Fabrice Pierron

List of Publications by Year in descending order

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252 papers 7,255 citations

47006 47 h-index 75 g-index

281 all docs

281 docs citations

times ranked

281

2913 citing authors

#	Article	IF	CITATIONS
1	Comparison of the High Strain Rate Response of Boron/Silicon Carbide and MAX Phase Ceramics Using the Image-Based Inertial Impact Test. Conference Proceedings of the Society for Experimental Mechanics, 2022, , 57-61.	0.5	O
2	Modelling of stress transfer in root-reinforced soils informed by four-dimensional X-ray computed tomography and digital volume correlation data. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2022, 478, 20210210.	2.1	2
3	A Simple Data-Rich IBII Test for Identifying All Orthotropic Stiffness Components at High Strain Rates. Conference Proceedings of the Society for Experimental Mechanics, 2022, , 53-56.	0.5	O
4	Shear Damage Model Identification for Off-axis IBII Composites Specimen Loaded and Unloaded at High Strain Rates. Conference Proceedings of the Society for Experimental Mechanics, 2022, , 105-111.	0.5	0
5	Assessment of the heterogeneous microstructure in the vicinity of a weld using thermographic measurements of the fullâ€field dissipative heat source. Strain, 2022, 58, .	2.4	O
6	Towards Material Testing 2.0. A review of test design for identification of constitutive parameters from fullâ€field measurements. Strain, 2021, 57, e12370.	2.4	64
7	Investigation of the 2D assumption in the imageâ€based inertial impact test. Strain, 2021, 57, e12369.	2.4	2
8	The Off-Axis IBII Test for Composites. Journal of Dynamic Behavior of Materials, 2021, 7, 127-155.	1.7	6
9	Quantifying Ultrasonic Deformation of Cell Membranes with Ultra-High-Speed Imaging. Conference Proceedings of the Society for Experimental Mechanics, 2021, , 21-27.	0.5	1
10	High strain rate elastoâ€plasticity identification using the imageâ€based inertial impact (IBII) test part 1: Error quantification. Strain, 2021, 57, e12375.	2.4	4
11	Data rich imaging approaches assessing fatigue crack initiation and early propagation in a DS superalloy at room temperature. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 805, 140592.	5.6	5
12	High strain rate elastoâ€plasticity identification using the imageâ€based inertial impact (IBII) test part 2: Experimental validation. Strain, 2021, 57, e12374.	2.4	3
13	Characterization of dynamic hardening behavior at intermediate strain rates using the virtual fields method. Mechanics of Materials, 2021, 162, 104101.	3.2	3
14	Inverse identification strategies for the characterization of transformation-based anisotropic plasticity models with the non-linear VFM. International Journal of Mechanical Sciences, 2020, 173, 105422.	6.7	33
15	Surface Pressure Reconstruction from Phase Averaged Deflectometry Measurements Using the Virtual Fields Method. Experimental Mechanics, 2020, 60, 379-392.	2.0	2
16	Image-Based Inertial Impact Test for Characterisation of Strain Rate Dependency of Ti6Al4V Titanium Alloy. Experimental Mechanics, 2020, 60, 235-248.	2.0	11
17	Measurement of Internal Implantation Strains in Analogue Bone Using DVC. Materials, 2020, 13, 4050.	2.9	3
18	Microstructural Assessment of 316L Stainless Steel Using Infrared Thermography Based Measurement of Energy Dissipation Arising from Cyclic Loading. Mechanics of Materials, 2020, 148, 103455.	3.2	8

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19	Image-Based Inertial Impact (IBII) Tests for Measuring the Interlaminar Shear Moduli of Composites. Journal of Dynamic Behavior of Materials, 2020, 6, 373-398.	1.7	3
20	Mechanisms of root reinforcement in soils: an experimental methodology using four-dimensional X-ray computed tomography and digital volume correlation. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2020, 476, 20190838.	2.1	9
21	Experimental Validation of the Sensitivity-Based Virtual Fields for Identification of Anisotropic Plasticity Models. Experimental Mechanics, 2020, 60, 639-664.	2.0	16
22	Reconstruction of surface-pressure fluctuations using deflectometry and the virtual fields method. Experiments in Fluids, 2020, $61,1.$	2.4	5
23	Validation of finiteâ€element models using fullâ€field experimental data: Levelling finiteâ€element analysis data through a digital image correlation engine. Strain, 2020, 56, e12350.	2.4	29
24	Infrared Deflectometry. Conference Proceedings of the Society for Experimental Mechanics, 2020, , 97-100.	0.5	1
25	The Image-Based Inertial Release (IBIR) Test: A New High Strain Rate Test for Stiffness Strain-Rate Sensitivity Identification. Experimental Mechanics, 2020, 60, 493-508.	2.0	6
26	Dynamic VFM to Identify Viscoplastic Parameters. Analysis of Impact Tests on Titanium Alloy. Conference Proceedings of the Society for Experimental Mechanics, 2020, , 101-103.	0.5	0
27	Test Design for Identification from Full-Field Measurements: A Concise Review. Conference Proceedings of the Society for Experimental Mechanics, 2020, , 105-110.	0.5	0
28	Extension of the sensitivity-based virtual fields to large deformation anisotropic plasticity. International Journal of Material Forming, 2019, 12, 457-476.	2.0	41
29	Infrared Deflectometry for Slope Deformation Measurements. Experimental Mechanics, 2019, 59, 1187-1202.	2.0	11
30	A benchmark testing technique to characterize the stress–strain relationship in materials based on the spalling test and a photomechanical method. Measurement Science and Technology, 2019, 30, 125006.	2.6	11
31	Generalized Stress–Strain Curves for IBII Tests on Isotropic and Orthotropic Materials. Journal of Dynamic Behavior of Materials, 2019, 5, 180-193.	1.7	5
32	Characterising the compressive anisotropic properties of analogue bone using optical strain measurement. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2019, 233, 954-960.	1.8	6
33	A computational approach to design new tests for viscoplasticity characterization at high strain-rates. Computational Mechanics, 2019, 64, 1639-1654.	4.0	18
34	Full-Field Surface Pressure Reconstruction Using the Virtual Fields Method. Experimental Mechanics, 2019, 59, 1203-1221.	2.0	11
35	Understanding the mechanisms of root-reinforcement in soils: soil shear tests using X-ray computed tomography and digital volume correlation. E3S Web of Conferences, 2019, 92, 12009.	0.5	1
36	A Novel Image-Based Inertial Impact Test (IBII) for the Transverse Properties of Composites at High Strain Rates. Journal of Dynamic Behavior of Materials, 2019, 5, 65-92.	1.7	22

