# Fabrice Pierron

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8528240/publications.pdf

Version: 2024-02-01

| 252 | 7,255 | 47006 47 | 74163 75 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 281 | 281 | 281 | 2913 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Overview of Identification Methods of Mechanical Parameters Based on Full-field Measurements. Experimental Mechanics, 2008, 48, 381-402. | 2.0 | 594 |
| 2 | The Virtual Fields Method. , 2012, , . | | 219 |
| 3 | The Virtual Fields Method for Extracting Constitutive Parameters From Full-Field Measurements: a Review. Strain, 2006, 42, 233-253. | 2.4 | 180 |
| 4 | 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 |
| 5 | Applying the Virtual Fields Method to the identification of elasto-plastic constitutive parameters. International Journal of Plasticity, 2006, 22, 602-627. | 8.8 | 176 |
| 6 | 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 |
| 7 | Sensitivity of the virtual fields method to noisy data. Computational Mechanics, 2004, 34, 439-452. | 4.0 | 156 |
| 8 | 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 |
| 9 | 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 |
| 10 | 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 |
| 11 | Identification of elasto-visco-plastic parameters and characterization of LÃ¼ders behavior using digital image correlation and the virtual fields method. Mechanics of Materials, 2008, 40, 729-742. | 3.2 | 119 |
| 12 | 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 |
| 13 | A comparison between the Iosipescu 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 |
| 14 | 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 |
| 15 | Effect of DIC Spatial Resolution, Noise and Interpolation Error on Identification Results with the VFM. Strain, 2015, 51, 206-222. | 2.4 | 97 |
| 16 | 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 |
| 17 | A Numerical and Experimental Study of Woven Composite Pin-Joints. Journal of Composite Materials, 2000, 34, 1028-1054. | 2.4 | 89 |
| 18 | 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 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Special virtual fields for the direct determination of material parameters with the virtual fields method. 2â€“â€“Application to in-plane properties. International Journal of Solids and Structures, 2002, 39, 2707-2730. | 2.7 | 87 |
| 20 | Identification of plastic constitutive parameters at large deformations from three dimensional displacement fields. Computational Mechanics, 2012, 49, 53-71. | 4.0 | 86 |
| 21 | Beyond Hopkinson's bar. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2014, 372, 20130195. | 3.4 | 86 |
| 22 | 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 |
| 23 | 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 |
| 24 | Novel procedure for complete in-plane composite characterization using a single T-shaped specimen. Experimental Mechanics, 1999, 39, 142-149. | 2.0 | 76 |
| 25 | Determination of Anisotropic Plastic Constitutive Parameters Using the Virtual Fields Method. Experimental Mechanics, 2014, 54, 1189-1204. | 2.0 | 76 |
| 26 | 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 |
| 27 | 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 |
| 28 | 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 |
| 29 | 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 |
| 30 | 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 |
| 31 | The virtual fields method with piecewise virtual fields. International Journal of Mechanical Sciences, 2006, 48, 256-264. | 6.7 | 68 |
| 32 | The 10 Â° off-axis tensile test: A critical approach. Composites Science and Technology, 1996, 56, 483-488. | 7.8 | 67 |
| 33 | Identification of Elasto-Plastic Constitutive Parameters from Statically Undetermined Tests Using the Virtual Fields Method. Experimental Mechanics, 2006, 46, 735-755. | 2.0 | 66 |
| 34 | 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 |
| 35 | 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 |
| 36 | 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 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Sensitivity-based virtual fields for the non-linear virtual fields method. Computational Mechanics, 2017, 60, 409-431. | 4.0 | 63 |
| 38 | Characterisation of strain localisation processes during fatigue crack initiation and early crack propagation by SEM-DIC in an advanced disc alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 699, 128-144. | 5.6 | 62 |
| 39 | Measurement of the in-plane shear strengths of unidirectional composites with the Iosipescu test. Composites Science and Technology, 1998, 57, 1653-1660. | 7.8 | 59 |
| 40 | 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 |
| 41 | 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 |
