Paola Pietra

List of Publications by Year
in descending order

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35	1,180	567281 15	395702 33
papers	citations	h-index	g-index

39	39	39	557
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Discontinuous Galerkin approximations for elliptic problems. Numerical Methods for Partial Differential Equations, 2000, 16, 365-378.	3.6	277
2	Two-Dimensional Exponential Fitting and Applications to Drift-Diffusion Models. SIAM Journal on Numerical Analysis, 1989, 26, 1342-1355.	2.3	147
3	A plane wave virtual element method for the Helmholtz problem. ESAIM: Mathematical Modelling and Numerical Analysis, 2016, 50, 783-808.	1.9	97
4	Numerical approximation of quadratic observables of SchrÃ¶dinger-type equations in the semi-classical limit. Numerische Mathematik, 1999, 81, 595-630.	1.9	93
5	Numerical simulation of semiconductor devices. Computer Methods in Applied Mechanics and Engineering, 1989, 75, 493-514.	6.6	73
6	A PHASE PLANE ANALYSIS OF TRANSONIC SOLUTIONS FOR THE HYDRODYNAMIC SEMICONDUCTOR MODEL. Mathematical Models and Methods in Applied Sciences, 1991, 01, 347-376.	3.3	65
7	Numerical Discretization of Energy-Transport Models for Semiconductors with Nonparabolic Band Structure. SIAM Journal of Scientific Computing, 2000, 22, 986-1007.	2.8	53
8	A Wigner-Measure Analysis of the Dufort--Frankel Scheme for the SchrÃ¶dinger Equation. SIAM Journal on Numerical Analysis, 2002, 40, 1281-1310.	2.3	40
9	Identification of doping profiles in semiconductor devices. Inverse Problems, 2001, 17, 1765-1795.	2.0	39
10	NEW MIXED FINITE ELEMENT SCHEMES FOR CURRENT CONTINUITY EQUATIONS. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 1990, 9, 257-268.	0.9	36
11	A Discretization Scheme for a Quasi-Hydrodynamic Semiconductor Model. Mathematical Models and Methods in Applied Sciences, 1997, 07, 935-955.	3.3	29
12	Discretization of Semiconductor Device Problems (I). Handbook of Numerical Analysis, 2005, 13, 317-441.	1.8	28
13	Boundary and interface conditions within a finite element preconditioner for spectral methods. Journal of Computational Physics, 1990, 91, 310-343.	3.8	26
14	A Mixed Finite-Element Discretization of the Energy-Transport Model for Semiconductors. SIAM Journal of Scientific Computing, 2003, 24, 2058-2075.	2.8	26
15	Stability and error analysis of mixed finite-volume methods for advection dominated problems. Computers and Mathematics With Applications, 2006, 51, 681-696.	2.7	20
16	Fixed-point algorithms for stationary flow in porous media. Computer Methods in Applied Mechanics and Engineering, 1986, 56, 17-45.	6.6	14
17	An Adaptive Mixed Scheme for Energy-Transport Simulations of Field-Effect Transistors. SIAM Journal of Scientific Computing, 2004, 25, 1698-1716.	2.8	13
18	A Hierarchy of Diffusive Higher-Order Moment Equations for Semiconductors. SIAM Journal on Applied Mathematics, 2007, 68, 171-198.	1.8	13

#	Article	IF	Citations
19	On the interplay between meshing and discretization in three-dimensional diffusion simulation. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2000, 19, 1233-1240.	2.7	12
20	A non-isentropic Euler-Poisson model for a collisionless plasma. Mathematical Methods in the Applied Sciences, 1993, 16, 409-442.	2.3	11
21	Weak Limits of the Quantum Hydrodynamic Model. VLSI Design, 1999, 9, 427-434.	0.5	10
22	Mixed finite element approximation of a degenerate elliptic problem. Numerische Mathematik, 1995, 71, 225-236.	1.9	9
23	On the classical limit of a time-dependent self-consistent field system: Analysis and computation. Kinetic and Related Models, 2017, 10, 263-298.	0.9	9
24	Diffusive semiconductor moment equations using Fermiâ€“Dirac statistics. Zeitschrift Fur Angewandte Mathematik Und Physik, 2011, 62, 623-639.	1.4	7
25	A Hybrid Classical-Quantum Transport Model for the Simulation of Carbon Nanotube Transistors. SIAM Journal of Scientific Computing, 2014, 36, B486-B507.	2.8	7
26	Space-frequency adaptive approximation for quantum hydrodynamic models. Transport Theory and Statistical Physics, 2000, 29, 375-395.	0.4	5
27	Modeling and simulation of the diffusive transport in a nanoscale Double-Gate MOSFET. Journal of Computational Electronics, 2008, 7, 52-65.	2.5	5
28	AN EFFECTIVE MASS MODEL FOR THE SIMULATION OF ULTRA-SCALED CONFINED DEVICES. Mathematical Models and Methods in Applied Sciences, 2012, 22, .	3.3	5
29	Exponentially fitted discontinuous Galerkin schemes for singularly perturbed problems. Numerical Methods for Partial Differential Equations, 2012, 28, 1747-1777.	3.6	4
30	Numerical simulations of an energy-transport model for partially quantized particles. Communications in Mathematical Sciences, 2014, 12, 99-123.	1.0	2
31	Semiclassical Analysis of Discretizations of SchrÃ¶dinger-type Equations. VLSI Design, 1999, 9, 397-413.	0.5	1
32	A quantum Drift-Diffusion model and its use into a hybrid strategy for strongly confined nanostructures. Kinetic and Related Models, 2019, 12, 217-242.	0.9	1
33	Formulation of Alternating-Direction Iterative Methods for Mixed Methods in Three Space. North-Holland Mathematics Studies, 1987, , 21-30.	0.2	0
34	A posteriori error estimator for exponentially fitted Discontinuous Galerkin approximation of advection dominated problems. Calcolo, 2016, 53, 83-103.	1.1	0
35	Hybrid coupling of a one-dimensional energy-transport SchrÃ¶dinger system. Monatshefte Fur Mathematik, 2017, 184, 563-596.	0.9	0