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37	Characterisation of 3D printed sand moulds using micro-focus X-ray computed tomography. Rapid Prototyping Journal, 2019, 25, 404-416.	3.2	13
38	An Image-Based Inertial Impact Test for the High Strain Rate Properties of Brittle Materials. Conference Proceedings of the Society for Experimental Mechanics, 2019, , 243-246.	0.5	0
39	Image-Based Stress Field Reconstruction in Complex Media. Conference Proceedings of the Society for Experimental Mechanics, 2019, , 101-104.	0.5	4
40	Deflectometry on Curved Surfaces. Conference Proceedings of the Society for Experimental Mechanics, 2019, , 217-221.	0.5	5
41	Optimization of an Image-Based Experimental Setup for the Dynamic Behaviour Characterization of Materials. Conference Proceedings of the Society for Experimental Mechanics, 2019, , 153-155.	0.5	0
42	IBII Test for High Strain Rate Tensile Testing of Adhesives. Conference Proceedings of the Society for Experimental Mechanics, 2019, , 301-305.	0.5	0
43	A Novel Image-based Ultrasonic Test to Map Material Mechanical Properties at High Strain-rates. Experimental Mechanics, 2018, 58, 183-206.	2.0	32
44	Image-based high strain-rate testing for the characterization of viscoplasticity. EPJ Web of Conferences, 2018, 183, 02032.	0.3	0
45	Inertial Impact Tests to Identify the Plastic Properties of Metals. EPJ Web of Conferences, 2018, 183, 02051.	0.3	1
46	Image-Based Inertial Impact Test for Composite Interlaminar Tensile Properties. Journal of Dynamic Behavior of Materials, 2018, 4, 543-572.	1.7	18
47	An Image-Based Impact Test for the High Strain Rate Tensile Properties of Brittle Materials. EPJ Web of Conferences, 2018, 183, 02042.	0.3	1
48	Image-based high strain rate testing of orthopaedic bone cement. EPJ Web of Conferences, 2018, 183, 04014.	0.3	0
49	Combined shear/tension testing of fibre composites at high strain rates using an image-based inertial impact test. EPJ Web of Conferences, 2018, 183, 02041.	0.3	5
50	Identification from full-field measurements. Strain, 2018, 54, e12274.	2.4	0
51	Measuring orthotropic bending stiffness components of <i>Pinus pinaster</i> by the virtual fields method. Journal of Strain Analysis for Engineering Design, 2018, 53, 556-565.	1.8	10
52	Strain accumulation and fatigue crack initiation at pores and carbides in a SX superalloy at room temperature. International Journal of Fatigue, 2018, 114, 22-33.	5.7	44
53	An Image-Based Inertial Impact (IBII) Test for Tungsten Carbide Cermets. Journal of Dynamic Behavior of Materials, 2018, 4, 481-504.	1.7	24
54	Application of the Virtual Fields Method to determine dynamic properties at intermediate strain rates. Journal of Physics: Conference Series, 2018, 1063, 012041.	0.4	0

