Takuya Matsunaga

List of Publications by Year
in descending order

19 papers	334 citations	759233 12 h-index	839539 18 g-index
19 all docs	19 docs citations	19 times ranked	164 citing authors

#	Article	IF	Citations
1	The overlapping particle technique for multi-resolution simulation of particle methods. Computer Methods in Applied Mechanics and Engineering, 2017, 325, 434-462.	6.6	48
2	An approach for accurate simulation of liquid mixing in a T-shaped micromixer. Lab on A Chip, 2013, 13, 1515.	6.0	40
3	Improved treatment of wall boundary conditions for a particle method with consistent spatial discretization. Computer Methods in Applied Mechanics and Engineering, 2020, 358, 112624.	6.6	39
4	Swirl-inducing inlet for passive micromixers. RSC Advances, 2014, 4, 824-829.	3.6	28
5	Moving surface mesh-incorporated particle method for numerical simulation of a liquid droplet. Journal of Computational Physics, 2020, 409, 109349.	3.8	25
6	Imposing accurate wall boundary conditions in corrective-matrix-based moving particle semi-implicit method for free surface flow. International Journal for Numerical Methods in Fluids, 2021, 93, 148-175.	1.6	22
7	Consistent Robin boundary enforcement of particle method for heat transfer problem with arbitrary geometry. International Journal of Heat and Mass Transfer, 2020, 157, 119919.	4.8	18
8	Stabilized LSMPS method for complex free-surface flow simulation. Computer Methods in Applied Mechanics and Engineering, 2022, 389, 114416.	6.6	18
9	An ALE particle method using upwind interpolation. Computers and Fluids, 2017, 145, 21-36.	2.5	17
10	New insights into error accumulation due to biased particle distribution in semi-implicit particle methods. Computer Methods in Applied Mechanics and Engineering, 2022, 388, 114219.	6.6	17
11	Performance improvements of differential operators code for MPS method on GPU. Computational Particle Mechanics, 2015, 2, 261-272.	3.0	14
12	A wall boundary treatment using analytical volume integrations in a particle method. International Journal for Numerical Methods in Engineering, 2020, 121, 4101-4133.	2.8	14
13	Hybrid grid-particle method for fluid mixing simulation. Computational Particle Mechanics, 2015, 2, 233-246.	3.0	12
14	A coupled 3D isogeometric/least-square MPS approach for modeling fluid–structure interactions. Computer Methods in Applied Mechanics and Engineering, 2021, 373, 113538.	6.6	11
15	Semi-Lagrangian Method for Numerical Analysis of Fluid Mixing in T-Shaped Micromixer. Journal of Chemical Engineering of Japan, 2013, 46, 699-708.	0.6	4
16	Bucket-based multigrid preconditioner for solving pressure Poisson equation using a particle method. Computers and Fluids, 2019, 191, 104242.	2.5	3
17	Improvement of the time marching method in a particle method. Transactions of the JSME (in Japanese), 2021, 87, 20-00437-20-00437.	0.2	3
18	Axisymmetric free-surface flow simulation using the moving surface mesh particle method and application to drop formation. Journal of Computational Physics, 2022, , 111298.	3.8	1

#	Article	IF	Citations
19	Adaptive resizing-based multi-resolution particle method. Mechanical Engineering Journal, 2021, , .	0.4	0