| 42 | Identification of the through-thickness moduli of thick composites from whole-field measurements using the Iosipescu fixture: theory and simulations. Composites Part A: Applied Science and Manufacturing, 2000, 31, 309-318. | 7.6 | 58 |
| 43 | Novel experimental approach for longitudinal-radial stiffness characterisation of clear wood by a single test. Holzforschung, 2007, 61, 573-581. | 1.9 | 56 |
| 44 | 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 |
| 45 | 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 |
| 46 | Estimation of the strain field from full-field displacement noisy data. European Journal of Computational Mechanics, 2008, 17, 857-868. | 0.6 | 51 |
| 47 | 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 |
| 48 | Influence of the microstructural changes and induced residual stresses on tensile properties of wrought magnesium alloy friction stir welds. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 551, 288-292. | 5.6 | 50 |
| 49 | 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 |
| 50 | 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 |
| 51 | 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 |
| 52 | 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 |
| 53 | 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 |
| 54 | 3D Heterogeneous Stiffness Reconstruction Using MRI and the Virtual Fields Method. Experimental Mechanics, 2008, 48, 479-494. | 2.0 | 48 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Dissipated energy measurements as a marker of microstructural evolution: 316L and DP600. Acta Materialia, 2011, 59, 4100-4115. | 7.9 | 47 |
| 56 | 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 |
| 57 | Comparison of two approaches for differentiating full-field data in solid mechanics. Measurement Science and Technology, 2010, 21, 015703. | 2.6 | 46 |
| 58 | 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 |
| 59 | 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 |
| 60 | Accurate comparative determination of the in-plane shear modulus of T300/914 by the iosipescu and 45Â° off-axis tests. Composites Science and Technology, 1994, 52, 61-72. | 7.8 | 42 |
| 61 | Optimised Experimental Characterisation of Polymeric Foam Material Using DIC and the Virtual Fields Method. Strain, 2016, 52, 59-79. | 2.4 | 42 |
| 62 | 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 |
| 63 | 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 |
| 64 | Extension of the sensitivity-based virtual fields to large deformation anisotropic plasticity. International Journal of Material Forming, 2019, 12, 457-476. | 2.0 | 41 |
| 65 | 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 |
| 66 | Saint-Venant Effects in the Iosipescu Specimen. Journal of Composite Materials, 1998, 32, 1986-2015. | 2.4 | 39 |
| 67 | 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 |
| 68 | 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 |
| 69 | 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 |
| 70 | Identification of the Local Elasto-Plastic Behavior of FSW Welds Using the Virtual Fields Method. Experimental Mechanics, 2013, 53, 849-859. | 2.0 | 37 |
| 71 | The Iosipescu 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 |
| 72 | 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 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | The Virtual Fields Method for Extracting Constitutive Parameters From Fullâ€Field Measurements: a Review. Strain, 2006, 42, 233-253. | 2.4 | 34 |
| 74 | Stiffness and Damping Identification from Full Field Measurements on Vibrating Plates. Experimental Mechanics, 2006, 46, 777-787. | 2.0 | 33 |
| 75 | 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 |
| 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 | 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 |
| 78 | A Novel Image-based Ultrasonic Test to Map Material Mechanical Properties at High Strain-rates. Experimental Mechanics, 2018, 58, 183-206. | 2.0 | 32 |
| 79 | 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 |
| 80 | 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 |
| 81 | 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 |
| 82 | 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 |
| 83 | 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 |
| 84 | 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 |
| 85 | 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 |
| 86 | 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 |
| 87 | 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 |
| 88 | Assessment of the metrological performance of anin situstorage image sensor ultra-high speed camera for full-field deformation measurements. Measurement Science and Technology, 2014, 25, 025401. | 2.6 | 26 |
