Chongyang Shen

List of Publications by Year
in descending order

58 papers	1,853 citations	236833 25 h-index	265120 42 g-index
62 all docs	62 docs citations	62 times ranked	1275 citing authors

#	Article	IF	Citations
1	Impact of heavy metal cations on deposition and release of clay colloids in saturated porous media. Vadose Zone Journal, 2023, 22, .	1.3	6
2	Hydrogen peroxide and high-temperature heating differently alter the stability and aggregation of black soil colloids. Chemosphere, 2022, 287, 132018.	4.2	8
3	Novel analytical expressions for determining van der Waals interaction between a particle and airâ€“water interface: Unexpected stronger van der Waals force than capillary force. Journal of Colloid and Interface Science, 2022, 610, 982-993.	5.0	6
4	Important Role of Concave Surfaces in Deposition of Colloids under Favorable Conditions as Revealed by Microscale Visualization. Environmental Science & Technology, 2022, 56, 4121-4131.	4.6	7
5	Environmental applications and risks of nanomaterials: An introduction to CREST publications during 2018â€“2021. Critical Reviews in Environmental Science and Technology, 2022, 52, 3753-3762.	6.6	16
6	Mesoscale Aggregation of Sulfur-Rich Asphaltenes: <i>In Situ</i> Microscopy and Coarse-Grained Molecular Simulation. Langmuir, 2022, , .	1.6	2
7	Significant Mobility of Novel Heteroaggregates of Montmorillonite Microparticles with Nanoscale Zerovalent Irons in Saturated Porous Media. Toxics, 2022, 10, 332.	1.6	0
8	Micro- and nanoplastics retention in porous media exhibits different dependence on grain surface roughness and clay coating with particle size. Water Research, 2022, 221, 118717.	5.3	15
9	Application of the RUSLE for Determining Riverine Heavy Metal Flux in the Upper Pearl River Basin, China. Bulletin of Environmental Contamination and Toxicology, 2021, 106, 24-32.	1.3	3
10	Colloid Interaction Energies for Surfaces with Steric Effects and Incompressible and/or Compressible Roughness. Langmuir, 2021, 37, 1501-1510.	1.6	20
11	Why Are Viruses Spiked?. MSphere, 2021, 6, .	1.3	5
12	Evidence on enhanced transport and release of silver nanoparticles by colloids in soil due to modification of grain surface morphology and co-transport. Environmental Pollution, 2021, 276, 116661.	3.7	18
13	Observed equilibrium partition and second-order kinetic interaction of quantum dot nanoparticles in saturated porous media. Journal of Contaminant Hydrology, 2021, 240, 103799.	1.6	5
14	A Review on Montmorillonite-Supported Nanoscale Zerovalent Iron for Contaminant Removal from Water and Soil. Adsorption Science and Technology, 2021, 2021, .	1.5	4
15	Role and importance of surface heterogeneities in transport of particles in saturated porous media. Critical Reviews in Environmental Science and Technology, 2020, 50, 244-329.	6.6	50
16	An empirical soil water retention model based on probability laws for poreâ€size distribution. Vadose Zone Journal, 2020, 19, e20065.	1.3	11
17	Removal of hexavalent chromium from aqueous solution by fabricating novel heteroaggregates of montmorillonite microparticles with nanoscale zero-valent iron. Scientific Reports, 2020, 10, 12137.	1.6	27
18	Investigation for Synergies of Ionic Strength and Flow Velocity on Colloidal-Sized Microplastic Transport and Deposition in Porous Media Using the Colloidalâ€“AFM Probe. Langmuir, 2020, 36, 6292-6303.	1.6	36

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19	Synergies of surface roughness and hydration on colloid detachment in saturated porous media: Column and atomic force microscopy studies. Water Research, 2020, 183, 116068.	5.3	21
20	Mobility of Cellulose Nanocrystals in Porous Media: Effects of Ionic Strength, Iron Oxides, and Soil Colloids. Nanomaterials, 2020, 10, 348.	1.9	6
21	Humic acid induced weak attachment of fullerene nC60 nanoparticles and subsequent detachment upon reduction of solution ionic strength in saturated porous media. Journal of Contaminant Hydrology, 2020, 231, 103630.	1.6	5
22	The failure of using equilibrium adsorption of fosthiazate onto montmorillonite clay particles to predict their cotransport in porous media as revealed by batch and column studies. Journal of Soils and Sediments, 2019, 19, 917-928.	1.5	3
23	Transport and retention of Microcystis aeruginosa in porous media: Impacts of ionic strength, flow rate, media size and pre-oxidization. Water Research, 2019, 162, 277-287.	5.3	27
24	Influence of phosphate on deposition and detachment of TiO2 nanoparticles in soil. Frontiers of Environmental Science and Engineering, 2019, 13, 1.	3.3	9
25	Chemical Aging Changed Aggregation Kinetics and Transport of Biochar Colloids. Environmental Science & Technology, 2019, 53, 8136-8146.	4.6	91
26	A novel method for the preparation of solvent-free, microwave-assisted and nitrogen-doped carbon dots as fluorescent probes for chromium(<scp>vi</scp>) detection and bioimaging. RSC Advances, 2019, 9, 8230-8238.	1.7	33
27	Transport of Microplastic Particles in Saturated Porous Media. Water (Switzerland), 2019, 11, 2474.	1.2	36
28	Interactions between nanoparticles and fractal surfaces. Water Research, 2019, 151, 296-309.	5.3	28
29	Anomalous Attachment Behavior of Nanoparticles inside Narrow Channels. Vadose Zone Journal, 2018, 17, 1-9.	1.3	3
30	DLVO Interaction Energies for Hollow Particles: The Filling Matters. Langmuir, 2018, 34, 12764-12775.	1.6	9
31	Impact of Flow Velocity on Transport of Graphene Oxide Nanoparticles in Saturated Porous Media. Vadose Zone Journal, 2018, 17, 180019.	1.3	20
32	Can nanoscale surface charge heterogeneity really explain colloid detachment from primary minima upon reduction of solution ionic strength?. Journal of Nanoparticle Research, 2018, 20, 1.	0.8	53
33	Observed Dependence of Colloid Detachment on the Concentration of Initially Attached Colloids and Collector Surface Heterogeneity in Porous Media. Environmental Science & Technology, 2017, 51, 2811-2820.	4.6	44
34	DLVO Interaction Energies between Hollow Spherical Particles and Collector Surfaces. Langmuir, 2017, 33, 10455-10467.	1.6	21
35	Contributions of Nanoscale Roughness to Anomalous Colloid Retention and Stability Behavior. Langmuir, 2017, 33, 10094-10105.	1.6	94
36	Role of solution chemistry in the retention and release of graphene oxide nanomaterials in uncoated and iron oxide-coated sand. Science of the Total Environment, 2017, 579, 776-785.	3.9	55

