Jacques Lamon

List of Publications by Year
in descending order

91	3,572	109321 35	138484 58
papers	citations	h-index	g-index

95	95	95	1329
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The tensile behavior of carbon fibers at high temperatures up to 2400 Â°C. Carbon, 2004, 42, 715-725.	10.3	171
2	A micromechanics-based approach to the mechanical behavior of brittle-matrix composites. Composites Science and Technology, 2001, 61, 2259-2272.	7.8	149
3	Damage and failure in ceramic matrix minicomposites: Experimental study and model. Acta Materialia, 1997, 45, 1025-1044.	7.9	144
4	Fracture Toughness of 2-D Woven SiC/SiC CVI-Composites with Multilayered Interphases. Journal of the American Ceramic Society, 1996, 79, 849-858.	3.8	141
5	The concept of a strong interface applied to SiC/SiC composites with a BN interphase. Acta Materialia, 2000, 48, 4609-4618.	7.9	112
6	Microcomposite Test Procedure for Evaluating the Interface Properties of Ceramic Matrix Composites. Journal of the American Ceramic Society, 1995, 78, 401-405.	3.8	109
7	Statistical Approaches to Failure for Ceramic Reliability Assessment. Journal of the American Ceramic Society, 1988, 71, 106-112.	3.8	105
8	Thermomechanical properties of carbon fibres at high temperatures (up to 2000ÂÂ°C). Composites Science and Technology, 2002, 62, 499-504.	7.8	102
9	Micro/minicomposites: a useful approach to the design and development of non-oxide CMCs. Composites Part A: Applied Science and Manufacturing, 1999, 30, 537-547.	7.6	96
10	Statistical Analysis of Bending Strengths for Brittle Solids: A Multiaxial Fracture Problem. Journal of the American Ceramic Society, 1983, 66, 177-182.	3.8	92
11	The influence of the interphase and associated interfaces on the deflection of matrix cracks in ceramic matrix composites. Composites Part A: Applied Science and Manufacturing, 2000, 31, 1179-1190.	7.6	92
12	Influence of Interface Characteristics on the Mechanical Properties of Hiâ€Nicalon typeâ€S or Tyrannoâ€SA3 Fiberâ€Reinforced SiC/SiC Minicomposites. International Journal of Applied Ceramic Technology, 2010, 7, 291-303.	2.1	88
13	Tensile creep behaviour of a silicon carbide-based fibre with a low oxygen content. Journal of Materials Science, 1995, 30, 661-677.	3.7	86
14	Hiâ€Nicalon/SiC Minicomposites with (Pyrocarbon/SiC)_n Nanoscale Multilayered Interphases. Journal of the American Ceramic Society, 1999, 82, 2465-2473.	3.8	83
15	Failure of fiber bundles. Composites Science and Technology, 2004, 64, 701-710.	7.8	79
16	Delayed Failure of Hiâ€Nicalon and Hiâ€Nicalon S Multifilament Tows and Single Filaments at Intermediate Temperatures (500Â°â€“800Â°C). Journal of the American Ceramic Society, 2009, 92, 702-709.	3.8	78
17	Thermal residual stresses in ceramic matrix compositesâ€”I. Axisymmetrical model and finite element analysis. Acta Metallurgica Et Materialia, 1995, 43, 2241-2253.	1.8	77
18	Tensile Creep Behavior of SiC-Based Fibers With a Low Oxygen Content. Journal of the American Ceramic Society, 2007, 90, 1146-1156.	3.8	74