| 89 | 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 |
| 90 | Numerical issues in the virtual fields method. International Journal for Numerical Methods in Engineering, 2004, 59, 1287-1312. | 2.8 | 25 |

| # | Article | IF | Citations |
|---|---|---|---|
| 91 | 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 |
| 92 | An Image-Based Inertial Impact (IBII) Test for Tungsten Carbide Cermets. Journal of Dynamic Behavior of Materials, 2018, 4, 481-504. | 1.7 | 24 |
| 93 | Reduction of tool wear in metal cutting using external electromotive sources. Surface and Coatings Technology, 2003, 163-164, 472-477. | 4.8 | 23 |
| 94 | 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 |
| 95 | On the identifiability of Anand visco-plastic model parameters using the Virtual Fields Method. Acta Materialia, 2015, 86, 118-136. | 7.9 | 22 |
| 96 | 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 |
| 97 | 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 |
| 98 | Evaluation of Volume Deformation from Surface DIC Measurement. Experimental Mechanics, 2018, 58, 1181-1194. | 2.0 | 19 |
| 99 | Image-Based Inertial Impact Test for Composite Interlaminar Tensile Properties. Journal of Dynamic Behavior of Materials, 2018, 4, 543-572. | 1.7 | 18 |
| 100 | A computational approach to design new tests for viscoplasticity characterization at high strain-rates. Computational Mechanics, 2019, 64, 1639-1654. | 4.0 | 18 |
| 101 | General Anisotropy Identification of Paperboard with Virtual Fields Method. Experimental Mechanics, 2014, 54, 1395-1410. | 2.0 | 17 |
| 102 | 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 |
| 103 | Exploration of Saint-Venantâ€™s Principle in Inertial High Strain Rate Testing of Materials. Experimental Mechanics, 2016, 56, 3-23. | 2.0 | 17 |
| 104 | Experimental Validation of the Sensitivity-Based Virtual Fields for Identification of Anisotropic Plasticity Models. Experimental Mechanics, 2020, 60, 639-664. | 2.0 | 16 |
| 105 | French transportable laser ranging station: scientific objectives, technical features, and performance. Applied Optics, 2000, 39, 402. | 2.1 | 15 |
| 106 | Time-resolved full-field imaging of ultrasonic Lamb waves using deflectometry. Experimental Mechanics, 2016, 56, 345-357. | 2.0 | 15 |
| 107 | The Iosipescu in-plane shear test: Validation on an isotropic material. Experimental Mechanics, 1995, 35, 130-136. | 2.0 | 14 |
| 108 | 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 |

| # | Article | IF | Citations |
|---|---|---|---|
| 109 | Full-field evaluation of the onset of microplasticity in a steel specimen. Mechanics of Materials, 2009, 41, 1207-1222. | 3.2 | 13 |
| 110 | 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 |
| 111 | Characterisation of 3D printed sand moulds using micro-focus X-ray computed tomography. Rapid Prototyping Journal, 2019, 25, 404-416. | 3.2 | 13 |
| 112 | Time transfer by laser link T2L2 first results. , 2009, , . | | 12 |
| 113 | Deformation mechanisms of idealised cermets under multi-axial loading. Journal of the Mechanics and Physics of Solids, 2017, 102, 80-100. | 4.8 | 12 |
| 114 | A Practical Procedure for Measuring the Stiffness of Foam like Materials. Experimental Techniques, 2018, 42, 439-452. | 1.5 | 12 |
| 115 | Infrared Deflectometry for Slope Deformation Measurements. Experimental Mechanics, 2019, 59, 1187-1202. | 2.0 | 11 |
| 116 | A benchmark testing technique to characterize the stressâ€“strain relationship in materials based on the spalling test and a photomechanical method. Measurement Science and Technology, 2019, 30, 125006. | 2.6 | 11 |
| 117 | Full-Field Surface Pressure Reconstruction Using the Virtual Fields Method. Experimental Mechanics, 2019, 59, 1203-1221. | 2.0 | 11 |
| 118 | Image-Based Inertial Impact Test for Characterisation of Strain Rate Dependency of Ti6Al4V Titanium Alloy. Experimental Mechanics, 2020, 60, 235-248. | 2.0 | 11 |
| 119 | Simultaneous identification of stiffness and damping properties of isotropic materials from forced vibrating plates. Comptes Rendus - Mecanique, 2003, 331, 259-264. | 2.1 | 10 |
| 120 | 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 |
| 121 | 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 |
| 122 | Measuring orthotropic bending stiffness components of Pinus pinaster by the virtual fields method. Journal of Strain Analysis for Engineering Design, 2018, 53, 556-565. | 1.8 | 10 |
| 123 | Title is missing!. Surveys in Geophysics, 2001, 22, 449-464. | 4.6 | 9 |
| 124 | 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 |
| 125 | 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 |
| 126 | A procedure for specimen optimization applied to material testing in plasticity with the virtual fields method. AIP Conference Proceedings, 2016, , . | 0.4 | 9 |

