# Pierre Ladevze

## List of Publications by Citations



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|---|---|---|---|
| 77 papers | 2,164 citations | 23 h-index | 45 g-index |
| 82 ext. papers | 2,360 ext. citations | 3.8 avg, IF | 5.27 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 77 | A Short Review on Model Order Reduction Based on Proper Generalized Decomposition. *Archives of Computational Methods in Engineering*, **2011**, 18, 395-404 | 7.8 | 354 |
| 76 | Nonlinear Computational Structural Mechanics. *Mechanical Engineering Series*, **1999**, | 0.3 | 170 |
| 75 | A mesomodel for localisation and damage computation in laminates. *Computer Methods in Applied Mechanics and Engineering*, **2000**, 183, 105-122 | 5.7 | 127 |
| 74 | On a multiscale computational strategy with time and space homogenization for structural mechanics. *Computer Methods in Applied Mechanics and Engineering*, **2003**, 192, 3061-3087 | 5.7 | 114 |
| 73 | On the verification of model reduction methods based on the proper generalized decomposition. *Computer Methods in Applied Mechanics and Engineering*, **2011**, 200, 2032-2047 | 5.7 | 82 |
| 72 | New concepts for linear beam theory with arbitrary geometry and loading. *European Journal of Mechanics, A/Solids*, **1998**, 17, 377-402 | 3.7 | 80 |
| 71 | Data-driven non-linear elasticity: constitutive manifold construction and problem discretization. *Computational Mechanics*, **2017**, 60, 813-826 | 4 | 67 |
| 70 | Proper Generalized Decomposition for Multiscale and Multiphysics Problems. *Archives of Computational Methods in Engineering*, **2010**, 17, 351-372 | 7.8 | 66 |
| 69 | Application of a posteriori error estimation for structural model updating. *Inverse Problems*, **1999**, 15, 49-58 | 2.3 | 64 |
| 68 | On a damage mesomodel for laminates: micromechanics basis and improvement. *Mechanics of Materials*, **2003**, 35, 763-775 | 3.3 | 59 |
| 67 | A damage prediction method for composite structures. *International Journal for Numerical Methods in Engineering*, **1989**, 27, 271-283 | 2.4 | 52 |
| 66 | Strict upper error bounds on computed outputs of interest in computational structural mechanics. *Computational Mechanics*, **2008**, 42, 271-286 | 4 | 50 |
| 65 | THE MULTISCALE VTCR APPROACH APPLIED TO ACOUSTICS PROBLEMS. *Journal of Computational Acoustics*, **2008**, 16, 487-505 | | 47 |
| 64 | A Computational Damage Micromodel of Laminated Composites. *International Journal of Fracture*, **2006**, 137, 139-150 | 2.3 | 43 |
| 63 | The variational theory of complex rays: a predictive tool for medium-frequency vibrations. *Computer Methods in Applied Mechanics and Engineering*, **2003**, 192, 3301-3315 | 5.7 | 42 |
| 62 | A new a posteriori error estimation for nonlinear time-dependent finite element analysis. *Computer Methods in Applied Mechanics and Engineering*, **1998**, 157, 45-68 | 5.7 | 38 |
| 61 | A new non-intrusive technique for the construction of admissible stress fields in model verification. *Computer Methods in Applied Mechanics and Engineering*, **2010**, 199, 766-777 | 5.7 | 37 |

