Koeli Ghoshal

List of Publications by Year
in descending order

47 papers	675 citations	623188 14 h-index	642321 23 g-index
49 all docs	49 docs citations	49 times ranked	297 citing authors

#	Article	IF	Citations
1	Nonlinear Partial Differential Equation for Unsteady Vertical Distribution of Suspended Sediments in Open Channel Flows: Effects of Hindered Settling and Concentration-Dependent Mixing Length. Journal of Engineering Mechanics - ASCE, 2022, 148, .	1.6	8
2	Semianalytical Solution for Nonequilibrium Suspended Sediment Transport in Open Channels with Concentration-Dependent Settling Velocity. Journal of Hydrologic Engineering - ASCE, 2022, 27, .	0.8	5
3	Two-dimensional distribution of stream-wise mean velocity in turbulent flow with effect of suspended sediment concentration. Environmental Fluid Mechanics, 2022, 22, 133-158.	0.7	5
4	Generalized non-equilibrium suspended sediment transport model with hindered settling effect for open channel flows. Journal of Hydrology, 2022, , 128145.	2.3	3
5	Mathematical modelling of streamwise velocity profile in open channels using Tsallis entropy. Communications in Nonlinear Science and Numerical Simulation, 2021, 94, 105581.	1.7	5
6	An explicit expression for velocity profile in presence of secondary current and sediment in an open channel turbulent flow. Canadian Journal of Civil Engineering, 2021, 48, 52-61.	0.7	5
7	Unsteady two-dimensional suspended sediment transport in open channel flow subject to deposition and re-entrainment. Journal of Engineering Mathematics, 2021, 126, 1.	0.6	3
8	Effects of non-locality on unsteady nonequilibrium sediment transport in turbulent flows: A study using space fractional ADE with fractional divergence. Applied Mathematical Modelling, 2021, 96, 617-644.	2.2	4
9	Two-dimensional distribution of streamwise velocity in open channel flow using maximum entropy principle: Incorporation of additional constraints based on conservation laws. Computer Methods in Applied Mechanics and Engineering, 2020, 361, 112738.	3.4	11
10	On the role of Tsallis entropy index for velocity modelling in open channels. Physica A: Statistical Mechanics and Its Applications, 2020, 557, 124901.	1.2	6
11	Semi-analytical solution for one-dimensional unsteady sediment transport model in open channel with concentration-dependent settling velocity. Physica Scripta, 2020, 95, 055204.	1.2	13
12	Semianalytical Solution for Simultaneous Distribution of Fluid Velocity and Sediment Concentration in Open-Channel Flow. Journal of Engineering Mechanics - ASCE, 2019, 145, .	1.6	12
13	Distribution of sediment concentration in debris flow using RÃ©nyi entropy. Physica A: Statistical Mechanics and Its Applications, 2019, 521, 267-281.	1.2	9
14	Application of relative entropy theory to streamwise velocity profile in open-channel flow: effect of prior probability distributions. Zeitschrift Fur Angewandte Mathematik Und Physik, 2019, 70, 1.	0.7	6
15	Reinvestigation on mixing length in an open channel turbulent flow. Acta Geophysica, 2018, 66, 93-107.	1.0	10
16	A mathematical model on depth-averaged β-factor in open-channel turbulent flow. Environmental Earth Sciences, 2018, 77, 1.	1.3	8
17	Vertical Sediment Concentration Distribution in High-Concentrated Flows: An Analytical Solution Using Homotopy Analysis Method. Communications in Theoretical Physics, 2018, 70, 367.	1.1	10
18	An explicit analytical expression for bed-load layer thickness based on maximum entropy principle. Physics Letters, Section A: General, Atomic and Solid State Physics, 2018, 382, 2297-2304.	0.9	15