| # | Article | IF | Citations |
|---|---|---|---|
| 127 | Smoothly varying inâ€plane stiffness heterogeneity evaluated under uniaxial tensile stress. Strain, 2017, 53, e12237. | 2.4 | 9 |
| 128 | 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 |
| 129 | A Numerical and Experimental Study of Woven Composite Pin-Joints. Journal of Composite Materials, 2000, 34, 1028-1054. | 2.4 | 9 |
| 130 | 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 |
| 131 | Identifying Constitutive Parameters from Heterogeneous Strain Fields using the Virtual Fields Method. Procedia IUTAM, 2012, 4, 48-53. | 1.2 | 8 |
| 132 | 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 |
| 133 | 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 |
| 134 | Addendum to â€˜Characterising the Strain and Temperature Fields in a Surrogate Bone Material Subject to Power Ultrasonic Excitationâ€™. Strain, 2016, 52, 186-190. | 2.4 | 7 |
| 135 | The virtual fields method applied to spalling tests on concrete. EPJ Web of Conferences, 2012, 26, 01054. | 0.3 | 6 |
| 136 | Composites Part A: Applied Science and Manufacturing. Composites Part A: Applied Science and Manufacturing, 2012, 43, 1629. | 7.6 | 6 |
| 137 | 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 |
| 138 | The Off-Axis IBII Test for Composites. Journal of Dynamic Behavior of Materials, 2021, 7, 127-155. | 1.7 | 6 |
| 139 | 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 |
| 140 | Identification of low density polyurethane foam properties by DIC and the virtual fields method. Proceedings of SPIE, 2008, , . | 0.8 | 5 |
| 141 | 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 |
| 142 | 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 |
| 143 | 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 |
| 144 | Generalized Stressâ€“Strain Curves for IBII Tests on Isotropic and Orthotropic Materials. Journal of Dynamic Behavior of Materials, 2019, 5, 180-193. | 1.7 | 5 |

| # | Article | IF | Citations |
|---|---|---|---|
| 145 | Reconstruction of surface-pressure fluctuations using deflectometry and the virtual fields method. Experiments in Fluids, 2020, 61, 1. | 2.4 | 5 |
| 146 | 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 |
| 147 | Deflectometry on Curved Surfaces. Conference Proceedings of the Society for Experimental Mechanics, 2019, , 217-221. | 0.5 | 5 |
| 148 | Inverse Problems in Experimental Mechanics. Experimental Mechanics, 2008, 48, 379-379. | 2.0 | 4 |
| 149 | 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 |
| 150 | MÃ©thodologie d'identification du comportement mÃ©canique des mousses hyperÃ©lastiques par mesures de champs et mÃ©thode inverse. Mecanique Et Industries, 2009, 10, 55-59. | 0.2 | 4 |
| 151 | Measurement of Vibrating Plate Spatial Responses Using Deflectometry and High Speed Camera. AIP Conference Proceedings, 2010, , . | 0.4 | 4 |
| 152 | Mechanical properties of low density polymeric foams obtained from full-ï¬eld measurements. EPJ Web of Conferences, 2010, 6, 37006. | 0.3 | 4 |
| 153 | Full-Field Strain Measurement On Titanium Welds And Local Elasto-Plastic Identification With The Virtual Fields Method. AIP Conference Proceedings, 2011, , . | 0.4 | 4 |
| 154 | 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 |
| 155 | Image-Based Stress Field Reconstruction in Complex Media. Conference Proceedings of the Society for Experimental Mechanics, 2019, , 101-104. | 0.5 | 4 |
| 156 | Full-field strain measurements at high rate on notched composites tested with a tensile Hopkinson bar. , 2009, , . | | 4 |
| 157 | Application of full-field measurement techniques to composite materials and structures. Composites Part A: Applied Science and Manufacturing, 2008, 39, 1193. | 7.6 | 3 |
| 158 | Characterizing elastic properties of superconducting windings by simulations and experiments. Superconductor Science and Technology, 2011, 24, 125001. | 3.5 | 3 |
| 159 | Measurement of Internal Implantation Strains in Analogue Bone Using DVC. Materials, 2020, 13, 4050. | 2.9 | 3 |
| 160 | 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 |
| 161 | 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 |
| 162 | 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 |

| # | Article | IF | Citations |
|---|---|---|---|
| 163 | UsinabilitÃ© Ã grande vitesse et Ã sec des couches du rechargement base-nickel par soudage d'outillage Ã chaud. Mecanique Et Industries, 2005, 6, 211-225. | 0.2 | 3 |
| 164 | Characterization of dynamic hardening behavior at intermediate strain rates using the virtual fields method. Mechanics of Materials, 2021, 162, 104101. | 3.2 | 3 |
| 165 | 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 |
| 166 | Latest Results in Novel Inertial High Strain Rate Tests. Conference Proceedings of the Society for Experimental Mechanics, 2015, , 21-26. | 0.5 | 3 |