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55	A Practical Procedure for Measuring the Stiffness of Foam like Materials. Experimental Techniques, 2018, 42, 439-452.	1.5	12
56	Sheet metals characterization using the virtual fields method. AIP Conference Proceedings, 2018, , .	0.4	1
57	Evaluation of Volume Deformation from Surface DIC Measurement. Experimental Mechanics, 2018, 58, 1181-1194.	2.0	19
58	Latest Results for Elasto-Plastic Identification at High Rates Using Inertial Impact. Conference Proceedings of the Society for Experimental Mechanics, 2018, , 93-95.	0.5	0
59	Deformation mechanisms of idealised cermets under multi-axial loading. Journal of the Mechanics and Physics of Solids, 2017, 102, 80-100.	4.8	12
60	Viscoelastic Properties Identification Through Innovative Image-Based DMTA Strategy. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 207-209.	0.5	0
61	A Fourierâ€seriesâ€based virtual fields method for the identification of threeâ€dimensional stiffness distributions and its application to incompressible materials. Strain, 2017, 53, e12229.	2.4	8
62	Characterisation of strain localisation processes during fatigue crack initiation and early crack propagation by SEM-DIC in an advanced disc alloy. Materials Science & Dipineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 699, 128-144.	5.6	62
63	Inertial Impact Method for the Through-Thickness Strength of Composites. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 105-108.	0.5	1
64	Smoothly varying inâ€plane stiffness heterogeneity evaluated under uniaxial tensile stress. Strain, 2017, 53, e12237.	2.4	9
65	Sensitivity-based virtual fields for the non-linear virtual fields method. Computational Mechanics, 2017, 60, 409-431.	4.0	63
66	Image-Based Inertial Impact Tests on an Aluminum Alloy. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 219-223.	0.5	2
67	Application of the virtual fields method to the identification of the homogeneous anisotropic hardening parameters for advanced high strength steels. International Journal of Plasticity, 2017, 93, 229-250.	8.8	26
68	Ultrasonic Test for High Rate Material Property Imaging. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 173-176.	0.5	0
69	Inertial Impact Tests on Polymers for Inverse Parameter Identification. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 187-190.	0.5	1
70	Characterization of dynamic hardening behavior using acceleration information. Procedia Engineering, 2017, 207, 245-250.	1.2	1
71	The Effect of Microstructure on Energy Dissipation in 316L Stainless Steel. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 15-19.	0.5	1
72	Quantification of the Compressibility of Elastomers Using DIC. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 199-201.	0.5	2

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73	Inverse Identification of the Elasto-Plastic Response of Metals at High Strain Rates. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 203-205.	0.5	0
74	Inverse Identification of the High Strain Rate Properties of PMMA. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 195-197.	0.5	1
75	Optimised Experimental Characterisation of Polymeric Foam Material Using DIC and the Virtual Fields Method. Strain, 2016, 52, 59-79.	2.4	42
76	Depth-Resolved Full-Field Measurement of Corneal Deformation by Optical Coherence Tomography and Digital Volume Correlation. Experimental Mechanics, 2016, 56, 1203-1217.	2.0	33
77	Time-resolved full-field imaging of ultrasonic Lamb waves using deflectometry. Experimental Mechanics, 2016, 56, 345-357.	2.0	15
78	Application of the virtual fields method to large strain anisotropic plasticity. International Journal of Solids and Structures, 2016, 97-98, 322-335.	2.7	63
79	Identification of nonlinear kinematic hardening constitutive model parameters using the virtual fields method for advanced high strength steels. International Journal of Solids and Structures, 2016, 102-103, 30-43.	2.7	24
80	A procedure for specimen optimization applied to material testing in plasticity with the virtual fields method. AIP Conference Proceedings, 2016, , .	0.4	9
81	Addendum to â€~Characterising the Strain and Temperature Fields in a Surrogate Bone Material Subject to Power Ultrasonic Excitation'. Strain, 2016, 52, 186-190.	2.4	7
82	Towards the design of a new standard for composite stiffness identification. Composites Part A: Applied Science and Manufacturing, 2016, 91, 448-460.	7.6	31
83	Exploration of Saint-Venant's Principle in Inertial High Strain Rate Testing of Materials. Experimental Mechanics, 2016, 56, 3-23.	2.0	17
84	Identification of the YLD2000-2D Model with the Virtual Fields Method. Conference Proceedings of the Society for Experimental Mechanics, 2016, , 51-57.	0.5	1
85	Optimized Test Design for Identification of the Variation of Elastic Stiffness Properties of Loblolly Pine (Pinus taeda) Pith to Bark. Conference Proceedings of the Society for Experimental Mechanics, 2016, , 67-76.	0.5	2
86	Full-Field Strain Imaging of Ultrasonic Waves in Solids. Conference Proceedings of the Society for Experimental Mechanics, 2016, , 81-85.	0.5	0
87	Use of VFM for Heterogeneity Evaluation of Materials Under Uniaxial Tensile Stress. Conference Proceedings of the Society for Experimental Mechanics, 2016, , 61-66.	0.5	1
88	Effect of DIC Spatial Resolution, Noise and Interpolation Error on Identification Results with the VFM. Strain, 2015, 51, 206-222.	2.4	97
89	On the identifiability of Anand visco-plastic model parameters using the Virtual Fields Method. Acta Materialia, 2015, 86, 118-136.	7.9	22
90	Identification of the Dynamic Properties of AlÂ5456 FSW Welds Using the Virtual Fields Method. Journal of Dynamic Behavior of Materials, 2015, 1, 176-190.	1.7	29

