Nicolas Chevaugeon

List of Publications by Year
in descending order

30	1,324	516710 16	580821 25
papers	citations	h-index	g-index

31	31	31	1010
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Shock detection and limiting with discontinuous Galerkin methods for hyperbolic conservation laws. Applied Numerical Mathematics, 2004, 48, 323-338.	2.1	330
2	A level set based model for damage growth: The thick level set approach. International Journal for Numerical Methods in Engineering, 2011, 86, 358-380.	2.8	187
3	Studied X-FEM enrichment to handle material interfaces with higher order finite element. Computer Methods in Applied Mechanics and Engineering, 2010, 199, 1922-1936.	6.6	82
4	A quadrature-free discontinuous Galerkin method for the level set equation. Journal of Computational Physics, 2006, 212, 338-357.	3.8	80
5	A stabilized finite element method using a discontinuous level set approach for the computation of bubble dynamics. Journal of Computational Physics, 2007, 225, 949-974.	3.8	75
6	Damage growth modeling using the Thick Level Set (TLS) approach: Efficient discretization for quasi-static loadings. Computer Methods in Applied Mechanics and Engineering, 2012, 233-236, 11-27.	6.6	75
7	High order X-FEM and levelsets for complex microstructures: Uncoupling geometry and approximation. Computer Methods in Applied Mechanics and Engineering, 2012, 241-244, 172-189.	6.6	66
8	Adaptive mesh generation for curved domains. Applied Numerical Mathematics, 2005, 52, 251-271.	2.1	65
9	Efficient visualization of high-order finite elements. International Journal for Numerical Methods in Engineering, 2007, 69, 750-771.	2.8	43
10	IMPROVED CRACK TIP ENRICHMENT FUNCTIONS AND INTEGRATION FOR CRACK MODELING USING THE EXTENDED FINITE ELEMENT METHOD. International Journal for Multiscale Computational Engineering, 2013, 11, 597-631.	1.2	43
11	High-order h-adaptive discontinuous Galerkin methods for ocean modelling. Ocean Dynamics, 2007, 57, 109-121.	2.2	42
12	A level set based approach for the finite element simulation of a forming process involving multiphysics coupling: Ultrasonic welding of thermoplastic composites. European Journal of Mechanics, A/Solids, 2011, 30, 501-509.	3.7	28
13	CFD Application to Gun Muzzle Blast - A Validation Case Study. , 2003, , .		27
14	Efficient Discontinuous Galerkin Methods for solving acoustic problems. , 2005, , .		26
15	Optimal numerical parameterization of discontinuous Galerkin method applied to wave propagation problems. Journal of Computational Physics, 2007, 223, 188-207.	3.8	23
16	Hierarchic multigrid iteration strategy for the discontinuous Galerkin solution of the steady Euler equations. International Journal for Numerical Methods in Fluids, 2006, 51, 1157-1176.	1.6	21
17	Coupling local and non-local damage evolutions with the Thick Level Set model. Advanced Modeling and Simulation in Engineering Sciences, 2014, 1, .	1.7	18
18	Discontinuous Galerkin Methods Applied to Shock and Blast Problems. Journal of Scientific Computing, 2005, 22-23, 227-243.	2.3	17

#	Article	IF	Citations
19	Discontinuous Galerkin Implementation of the Extended Helmholtz Resonator Model in Time Domain. , 2006, , .		16
20	Spatial and spectral superconvergence of discontinuous Galerkin method for hyperbolic problems. Journal of Computational and Applied Mathematics, 2008, 215, 484-494.	2.0	11
21	A comparative study between two smoothing strategies for the simulation of contact with large sliding. Computational Mechanics, 2013, 51, 581-601.	4.0	11
22	On use of the thick level set method in 3D quasi-static crack simulation of quasi-brittle material. International Journal of Fracture, 2016, 202, 21-49.	2.2	9
23	Concurrent development of local and non-local damage with the Thick Level Set approach: Implementation aspects and application to quasi-brittle failure. Computer Methods in Applied Mechanics and Engineering, 2017, 327, 306-326.	6.6	9
24	Lipschitz regularization for softening material models: the Lip-field approach. Comptes Rendus - Mecanique, 2021, 349, 415-434.	0.7	6
25	Treating volumetric inequality constraint in a continuum media with a coupled X-FEM/level-set strategy. Computer Methods in Applied Mechanics and Engineering, 2012, 205-208, 16-28.	6.6	5
26	The inequality level-set approach to handle contact: membrane case. Advanced Modeling and Simulation in Engineering Sciences, 2015, 2, .	1.7	4
27	How to efficiently apply soft thin coating to existing Finite Element contact model. Finite Elements in Analysis and Design, 2020, 177, 103420.	3.2	3
28	InstabilitÃ© et bifurcation du soufflage de membranes hyperÃ©lastiques. Revue Europeenne Des Elements, 2002, 11, 479-492.	0.1	2
29	Handling Localization in Damage Models With the Thick Level Set Approach (TLS). , 2012, , .		0
30	A Regularized Brittle Damage Model Solved by a Level Set Technique. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2008, , 89-96.	0.2	0