| 167 | Discussion of the article, â€œexperimental strain analysis of the Iosipescu shear test specimenâ€. Experimental Mechanics, 1997, 37, 11-12. | 2.0 | 2 |
| 168 | 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 |
| 169 | Dissipative energy as an indicator of material microstructural evolution. EPJ Web of Conferences, 2010, 6, 38013. | 0.3 | 2 |
| 170 | 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 |
| 171 | Image-Based Inertial Impact Tests on an Aluminum Alloy. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 219-223. | 0.5 | 2 |
| 172 | Surface Pressure Reconstruction from Phase Averaged Deflectometry Measurements Using the Virtual Fields Method. Experimental Mechanics, 2020, 60, 379-392. | 2.0 | 2 |
| 173 | Investigation of the 2D assumption in the imageâ€based inertial impact test. Strain, 2021, 57, e12369. | 2.4 | 2 |
| 174 | Identification of Strain-Rate Sensitivity With the Virtual Fields Method. , 2007, , 661-662. | | 2 |
| 175 | Identification of the Local Stiffness Reduction of Damaged Composite Plates Using Full-Field Measurements. , 2007, , 675-676. | | 2 |
| 176 | Uncertainty Quantification in VFM Identification. Conference Proceedings of the Society for Experimental Mechanics, 2015, , 137-142. | 0.5 | 2 |
| 177 | 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 |
| 178 | Quantification of the Compressibility of Elastomers Using DIC. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 199-201. | 0.5 | 2 |
| 179 | Optical full-field measurement of strain at a microscopic scale with the grid method. , 2006, , . | | 2 |
| 180 | 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 |

| # | Article | IF | Citations |
|---|---|---|---|
| 181 | Identification directe du comportement Ã©lastique endommageable de matÃ©riaux composites par la mÃ©thode des champs virtuels. European Physical Journal Special Topics, 2002, 12, 291-300. | 0.2 | 1 |
| 182 | Influence de la dÃ©coupe d'Ã©prouvettes en composite sur leur tenue mÃ©caniqueThe cutting effect of composite coupons on their mechanical strengths. Mecanique Et Industries, 2002, 3, 361-378. | 0.2 | 1 |
| 183 | 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 |
| 184 | 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 |
| 185 | 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 |
| 186 | Viscoelastic material properties' identification using full field measurements on vibrating plates. , 2008, , . | | 1 |
| 187 | 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 |
| 188 | Identification of material stiffness and damping in vibrating plates using full-field measurements. Journal of Physics: Conference Series, 2009, 181, 012063. | 0.4 | 1 |
| 189 | Off-Axis Ratcheting Behavior of a Unidirectional Carbon/Epoxy Laminate at High Temperature. Polymers and Polymer Composites, 2011, 19, 383-390. | 1.9 | 1 |
| 190 | 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 |
| 191 | Inertial Impact Method for the Through-Thickness Strength of Composites. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 105-108. | 0.5 | 1 |
| 192 | Inertial Impact Tests on Polymers for Inverse Parameter Identification. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 187-190. | 0.5 | 1 |
| 193 | Characterization of dynamic hardening behavior using acceleration information. Procedia Engineering, 2017, 207, 245-250. | 1.2 | 1 |
| 194 | Inertial Impact Tests to Identify the Plastic Properties of Metals. EPJ Web of Conferences, 2018, 183, 02051. | 0.3 | 1 |
| 195 | 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 |
| 196 | Sheet metals characterization using the virtual fields method. AIP Conference Proceedings, 2018, , . | 0.4 | 1 |
| 197 | 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 |
| 198 | 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 |

| # | Article | IF | Citations |
|---|---|---|---|
| 199 | Introduction, Main Equations and Notations. , 2012, , 3-19. | | 1 |
| 200 | Infrared Deflectometry. Conference Proceedings of the Society for Experimental Mechanics, 2020, , 97-100. | 0.5 | 1 |
| 201 | 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 |
| 202 | Fast Fourier Virtual Fields Method for Determination of Modulus Distributions from Full-Field Optical Strain Data. , 2014, , 161-166. | | 1 |
| 203 | Identification d'une loi de Fick 3D anisotropeÂ: thÃ©orie et validation. European Physical Journal Special Topics, 2002, 12, 251-258. | 0.2 | 1 |
| 204 | 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 |
| 205 | Inverse Identification of the High Strain Rate Properties of PMMA. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 195-197. | 0.5 | 1 |
| 206 | Direct identification of an in-plane orthotropic law from a single test. , 1998, , 215-224. | | 0 |