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91	Extension of the Optimised Virtual Fields Method to Estimate Viscoelastic Material Parameters from 3D Dynamic Displacement Fields. Strain, 2015, 51, 110-134.	2.4	17
92	Uncertainty Quantification in VFM Identification. Conference Proceedings of the Society for Experimental Mechanics, 2015, , 137-142.	0.5	2
93	Latest Results in Novel Inertial High Strain Rate Tests. Conference Proceedings of the Society for Experimental Mechanics, 2015, , 21-26.	0.5	3
94	Beyond Hopkinson's bar. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2014, 372, 20130195.	3.4	86
95	A Fourierâ€seriesâ€based Virtual Fields Method for the Identification of 2â€D Stiffness and Traction Distributions. Strain, 2014, 50, 454-468.	2.4	10
96	Assessment of the metrological performance of an <i>in situ</i> storage image sensor ultra-high speed camera for full-field deformation measurements. Measurement Science and Technology, 2014, 25, 025401.	2.6	26
97	The application of digital volume correlation (DVC) to study the microstructural behaviour of trabecular bone during compression. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 29, 480-499.	3.1	127
98	General Anisotropy Identification of Paperboard with Virtual Fields Method. Experimental Mechanics, 2014, 54, 1395-1410.	2.0	17
99	Determination of Anisotropic Plastic Constitutive Parameters Using the Virtual Fields Method. Experimental Mechanics, 2014, 54, 1189-1204.	2.0	76
100	Identification of dynamic loading on a bending plate using the Virtual Fields Method. Journal of Sound and Vibration, 2014, 333, 7151-7164.	3.9	50
101	A Fourierâ€seriesâ€based virtual fields method for the identification of 2â€D stiffness distributions. International Journal for Numerical Methods in Engineering, 2014, 98, 917-936.	2.8	14
102	Fast Fourier Virtual Fields Method for Determination of Modulus Distributions from Full-Field Optical Strain Data., 2014,, 161-166.		1
103	Parameter Determination of Anisotropic Yield Criterion. Conference Proceedings of the Society for Experimental Mechanics, 2014, , 253-257.	0.5	0
104	Characterisation of the bending stiffness components of MDF panels from full-field slope measurements. Wood Science and Technology, 2013, 47, 423-441.	3.2	28
105	Identification of Material Parameters of PVC Foams using Digital Image Correlation and the Virtual Fields Method. Experimental Mechanics, 2013, 53, 1001-1015.	2.0	59
106	Identification of the Local Elasto-Plastic Behavior of FSW Welds Using the Virtual Fields Method. Experimental Mechanics, 2013, 53, 849-859.	2.0	37
107	Characterization of the post-necking strain hardening behavior using the virtual fields method. International Journal of Solids and Structures, 2013, 50, 3829-3842.	2.7	177
108	Impact damage detection in composite plates using deflectometry and the Virtual Fields Method. Composites Part A: Applied Science and Manufacturing, 2013, 48, 201-218.	7.6	33

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109	Elastic stiffness characterization using three-dimensional full-field deformation obtained with optical coherence tomography and digital volume correlation. Journal of Biomedical Optics, 2013, 18, 121512.	2.6	52
110	Comparison of the Mechanical Behaviour of Standard and Auxetic Foams by Xâ€ray Computed Tomography and Digital Volume Correlation. Strain, 2013, 49, 467-482.	2.4	41
111	Ultra high speed DIC on a three point bending test mounted on a Hopkinson bar. Conference Proceedings of the Society for Experimental Mechanics, 2013, , 451-460.	0.5	O
112	Application of the Virtual Fields Method to Magnetic Resonance Elastography data. Conference Proceedings of the Society for Experimental Mechanics, 2013, , 135-142.	0.5	3
113	Identification of the Plastic Behaviour in the Post-Necking Regime Using a Three Dimensional Reconstruction Technique. Key Engineering Materials, 2012, 504-506, 703-708.	0.4	9
114	The virtual fields method applied to spalling tests on concrete. EPJ Web of Conferences, 2012, 26, 01054.	0.3	6
115	Identification of plastic constitutive parameters at large deformations from three dimensional displacement fields. Computational Mechanics, 2012, 49, 53-71.	4.0	86
116	Ultraâ∈Highâ∈Speed Fullâ∈Field Deformation Measurements on Concrete Spalling Specimens and Stiffness Identification with the Virtual Fields Method. Strain, 2012, 48, 388-405.	2.4	83
117	Influence of the microstructural changes and induced residual stresses on tensile properties of wrought magnesium alloy friction stir welds. Materials Science & Degraphy: Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 551, 288-292.	5.6	50
118	Damage detection in composite materials using deflectometry, a full-field slope measurement technique. Composites Part A: Applied Science and Manufacturing, 2012, 43, 1650-1666.	7.6	40
119	Composites Part A: Applied Science and Manufacturing. Composites Part A: Applied Science and Manufacturing, 2012, 43, 1629.	7.6	6
120	Identifying Constitutive Parameters from Heterogeneous Strain Fields using the Virtual Fields Method. Procedia IUTAM, 2012, 4, 48-53.	1.2	8
121	Soft and Biological Materials. , 2012, , 293-327.		O
122	The Virtual Fields Method. , 2012, , .		219
123	On the use of simulated experiments in designing tests for material characterization from full-field measurements. International Journal of Solids and Structures, 2012, 49, 420-435.	2.7	97
124	Introduction, Main Equations and Notations. , 2012, , 3-19.		1
125	The Non-linear Virtual Fields Method. , 2012, , 107-120.		0
126	The VFM for Force Reconstruction. , 2012, , 375-393.		0

