Som Dutta

List of Publications by Year
in descending order

22 papers	211 citations	1307594 7 h-index	1058476 14 g-index
28 all docs	28 docs citations	28 times ranked	254 citing authors

#	ARTICLE	IF	CITATIONS
1	Direct numerical simulation of the turbulent flow generated during a violent expiratory event. Physics of Fluids, 2021, 33, 035122.	4.0	39
2	Scalability of high-performance PDE solvers. International Journal of High Performance Computing Applications, 2020, 34, 562-586.	3.7	34
3	Three‐dimensional numerical modeling of the Bulle effect: the nonlinear distribution of near‐bed sediment at fluvial diversions. Earth Surface Processes and Landforms, 2017, 42, 2322-2337.	2.5	26
4	Direct numerical simulation of turbulent dispersion of evaporative aerosol clouds produced by an intense expiratory event. Physics of Fluids, 2021, 33, 033329.	4.0	24
5	Nonconforming Schwarz-spectral element methods for incompressible flow. Computers and Fluids, 2019, 191, 104237.	2.5	19
6	The effect of Schmidt number on gravity current flows: The formation of large-scale three-dimensional structures. Physics of Fluids, 2021, 33, .	4.0	11
7	Multirate timestepping for the incompressible Navier-Stokes equations in overlapping grids. Journal of Computational Physics, 2021, 437, 110335.	3.8	10
8	Effect of self-stratification on sediment diffusivity in channel flows and boundary layers: a study using direct numerical simulations. Earth Surface Dynamics, 2014, 2, 419-431.	2.4	7
9	Application of computational fluid dynamic modelling to improve flow and grit transport in Terrence J. O'Brien Water Reclamation Plant, Chicago, Illinois. Journal of Hydraulic Research/De Recherches Hydrauliques, 2014, 52, 759-774.	1.7	7
10	Nonlinear Distribution of Sediment at River Diversions: Brief History of the Bulle Effect and Its Implications. Journal of Hydraulic Engineering, 2018, 144, .	1.5	5
11	Large Eddy Simulation of three‐dimensional flow structures over wave‐generated ripples. Earth Surface Processes and Landforms, 2021, 46, 1536-1548.	2.5	5
12	Morphology of bubble dynamics and sound in heated oil. Physics of Fluids, 2022, 34, .	4.0	5
13	Large Eddy Simulation (LES) of flow and bedload transport at an idealized 90-degree diversion: Insight into Bulle-Effect. , 2016, , .		4
14	Sediment Flushout from Pond of River Diversion Barrages by Gate Operation. Water Resources Management, 2014, 28, 5335-5356.	3.9	3
15	Visualization of the Bulle-Effect at River Bifurcations. , 2018, , .		3
16	Computational Fluid Dynamics (CFD) Modeling of Flow into the Aerated Grit Chamber of the MWRD's North Side Water Reclamation Plant, Illinois. , 2010, , .		2
17	CFD Model of the Density-Driven Bidirectional Flows through the West Crack Breach in the Great Salt Lake Causeway. Water (Switzerland), 2021, 13, 2423.	2.7	2
18	High‐Resolution Large Eddy Simulations of Vortex Dynamics Over Ripple Defects Under Oscillatory Flow. Journal of Geophysical Research F: Earth Surface, 2022, 127, .	2.8	2

#	ARTICLE	IF	CITATIONS
19	Discussion of â€œEvaluation of Sediment Diversion Design Attributes and Their Impact on the Capture Efficiencyâ€•by Ahmed Gaweesh and Ehab Meselhe. Journal of Hydraulic Engineering, 2018, 144, 07018007.	1.5	1
20	Direct numerical simulation of rotating ellipsoidal particles using moving nonconforming Schwarz-spectral element method. Computers and Fluids, 2020, 205, 104556.	2.5	1
21	The effect of highâ€fidelity flow models on electromagnetic flowmeter analysis. AWWA Water Science, 2022, 4, .	2.1	1
22	10.1063/5.0045416.3. , 2021, , .		0