Roman Samulyak

List of Publications by Year
in descending order

19 papers	229 citations
933447 10 h-index	996975 15 g-index
19 all docs	19 docs citations
19 times ranked	149 citing authors

#	Article	IF	Citations
1	A magnetohydrodynamic simulation of pellet ablation in the electrostatic approximation. Nuclear Fusion, 2007, 47, 103-118.	3.5	27
2	A numerical algorithm for MHD of free surface flows at low magnetic Reynolds numbers. Journal of Computational Physics, 2007, 226, 1532-1549.	3.8	25
3	Plasma-Jet-Driven Magneto-Inertial Fusion. Fusion Science and Technology, 2019, 75, 581-598.	1.1	21
4	Spherically symmetric simulation of plasma liner driven magnetoinertial fusion. Physics of Plasmas, 2010, 17, .	1.9	20
5	Simulation study of CO_2 laser-plasma interactions and self-modulated wakefield acceleration. Physics of Plasmas, 2019, 26, 083106.	1.9	14
6	AP-Cloud: Adaptive Particle-in-Cloud method for optimal solutions to Vlasovâ€"Poisson equation. Journal of Computational Physics, 2016, 316, 682-699.	3.8	13
7	Near-field models and simulations of pellet ablation in tokamaks. Physics of Plasmas, 2021, 28, .	1.9	13
8	On the structure of plasma liners for plasma jet induced magnetoinertial fusion. Physics of Plasmas, 2013, 20, .	1.9	12
9	Lagrangian particle method for compressible fluid dynamics. Journal of Computational Physics, 2018, 362, 1-19.	3.8	12
10	Lagrangian particle model for 3D simulation of pellets and SPI fragments in tokamaks. Nuclear Fusion, 2021, 61, 046007.	3.5	12
11	Evolution of the self-injection process in long wavelength infrared laser driven LWFA. Physics of Plasmas, 2021, 28, .	1.9	11
12	Simulation of beam-induced plasma in gas-filled rf cavities. Physical Review Accelerators and Beams, 2017, 20, .	1.6	11
13	Influence of atomic processes on the implosion of plasma liners. Physics of Plasmas, 2012, 19, .	1.9	10
14	A TSTT integrated FronTier code and its applications in computational fluid physics. Journal of Physics: Conference Series, 2005, 16, 471-475.	0.4	7
15	Simulation studies of modulator for coherent electron cooling. Physical Review Accelerators and Beams, 2018, 21, .	1.6	7
16	Simulation study of the influence of experimental variations on the structure and quality of plasma liners. Physics of Plasmas, 2019, 26, 032704.	1.9	6
17	Finite Element Model for Brittle Fracture and Fragmentation. Procedia Computer Science, 2016, 80, 245-256.	2.0	5
18	SPACE: 3D parallel solvers for Vlasov-Maxwell and Vlasov-Poisson equations for relativistic plasmas with atomic transformations. Computer Physics Communications, 2022, 277, 108396.	7.5	3

#	Article	IF	Citations
19	Second Order Upwind Lagrangian Particle Method for Euler Equations. Procedia Computer Science, 2016, 80, 2433-2437.	2.0	0