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127	Design of New Tests for the VFM. , 2012, , 353-374.		O
128	Fiber Composites., 2012,, 161-252.		0
129	Complements. , 2012, , 121-157.		0
130	Other Materials. , 2012, , 329-352.		0
131	Case Study III: Orthotropic Plate in Pure Bending. , 2012, , 477-490.		0
132	Case Study II: Unnotched Iosipescu Test. , 2012, , 417-476.		0
133	The Linear Virtual Fields Method. , 2012, , 57-106.		0
134	Dissipative energy: monitoring microstructural evolutions during mechanical tests. Conference Proceedings of the Society for Experimental Mechanics, 2011, , 59-65.	0.5	0
135	Off-Axis Ratcheting Behavior of a Unidirectional Carbon/Epoxy Laminate at High Temperature. Polymers and Polymer Composites, 2011, 19, 383-390.	1.9	1
136	Texture evolution in Nd:YAG-laser welds of AZ31 magnesium alloy hot rolled sheets and its influence on mechanical properties. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 2049-2055.	5.6	13
137	Experimental Energy Balance During the First Cycles of Cyclically Loaded Specimens Under the Conventional Yield Stress. Experimental Mechanics, 2011, 51, 23-44.	2.0	31
138	Ultra High Speed DIC and Virtual Fields Method Analysis of a Three Point Bending Impact Test on an Aluminium Bar. Experimental Mechanics, 2011, 51, 537-563.	2.0	108
139	Full-Field Strain Measurement and Identification of Composites Moduli at High Strain Rate with the Virtual Fields Method. Experimental Mechanics, 2011, 51, 509-536.	2.0	88
140	Dissipated energy measurements as a marker of microstructural evolution: 316L and DP600. Acta Materialia, 2011, 59, 4100-4115.	7.9	47
141	Characterizing elastic properties of superconducting windings by simulations and experiments. Superconductor Science and Technology, 2011, 24, 125001.	3.5	3
142	Full-Field Strain Measurement On Titanium Welds And Local Elasto-Plastic Identification With The Virtual Fields Method. AIP Conference Proceedings, 2011, , .	0.4	4
143	Dissipative energy as an indicator of material microstructural evolution. Conference Proceedings of the Society for Experimental Mechanics, 2011, , 71-72.	0.5	0
144	Identification of material damping in vibrating plates using full-field measurements. Conference Proceedings of the Society for Experimental Mechanics, 2011, , 1187-1192.	0.5	0

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145	Ultra high speed full-field strain measurements on spalling tests on concrete materials. Conference Proceedings of the Society for Experimental Mechanics, 2011, , 221-228.	0.5	3
146	Viscoelastic material properties' identiffation using high speed full ffld measurements on vibrating plates. EPJ Web of Conferences, 2010, 6, 37002.	0.3	0
147	An alternative to modal analysis for material stiffness and damping identification from vibrating plates. Journal of Sound and Vibration, 2010, 329, 1653-1672.	3.9	35
148	Extension of the virtual fields method to elasto-plastic material identification with cyclic loads and kinematic hardening. International Journal of Solids and Structures, 2010, 47, 2993-3010.	2.7	71
149	Dissipative energy as an indicator of material microstructural evolution. EPJ Web of Conferences, 2010, 6, 38013.	0.3	2
150	Identification of Poisson's ratios of standard and auxetic low-density polymeric foams from full-field measurements. Journal of Strain Analysis for Engineering Design, 2010, 45, 233-253.	1.8	31
151	Comparison of two approaches for differentiating full-field data in solid mechanics. Measurement Science and Technology, 2010, 21, 015703.	2.6	46
152	Identification of the Mechanical Properties of Superconducting Windings Using the Virtual Fields Method. IEEE Transactions on Applied Superconductivity, 2010, 20, 1993-1997.	1.7	5
153	Measurement of Vibrating Plate Spatial Responses Using Deflectometry and High Speed Camera. AIP Conference Proceedings, 2010, , .	0.4	4
154	Mechanical properties of low density polymeric foams obtained from full-ï¬eld measurements. EPJ Web of Conferences, 2010, 6, 37006.	0.3	4
155	Time transfer by laser link T2L2 first results. , 2009, , .		12
156	Full-field evaluation of the onset of microplasticity in a steel specimen. Mechanics of Materials, 2009, 41, 1207-1222.	3.2	13
157	Heat dissipation measurements in low stress cyclic loading of metallic materials: From internal friction to micro-plasticity. Mechanics of Materials, 2009, 41, 928-942.	3.2	96
158	A novel method for measuring the through-thickness shear moduli of anisotropic plates from surface deformation measurements. Composites Part A: Applied Science and Manufacturing, 2009, 40, 1815-1825.	7.6	4
159	Variation of transverse and shear stiffness properties of wood in a tree. Composites Part A: Applied Science and Manufacturing, 2009, 40, 1953-1960.	7.6	43
160	Local stiffness reduction in impacted composite plates from full-field measurements. Composites Part A: Applied Science and Manufacturing, 2009, 40, 1961-1974.	7.6	27
161	Identification of shear bands in wrought magnesium alloy friction stir welds and laser beam welds. Materials Science and Technology, 2009, 25, 1215-1221.	1.6	9
162	Identification of the mechanical behaviour of low density hyperelastic polymeric foams from full-field measurements. Journal of Physics: Conference Series, 2009, 181, 012044.	0.4	1