#	Article	IF	Citations
19	Suspended Sediment Concentration and Discharge in Open Channels Using RÃ©nyi Entropy. Journal of Hydrologic Engineering - ASCE, 2018, 23, .	0.8	5
20	One-Dimensional velocity distribution in open channels using Renyi entropy. Stochastic Environmental Research and Risk Assessment, 2017, 31, 949-959.	1.9	42
21	Theoretical modeling of suspended grain-size distribution in fluvial environment by stratification and secondary current approaches. Environmental Fluid Mechanics, 2017, 17, 591-613.	0.7	0
22	A mathematical model for type II profile of concentration distribution in turbulent flows. Environmental Fluid Mechanics, 2017, 17, 449-472.	0.7	6
23	Renyi Entropy and Random Walk Hypothesis to Study Suspended Sediment Concentration. Journal of Hydrologic Engineering - ASCE, 2017, 22, .	0.8	7
24	Hydrodynamic interaction in suspended sediment distribution of open channel turbulent flow. Applied Mathematical Modelling, 2017, 49, 630-646.	2.2	21
25	Hindered Settling Velocity in Particle-Fluid Mixture: A Theoretical Study Using the Entropy Concept. Journal of Hydraulic Engineering, 2017, 143, .	0.7	20
26	Derivation of Rouse equation for sediment concentration using Shannon entropy. Physica A: Statistical Mechanics and Its Applications, 2017, 465, 494-499.	1.2	26
27	Entropy-Based Modeling of Velocity Lag in Sediment-Laden Open Channel Turbulent Flow. Entropy, 2016, 18, 318.	1.1	9
28	Effect of particle concentration on sediment and turbulent diffusion coefficients in open-channel turbulent flow. Environmental Earth Sciences, 2016, 75, 1.	1.3	43
29	Two dimensional velocity distribution in open channels using Renyi entropy. Physica A: Statistical Mechanics and Its Applications, 2016, 450, 546-559.	1.2	30
30	Vertical distribution of fluid velocity and suspended sediment in open channel turbulent flow. Fluid Dynamics Research, 2016, 48, 035501.	0.6	14
31	Velocity lag between particle and liquid in sediment-laden open channel turbulent flow. European Journal of Mechanics, B/Fluids, 2016, 56, 130-142.	1.2	6
32	Unique shapes of liquid bells as a function of flow parameters: A brief overview and some new results. European Journal of Mechanics, B/Fluids, 2015, 50, 98-109.	1.2	1
33	Concentration distribution in an open channel flow by observational approach. ISH Journal of Hydraulic Engineering, 2014, 20, 75-89.	1.1	1
34	An analytical model for bedload layer thickness. Acta Mechanica, 2014, 225, 701-714.	1.1	12
35	Effects of secondary current and stratification on suspension concentration in an open channel flow. Environmental Fluid Mechanics, 2014, 14, 1357-1380.	0.7	31
36	Mathematical model on grain-size distribution in suspension over sand-gravel bed. Journal of Hydrology, 2014, 511, 640-647.	2.3	8

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37	Grain-size distribution in suspension over a sand-gravel bed in open channel flow. International Journal of Sediment Research, 2014, 29, 184-194.	1.8	15
38	Effect of bed roughness on grain-size distribution in an open channel flow. Journal of Hydro-Environment Research, 2014, 8, 441-451.	1.0	10
39	Explicit formulation for suspended concentration distribution with near-bed particle deficiency. Powder Technology, 2014, 253, 429-437.	2.1	7
40	Hindered settling with an apparent particle diameter concept. Advances in Water Resources, 2013, 60, 178-187.	1.7	22
41	Influence of secondary current on vertical concentration distribution in an open channel flow. ISH Journal of Hydraulic Engineering, 2013, 19, 88-96.	1.1	14
42	An Analytical Model for Velocity Distribution and Dip-Phenomenon in Uniform Open Channel Flows. International Journal of Fluid Mechanics Research, 2012, 39, 381-395.	0.4	34
43	Grain-size distributions of bed load: Inferences from flume experiments using heterogeneous sediment beds. Sedimentary Geology, 2010, 223, 1-14.	1.0	25
44	Turbulence statistics of flow over isolated scalene and isosceles triangular-shaped bedforms. Journal of Hydraulic Research/De Recherches Hydrauliques, 2009, 47, 626-637.	0.7	45
45	Velocity and concentration profiles in uniform sediment-laden flow. Applied Mathematical Modelling, 2006, 30, 164-176.	2.2	45
46	Influence of bed roughness on sediment suspension: experimental and theoretical studies. Journal of Hydraulic Research/De Recherches Hydrauliques, 2005, 43, 245-257.	0.7	33
47	Application of homotopy analysis method to the determination of vertical sediment concentration distribution with shear-induced diffusivity. Engineering With Computers, 0, , 1.	3.5	5