Bruno Despres

List of Publications by Year
in descending order

23 papers	1,204 citations	687363 13 h-index	839539 18 g-index
23 all docs	23 docs citations	23 times ranked	550 citing authors

#	ARTICLE	IF	CITATIONS
1	Application of an Ultra Weak Variational Formulation of Elliptic PDEs to the Two-Dimensional Helmholtz Problem. SIAM Journal on Numerical Analysis, 1998, 35, 255-299.	2.3	314
2	Lagrangian Gas Dynamics in Two Dimensions and Lagrangian systems. Archive for Rational Mechanics and Analysis, 2005, 178, 327-372.	2.4	195
3	Uncertainty quantification for systems of conservation laws. Journal of Computational Physics, 2009, 228, 2443-2467.	3.8	156
4	Using Plane Waves as Base Functions for Solving Time Harmonic Equations with the Ultra Weak Variational Formulation. Journal of Computational Acoustics, 2003, 11, 227-238.	1.0	105
5	Asymptotic analysis of fluid models for the coupling of radiation and hydrodynamics. Journal of Quantitative Spectroscopy and Radiative Transfer, 2004, 85, 385-418.	2.3	97
6	Contact Discontinuity Capturing Schemes for Linear Advection and Compressible Gas Dynamics. Journal of Scientific Computing, 2001, 16, 479-524.	2.3	93
7	Asymptotic preserving and positive schemes for radiation hydrodynamics. Journal of Computational Physics, 2006, 215, 717-740.	3.8	63
8	Design of asymptotic preserving finite volume schemes for the hyperbolic heat equation on unstructured meshes. Numerische Mathematik, 2012, 122, 227-278.	1.9	34
9	Lagrangian systems of conservation laws. Numerische Mathematik, 2001, 89, 99-134.	1.9	29
10	Weak consistency of the cell-centered Lagrangian GLACE scheme on general meshes in any dimension. Computer Methods in Applied Mechanics and Engineering, 2010, 199, 2669-2679.	6.6	26
11	Stabilization of cell-centered compressible Lagrangian methods using subzonal entropy. Journal of Computational Physics, 2012, 231, 6559-6595.	3.8	20
12	Robust Uncertainty Propagation in Systems of Conservation Laws with the Entropy Closure Method. Lecture Notes in Computational Science and Engineering, 2013, , 105-149.	0.3	19
13	Perfect plasticity and hyperelastic models for isotropic materials. Continuum Mechanics and Thermodynamics, 2008, 20, 173-192.	2.2	15
14	Treatment of uncertain material interfaces in compressible flows. Computer Methods in Applied Mechanics and Engineering, 2011, 200, 284-308.	6.6	13
15	Polynomials with bounds and numerical approximation. Numerical Algorithms, 2017, 76, 829-859.	1.9	8
16	Trefftz discontinuous Galerkin basis functions for a class of Friedrichs systems coming from linear transport. Advances in Computational Mathematics, 2020, 46, 1.	1.6	7
17	Trefftz Discontinuous Galerkin Method for Friedrichs Systems with Linear Relaxation: Application to the P 1 Model. Computational Methods in Applied Mathematics, 2018, 18, 521-557.	0.8	6
18	Genuinely Multi-Dimensional Non-Dissipative Finite-Volume Schemes for Transport. International Journal of Applied Mathematics and Computer Science, 2007, 17, 321-328.	1.5	4

#	Article	IF	Citations
19	High-Resolution Mathematical and Numerical Analysis of Involution-Constrained PDEs. Oberwolfach Reports, 2013, 10, 2691-2747.	0.0	0
20	Navierâ€"Stokes Hierarchies of Reduced MHD Models in Tokamak Geometry. Journal of Mathematical Fluid Mechanics, 2018, 20, 329-357.	1.0	0
21	Entropy Inequality for High Order Discontinuous Galerkin Approximation of Euler Equations. , 1999, , 225-231.		0
22	Lagrangian Godunov Schemes. , 2020, , 119-124.		0
23	A Trefftz method with reconstruction of the normal derivative applied to elliptic equations. , 0, , .		0