| 207 | Discussion of the Article: "Biaxial Testing of Unidirectional Carbon-Epoxy Composite Using Biaxial Iosipescu Test Fixture". Journal of Composite Materials, 1999, 33, 682-687. | 2.4 | 0 |
| 208 | Response to the discussion of the paper â€œNovel procedure for complete in-plane composite characterization using a single T-shaped specimenâ€• Experimental Mechanics, 2000, 40, 97-97. | 2.0 | 0 |
| 209 | ‹title›New performances of the French transportable laser ranging station (FTLRS)‹/title›. , 2002, , . | | 0 |
| 210 | Material Properties' Identification Using Full Field Measurements on Vibrating Plates. Applied Mechanics and Materials, 2006, 5-6, 465-472. | 0.2 | 0 |
| 211 | 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 | 0 |
| 212 | Experimental Application of the Virtual Fields Method to Elasto-Plastic Behaviour. Applied Mechanics and Materials, 2006, 3-4, 33-38. | 0.2 | 0 |
| 213 | Dissipative Behaviour of Metallic Materials in Low Stress Cyclic Loading. Applied Mechanics and Materials, 2005, 3-4, 253-258. | 0.2 | 0 |
| 214 | 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 |
| 215 | Software Implementation of the Virtual Fields Method. Applied Mechanics and Materials, 2007, 7-8, 57-62. | 0.2 | 0 |
| 216 | Viscoelastic material propertiesâ€™ identiï¬cation using high speed full ï¬eld measurements on vibrating plates. EPJ Web of Conferences, 2010, 6, 37002. | 0.3 | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 217 | 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 |
| 218 | Dissipative energy: monitoring microstructural evolutions during mechanical tests. Conference Proceedings of the Society for Experimental Mechanics, 2011, , 59-65. | 0.5 | 0 |
| 219 | Dissipative energy as an indicator of material microstructural evolution. Conference Proceedings of the Society for Experimental Mechanics, 2011, , 71-72. | 0.5 | 0 |
| 220 | 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 |
| 221 | Soft and Biological Materials. , 2012, , 293-327. | | 0 |
| 222 | Viscoelastic Properties Identification Through Innovative Image-Based DMTA Strategy. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 207-209. | 0.5 | 0 |
| 223 | Ultrasonic Test for High Rate Material Property Imaging. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 173-176. | 0.5 | 0 |
| 224 | Image-based high strain-rate testing for the characterization of viscoplasticity. EPJ Web of Conferences, 2018, 183, 02032. | 0.3 | 0 |
| 225 | Image-based high strain rate testing of orthopaedic bone cement. EPJ Web of Conferences, 2018, 183, 04014. | 0.3 | 0 |
| 226 | Identification from full-field measurements. Strain, 2018, 54, e12274. | 2.4 | 0 |
| 227 | 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 |
| 228 | 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 |
| 229 | Champs virtuels spÃ©ciaux 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 |
| 230 | Identification of 3-D Heterogeneous Modulus Distribution With the Virtual Fields Method. , 2007, , 663-664. | | 0 |
| 231 | The Non-linear Virtual Fields Method. , 2012, , 107-120. | | 0 |
| 232 | The VFM for Force Reconstruction. , 2012, , 375-393. | | 0 |
| 233 | Design of New Tests for the VFM. , 2012, , 353-374. | | 0 |
| 234 | Fiber Composites. , 2012, , 161-252. | | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 235 | Complements. , 2012, , 121-157. | | 0 |
| 236 | Other Materials. , 2012, , 329-352. | | 0 |
| 237 | Case Study III: Orthotropic Plate in Pure Bending. , 2012, , 477-490. | | 0 |
| 238 | Case Study II: Unnotched Iosipescu Test. , 2012, , 417-476. | | 0 |
| 239 | The Linear Virtual Fields Method. , 2012, , 57-106. | | 0 |
| 240 | 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 | 0 |
| 241 | Parameter Determination of Anisotropic Yield Criterion. Conference Proceedings of the Society for Experimental Mechanics, 2014, , 253-257. | 0.5 | 0 |
| 242 | Full-Field Strain Imaging of Ultrasonic Waves in Solids. Conference Proceedings of the Society for Experimental Mechanics, 2016, , 81-85. | 0.5 | 0 |
| 243 | 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 |
| 244 | 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 |
| 245 | 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 |
| 246 | IBII Test for High Strain Rate Tensile Testing of Adhesives. Conference Proceedings of the Society for Experimental Mechanics, 2019, , 301-305. | 0.5 | 0 |
| 247 | 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 |
| 248 | 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 |
| 249 | 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 | 0 |
| 250 | 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 | 0 |
| 251 | 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 |
| 252 | 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 | 0 |