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163	Identification of material stiffness and damping in vibrating plates using full-field measurements. Journal of Physics: Conference Series, 2009, 181, 012063.	0.4	1
164	Méthodologie d'identification du comportement mécanique des mousses hyperélastiques par mesures de champs et méthode inverse. Mecanique Et Industries, 2009, 10, 55-59.	0.2	4
165	Full-field strain measurements at high rate on notched composites tested with a tensile Hopkinson bar. , 2009, , .		4
166	Stress Reconstruction and Constitutive Parameter Identification in Plane-Stress Elasto-plastic Problems Using Surface Measurements of Deformation Fields. Experimental Mechanics, 2008, 48, 403-419.	2.0	73
167	3D Heterogeneous Stiffness Reconstruction Using MRI and the Virtual Fields Method. Experimental Mechanics, 2008, 48, 479-494.	2.0	48
168	Identification of Heterogeneous Constitutive Parameters in a Welded Specimen: Uniform Stress and Virtual Fields Methods for Material Property Estimation. Experimental Mechanics, 2008, 48, 451-464.	2.0	70
169	Overview of Identification Methods of Mechanical Parameters Based on Full-field Measurements. Experimental Mechanics, 2008, 48, 381-402.	2.0	594
170	Inverse Problems in Experimental Mechanics. Experimental Mechanics, 2008, 48, 379-379.	2.0	4
171	Identification of elasto-visco-plastic parameters and characterization of $L\tilde{A}^{1/4}$ ders behavior using digital image correlation and the virtual fields method. Mechanics of Materials, 2008, 40, 729-742.	3.2	119
172	Application of full-field measurement techniques to composite materials and structures. Composites Part A: Applied Science and Manufacturing, 2008, 39, 1193.	7.6	3
173	Estimation of the strain field from full-field displacement noisy data. European Journal of Computational Mechanics, 2008, 17, 857-868.	0.6	51
174	Viscoelastic material properties' identification using full field measurements on vibrating plates. , 2008, , .		1
175	Identification of low density polyurethane foam properties by DIC and the virtual fields method. Proceedings of SPIE, 2008, , .	0.8	5
176	Development of a Full-Field Displacement Measurement Technique at the Microscale and Application to the Study of Strain Fields in a Tensile Steel Specimen. Applied Mechanics and Materials, 2007, 7-8, 181-186.	0.2	0
177	Software Implementation of the Virtual Fields Method. Applied Mechanics and Materials, 2007, 7-8, 57-62.	0.2	0
178	Novel experimental approach for longitudinal-radial stiffness characterisation of clear wood by a single test. Holzforschung, 2007, 61, 573-581.	1.9	56
179	Full-field assessment of the damage process of laminated composite open-hole tensile specimens. Part I: Methodology. Composites Part A: Applied Science and Manufacturing, 2007, 38, 2307-2320.	7.6	59
180	Full-field assessment of the damage process of laminated composite open-hole tensile specimens. Part II: Experimental results. Composites Part A: Applied Science and Manufacturing, 2007, 38, 2321-2332.	7.6	69

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181	Identification of the local stiffness reduction of a damaged composite plate using the virtual fields method. Composites Part A: Applied Science and Manufacturing, 2007, 38, 2065-2075.	7.6	48
182	Refined experimental methodology for assessing the heat dissipated in cyclically loaded materials at low stress levels. Comptes Rendus - Mecanique, 2007, 335, 168-174.	2.1	10
183	General framework for the identification of constitutive parameters from full-field measurements in linear elasticity. International Journal of Solids and Structures, 2007, 44, 4978-5002.	2.7	130
184	On the realization of microscopic grids for local strain measurement by direct interferometric photolithography. Optics and Lasers in Engineering, 2007, 45, 1131-1147.	3.8	38
185	A Procedure for Producing Reflective Coatings on Plates to be Used for Full-Field Slope Measurements by a Deflectometry Technique. Strain, 2007, 43, 138-144.	2.4	19
186	Identification of the Orthotropic Elastic Stiffnesses of Composites with the Virtual Fields Method: Sensitivity Study and Experimental Validation. Strain, 2007, 43, 250-259.	2.4	81
187	Identification of Strain-Rate Sensitivity With the Virtual Fields Method., 2007,, 661-662.		2
188	Identification of the Local Stiffness Reduction of Damaged Composite Plates Using Full-Field Measurements., 2007,, 675-676.		2
189	Identification of 3-D Heterogeneous Modulus Distribution With the Virtual Fields Method., 2007,, 663-664.		0
190	Experimental identification of a nonlinear model for composites using the grid technique coupled to the virtual fields method. Composites Part A: Applied Science and Manufacturing, 2006, 37, 315-325.	7.6	65
191	Identification of the through-thickness rigidities of a thick laminated composite tube. Composites Part A: Applied Science and Manufacturing, 2006, 37, 326-336.	7.6	41
192	Influence of specimen preparation by machining on the failure of polymer matrix off-axis tensile coupons. Composites Science and Technology, 2006, 66, 1857-1872.	7.8	49
193	The virtual fields method with piecewise virtual fields. International Journal of Mechanical Sciences, 2006, 48, 256-264.	6.7	68
194	Applying the Virtual Fields Method to the identification of elasto-plastic constitutive parameters. International Journal of Plasticity, 2006, 22, 602-627.	8.8	176
195	Stiffness and Damping Identification from Full Field Measurements on Vibrating Plates. Experimental Mechanics, 2006, 46, 777-787.	2.0	33
196	Identification of Elasto-Plastic Constitutive Parameters from Statically Undetermined Tests Using the Virtual Fields Method. Experimental Mechanics, 2006, 46, 735-755.	2.0	66
197	Optimization of the Unnotched Iosipescu Test on Composites for Identification from Full-Field Measurements. Applied Mechanics and Materials, 2006, 5-6, 125-134.	0.2	2
198	Material Properties' Identification Using Full Field Measurements on Vibrating Plates. Applied Mechanics and Materials, 2006, 5-6, 465-472.	0.2	0