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| 60 | Identification and validation of an enhanced mesomodel for laminated composites within the WWFE-III. *Journal of Composite Materials*, **2013**, 47, 2675-2693 | 2.7 | 36 |
| 59 | Micromodel-based simulations for laminated composites. *Composites Science and Technology*, **2009**, 69, 1364-1371 | 8.6 | 36 |
| 58 | Constitutive relation error estimators for (visco)plastic finite element analysis with softening. *Computer Methods in Applied Mechanics and Engineering*, **1999**, 176, 247-264 | 5.7 | 35 |
| 57 | A non-intrusive method for the calculation of strict and efficient bounds of calculated outputs of interest in linear viscoelasticity problems. *Computer Methods in Applied Mechanics and Engineering*, **2008**, 197, 994-1014 | 5.7 | 32 |
| 56 | On a mixed and multiscale domain decomposition method. *Computer Methods in Applied Mechanics and Engineering*, **2007**, 196, 1526-1540 | 5.7 | 30 |
| 55 | Pont entre les « micro » et « méso » mécaniques des composites stratifiés. *Comptes Rendus - Mecanique*, **2003**, 331, 537-544 | 2.1 | 24 |
| 54 | Guaranteed error bounds on pointwise quantities of interest for transient viscodynamics problems. *Computational Mechanics*, **2012**, 49, 291-307 | 4 | 23 |
| 53 | A new computational method for transient dynamics including the low- and the medium-frequency ranges. *International Journal for Numerical Methods in Engineering*, **2005**, 64, 503-527 | 2.4 | 21 |
| 52 | The Fourier version of the Variational Theory of Complex Rays for medium-frequency acoustics. *Computer Methods in Applied Mechanics and Engineering*, **2012**, 225-228, 142-153 | 5.7 | 20 |
| 51 | Upper error bounds on calculated outputs of interest for linear and nonlinear structural problems. *Comptes Rendus - Mecanique*, **2006**, 334, 399-407 | 2.1 | 20 |
| 50 | Integration of PGD-virtual charts into an engineering design process. *Computational Mechanics*, **2016**, 57, 637-651 | 4 | 19 |
| 49 | On reduced models in nonlinear solid mechanics. *European Journal of Mechanics, A/Solids*, **2016**, 60, 227-237 | 3.7 | 17 |
| 48 | Proper Generalized Decomposition applied to linear acoustic: A new tool for broad band calculation. *Journal of Sound and Vibration*, **2014**, 333, 2422-2431 | 3.9 | 16 |
| 47 | Strict and practical bounds through a non-intrusive and goal-oriented error estimation method for linear viscoelasticity problems. *Finite Elements in Analysis and Design*, **2009**, 45, 251-262 | 2.2 | 16 |
| 46 | Model verification in dynamics through strict upper error bounds. *Computer Methods in Applied Mechanics and Engineering*, **2009**, 198, 1775-1784 | 5.7 | 16 |
| 45 | A Multi-Time-Scale Strategy for Multiphysics Problems: Application to Poroelasticity. *International Journal for Multiscale Computational Engineering*, **2003**, 1, 387-400 | 2.4 | 16 |
| 44 | An enhanced method with local energy minimization for the robust a posteriori construction of equilibrated stress fields in finite element analyses. *Computational Mechanics*, **2012**, 49, 357-378 | 4 | 15 |
| 43 | A new approach to the subcritical cracking of ceramic fibers. *Composites Science and Technology*, **2010**, 70, 1575-1583 | 8.6 | 15 |

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| 42 | Adaptive control for finite element analysis in plasticity. *Computers and Structures*, **1999**, 73, 45-60 | 4.5 | 15 |
| 41 | A LATIN-based model reduction approach for the simulation of cycling damage. *Computational Mechanics*, **2018**, 62, 725-743 | 4 | 15 |
| 40 | AN ADAPTIVE NUMERICAL STRATEGY FOR THE MEDIUM-FREQUENCY ANALYSIS OF HELMHOLTZ PROBLEM. *Journal of Computational Acoustics*, **2012**, 20, 1250001 | | 14 |
| 39 | Constitutive relation errors for F.E. analysis considering (visco-) plasticity and damage. *International Journal for Numerical Methods in Engineering*, **2001**, 52, 527-542 | 2.4 | 14 |
| 38 | A multi-temporal scale model reduction approach for the computation of fatigue damage. *Computer Methods in Applied Mechanics and Engineering*, **2018**, 340, 630-656 | 5.7 | 13 |
| 37 | THE VARIATIONAL THEORY OF COMPLEX RAYS FOR THREE-DIMENSIONAL HELMHOLTZ PROBLEMS. *Journal of Computational Acoustics*, **2012**, 20, 1250021 | | 13 |
| 36 | On structural computations until fracture based on an anisotropic and unilateral damage theory. *International Journal of Damage Mechanics*, **2014**, 23, 483-506 | 3 | 11 |
| 35 | Data-driven computation for history-dependent materials. *Comptes Rendus - Mecanique*, **2019**, 347, 831-844 | 2.4 | 11 |
| 34 | A kinetic two-scale damage model for high-cycle fatigue simulation using multi-temporal Latin framework. *European Journal of Mechanics, A/Solids*, **2019**, 77, 103808 | 3.7 | 10 |
| 33 | A posteriori error estimation and adaptive strategy for PGD model reduction applied to parametrized linear parabolic problems. *Computer Methods in Applied Mechanics and Engineering*, **2017**, 327, 118-146 | 5.7 | 10 |
| 32 | Proper Generalized Decomposition computational methods on a benchmark problem: introducing a new strategy based on Constitutive Relation Error minimization. *Advanced Modeling and Simulation in Engineering Sciences*, **2015**, 2, | 2.7 | 10 |
| 31 | On Trefftz and weak Trefftz discontinuous Galerkin approaches for medium-frequency acoustics. *Computer Methods in Applied Mechanics and Engineering*, **2014**, 278, 729-743 | 5.7 | 10 |
| 30 | Strict upper bounds of the error in calculated outputs of interest for plasticity problems. *Computer Methods in Applied Mechanics and Engineering*, **2012**, 245-246, 194-205 | 5.7 | 10 |
| 29 | Robust control of PGD-based numerical simulations. *European Journal of Computational Mechanics*, **2012**, 21, 195-207 | 0.5 | 10 |
| 28 | Transient analysis including the low- and the medium-frequency ranges of engineering structures. *Computers and Structures*, **2007**, 85, 1431-1444 | 4.5 | 10 |
| 27 | Goal-oriented updating of mechanical models using the adjoint framework. *Computational Mechanics*, **2014**, 54, 1415-1430 | 4 | 9 |
| 26 | Une stratégie de calcul multi-échelle avec homogénéisation en espace et en temps. *Comptes Rendus - Mecanique*, **2002**, 330, 683-689 | 2.1 | 9 |
| 25 | The Exact Theory of Plate Bending. *Journal of Elasticity*, **2002**, 68, 37-71 | 1.5 | 9 |

