Sergio A Galindo-Torres

List of Publications by Year
in descending order

64 papers	1,405 citations	361296 20 h-index	360920 35 g-index
65 all docs	65 docs citations	65 times ranked	1044 citing authors

#	Article	IF	Citations
1	Transient Two-Phase Flow in Porous Media: A Literature Review and Engineering Application in Geotechnics. Geotechnics, 2022, 2, 32-90.	1.2	21
2	Random walk discrete element lattice boltzmann model for scalar transport in fluid and particle flows with strict scalar mass conservation. International Journal of Heat and Mass Transfer, 2022, 187, 122577.	2.5	7
3	Pore-scale observations of natural hydrate-bearing sediments via pressure core sub-coring and micro-CT scanning. Scientific Reports, 2022, 12, 3471.	1.6	10
4	Influence of cross-section shape on granular column collapses. Powder Technology, 2022, 407, 117591.	2.1	4
5	Metaball based discrete element method for general shaped particles with round features. Computational Mechanics, 2021, 67, 1243-1254.	2.2	13
6	Deposition morphology of granular column collapses. Granular Matter, 2021, 23, 1.	1.1	16
7	Slip-Flow Regimes in Nanofluidics: A Universal Superexponential Model. Physical Review Applied, 2021, 15, .	1.5	7
8	Discovery of Dynamic Two-Phase Flow in Porous Media Using Two-Dimensional Multiphase Lattice Boltzmann Simulation. Energies, 2021, 14, 4044.	1.6	14
9	Coupled material point Lattice Boltzmann method for modeling fluidâ€“structure interactions with large deformations. Computer Methods in Applied Mechanics and Engineering, 2021, 385, 114040.	3.4	14
10	Finiteâ€Size Analysis of the Collapse of Dry Granular Columns. Geophysical Research Letters, 2021, 48, e2021GL096054.	1.5	10
11	A pore-scale study of flow and transport across the sedimentâ€“water interface: From dispersive to turbulent regimes. Physics of Fluids, 2021, 33, 126601.	1.6	3
12	A microscale analytical study on the strength of two-dimensional frictional granular materials. International Journal of Geotechnical Engineering, 2020, 14, 302-311.	1.1	2
13	Intercomparison of boundary schemes in Lattice Boltzmann method for flow simulation in porous media. International Journal for Numerical Methods in Fluids, 2020, 92, 2009-2029.	0.9	10
14	An efficient framework for particle-fluid interaction using Discrete Element Lattice Boltzmann Method: Coupling scheme and periodic boundary condition. Computers and Fluids, 2020, 208, 104613.	1.3	12
15	Numerical investigations of CO2 and N2 miscible flow as the working fluid in enhanced geothermal systems. Energy, 2020, 206, 118062.	4.5	12
16	Smooth particle hydrodynamics and discrete element method coupling scheme for the simulation of debris flows. Computers and Geotechnics, 2020, 125, 103669.	2.3	31
17	Application of high-order lattice Boltzmann pseudopotential models. Physical Review E, 2020, 101, 033303.	0.8	6
18	AUS: Anisotropic undrained shear strength model for clays. International Journal for Numerical and Analytical Methods in Geomechanics, 2019, 43, 2652-2666.	1.7	47

#	Article	IF	Citations
19	Interaction pressure tensor on high-order lattice Boltzmann models for nonideal fluids. Physical Review E, 2019, 99, 063318.	0.8	9
20	Investigations of heat extraction for water and CO2 flow based on the rough-walled discrete fracture network. Energy, 2019, 189, 116184.	4.5	29
21	Pore-Scale Simulations of Simultaneous Steady-State Two-Phase Flow Dynamics Using a Lattice Boltzmann Model: Interfacial Area, Capillary Pressure and Relative Permeability. Transport in Porous Media, 2019, 129, 295-320.	1.2	18
22	Numerical investigation of liquid and supercritical CO2 flow behaviors through 3D self-affine rough fractures. Fuel, 2019, 251, 669-682.	3.4	4
23	Micro-scale Flow Conditions Leading to the Onset of Erosion. Lecture Notes in Civil Engineering, 2019, , 180-188.	0.3	0
24	A unified Lagrangian formulation for solid and fluid dynamics and its possibility for modelling submarine landslides and their consequences. Computer Methods in Applied Mechanics and Engineering, 2019, 343, 314-338.	3.4	64
25	SPH approach for simulating hydro-mechanical processes with large deformations and variable permeabilities. Acta Geotechnica, 2018, 13, 303.	2.9	10
26	Synthetic low-strength materials as rock substitutes for physical model studies. Geomechanics and Geophysics for Geo-Energy and Geo-Resources, 2018, 4, 273-297.	1.3	5
27	Micromechanics of Liquefaction in Granular Materials. Physical Review Applied, 2018, 10, .	1.5	11
28	An improved immersed moving boundary for the coupled discrete element lattice Boltzmann method. Computers and Fluids, 2018, 177, 12-19.	1.3	18
29	Slip-flow lattice-Boltzmann simulations in ducts and porous media: A full rehabilitation of spurious velocities. Physical Review E, 2018, 98, .	0.8	11
30	A lattice Boltzmann investigation of steady-state fluid distribution, capillary pressure and relative permeability of a porous medium: Effects of fluid and geometrical properties. Advances in Water Resources, 2018, 116, 153-166.	1.7	49
31	Laboratory Investigation of Flow Paths in 3D Self-Affine Fractures with Lattice Boltzmann Simulations. Energies, 2018, 11, 168.	1.6	8
32	Smoothed Particle Hydrodynamics for investigating hydraulic and mechanical behaviour of an embankment under action of flooding and overburden loads. Computers and Geotechnics, 2018, 94, 31-45.	2.3	11
33	An efficient Discrete Element Lattice Boltzmann model for simulation of particle-fluid, particle-particle interactions. Computers and Fluids, 2017, 147, 63-71.	1.3	33
34	Parametric study on smoothed particle hydrodynamics for accurate determination of drag coefficient for a circular cylinder. Water Science and Engineering, 2017, 10, 143-153.	1.4	22
35	Closure to â€œProbability of Transportation of Loose Particles in Suffusion Assessment by Self-Filtration Criteriaâ€•by Huu Duc To, Alexander Scheuermann, and Sergio A. Galindo-Torres. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2017, 143, 07017002.	1.5	0
36	Experimental study of porous media flow using hydro-gel beads and LED based PIV. Measurement Science and Technology, 2017, 28, 015902.	1.4	22

