.0	3

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19	Fatigue life analysis and predictions for NR and SBR under variable amplitude and multiaxial loading conditions. <i>International Journal of Fatigue</i> , 2008, 30, 1231-1247.	5.7	81
20	Constitutive Behavior and Temperature Effects in NR and SBR Under Variable Amplitude and Multiaxial Loading Conditions. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2008, 130, .	1.4	4
21	The Effect of a Dwell Period on Fatigue Crack Growth Rates in Filled SBR and NR. <i>Rubber Chemistry and Technology</i> , 2007, 80, 838-853.	1.2	32
22	The Correlation of Fatigue Crack Growth Rates in Rubber Subjected to Multiaxial Loading Using Continuum Mechanical Parameters. <i>Rubber Chemistry and Technology</i> , 2007, 80, 169-182.	1.2	15
23	Fatigue Life Prediction for Elastomeric Structures. <i>Rubber Chemistry and Technology</i> , 2007, 80, 481-503.	1.2	33
24	Fatigue crack growth of filled rubber under constant and variable amplitude loading conditions. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2007, 30, 640-652.	3.4	47
25	Validation of a Steady-State Transport Analysis for Rolling Treaded Tires. <i>Tire Science and Technology</i> , 2007, 35, 183-208.	0.4	27
26	Multiaxial stress effects on fatigue behavior of filled natural rubber. <i>International Journal of Fatigue</i> , 2006, 28, 521-529.	5.7	43
27	Nucleation and growth of small fatigue cracks in filled natural rubber under multiaxial loading. <i>Journal of Materials Science</i> , 2006, 41, 7324-7332.	3.7	49
28	Analysis of Fatigue Life under Complex Loading: Revisiting Cadwell, Merrill, Sloman, and Yost. <i>Rubber Chemistry and Technology</i> , 2006, 79, 589-601.	1.2	13
29	Multiaxial fatigue of rubber: Part I: equivalence criteria and theoretical aspects. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2005, 28, 515-522.	3.4	58
30	Multiaxial fatigue of rubber: Part II: experimental observations and life predictions. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2005, 28, 523-538.	3.4	63
31	Factors that Affect the Fatigue Life of Rubber: A Literature Survey. <i>Rubber Chemistry and Technology</i> , 2004, 77, 391-412.	1.2	257
32	Observations of the Constitutive Response and Characterization of Filled Natural Rubber Under Monotonic and Cyclic Multiaxial Stress States. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2004, 126, 19-28.	1.4	78
33	A novel specimen for investigating the mechanical behavior of elastomers under multiaxial loading conditions. <i>Experimental Mechanics</i> , 2004, 44, 136-146.	2.0	30
34	Fatigue crack nucleation and growth in filled natural rubber. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2003, 26, 779-789.	3.4	91
35	A Phenomenological Model for the Effect of R Ratio on Fatigue of Strain Crystallizing Rubbers. <i>Rubber Chemistry and Technology</i> , 2003, 76, 1241-1258.	1.2	57
36	Cracking Energy Density as a Predictor of Fatigue Life under Multiaxial Conditions. <i>Rubber Chemistry and Technology</i> , 2002, 75, 1-17.	1.2	107

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37	A literature survey on fatigue analysis approaches for rubber. International Journal of Fatigue, 2002, 24, 949-961.	5.7	387
38	Critical Plane Analysis of Rubber Bushing Durability under Road Loads. , 0, , .		17
39	Computing Remaining Fatigue Life Under Incrementally Updated Loading Histories. , 0, , .		9