Adrien Leygue

List of Publications by Year
in descending order

63 papers	1,965 citations	236925 25 h-index	243625 44 g-index
67 all docs	67 docs citations	67 times ranked	1078 citing authors

#	Article	IF	Citations
1	PGD-Based Computational Vademecum for Efficient Design, Optimization and Control. Archives of Computational Methods in Engineering, 2013, 20, 31-59.	10.2	246
2	An overview of the proper generalized decomposition with applications in computational rheology. Journal of Non-Newtonian Fluid Mechanics, 2011, 166, 578-592.	2.4	194
3	The Proper Generalized Decomposition for Advanced Numerical Simulations. SpringerBriefs in Applied Sciences and Technology, 2014, , .	0.4	175
4	Advanced simulation of models defined in plate geometries: 3D solutions with 2D computational complexity. Computer Methods in Applied Mechanics and Engineering, 2012, 201-204, 1-12.	6.6	137
5	Data-based derivation of material response. Computer Methods in Applied Mechanics and Engineering, 2018, 331, 184-196.	6.6	90
6	First steps towards an advanced simulation of composites manufacturing by automated tape placement. International Journal of Material Forming, 2014, 7, 81-92.	2.0	88
7	Real-time simulation of biological soft tissues: a PGD approach. International Journal for Numerical Methods in Biomedical Engineering, 2013, 29, 586-600.	2.1	72
8	Parametric solutions involving geometry: A step towards efficient shape optimization. Computer Methods in Applied Mechanics and Engineering, 2014, 268, 178-193.	6.6	69
9	Model-free data-driven methods in mechanics: material data identification and solvers. Computational Mechanics, 2019, 64, 381-393.	4.0	64
10	Proper Generalized Decomposition based dynamic data driven inverse identification. Mathematics and Computers in Simulation, 2012, 82, 1677-1695.	4.4	57
11	Methodological approach to efficient modeling and optimization of thermal processes taking place in a die: Application to pultrusion. Composites Part A: Applied Science and Manufacturing, 2011, 42, 1169-1178.	7.6	45
12	The rheology of multiwalled carbon nanotube and carbon black suspensions. Journal of Rheology, 2012, 56, 1465-1490.	2.6	42
13	Separated representations of 3D elastic solutions in shell geometries. Advanced Modeling and Simulation in Engineering Sciences, 2014, 1, .	1.7	42
14	Multiaxial deformation and strain-induced crystallization around a fatigue crack in natural rubber. Engineering Fracture Mechanics, 2014, 123, 59-69.	4.3	40
15	*In situ* synchrotron wide-angle X-ray diffraction investigation of fatigue cracks in natural rubber. Journal of Synchrotron Radiation, 2013, 20, 105-109.	2.4	36
16	A numerical approach to design dual-scale porosity composite reinforcements with enhanced permeability. Materials and Design, 2017, 131, 307-322.	7.0	36
17	A First Step Towards the Use of Proper General Decomposition Method for Structural Optimization. Archives of Computational Methods in Engineering, 2010, 17, 465-472.	10.2	35
18	Systematic Coarse Graining of 4-Cyano-4′-pentylbiphenyl. Industrial & Engineering Chemistry Research, 2011, 50, 546-556.	3.7	35

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19	Measuring stress field without constitutive equation. Mechanics of Materials, 2019, 136, 103087.	3.2	35
20	A tube-based constitutive equation for polydisperse entangled linear polymers. Journal of Non-Newtonian Fluid Mechanics, 2006, 136, 1-16.	2.4	30
21	The Proper Generalized Decomposition (PGD) as a numerical procedure to solve 3D cracked plates in linear elastic fracture mechanics. International Journal of Solids and Structures, 2013, 50, 1710-1720.	2.7	30
22	Towards a framework for nonâ€linear thermal models in shell domains. International Journal of Numerical Methods for Heat and Fluid Flow, 2013, 23, 55-73.	2.8	30
23	Finite element solver for data-driven finite strain elasticity. Computer Methods in Applied Mechanics and Engineering, 2021, 379, 113756.	6.6	29
24	Numerical simulation of large amplitude oscillatory shear of a high-density polyethylene melt using the MSF model. Journal of Non-Newtonian Fluid Mechanics, 2005, 130, 63-76.	2.4	28
25	A single segment differential tube model with interchain tube pressure effect. Journal of Non-Newtonian Fluid Mechanics, 2009, 161, 10-18.	2.4	25
26	Non-parametric material state field extraction from full field measurements. Computational Mechanics, 2019, 64, 501-509.	4.0	23
27	A differential tube-based model for predicting the linear viscoelastic moduli of polydisperse entangled linear polymers. Journal of Non-Newtonian Fluid Mechanics, 2006, 133, 28-34.	2.4	18
28	Computational measurements of stress fields from digital images. International Journal for Numerical Methods in Engineering, 2018, 113, 1810-1826.	2.8	17
29	On the space separated representation when addressing the solution of PDE in complex domains. Discrete and Continuous Dynamical Systems - Series S, 2016, 9, 475-500.	1.1	17
30	Squeeze flow in heterogeneous unidirectional discontinuous viscous prepreg laminates: Experimental measurement and 3D modeling. Composites Part A: Applied Science and Manufacturing, 2017, 103, 196-207.	7.6	16
31	Parametric 3D elastic solutions of beams involved in frame structures. Advances in Aircraft and Spacecraft Science, 2015, 2, 233-248.	0.5	15
32	Identification of non uniform thermal contact resistance in automated tape placement process. International Journal of Material Forming, 2014, 7, 479-486.	2.0	14
33	On the fully 3D simulations of thermoelastic models defined in plate and shell geometries. European Journal of Computational Mechanics, 2012, 21, 40-51.	0.6	12
34	A separated representation of an error indicator for the mesh refinement process under the proper generalized decomposition framework. Computational Mechanics, 2015, 55, 251-266.	4.0	12
35	<i>Vademecum</i>â€based GFEM (Vâ€GFEM): optimal enrichment for transient problems. International Journal for Numerical Methods in Engineering, 2016, 108, 971-989.	2.8	12
36	Flow modeling of linear and nonlinear fluids in two scale fibrous fabrics. International Journal of Material Forming, 2017, 10, 317-328.	2.0	12