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19	Influence of Strong Fiber/Coating Interfaces on the Mechanical Behavior and Lifetime of Hi-Nicalon/(PyC/SiC)n/SiC Minicomposites. Journal of the American Ceramic Society, 2001, 84, 787-794.	3.8	69
20	Delayed Failure at Intermediate Temperatures (600Â°â€“700Â°C) in Air in Silicon Carbide Multifilament Tows. Journal of the American Ceramic Society, 2004, 87, 888-893.	3.8	67
21	Oxidation of Silicon Carbide Fibers During Static Fatigue in Air at Intermediate Temperatures. Journal of the American Ceramic Society, 2009, 92, 2067-2073.	3.8	66
22	Analysis of Acoustic Emission energy release during static fatigue tests at intermediate temperatures on Ceramic Matrix Composites: Towards rupture time prediction. Composites Science and Technology, 2012, 72, 1001-1007.	7.8	66
23	Micromechanics based model of fatigue/oxidation for ceramic matrix composites. Composites Science and Technology, 2005, 65, 369-374.	7.8	64
24	Damage monitoring and identification in SiC/SiC minicomposites using combined acousto-ultrasonics and acoustic emission. Composites Part A: Applied Science and Manufacturing, 2014, 57, 8-15.	7.6	64
25	Sharp indentation behavior of carbon/carbon composites and varieties of carbon. Carbon, 2002, 40, 2567-2579.	10.3	61
26	Model of the Nonlinear Mechanical Behavior of 2D SiC-SiC Chemical Vapor Infiltration Composites. Journal of the American Ceramic Society, 1994, 77, 2118-2126.	3.8	58
27	Analysis of crack deviation in ceramic matrix composites and multilayers based on the Cook and Gordon mechanism. Composites Science and Technology, 2007, 67, 2052-2060.	7.8	54
28	Real-time evaluation of energy attenuation: A novel approach to acoustic emission analysis for damage monitoring of ceramic matrix composites. Journal of the European Ceramic Society, 2014, 34, 1673-1679.	5.7	54
29	Fracture statistics applied to modelling the non-linear stress-strain behavior in microcomposites: Influence of interfacial parameters. International Journal of Fracture, 1996, 82, 297-316.	2.2	44
30	Damage and failure mechanisms of a3-directional carbon/carbon composite under uniaxial tensile and shear loads. Acta Materialia, 1998, 46, 6631-6643.	7.9	44
31	Creep behaviour of a SiC/Si-B-C composite with a self-healing multilayered matrix. Journal of the European Ceramic Society, 2003, 23, 1105-1114.	5.7	44
32	Microstructural Stability and Creep Behavior of Siâ€Câ€O (Nicalon) Fibers in Carbon Monoxide and Argon Environments. Journal of the American Ceramic Society, 1996, 79, 2673-2686.	3.8	44
33	Characterization of fibre/matrix interfaces in carbon/carbon composites. Composites Science and Technology, 2009, 69, 1442-1446.	7.8	43
34	Tensile static fatigue of 2D SiC/SiC composites with multilayered (PyCâ€“SiC)n interphases at high temperatures in oxidizing atmosphere. Composites Part A: Applied Science and Manufacturing, 1998, 29, 1157-1164.	7.6	42
35	The tensile properties of carbon matrices at temperatures up to 2200Â°C. Carbon, 2005, 43, 2054-2065.	10.3	41
36	Ceramics Reliability: Statistical Analysis of Multiaxial Failure Using the Weibull Approach and the Multiaxial Elemental Strength Model. Journal of the American Ceramic Society, 1990, 73, 2204-2212.	3.8	37