#	Article	IF	Citations
199	Experimental Application of the Virtual Fields Method to the Identification of Material Properties Using Vibrating Plates. Applied Mechanics and Materials, 2006, 3-4, 303-308.	0.2	O
200	Experimental Application of the Virtual Fields Method to Elasto-Plastic Behaviour. Applied Mechanics and Materials, 2006, 3-4, 33-38.	0.2	0
201	The Virtual Fields Method for Extracting Constitutive Parameters From Full-Field Measurements: a Review. Strain, 2006, 42, 233-253.	2.4	180
202	The Virtual Fields Method for Extracting Constitutive Parameters From Fullâ€Field Measurements: a Review. Strain, 2006, 42, 233-253.	2.4	34
203	Optical full-field measurement of strain at a microscopic scale with the grid method. , 2006, , .		2
204	Identification of stiffness and damping properties of thin isotropic vibrating plates using the virtual fields method: theory and simulations. Journal of Sound and Vibration, 2005, 284, 757-781.	3.9	46
205	Characterization of the Nonlinear Shear Behaviour of UD Composite Materials Using the Virtual Fields Method. Applied Mechanics and Materials, 2005, 3-4, 185-190.	0.2	1
206	Identification of the Through-Thickness Orthotropic Stiffness of Composite Tubes from Full-Field Measurements. Applied Mechanics and Materials, 2005, 3-4, 161-166.	0.2	1
207	Dissipative Behaviour of Metallic Materials in Low Stress Cyclic Loading. Applied Mechanics and Materials, 2005, 3-4, 253-258.	0.2	0
208	Usinabilit \tilde{A} \tilde{Q} \tilde{A} grande vitesse et \tilde{A} sec des couches du rechargement base-nickel par soudage d'outillage \tilde{A} chaud. Mecanique Et Industries, 2005, 6, 211-225.	0.2	3
209	Sensitivity of the virtual fields method to noisy data. Computational Mechanics, 2004, 34, 439-452.	4.0	156
210	Numerical issues in the virtual fields method. International Journal for Numerical Methods in Engineering, 2004, 59, 1287-1312.	2.8	25
211	Direct identification of the damage behaviour of composite materials using the virtual fields method. Composites Part A: Applied Science and Manufacturing, 2004, 35, 841-848.	7.6	37
212	A comparison between the losipescu and off-axis shear test methods for the characterization of Pinus Pinaster Ait. Composites Part A: Applied Science and Manufacturing, 2004, 35, 827-840.	7.6	105
213	Edge machining effects on the failure of polymer matrix composite coupons. Composites Part A: Applied Science and Manufacturing, 2004, 35, 989-999.	7.6	71
214	Special virtual fields for the direct determination of material parameters with the virtual fields method. 3. Application to the bending rigidities of anisotropic plates. International Journal of Solids and Structures, 2003, 40, 2401-2419.	2.7	53
215	Simultaneous identification of stiffness and damping properties of isotropic materials from forced vibrating plates. Comptes Rendus - Mecanique, 2003, 331, 259-264.	2.1	10
216	Reduction of tool wear in metal cutting using external electromotive sources. Surface and Coatings Technology, 2003, 163-164, 472-477.	4.8	23

