

JÃ©rÃ©me Ac Molimard

List of Publications by Year in descending order

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88
papers

1,795
citations

393982

19
h-index

276539

41
g-index

96
all docs

96
docs citations

96
times ranked

1500
citing authors

#	ARTICLE	IF	CITATIONS
1	Assessment of Digital Image Correlation Measurement Errors: Methodology and Results. <i>Experimental Mechanics</i> , 2009, 49, 353-370.	1.1	497
2	Thin Film Colorimetric Interferometry. <i>Tribology Transactions</i> , 2001, 44, 270-276.	1.1	160
3	Full-field strain measurements for validation of meso-FE analysis of textile composites. <i>Composites Part A: Applied Science and Manufacturing</i> , 2008, 39, 1218-1231.	3.8	133
4	Identification of the four orthotropic plate stiffnesses using a single open-hole tensile test. <i>Experimental Mechanics</i> , 2005, 45, 404-411.	1.1	78
5	Non contact method for in vivo assessment of skin mechanical properties for assessing effect of ageing. <i>Medical Engineering and Physics</i> , 2012, 34, 172-178.	0.8	58
6	Digital phase-shifting grating shearography for experimental analysis of fabric composites under tension. <i>Composites Part A: Applied Science and Manufacturing</i> , 2004, 35, 849-859.	3.8	44
7	Transient and cyclical hygrothermoelastic stress in laminated composite plates: Modelling and experimental assessment. <i>Mechanics of Materials</i> , 2007, 39, 729-745.	1.7	41
8	On the nonlinear deformations of thin unsymmetric 0/90 composite plates under hygrothermal loads. <i>Composites Part A: Applied Science and Manufacturing</i> , 2006, 37, 624-629.	3.8	39
9	Bayesian Identification of Elastic Constants in Multi-Directional Laminate from MoirÃ© Interferometry Displacement Fields. <i>Experimental Mechanics</i> , 2013, 53, 635-648.	1.1	39
10	In Situ Pressure and Film Thickness Measurements in Rolling/Sliding Lubricated Point Contacts. <i>Tribology Letters</i> , 2003, 15, 421-429.	1.2	35
11	Assessment of the in-plane biomechanical properties of human skin using a finite element model updating approach combined with an optical full-field measurement on a new tensile device. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2013, 27, 273-282.	1.5	33
12	Uncertainty analysis of temporal phase-stepping algorithms for interferometry. <i>Optics Communications</i> , 2007, 275, 144-155.	1.0	32
13	Application of grating shearography and speckle shearography to mechanical analysis of composite material. <i>Composites Part A: Applied Science and Manufacturing</i> , 2004, 35, 965-976.	3.8	30
14	Monitoring the resin infusion manufacturing process under industrial environment using distributed sensors. <i>Journal of Composite Materials</i> , 2012, 46, 691-706.	1.2	30
15	Introduction to the Bayesian Approach Applied to Elastic Constants Identification. <i>AIAA Journal</i> , 2010, 48, 893-903.	1.5	28
16	Densification and thermal gradient evolution of alumina during microwave sintering at 2.45GHz. <i>Ceramics International</i> , 2013, 39, 3269-3277.	2.3	27
17	Contactless Monitoring of Shrinkage and Temperature Distribution during Hybrid Microwave Sintering. <i>Advanced Engineering Materials</i> , 2011, 13, 901-905.	1.6	25
18	Three-Dimensional Full-Field Strain Measurements across a Whole Porcine Aorta Subjected to Tensile Loading Using Optical Coherence Tomographyâ€”Digital Volume Correlation. <i>Frontiers in Mechanical Engineering</i> , 2018, 4, .	0.8	24

