Tariq D Aslam

List of Publications by Year
in descending order

52 papers	3,497 citations	430874 18 h-index	289244 40 g-index
57 all docs	57 docs citations	57 times ranked	1990 citing authors

#	Article	IF	Citations
1	A Non-oscillatory Eulerian Approach to Interfaces in Multimaterial Flows (the Ghost Fluid Method). Journal of Computational Physics, 1999, 152, 457-492.	3.8	1,587
2	Mapped weighted essentially non-oscillatory schemes: Achieving optimal order near critical points. Journal of Computational Physics, 2005, 207, 542-567.	3.8	699
3	A partial differential equation approach to multidimensional extrapolation. Journal of Computational Physics, 2004, 193, 349-355.	3.8	193
4	The Ghost Fluid Method for Deflagration and Detonation Discontinuities. Journal of Computational Physics, 1999, 154, 393-427.	3.8	149
5	Simulations of pulsating one-dimensional detonations with true fifth order accuracy. Journal of Computational Physics, 2006, 213, 311-329.	3.8	106
6	On sub-linear convergence for linearly degenerate waves in capturing schemes. Journal of Computational Physics, 2008, 227, 6985-7002.	3.8	90
7	A second-order accurate Super TimeStepping formulation for anisotropic thermal conduction. Monthly Notices of the Royal Astronomical Society, 2012, 422, 2102-2115.	4.4	90
8	A stabilized Runge–Kutta–Legendre method for explicit super-time-stepping of parabolic and mixed equations. Journal of Computational Physics, 2014, 257, 594-626.	3.8	84
9	Level Set Methods Applied to Modeling Detonation Shock Dynamics. Journal of Computational Physics, 1996, 126, 390-409.	3.8	75
10	The effect of diffusion on the dynamics of unsteady detonations. Journal of Fluid Mechanics, 2012, 699, 453-464.	3.4	40
11	Shock temperature dependent rate law for plastic bonded explosives. Journal of Applied Physics, 2018, 123, .	2.5	35
12	A Level-Set Algorithm for Tracking Discontinuities in Hyperbolic Conservation Laws. Journal of Computational Physics, 2001, 167, 413-438.	3.8	32
13	The reactants equation of state for the tri-amino-tri-nitro-benzene (TATB) based explosive PBX 9502. Journal of Applied Physics, 2017, 122, .	2.5	31
14	Title is missing!. Journal of Scientific Computing, 2003, 19, 37-62.	2.3	28
15	Stability of detonations for an idealized condensed-phase model. Journal of Fluid Mechanics, 2008, 595, 45-82.	3.4	28
16	A static PDE Approach for MultiDimensional Extrapolation Using Fast Sweeping Methods. SIAM Journal of Scientific Computing, 2014, 36, A2907-A2928.	2.8	21
17	High-order shock-fitted detonation propagation in high explosives. Journal of Computational Physics, 2017, 332, 210-235.	3.8	21
18	Verified and validated calculation of unsteady dynamics of viscous hydrogen–air detonations. Journal of Fluid Mechanics, 2015, 769, 154-181.	3.4	19