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| 24 | A Posteriori Constitutive Relation Error Estimators for Nonlinear Finite Element Analysis and Adaptive Control. *Studies in Applied Mechanics*, **1998**, 231-256 | | 9 |
| 23 | Duality preserving discretization of the large time increment methods. *Computer Methods in Applied Mechanics and Engineering*, **2000**, 189, 205-232 | 5.7 | 7 |
| 22 | Constitutive relation error estimators for time-dependent non-linear FE analysis. *Computer Methods in Applied Mechanics and Engineering*, **2000**, 188, 775-788 | 5.7 | 6 |
| 21 | A door to model reduction in high-dimensional parameter space. *Comptes Rendus - Mecanique*, **2018** , 346, 524-531 | 2.1 | 5 |
| 20 | The Variational Theory of Complex Rays applied to the shallow shell theory. *Computers and Structures*, **2015**, 158, 98-107 | 4.5 | 4 |
| 19 | Damage and Lifetime Modeling for Structure Computations **2014**, 465-519 | | 4 |
| 18 | Une nouvelle strat□gie de calcul micro/macro en m□canique des structures. *Comptes Rendus De LrAcademie De Sciences - Serie IIb: Mecanique, Physique, Chimie, Astronomie*, **1999**, 327, 1237-1244 | | 4 |
| 17 | The Constitutive Relation Error Method: A General Verification Tool. *SpringerBriefs in Applied Sciences and Technology*, **2016**, 59-94 | 0.4 | 3 |
| 16 | Towards a Micromechanics-Based Damage Mesomodel for CFRP Laminates under Thermomechanical Cyclic Loading. *Science and Engineering of Composite Materials*, **2005**, 12, 71-82 | 1.5 | 3 |
| 15 | La Th□orie Variationnelle des Rayons Complexes pour le calcul des vibrations moyennes fr□quences. *Revue Europeenne Des Elements*, **2000**, 9, 67-88 | | 3 |
| 14 | A Virtual Testing Approach for Laminated Composites Based on Micromechanics **2017**, 667-698 | | 2 |
| 13 | Toward Optimality of Proper Generalised Decomposition Bases. *Mathematical and Computational Applications*, **2019**, 24, 30 | 1 | 2 |
| 12 | Variational theory of complex rays applied to shell structures: in-plane inertia, quasi-symmetric ray distribution, and orthotropic materials. *Computational Mechanics*, **2015**, 56, 983-997 | 4 | 2 |
| 11 | A Model Reduction Technique in Space and Time for Fatigue Simulation. *Lecture Notes in Applied and Computational Mechanics*, **2018**, 183-203 | 0.3 | 2 |
| 10 | Mise en □uvre num□rique d□un m□somod□le d□endommagement des stratifi□s. *Revue Europeenne Des Elements*, **2001**, 10, 473-487 | | 2 |
| 9 | Towards simplified and optimized a posteriori error estimation using PGD reduced models. *International Journal for Numerical Methods in Engineering*, **2018**, 113, 967-998 | 2.4 | 1 |
| 8 | Validation of Intralaminar Behaviour of the Laminated Composites by Damage Mesomodel **2009**, | | 1 |
| 7 | A Bridge Between the Micro- and Mesomechanics of Laminates: Fantasy or Reality? **2005**, 187-201 | | 1 |

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| 6 | Industrial Digital Twins based on the non-linear LATIN-PGD. *Advanced Modeling and Simulation in Engineering Sciences*, **2021**, 8, | 2.7 | 1 |
| 5 | On a wave-based reduced order model for transient effects computation including mid frequencies. *Computer Methods in Applied Mechanics and Engineering*, **2022**, 395, 114990 | 5.7 | 0 |
| 4 | A non-intrusive approach of goal-oriented error estimation for evolution problems solved by the finite element method. *European Journal of Computational Mechanics*, **2008**, 17, 981-992 | 0.5 | |
| 3 | A Semi-incremental Scheme for Cyclic Damage Computations. *Lecture Notes in Applied and Computational Mechanics*, **2020**, 229-247 | 0.3 | |
| 2 | Extension of the variational theory of complex rays to orthotropic shallow shell structures. *Advances in Aircraft and Spacecraft Science*, **2016**, 3, 317-330 | | |
| 1 | On a Physics-Compatible Approach for Data-Driven Computational Mechanics **2022**, 287-294 | | |