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37	On the solution of the heat equation in very thin tapes. International Journal of Thermal Sciences, 2013, 65, 148-157.	4.9	11
38	Arlequin based PGD domain decomposition. Computational Mechanics, 2014, 54, 1175-1190.	4.0	11
39	First Steps in the Space Separated Representation of Models Defined in Complex Domains. , 2012, , .		9
40	A constitutive equation for entangled linear polymers inspired by reptation theory and consistent with non-equilibrium thermodynamics. Journal of Non-Newtonian Fluid Mechanics, 2001, 101, 95-111.	2.4	8
41	Parametric modeling of an electromagnetic compression device with the proper generalized decomposition. International Journal of Material Forming, 2016, 9, 101-113.	2.0	8
42	A differential formulation of thermal constraint release for entangled linear polymers. Journal of Non-Newtonian Fluid Mechanics, 2005, 128, 23-28.	2.4	6
43	A first step toward a PGD-based time parallelisation strategy. European Journal of Computational Mechanics, 2012, 21, 300-311.	0.6	6
44	An Improvement in Thermal Modelling of Automated Tape Placement Process. , 2011, , .		5
45	Online Prediction of Machining Distortion of Aeronautical Parts Caused by Re-Equilibration of Residual Stresses. Key Engineering Materials, 2014, 611-612, 1327-1335.	0.4	5
46	Composites manufacturing processes. Towards an advanced simulation. Revue Des Composites Et Des Materiaux Avances, 2011, 21, 23-32.	0.6	4
47	Phase distribution and properties identification of heterogeneous materials: A data-driven approach. Computer Methods in Applied Mechanics and Engineering, 2022, 390, 114354.	6.6	4
48	In-plane/out-of-plane separated representations of updated Lagrangian descriptions of viscoplastic flow models in plate domains. Comptes Rendus - Mecanique, 2016, 344, 225-235.	2.1	3
49	First Steps on the Modeling and Simulation of Thermoplastic/Thermoset Phase Separation. Key Engineering Materials, 2012, 504-506, 283-288.	0.4	1
50	Toward a Real Time Control of Toolpath in Milling Processes. Key Engineering Materials, 0, 554-557, 706-713.	0.4	1
51	Model of laser/composite interaction based on scattering by multiple cylinders. AIP Conference Proceedings, 2016, , .	0.4	1
52	The Transient Diffusion Equation. SpringerBriefs in Applied Sciences and Technology, 2014, , 57-69.	0.4	1
53	Squeeze ﬂow in heterogeneous discontinuous viscous woven prepreg laminates. Experimental measurements and 3D modeling. Revue Des Composites Et Des Materiaux Avances, 2018, 28, 35-53.	0.6	1
54	Tube Theory for Entangled Linear Polymers: Influence of Different Molecular Mechanisms in Non-Linear Flows. AIP Conference Proceedings, 2008, , .	0.4	0

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55	A First Approach Toward a Proper Generalized Decomposition Based Time Parallelization. Key Engineering Materials, 2012, 504-506, 461-466.	0.4	0
56	Real Time Simulation of Non-Linear Solids by PGD Techniques. Key Engineering Materials, 2012, 504-506, 467-472.	0.4	0
57	Rheological Modelling of Carbon Black Aggregate Suspensions. , 2012, , .		0
58	New routes to advanced simulation of material forming. , 2013, , .		0
59	Towards Online Control of Forming Processes Involving Residual Stresses: Defining Multi-Parametric <i>Computational vademecums</i>. Key Engineering Materials, 0, 554-557, 699-705.	0.4	0
60	Elastic-Plastic Reduced Order Modelling of Sheet and Profiles Bending-under-Tension. Key Engineering Materials, 2014, 611-612, 1371-1379.	0.4	0
61	Efficient Updated-Lagrangian Simulations in Forming Processes. Key Engineering Materials, 2015, 651-653, 1294-1300.	0.4	0
62	PGD Solution of the Poisson Equation. SpringerBriefs in Applied Sciences and Technology, 2014, , 25-46.	0.4	0
63	Parametric nonlinear PDEs with multiple solutions: A PGD approach. Discrete and Continuous Dynamical Systems - Series S, 2016, 9, 383-392.	1.1	0