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19	Experimental Investigation of Pressure Applied on the Lower Leg by Elastic Compression Bandage. <i>Annals of Biomedical Engineering</i> , 2015, 43, 2967-2977.	1.3	23
20	Characterization of chemoelastic effects in arteries using digital volume correlation and optical coherence tomography. <i>Acta Biomaterialia</i> , 2020, 102, 127-137.	4.1	23
21	A Fresnel's Reflection Optical Fiber Sensor for Thermoset Polymer Cure Monitoring. <i>Polymers and Polymer Composites</i> , 2004, 12, 269-276.	1.0	19
22	Characterization of Liquid Resin Infusion (LRI) filling by fringe pattern projection and in situ thermocouples. <i>Composites Part A: Applied Science and Manufacturing</i> , 2010, 41, 36-44.	3.8	19
23	<i>In vivo</i> Identification of the Passive Mechanical Properties of Deep Soft Tissues in the Human Leg. <i>Strain</i> , 2016, 52, 400-411.	1.4	19
24	Demodulation of Spatial Carrier Images: Performance Analysis of Several Algorithms Using a Single Image. <i>Experimental Mechanics</i> , 2013, 53, 1357-1370.	1.1	18
25	Prediction of the Biomechanical Effects of Compression Therapy by Finite Element Modeling and Ultrasound Elastography. <i>IEEE Transactions on Biomedical Engineering</i> , 2015, 62, 1011-1019.	2.5	18
26	Numerical and experimental analyses of resin infusion manufacturing processes of composite materials. <i>Journal of Composite Materials</i> , 2012, 46, 1617-1631.	1.2	16
27	Uncertainty on fringe projection technique: A Monte-Carlo-based approach. <i>Optics and Lasers in Engineering</i> , 2013, 51, 840-847.	2.0	16
28	New tools for the experimental study of EDH and limit lubrications. <i>Tribology Series</i> , 1999, 36, 717-726.	0.1	13
29	Numerical Model Reduction for the Prediction of Interface Pressure Applied by Compression Bandages on the Lower Leg. <i>IEEE Transactions on Biomedical Engineering</i> , 2018, 65, 449-457.	2.5	13
30	Does the Knowledge of the Local Thickness of Human Ascending Thoracic Aneurysm Walls Improve Their Mechanical Analysis?. <i>Frontiers in Bioengineering and Biotechnology</i> , 2019, 7, 169.	2.0	13
31	Strain maps obtained by phase-shifting interferometry: An uncertainty analysis. <i>Optics Communications</i> , 2008, 281, 2195-2206.	1.0	12
32	Exact and efficient interpolation using finite elements shape functions. <i>European Journal of Computational Mechanics</i> , 2009, 18, 307-331.	0.6	12
33	Characterisation of Knee Brace Migration and Associated Skin Deformation During Flexion by Full-Field Measurements. <i>Experimental Mechanics</i> , 2015, 55, 349-360.	1.1	12
34	Characterisation of in-vivo mechanical action of knee braces regarding their anti-drawer effect. <i>Knee</i> , 2015, 22, 80-87.	0.8	12
35	Thin film lubrication study by colorimetric interferometry. <i>Tribology Series</i> , 2000, 38, 695-704.	0.1	10
36	Characterization of a pressure measuring system for the evaluation of medical devices. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2014, 228, 1264-1274.	1.0	10