#	Article	IF	Citations
37	Determination of Thermal Conductivity of Soil Using Standard Cone Penetration Test. Energy Procedia, 2017, 118, 172-178.	1.8	5
38	Image processing based characterisation of coal cleat networks. International Journal of Coal Geology, 2017, 169, 1-21.	1.9	42
39	A calibration methodology to obtain material parameters for the representation of fracture mechanics based on discrete element simulations. Computers and Geotechnics, 2017, 81, 274-283.	2.3	26
40	Lattice Boltzmann simulations of settling behaviors of irregularly shaped particles. Physical Review E, 2016, 93, 062612.	0.8	18
41	Sequential sphere packing by trilateration equations. Granular Matter, 2016, 18, 1.	1.1	7
42	Probability of Transportation of Loose Particles in Suffusion Assessment by Self-Filtration Criteria. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2016, 142, .	1.5	21
43	Boundary effects on the Soil Water Characteristic Curves obtained from lattice Boltzmann simulations. Computers and Geotechnics, 2016, 71, 136-146.	2.3	14
44	Scaling solutions for connectivity and conductivity of continuous random networks. Physical Review E, 2015, 92, 041001.	0.8	8
45	Microbubble transport in waterâ€saturated porous media. Water Resources Research, 2015, 51, 4359-4373.	1.7	19
46	Numerical investigation of the effect of preexisting discontinuities on hydraulic stimulation. Computers and Geotechnics, 2015, 69, 320-328.	2.3	9
47	A micro-mechanical approach for the study of contact erosion. Acta Geotechnica, 2015, 10, 357-368.	2.9	37
48	Primary fabric fraction analysis of granular soils. Acta Geotechnica, 2015, 10, 375-387.	2.9	20
49	Particle Image Velocimetry with high power Light Emitting Diodes for flow through porous medium. , 2015, , .		3
50	Strength of non-spherical particles with anisotropic geometries under triaxial and shearing loading configurations. Granular Matter, 2013, 15, 531-542.	1.1	26
51	A Lattice Boltzmann model for studying transient effects during imbibitionâ€“drainage cycles in unsaturated soils. Computer Physics Communications, 2013, 184, 1086-1093.	3.0	33
52	A coupled Discrete Element Lattice Boltzmann Method for the simulation of fluidâ€“solid interaction with particles of general shapes. Computer Methods in Applied Mechanics and Engineering, 2013, 265, 107-119.	3.4	119
53	Numerical study on the permeability in a tensorial form for laminar flow in anisotropic porous media. Physical Review E, 2012, 86, 046306.	0.8	35
54	Effect of frictional heat dissipation on the loss of soil strength. Physical Review E, 2012, 86, 061302.	0.8	1

#	Article	IF	Citations
55	Bottlenecks in granular flow: When does an obstacle increase the flow rate in an hourglass?. Physical Review E, 2012, 85, 020301.	0.8	58
56	Breaking processes in three-dimensional bonded granular materials with general shapes. Computer Physics Communications, 2012, 183, 266-277.	3.0	101
57	Molecular dynamics simulations of complex-shaped particles using Voronoi-based spheropolyhedra. Physical Review E, 2010, 81, 061303.	0.8	100
58	Minkowski-Voronoi diagrams as a method to generate random packings of spheropolygons for the simulation of soils. Physical Review E, 2010, 82, 056713.	0.8	56
59	Molecular dynamics simulation of complex particles in three dimensions and the study of friction due to nonconvexity. Physical Review E, 2009, 79, 060301.	0.8	55
60	Simulation of the hydraulic fracture process in two dimensions using a discrete element method. Physical Review E, 2007, 75, 066109.	0.8	20
61	Numerical Simulation of Tank Discharge Using Smoothed Particle Hydrodynamics. Applied Mechanics and Materials, 0, 553, 168-173.	0.2	6
62	An Analysis of the Strength of Anisotropic Granular Assemblies via Discrete Methods. Applied Mechanics and Materials, 0, 553, 525-530.	0.2	0
63	A Numerical Approach for the Determination of the Primary Fabric of Granular Soils. Applied Mechanics and Materials, 0, 553, 489-494.	0.2	3
64	Micro-Mechanics of Contact Erosion. Applied Mechanics and Materials, 0, 553, 513-518.	0.2	0