Peter K Kang

List of Publications by Year
in descending order

40 papers	**1,248** citations	394286 **19** h-index	360920 **35** g-index
40 all docs	**40** docs citations	**40** times ranked	**867** citing authors

#	ARTICLE	IF	CITATIONS
1	Pore‐scale intermittent velocity structure underpinning anomalous transport through 3‐D porous media. Geophysical Research Letters, 2014, 41, 6184-6190.	1.5	131
2	Impact of velocity correlation and distribution on transport in fractured media: Field evidence and theoretical model. Water Resources Research, 2015, 51, 940-959.	1.7	124
3	Emergence of anomalous transport in stressed rough fractures. Earth and Planetary Science Letters, 2016, 454, 46-54.	1.8	109
4	Spatial Markov Model of Anomalous Transport Through Random Lattice Networks. Physical Review Letters, 2011, 107, 180602.	2.9	96
5	Anomalous transport on regular fracture networks: Impact of conductivity heterogeneity and mixing at fracture intersections. Physical Review E, 2015, 92, 022148.	0.8	84
6	Continuous time random walks for the evolution of Lagrangian velocities. Physical Review Fluids, 2016, 1, .	1.0	84
7	Anomalous transport in disordered fracture networks: Spatial Markov model for dispersion with variable injection modes. Advances in Water Resources, 2017, 106, 80-94.	1.7	59
8	Linking Structural and Transport Properties in Three‐Dimensional Fracture Networks. Journal of Geophysical Research: Solid Earth, 2019, 124, 1185-1204.	1.4	57
9	Stress‐Induced Anomalous Transport in Natural Fracture Networks. Water Resources Research, 2019, 55, 4163-4185.	1.7	46
10	Impact of surface porosity on water flux and structural parameter in forward osmosis. Desalination, 2018, 439, 46-57.	4.0	35
11	Anomalous Transport in Three‐Dimensional Discrete Fracture Networks: Interplay Between Aperture Heterogeneity and Injection Modes. Water Resources Research, 2020, 56, e2020WR027378.	1.7	31
12	Sequential approach to joint flow‐seismic inversion for improved characterization of fractured media. Water Resources Research, 2016, 52, 903-919.	1.7	29
13	Emergence of Stable Laws for First Passage Times in Three-Dimensional Random Fracture Networks. Physical Review Letters, 2019, 123, 248501.	2.9	28
14	Three-Dimensional Vortex-Induced Reaction Hot Spots at Flow Intersections. Physical Review Letters, 2020, 124, 144501.	2.9	28
15	Improved characterization of heterogeneous permeability in saline aquifers from transient pressure data during freshwater injection. Water Resources Research, 2017, 53, 4444-4458.	1.7	26
16	Continuous time random walks for non-local radial solute transport. Advances in Water Resources, 2015, 82, 16-26.	1.7	25
17	Anomalous transport through free-flow-porous media interface: Pore-scale simulation and predictive modeling. Advances in Water Resources, 2020, 135, 103467.	1.7	24
18	Roughness, inertia, and diffusion effects on anomalous transport in rough channel flows. Physical Review Fluids, 2021, 6, .	1.0	23

#	Article	IF	Citations
19	Potential impact of pore-scale incomplete mixing on biodegradation in aquifers: From batch experiment to field-scale modeling. Advances in Water Resources, 2019, 123, 1-11.	1.7	22
20	Evaluation of a real-time visualization system for scaling detection during DCMD, and its correlation with wetting. Desalination, 2019, 454, 59-70.	4.0	21
21	Well radius of influence and radius of investigation: What exactly are they and how to estimate them?. Journal of Hydrology, 2020, 583, 124646.	2.3	21
22	Predictability of anomalous transport on lattice networks with quenched disorder. Physical Review E, 2011, 83, 030101.	0.8	19
23	Origin of structural parameter inconsistency in forward osmosis models: A pore-scale CFD study. Desalination, 2017, 421, 47-60.	4.0	18
24	Recirculating flow-induced anomalous transport in meandering open-channel flows. Advances in Water Resources, 2020, 141, 103603.	1.7	16
25	Theoretical Analysis of Groundwater Flow Patterns Near Stagnation Points. Water Resources Research, 2019, 55, 1624-1650.	1.7	15
26	Impact of Confining Stress on Capillary Pressure Behavior During Drainage Through Rough Fractures. Geophysical Research Letters, 2019, 46, 7424-7436.	1.5	12
27	Spatiotemporal evolution of iron and sulfate concentrations during riverbank filtration: Field observations and reactive transport modeling. Journal of Contaminant Hydrology, 2020, 234, 103697.	1.6	8
28	Microfluidic pore model study of precipitates induced by the pore-scale mixing of an iron sulfate solution with simulated groundwater. Chemosphere, 2021, 271, 129857.	4.2	8
29	Machine learning to predict effective reaction rates in 3D porous media from pore structural features. Scientific Reports, 2022, 12, 5486.	1.6	8
30	Maximizing the value of pressure data in saline aquifer characterization. Advances in Water Resources, 2017, 109, 14-28.	1.7	7
31	Optimal fluid stretching for mixing-limited reactions in rough channel flows. Journal of Fluid Mechanics, 2021, 916, .	1.4	7
32	Pore-Scale Flow Effects on Solute Transport in Turbulent Channel Flows Over Porous Media. Transport in Porous Media, 2023, 146, 223-248.	1.2	6
33	Mixing-Induced Bimolecular Reactive Transport in Rough Channel Flows: Pore-Scale Simulation and Stochastic Upscaling. Transport in Porous Media, 0, , 1.	1.2	5
34	A Hybrid Optimization Methodology Identifying Optimal Operating Conditions for Carbon Dioxide Injection in Geologic Carbon Sequestration. International Journal of Greenhouse Gas Control, 2020, 98, 103067.	2.3	3
35	Evolution of the radius of investigation during recovery tests. Journal of Hydrology, 2020, 590, 125346.	2.3	3
36	Influence of hydrogeological and operational parameters on well pumping capacity. Journal of Hydrology, 2022, 608, 127643.	2.3	3

#	Article	IF	Citations
37	Joint flow seismic inversion for characterizing fractured reservoirs: Theoretical approach and numerical modeling. , 2013, , .		2
38	Effects of variable-density flow on the value-of-information of pressure and concentration data for aquifer characterization. Advances in Water Resources, 2020, 135, 103468.	1.7	2
39	Identification of iron and sulfate release processes during riverbank filtration using chemical mass balance modeling. Environmental Geochemistry and Health, 2021, 43, 3583-3596.	1.8	2
40	Aquifer-scale mapping of injection capacity for potential aquifer storage and recovery sites: Methodology development and case studies in Minnesota, USA. Journal of Hydrology: Regional Studies, 2022, 40, 101048.	1.0	1