#	Article	IF	Citations
19	AWSD calibration for the HMX based explosive PBX 9501. AIP Conference Proceedings, 2020, , .	0.4	16
20	Transverse initiation of an insensitive explosive in a layered slab geometry: Front shapes and post-shock flow measurements. Combustion and Flame, 2014, 161, 1944-1954.	5.2	14
21	Richardson Extrapolation for Linearly Degenerate Discontinuities. Journal of Scientific Computing, 2013, 57, 1-18.	2.3	13
22	Temperature of shocked plastic bonded explosive PBX 9502 measured with spontaneous Stokes/anti-Stokes Raman. Journal of Applied Physics, 2018, 123, .	2.5	13
23	An equation of state for polymethylpentene (TPX) including multi-shock response. , 2012, , .		9
24	An extension of high-order shock-fitted detonation propagation in explosives. Journal of Computational Physics, 2019, 395, 765-771.	3.8	8
25	A robust three-parameter reference curve for condensed phase materials. Journal of Applied Physics, 2022, 131, .	2.5	8
26	PROTON RADIOGRAPHY OF PBX 9502 DETONATION SHOCK DYNAMICS CONFINEMENT SANDWICH TEST. AIP Conference Proceedings, 2009, , .	0.4	7
27	From level set to volume of fluid and back again at second†order accuracy. International Journal for Numerical Methods in Fluids, 2016, 80, 231-255.	1.6	7
28	Shock to detonation transition of pentaerythritol tetranitrate (PETN) initially pressed to 1.65â€‰g/cm3. Journal of Applied Physics, 2021, 130, .	2.5	7
29	The effect of transverse shock propagation on the shock-to-detonation transition process for an insensitive explosive. Proceedings of the Combustion Institute, 2015, 35, 2033-2040.	3.9	6
30	Gas gun experiments and numerical simulations on the HMX based explosive PBX 9501 in the overdriven regime. AIP Conference Proceedings, 2018, , .	0.4	6
31	Evaluation of thermodynamic closure models for partially reacted two-phase mixture of condensed phase explosives. Journal of Applied Physics, 2022, 131, .	2.5	6
32	Highly Accurate Numerical Simulations of Pulsating One-Dimensional Detonations. , 2005, , .		5
33	Shock, release and reshock of PBX 9502: Experiments and modeling. AIP Conference Proceedings, 2018, , .	0.4	5
34	On the direct construction of the steady traveling solution to high explosive sandwich, cylinder and aquarium tests via a streamline finite volume approximation. Journal of Computational Physics, 2019, 395, 653-670.	3.8	5
35	The Dynamics of Unsteady Detonation with Diffusion. , 2011, , .		4
36	Shockwave compression of Ar gas at several initial densities. AIP Conference Proceedings, 2017, , .	0.4	4

#	Article	IF	Citations
37	Shock-Fitted Calculations of Unsteady Detonation in Ozone. , 2008, , .		3
38	DETONATION SHOCK DYNAMICS CALIBRATION FOR NON-IDEAL HE: ANFO. , 2009, , .		3
39	Implicit fast sweeping method for hyperbolic systems of conservation laws. Journal of Computational Physics, 2021, 430, 110039.	3.8	3
40	A reactive flow model for the 3,3â€²-diamino-4,4â€²-azoxyfurazan based plastic bonded explosive (PBX 9701). Journal of Applied Physics, 2021, 130, .	2.5	3
41	Verification of a Specialized Hydrodynamic Simulation Code for Modeling Deflagration and Detonation of High Explosives. Journal of Verification, Validation and Uncertainty Quantification, 2022, 7, .	0.4	3
42	The Dynamics of Unsteady Detonation in Ozone. , 2009, , .		2
43	Asymmetric Material Impact: Achieving Free Surfaces Velocities Nearly Double that of the Projectile. Procedia Engineering, 2015, 103, 12-18.	1.2	2
44	Modeling of an advanced wedge test. AIP Conference Proceedings, 2020, , .	0.4	2
45	Modeling atomically mixed graded density impactors. Journal of Applied Physics, 2022, 131, .	2.5	2
46	Exact Solutions for Two-Dimensional Reactive Flow for Verificaiton of Numerical Algorithms. , 2005, , .		1
47	Direct Numerical Simulation of Detonation. AIP Conference Proceedings, 2006, , .	0.4	1
48	DETONATION SHOCK DYNAMICS CALIBRATION OF PBX 9501. , 2008, , .		0
49	On the resolution necessary to capture dynamics of unsteady detonation. , 2013, , .		0
50	Numerical Considerations in the Modeling of a High Explosive Cylinder Experiment Using an ALE Continuum Mechanics Code. Materials, 2020, 13, 4448.	2.9	0
51	Super-time-stepping schemes for parabolic equations with boundary conditions. Journal of Computational Physics, 2021, 425, 109879.	3.8	0
52	Dynamics of Unsteady Inviscid and Viscous Detonations in Hydrogen-Air. , 2012, , .		0