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37	A Generalized Differential Colorimetric Interferometry Method: Extension to the Film Thickness Measurement of Any Point Contact Geometry. <i>Tribology Transactions</i> , 2018, 61, 648-660.	1.1	10
38	In situ pressure measurements in an elastohydrodynamically lubricated point contact using Raman microspectrometry. Comparison with numerical calculations. <i>Tribology Series</i> , 2003, 41, 663-673.	0.1	9
39	Monitoring LCM Process by FBG Sensor Under Birefringence. <i>Strain</i> , 2011, 47, 364-373.	1.4	9
40	Numerical Approach for the Assessment of Pressure Generated by Elastic Compression Bandage. <i>Annals of Biomedical Engineering</i> , 2016, 44, 3096-3108.	1.3	9
41	Calculation of pressure distribution in EHD point contacts from experimentally determined film thickness. <i>Tribology International</i> , 2005, 38, 391-401.	3.0	8
42	Diffraction grating interferometers for mechanical characterisations of advanced fabric laminates. <i>Optics and Laser Technology</i> , 2006, 38, 51-66.	2.2	8
43	Superimposition of elastic and nonelastic compression bandages. <i>Journal of Vascular Surgery: Venous and Lymphatic Disorders</i> , 2017, 5, 851-858.	0.9	8
44	Evaluation of the mechanical efficiency of knee braces based on computational modeling. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2015, 18, 646-661.	0.9	7
45	Multiscale Approach to Characterize Mechanical Properties of Tissue Engineered Skin. <i>Annals of Biomedical Engineering</i> , 2016, 44, 2851-2862.	1.3	7
46	Modelling and Experimental Characterisation of Hygrothermoelastic Stress in Polymer Matrix Composites. <i>Macromolecular Symposia</i> , 2007, 247, 199-210.	0.4	6
47	Lubricant rheology in real conditions: measurements and confrontation with a ball/disk contact. <i>Revue De Metallurgie</i> , 2001, 98, 141-148.	0.3	5
48	Colorimétrie Différentielle : Un outil pour l'étude de la lubrification fluide. <i>Mecanique Et Industries</i> , 2002, 3, 571-581.	0.2	5
49	Identification of Material Properties Using FEMU: Application to the Open Hole Tensile Test. <i>Applied Mechanics and Materials</i> , 2007, 7-8, 73-78.	0.2	5
50	Comparison between the basic least squares and the Bayesian approach for elastic constants identification. <i>Journal of Physics: Conference Series</i> , 2008, 135, 012045.	0.3	5
51	Bayesian Statistical Identification of Orthotropic Elastic Constants Accounting for Measurement and Modeling Errors. , 2009, , .		5
52	Quantitative strain and slope evaluation on a double lap joint tensile test using ESPI. , 2006, , .		4
53	Effect of approximation fidelity on vibration-based elastic constants identification. <i>Structural and Multidisciplinary Optimization</i> , 2010, 42, 293-304.	1.7	4
54	Robert Jones bandage pressure range assessment using a pressure mapping system and application to band calibration. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2015, 18, 2068-2069.	0.9	4

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55	Signal-to-noise based local decorrelation compensation for speckle interferometry applications. Applied Optics, 2008, 47, 3535.	2.1	3
56	Patient-specific modelling of the calf muscle under elastic compression using magnetic resonance imaging and ultrasound elastography. Computer Methods in Biomechanics and Biomedical Engineering, 2013, 16, 332-333.	0.9	3
57	Evaluation of the mechanical efficiency of knee orthoses: A combined experimental and numerical approach. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2014, 228, 533-546.	1.0	3
58	In-silico pre-clinical trials are made possible by a new simple and comprehensive lumbar belt mechanical model based on the Law of Laplace including support deformation and adhesion effects. PLoS ONE, 2019, 14, e0212681.	1.1	3
59	Characterization of Fabric-to-Fabric Friction: Application to Medical Compression Bandages. Autex Research Journal, 2020, 20, 220-227.	0.6	3
60	Parametric Study of Lumbar Belts in the Case of Low Back Pain: Effect of Patients' Specific Characteristics. , 2020, , 43-59.		3
61	Multifactorial Analysis of Endodontic Microsurgery Using Finite Element Models. Journal of Personalized Medicine, 2022, 12, 1012.	1.1	3
62	Maximum curvatures of 0/90 plates under thermal stress: Modelling and experimental validation. Composites Science and Technology, 2009, 69, 93-96.	3.8	2
63	Implementation of the direct evaluation of strains using a phase analysis code for random patterns. Optics and Lasers in Engineering, 2011, 49, 1194-1200.	2.0	2
64	Combined experimental and numerical approach for the assessment of pressure generated by elastic compression bandage. Computer Methods in Biomechanics and Biomedical Engineering, 2014, 17, 166-167.	0.9	2
65	Biomechanical analysis and modelling of lumbar belt: parametric study. Computer Methods in Biomechanics and Biomedical Engineering, 2014, 17, 62-63.	0.9	2
66	Bone Position and Ligament Deformations of the Foot From CT Images to Quantify the Influence of Footwear in ex vivo Feet. Frontiers in Bioengineering and Biotechnology, 2020, 8, 560.	2.0	2
67	Transition Saddle-Cylinder Shape of Thin Unsymmetric [0/90] Square Plates under Hygrothermal Loads: Fringe Projection Method and Variational Approach. Applied Mechanics and Materials, 2006, 3-4, 217-222.	0.2	1
68	A Signal to Noise Optimization Algorithm for Speckle Interferometry Applications. Applied Mechanics and Materials, 0, 13-14, 29-38.	0.2	1
69	Efficiency of Knee Braces: A Biomechanical Approach Based on Computational Modeling. , 2012, , .		1
70	Addendum to: Assessment of Digital Image Correlation Measurement Errors: Methodology and Results [Experimental Mechanics 49(3)]. Experimental Mechanics, 2017, 57, 1515-1515.	1.1	1
71	Subject-Specific Computational Prediction of the Effects of Elastic Compression in the Calf. , 2017, , 523-544.		1
72	Directional Denoising Using Fourier Spectrum Cloning. , 2019, , .		1