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37	Probabilistic-statistical approach to matrix damage and stressâ€“Strain behavior of 2-D woven SiC/SiC ceramic matrix composites. Journal of the European Ceramic Society, 1998, 18, 1797-1808.	5.7	34
38	Modelling of the stress/strain behaviour of a carbon/carbon composite with a 2.5 dimensional fibre architecture under tensile and shear loads at room temperature. Composites Science and Technology, 1999, 59, 1-12.	7.8	34
39	A probabilistic-statistical approach to the ultimate failure of ceramic-matrix compositesâ€”part I: experimental investigation of 2D woven SiC/SiC composites. Composites Science and Technology, 2002, 62, 385-393.	7.8	34
40	Damage and failure of SiC fiber tows during environment activated slow crack growth: Residual behavior and Strength-Probability-Time diagrams. Acta Materialia, 2017, 131, 197-205.	7.9	32
41	Prediction of elastic properties of carbon fibers and CVI matrices. Carbon, 2005, 43, 2044-2053.	10.3	31
42	SiC/SiC minicomposites with nanoscale multilayered fibre coatings. Composites Science and Technology, 2001, 61, 363-367.	7.8	29
43	In situ fibre strength determination in metal matrix composites. Composites Science and Technology, 2009, 69, 2580-2586.	7.8	28
44	Influence of an original manufacturing process on the properties and microstructure of SiC/SiC tubular composites. Composites Part A: Applied Science and Manufacturing, 2019, 123, 170-179.	7.6	28
45	A constitutive model for the mechanical behavior of a 3D C/C composite. Mechanics of Materials, 2002, 34, 161-177.	3.2	27
46	Stochastic approach to multiple cracking in composite systems based on the extreme-values theory. Composites Science and Technology, 2009, 69, 1607-1614.	7.8	26
47	Statistical flaw strength distributions for glass fibres: Correlation between bundle test and AFM-derived flaw size density functions. Acta Materialia, 2012, 60, 3711-3718.	7.9	23
48	Flaw strength distributions and statistical parameters for ceramic fibers: The normal distribution. Physical Review E, 2012, 85, 051106.	2.1	20
49	Stochastic models of fragmentation of brittle fibers or matrix in composites. Composites Science and Technology, 2010, 70, 743-751.	7.8	19
50	Resistance to Fatigue at Intermediate Temperatures in Air for <scp><scp>SiC</scp></scp>Â<scp><scp>Hi</scp></scp>â€Nicalon Fibers: Statistical Distributions of Lifetimes and Strength Degradation. Journal of the American Ceramic Society, 2012, 95, 3613-3621.	3.8	19
51	Creep of SiCâ€“SiC microcomposites. Journal of the European Ceramic Society, 1999, 19, 2285-2296.	5.7	18
52	Thermal Stress Failure of Ceramics under Repeated Rapid Heatings. Journal of the American Ceramic Society, 1991, 74, 1188-1196.	3.8	17
53	Determination of Fracture Toughness in 2-D Woven SiC Matrix Composites Made by Chemical Vapor Infiltration. Journal of the American Ceramic Society, 1995, 78, 1201-1211.	3.8	17
54	Interfacial behavior of microcomposites during creep at elevated temperatures. Journal of the European Ceramic Society, 1999, 19, 2297-2303.	5.7	17

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55	Review: creep of fibre-reinforced ceramic matrix composites. International Materials Reviews, 2020, 65, 28-62.	19.3	17
56	Analyses of fiber push-out tests performed on Nicalon/SiC composites with tailored interfaces. Composites Part B: Engineering, 1995, 5, 1387-1401.	0.6	16
57	Virtual testing applied to transverse multiple cracking of tows in woven ceramic composites. Mechanics Research Communications, 2011, 38, 579-585.	1.8	16
58	Improvement of silicon carbide fibers mechanical properties by Cl2 etching. Journal of the European Ceramic Society, 2018, 38, 5301-5310.	5.7	16
59	A probabilistic statistical approach to the ultimate failure of ceramic-matrix compositesâ€”part II: macroscopic model. Composites Science and Technology, 2002, 62, 395-399.	7.8	15
60	Study of thermal residual stresses in ceramic matrix composites. Journal of Alloys and Compounds, 1997, 259, 260-264.	5.5	14
61	Prediction of Lifetime in Static Fatigue at High Temperatures for Ceramic Matrix Composites. Advanced Materials Research, 0, 112, 129-140.	0.3	13
62	Properties and Characteristics of SiC and SiC/SiC Composites. , 2012, , 323-338.		13
63	Multiscale Thermal Characterization of Mechanically Loaded Ceramic Matrix Composite. Experimental Mechanics, 2015, 55, 783-794.	2.0	12
64	Static Fatigue of SiC Multifilament Tows at Temperatures up to 1200 Â°C in Air. Ceramics, 2019, 2, 426-440.	2.6	11
65	Investigation of statistical distributions of fracture strengths for flax fibre using the tow-based approach. Journal of Materials Science, 2016, 51, 8687-8698.	3.7	10
66	Investigation of flaw strength distributions from tensile force-strain curves of fiber tows. Composites Part A: Applied Science and Manufacturing, 2021, 145, 106262.	7.6	10
67	Influence d'interphases pyrocarbone dÃ©posÃ©es par CVI pulsÃ©e sur les caracteristiques mÃ©caniques de matÃ©riaux composites unidirectionnels. Journal De Physique III, 1995, 5, 937-951.	0.3	9
68	Direct comparison between monofilament and multifilament tow testing for evaluating the tensile strength distribution of SiC fibers. Journal of the European Ceramic Society, 2022, 42, 1928-1937.	5.7	9
69	Investigation of subcritical crack growth using load relaxation tests on fiber bundles. Acta Materialia, 2011, 59, 2850-2857.	7.9	8
70	A new inverse approach for the localization and characterization of defects based on compressive experiments. Computational Mechanics, 2016, 57, 1061-1074.	4.0	8
71	A method to distinguish extrinsic and intrinsic fracture-origin populations in monolithic ceramics. Journal of the European Ceramic Society, 2006, 26, 3887-3895.	5.7	6
72	Investigation of the residual tensile behavior of fiber bundles after static fatigue: Implications for the prediction of durability of composites. Composites Part A: Applied Science and Manufacturing, 2014, 67, 149-156.	7.6	5