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37	Influence of Biochar on Deposition and Release of Clay Colloids in Saturated Porous Media. Journal of Environmental Quality, 2017, 46, 1480-1488.	1.0	7
38	Coâ€transport of Pesticide Acetamiprid and Silica Nanoparticles in Biocharâ€Amended Sand Porous Media. Journal of Environmental Quality, 2016, 45, 1749-1759.	1.0	14
39	Detachment of fullerene nC60 nanoparticles in saturated porous media under flow/stop-flow conditions: Column experiments and mechanistic explanations. Environmental Pollution, 2016, 213, 698-709.	3.7	18
40	Spontaneous Detachment of Colloids from Primary Energy Minima by Brownian Diffusion. PLoS ONE, 2016, 11, e0147368.	1.1	12
41	Spatial variability of available soil microelements in an ecological functional zone of Beijing. Environmental Monitoring and Assessment, 2015, 187, 13.	1.3	16
42	Effective removal of nemacide fosthiazate from an aqueous solution using zero-valent iron. Journal of Environmental Management, 2015, 161, 11-20.	3.8	7
43	Cotransport of bismerthiazol and montmorillonite colloids in saturated porous media. Journal of Contaminant Hydrology, 2015, 177-178, 18-29.	1.6	19
44	Influence of surface heterogeneities on reversibility of fullerene (nC60) nanoparticle attachment in saturated porous media. Journal of Hazardous Materials, 2015, 290, 60-68.	6.5	28
45	Removal of bismerthiazol from water using zerovalent iron: Batch studies and mechanism interpretation. Chemical Engineering Journal, 2015, 260, 411-418.	6.6	12
46	Heteroaggregation of microparticles with nanoparticles changes the chemical reversibility of the microparticlesâ€™ attachment to planar surfaces. Journal of Colloid and Interface Science, 2014, 421, 103-113.	5.0	33
47	Facilitated attachment of nanoparticles at primary minima by nanoscale roughness is susceptible to hydrodynamic drag under unfavorable chemical conditions. Science of the Total Environment, 2014, 466-467, 1094-1102.	3.9	24
48	Effects of Flow Velocity and Nonionic Surfactant on Colloid Straining in Saturated Porous Media Under Unfavorable Conditions. Transport in Porous Media, 2013, 98, 193-208.	1.2	28
49	Influence of surface chemical heterogeneity on attachment and detachment of microparticles. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2013, 433, 14-29.	2.3	55
50	Retention and Transport of Silica Nanoparticles in Saturated Porous Media: Effect of Concentration and Particle Size. Environmental Science & Technology, 2012, 46, 7151-7158.	4.6	140
51	Application of DLVO Energy Map To Evaluate Interactions between Spherical Colloids and Rough Surfaces. Langmuir, 2012, 28, 14681-14692.	1.6	61
52	Theoretical and experimental investigation of detachment of colloids from rough collector surfaces. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2012, 410, 98-110.	2.3	45
53	Role of Surface Roughness in Chemical Detachment of Colloids Deposited at Primary Energy Minima. Vadose Zone Journal, 2012, 11, .	1.3	56
54	Coupled factors influencing detachment of nano- and micro-sized particles from primary minima. Journal of Contaminant Hydrology, 2012, 134-135, 1-11.	1.6	32

#	Article	IF	Citations
55	Surface Roughness Effect on Deposition of Nanoâ€•and Microâ€Sized Colloids in Saturated Columns at Different Solution Ionic Strengths. Vadose Zone Journal, 2011, 10, 1071-1081.	1.3	100
56	Predicting attachment efficiency of colloid deposition under unfavorable attachment conditions. Water Resources Research, 2010, 46, .	1.7	63
57	Effects of solution chemistry on straining of colloids in porous media under unfavorable conditions. Water Resources Research, 2008, 44, .	1.7	71
58	Kinetics of Coupled Primary- and Secondary-Minimum Deposition of Colloids under Unfavorable Chemical Conditions. Environmental Science & Technology, 2007, 41, 6976-6982.	4.6	215