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73	Lower leg compression and its biomechanical effects on the soft tissues of the leg. , 2020, , 55-85.		1
74	Bandages Static Stiffness Index Is Not Influenced by Calf Mechanical Properties but Only by Geometrical Changes. Biomechanics, 2022, 2, 87-94.	0.5	1
75	Application of grating shearography to the experimental analysis of a single fabric lamina under tensile loading. , 2002, 4778, 257.		0
76	Measurement of a surface profile with maximum accuracy using a temporal phase-stepping. Proceedings of SPIE, 2005, 9664, 348.	0.8	0
77	Implementation of the direct evaluation of strains in a frequency-based image analysis code for random patterns. Proceedings of SPIE, 2010, , .	0.8	0
78	Study of dimensional stability of a thick composite panel submitted to environmental changes. Proceedings of SPIE, 2010, , .	0.8	0
79	Applying a Bayesian Approach to Identification of Orthotropic Elastic Constants from Full Field Displacement Measurements. EPJ Web of Conferences, 2010, 6, 37005.	0.1	0
80	Methodology for metrological analysis of periodic coding images: measurement resolution and spatial resolution. EPJ Web of Conferences, 2010, 6, 10002.	0.1	0
81	Direct Strain and Slope and Slope Measurement Using 2D DSPI. Advanced Materials Research, 2011, 324, 384-387.	0.3	0
82	Biomechanical analysis and modelling of lumbar belt: preliminary study. Computer Methods in Biomechanics and Biomedical Engineering, 2013, 16, 219-221.	0.9	0
83	Modelisation of the action of compression bandages on the lower limb. Annals of Physical and Rehabilitation Medicine, 2016, 59, e30.	1.1	0
84	Role and limit of biomechanical modeling in the study of medical devices. Annals of Physical and Rehabilitation Medicine, 2016, 59, e25-e26.	1.1	0
85	Experimental and numerical approach for the investigation of interface pressure applied by compression bandages. Veins and Lymphatics, 2017, 6, .	0.1	0
86	Relevance of Colorimetric Interferometry for Thin Surface Film Contaminants. , 2008, , 675-692.		0
87	A new device for the combined measurement of friction and through-thickness deformation on ex vivo skin samples. Journal of the Mechanical Behavior of Biomedical Materials, 2022, 130, 105141.	1.5	0
88	Feasibility of a Full-Field Measurements-Based Protocol for the Biomechanical Study of a Lumbar Belt: A Case Study. Biomechanics, 2022, 2, 174-188.	0.5	0