#	Article	IF	CITATIONS
217	<title>New performances of the French transportable laser ranging station (FTLRS)</title> ., 2002, , .		О
218	Identification directe du comportement élastique endommageable de matériaux composites par la méthode des champs virtuels. European Physical Journal Special Topics, 2002, 12, 291-300.	0.2	1
219	Influence de la découpe d'éprouvettes en composite sur leur tenue mécaniqueThe cutting effect of composite coupons on their mechanical strengths. Mecanique Et Industries, 2002, 3, 361-378.	0.2	1
220	Special virtual fields for the direct determination of material parameters with the virtual fields method. 1â€"â€"Principle and definition. International Journal of Solids and Structures, 2002, 39, 2691-2705.	2.7	136
221	Special virtual fields for the direct determination of material parameters with the virtual fields method. 2––Application to in-plane properties. International Journal of Solids and Structures, 2002, 39, 2707-2730.	2.7	87
222	A Novel Procedure for Identification of 3D Moisture Diffusion Parameters on Thick Composites: Theory, Validation and Experimental Results. Journal of Composite Materials, 2002, 36, 2219-2243.	2.4	50
223	Identification d'une loi de Fick 3D anisotropeÂ: théorie et validation. European Physical Journal Special Topics, 2002, 12, 251-258.	0.2	1
224	Champs virtuels spéciaux pour l'extraction de paramÃ"tres de lois de comportement : exemple de la flexion faible des plaques anisotropes. European Physical Journal Special Topics, 2002, 12, 401-408.	0.2	0
225	Applying the virtual fields method to determine the through-thickness moduli of thick composites with a nonlinear shear response. Composites Part A: Applied Science and Manufacturing, 2001, 32, 1713-1725.	7.6	26
226	Title is missing!. Surveys in Geophysics, 2001, 22, 449-464.	4.6	9
227	Identification of the through-thickness properties of thick laminated tubes using the virtual fields method. International Journal of Solids and Structures, 2000, 37, 4437-4453.	2.7	49
228	Response to the discussion of the paper "Novel procedure for complete in-plane composite characterization using a single T-shaped specimen― Experimental Mechanics, 2000, 40, 97-97.	2.0	0
229	French transportable laser ranging station: scientific objectives, technical features, and performance. Applied Optics, 2000, 39, 402.	2.1	15
230	Identification of the through-thickness moduli of thick composites from whole-field measurements using the losipescu fixture: theory and simulations. Composites Part A: Applied Science and Manufacturing, 2000, 31, 309-318.	7.6	58
231	A Numerical and Experimental Study of Woven Composite Pin-Joints. Journal of Composite Materials, 2000, 34, 1028-1054.	2.4	89
232	A Numerical and Experimental Study of Woven Composite Pin-Joints. Journal of Composite Materials, 2000, 34, 1028-1054.	2.4	9
233	Discussion of the Article: "Biaxial Testing of Unidirectional Carbon-Epoxy Composite Using Biaxial losipescu Test Fixture". Journal of Composite Materials, 1999, 33, 682-687.	2.4	0
234	Novel procedure for complete in-plane composite characterization using a single T-shaped specimen. Experimental Mechanics, 1999, 39, 142-149.	2.0	76

#	Article	IF	Citations
235	A T-shaped specimen for the direct characterization of orthotropic materials. International Journal for Numerical Methods in Engineering, 1998, 41, 293-309.	2.8	49
236	Measurement of the in-plane shear strengths of unidirectional composites with the losipescu test. Composites Science and Technology, 1998, 57, 1653-1660.	7.8	59
237	whole-field assessment of the effects of boundary conditions on the strain field in off-axis tensile testing of unidirectional composites. Composites Science and Technology, 1998, 58, 1939-1947.	7.8	38
238	Saint-Venant Effects in the Iosipescu Specimen. Journal of Composite Materials, 1998, 32, 1986-2015.	2.4	39
239	Direct identification of an in-plane orthotropic law from a single test. , 1998, , 215-224.		O
240	New Ideas on the Measurement of the In-Plane Shear Strength of Unidirectional Composites. Journal of Composite Materials, 1997, 31, 889-895.	2.4	28
241	Discussion of the article, "experimental strain analysis of the losipescu shear test specimen― Experimental Mechanics, 1997, 37, 11-12.	2.0	2
242	Coronary artery spasm in patients with normal or near normal coronary arteries: Long-term follow-up of 277 patients. European Heart Journal, 1996, 17, 1015-1021.	2.2	166
243	The 10 ° off-axis tensile test: A critical approach. Composites Science and Technology, 1996, 56, 483-488.	7.8	67
244	The losipescu in-plane shear test: Validation on an isotropic material. Experimental Mechanics, 1995, 35, 130-136.	2.0	14
245	Accurate comparative determination of the in-plane shear modulus of T300/914 by the iosipescu and $45 {\hat A}^\circ$ off-axis tests. Composites Science and Technology, 1994, 52, 61-72.	7.8	42
246	The losipescu in-plane shear test applied to composites: A new approach based on displacement field processing. Composites Science and Technology, 1994, 51, 409-417.	7.8	36
247	Identification of Materials Mechanical Properties from Full-Field Measurements: Latest Advances in the Virtual Fields Method. Applied Mechanics and Materials, 0, 13-14, 3-9.	0.2	1
248	Identification of the Mechanical Properties of Superconducting Windings Using the Virtual Fields Method. Applied Mechanics and Materials, 0, 24-25, 379-384.	0.2	0
249	Correlation between Full-Field Measurements and Numerical Simulation Results for Multiple Delamination Composite Specimens in Bending. Applied Mechanics and Materials, 0, 24-25, 109-114.	0.2	5
250	Assessment of the Deformation of Low Density Polymeric Auxetic Foams by X-Ray Tomography and Digital Volume Correlation. Applied Mechanics and Materials, 0, 70, 93-98.	0.2	8
251	Performances and Limitations of Three Ultra High-Speed Imaging Cameras for Full-Field Deformation Measurements. Applied Mechanics and Materials, 0, 70, 81-86.	0.2	22
252	Local Elasto-Plastic Identification of the Behaviour of Friction Stir Welds with the Virtual Fields Method. Applied Mechanics and Materials, 0, 70, 135-140.	0.2	2