# Thomas PÃ¤htz

List of Publications by Year
in descending order



Version: 2024-02-01

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|---|---|---|---|
| 29 papers | 918 citations | 471509 17 h-index | 477307 29 g-index |
| 36 all docs | 36 docs citations | 36 times ranked | 757 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Megaripple mechanics: bimodal transport ingrained in bimodal sands. Nature Communications, 2022, 13, 162. | 12.8 | 13 |
| 2 | Fluid-particle interaction regimes during the evolution of turbidity currents from a coupled LES/DEM model. Advances in Water Resources, 2022, 163, 104171. | 3.8 | 9 |
| 3 | Unified Model of Sediment Transport Threshold and Rate Across Weak and Intense Subaqueous Bedload, Windblown Sand, and Windblown Snow. Journal of Geophysical Research F: Earth Surface, 2021, 126, e2020JF005859. | 2.8 | 15 |
| 4 | Aeolian sand transport: Scaling of mean saltation length and height and implications for mass flux scaling. Aeolian Research, 2021, 52, 100730. | 2.7 | 6 |
| 5 | The Physics of Sediment Transport Initiation, Cessation, and Entrainment Across Aeolian and Fluvial Environments. Reviews of Geophysics, 2020, 58, e2019RG000679. | 23.0 | 97 |
| 6 | Unification of Aeolian and Fluvial Sediment Transport Rate from Granular Physics. Physical Review Letters, 2020, 124, 168001. | 7.8 | 42 |
| 7 | Large Effects of Particle Size Heterogeneity on Dynamic Saltation Threshold. Journal of Geophysical Research F: Earth Surface, 2019, 124, 2311-2321. | 2.8 | 8 |
| 8 | Local Rheology Relation with Variable Yield Stress Ratio across Dry, Wet, Dense, and Dilute Granular Flows. Physical Review Letters, 2019, 123, 048001. | 7.8 | 34 |
| 9 | The Effect of Turbulence on Drifting Snow Sublimation. Geophysical Research Letters, 2019, 46, 11568-11575. | 4.0 | 20 |
| 10 | Comment on â€œDistinct Thresholds for the Initiation and Cessation of Aeolian Saltation From Field Measurementsâ€•by Raleigh L. Martin and Jasper F. Kok: Alternative Interpretation of Measured Thresholds as Two Distinct Cessation Thresholds. Journal of Geophysical Research F: Earth Surface, 2018, 123, 3388-3391. | 2.8 | 3 |
| 11 | The Critical Role of the Boundary Layer Thickness for the Initiation of Aeolian Sediment Transport. Geosciences (Switzerland), 2018, 8, 314. | 2.2 | 27 |
| 12 | Front Velocity and Front Location of Lock-Exchange Gravity Currents Descending a Slope in a Linearly Stratified Environment. Journal of Hydraulic Engineering, 2018, 144, . | 1.5 | 12 |
| 13 | The Cessation Threshold of Nonsuspended Sediment Transport Across Aeolian and Fluvial Environments. Journal of Geophysical Research F: Earth Surface, 2018, 123, 1638-1666. | 2.8 | 42 |
| 14 | Universal friction law at granular solid-gas transition explains scaling of sediment transport load with excess fluid shear stress. Physical Review Fluids, 2018, 3, . | 2.5 | 22 |
| 15 | Limitations of empirical sediment transport formulas for shallow water and their consequences for swash zone modelling. Journal of Hydraulic Research/De Recherches Hydrauliques, 2017, 55, 114-120. | 1.7 | 6 |
| 16 | Fluid forces or impacts: What governs the entrainment of soil particles in sediment transport mediated by a Newtonian fluid?. Physical Review Fluids, 2017, 2, . | 2.5 | 30 |
| 17 | Is it appropriate to model turbidity currents with the threeâ€equation model?. Journal of Geophysical Research F: Earth Surface, 2015, 120, 1153-1170. | 2.8 | 15 |
| 18 | Modeling of Breaching Due to Overtopping Flow and Waves Based on Coupled Flow and Sediment Transport. Water (Switzerland), 2015, 7, 4283-4304. | 2.7 | 10 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Discrete Element Method simulations of the saturation of aeolian sand transport. Geophysical Research Letters, 2015, 42, 2063-2070. | 4.0 | 27 |
| 20 | An optimized dispersionâ€“relation-preserving combined compact difference scheme to solve advection equations. Journal of Computational Physics, 2015, 300, 92-115. | 3.8 | 11 |
| 21 | The fluctuation energy balance in non-suspended fluid-mediated particle transport. Physics of Fluids, 2015, 27, 013303. | 4.0 | 13 |
| 22 | Electric Field and Humidity Trigger Contact Electrification. Physical Review X, 2015, 5, . | 8.9 | 30 |
| 23 | Well-balanced and flexible morphological modeling of swash hydrodynamics and sediment transport. Coastal Engineering, 2015, 96, 27-37. | 4.0 | 19 |
| 24 | Analytical model for flux saturation in sediment transport. Physical Review E, 2014, 89, 052213. | 2.1 | 35 |
| 25 | Midair Collisions Enhance Saltation. Physical Review Letters, 2013, 111, 058001. | 7.8 | 53 |
| 26 | Flux Saturation Length of Sediment Transport. Physical Review Letters, 2013, 111, 218002. | 7.8 | 62 |
| 27 | The apparent roughness of a sand surface blown by wind from an analytical model of saltation. New Journal of Physics, 2012, 14, 043035. | 2.9 | 62 |
| 28 | Jump at the Onset of Saltation. Physical Review Letters, 2011, 107, 098001. | 7.8 | 53 |
| 29 | Why do particle clouds generate electric charges?. Nature Physics, 2010, 6, 364-368. | 16.7 | 142 |