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73	CaractÃ©risation de l'endommagement de composites tissÃ©s Ã matrice SiC. Revue De Physique AppliquÃ©e, 1988, 23, 193-200.	0.4	5
74	La rupture des cÃ©ramiques. Revue De Metallurgie, 1995, 92, 265-284.	0.3	3
75	Probabilistic-statistical approach to the mechanical behavior of ceramic matrix composites (CMCs). Advanced Composite Materials, 1999, 8, 97-106.	1.9	3
76	Micromechanics-Based Evaluation of Interfaces in Ceramic Matrix Composites. Advances in Science and Technology, 2006, 50, 37-45.	0.2	3
77	Experimental assessment of damage-thermal diffusivity relationship in unidirectional fibre-reinforced composite under axial tensile test. Acta Materialia, 2019, 173, 302-312.	7.9	3
78	Fatigue statique de monofilaments et de fils SiC Hi-Nicalon Ã 500 Â°C et 800 Â°C. Revue Des Composites Et Des Materiaux Avances, 2006, 16, 221-241.	0.6	3
79	Multiscale Modelling of the Influence of Damage on the Thermal Properties of Ceramic Matrix Composites. Advances in Science and Technology, 2010, 73, 65-71.	0.2	2
80	Statistical-Probabilistic Approach to the Lifetime and Strength Degradation of E-Glass Filaments and Bundles under Constant Tensile Loading in Water. Journal of Composites Science, 2019, 3, 78.	3.0	2
81	Static Fatigue of SiC/SiC Minicomposites at High Temperatures Up to 1200 Â°C in Air: Multiscale Approach. Journal of Composites Science, 2021, 5, 67.	3.0	2
82	Investigation of Specimen Size Effects on P-Quantile Diagrams and Normal Distributions of Critical Flaw Strengths in Fiber Tows. Journal of Composites Science, 2022, 6, 171.	3.0	2
83	Influence des contraintes rÃ©siduelles sur le comportement mÃ©canique des composites Ã matrice cÃ©ramique. Revue De Metallurgie, 1997, 94, 207-218.	0.3	1
84	Ceramic Matrix Composite with Increased Thermal Conductivity. Advances in Science and Technology, 2006, 45, 1405-1410.	0.2	1
85	Reinforcement of ceramic matrix composites by ceramic continuous fibers. , 2021, , 55-93.		1
86	La fiabilitÃ© des matÃ©riaux cÃ©ramiques. Materiaux Et Techniques, 1985, 73, 171-177.	0.9	1
87	Mesure de l'intensitÃ© de la liaison interfaciale fibre/matrice par essais de push-out / push-back, application aux composites carbone-carbone. Materiaux Et Techniques, 2008, 96, 115-120.	0.9	1
88	MÃ©thodes de mesures de champs et d'identification des propriÃ©tÃ©s Ã©lastiques par corrÃ©lation d'images numÃ©riques. Application Ã l'Ã©tude d'un joint de brasure cÃ©ramique. Revue Des Composites Et Des Materiaux Avances, 2005, 15, 19-31.	0.6	0
89	DÃ©finition d'un potentiel de dÃ©viation des fissures dans les CMC et les multicouches. Une aide Ã la sÃ©lection des constituants. Revue Des Composites Et Des Materiaux Avances, 2006, 16, 147-166.	0.6	0
90	Identification de la signature acoustique des diffÃ©rents mÃ©canismes dâ€™endommagement lors dâ€™essais de fatigue sur CMC. Application de classificateurs supervisÃ© et non supervisÃ©. Revue Des Composites Et Des Materiaux Avances, 2013, 23, 85-98.	0.6	0

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91	Aspects probabilistes de la durÃ©e de vie en fatigue. Influence des dÃ©fauts. Revue Des Composites Et Des Materiaux Avances, 2013, 23, 181-196.	0.6	0