Bin Gao

List of Publications by Citations

464	31,638	88	165
papers	citations	h-index	g-index
483	39,137	8.3	7.91
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
464	Positive and negative carbon mineralization priming effects among a variety of biochar-amended soils. *Soil Biology and Biochemistry*, **2011**, 43, 1169-1179	7.5	897
463	Dairy-manure derived biochar effectively sorbs lead and atrazine. *Environmental Science & Technology*, **2009**, 43, 3285-91	10.3	888
462	Engineered/designer biochar for contaminant removal/immobilization from soil and water: Potential and implication of biochar modification. *Chemosphere*, **2016**, 148, 276-91	8.4	703
461	A review of biochar as a low-cost adsorbent for aqueous heavy metal removal. *Critical Reviews in Environmental Science and Technology*, **2016**, 46, 406-433	11.1	703
460	Atomically Thin Mesoporous Nanomesh of Graphitic C□N□ for High-Efficiency Photocatalytic Hydrogen Evolution. *ACS Nano*, **2016**, 10, 2745-51	16.7	701
459	Adsorption of VOCs onto engineered carbon materials: A review. *Journal of Hazardous Materials*, **2017**, 338, 102-123	12.8	672
458	Effect of biochar amendment on sorption and leaching of nitrate, ammonium, and phosphate in a sandy soil. *Chemosphere*, **2012**, 89, 1467-71	8.4	553
457	Removal of heavy metals from aqueous solution by biochars derived from anaerobically digested biomass. *Bioresource Technology*, **2012**, 110, 50-6	11	519
456	Preparation and characterization of a novel magnetic biochar for arsenic removal. *Bioresource Technology*, **2013**, 130, 457-62	11	461
455	Hydrogen peroxide modification enhances the ability of biochar (hydrochar) produced from hydrothermal carbonization of peanut hull to remove aqueous heavy metals: Batch and column tests. *Chemical Engineering Journal*, **2012**, 200-202, 673-680	14.7	451
454	Effects of feedstock type, production method, and pyrolysis temperature on biochar and hydrochar properties. *Chemical Engineering Journal*, **2014**, 240, 574-578	14.7	446
453	Surface functional groups of carbon-based adsorbents and their roles in the removal of heavy metals from aqueous solutions: A critical review. *Chemical Engineering Journal*, **2019**, 366, 608-621	14.7	435
452	Engineered biochar reclaiming phosphate from aqueous solutions: mechanisms and potential application as a slow-release fertilizer. *Environmental Science & Technology*, **2013**, 47, 8700-8	10.3	432
451	Simultaneous immobilization of lead and atrazine in contaminated soils using dairy-manure biochar. *Environmental Science & Technology*, **2011**, 45, 4884-9	10.3	429
450	Biochar derived from anaerobically digested sugar beet tailings: characterization and phosphate removal potential. *Bioresource Technology*, **2011**, 102, 6273-8	11	424
449	Synthesis of porous MgO-biochar nanocomposites for removal of phosphate and nitrate from aqueous solutions. *Chemical Engineering Journal*, **2012**, 210, 26-32	14.7	411
448	Removal of arsenic by magnetic biochar prepared from pinewood and natural hematite. *Bioresource Technology*, **2015**, 175, 391-5	11	410

447	Removal of phosphate from aqueous solution by biochar derived from anaerobically digested sugar beet tailings. *Journal of Hazardous Materials*, **2011**, 190, 501-7	12.8	395
446	Removal of Cu, Zn, and Cd from aqueous solutions by the dairy manure-derived biochar. *Environmental Science and Pollution Research*, **2013**, 20, 358-68	5.1	388
445	Batch and column sorption of arsenic onto iron-impregnated biochar synthesized through hydrolysis. *Water Research*, **2015**, 68, 206-16	12.5	347
444	Removal of Pb(II), Cu(II), and Cd(II) from aqueous solutions by biochar derived from KMnO4 treated hickory wood. *Bioresource Technology*, **2015**, 197, 356-62	11	329
443	Catechol and humic acid sorption onto a range of laboratory-produced black carbons (biochars). *Environmental Science & Technology*, **2010**, 44, 6189-95	10.3	329
442	Aggregation kinetics of graphene oxides in aqueous solutions: experiments, mechanisms, and modeling. *Langmuir*, **2013**, 29, 15174-81	4	317
441	Removal of arsenic, methylene blue, and phosphate by biochar/AlOOH nanocomposite. *Chemical Engineering Journal*, **2013**, 226, 286-292	14.7	314
440	Biochar from anaerobically digested sugarcane bagasse. *Bioresource Technology*, **2010**, 101, 8868-72	11	298
439	Carbon-Based Adsorbents for Postcombustion CO2 Capture: A Critical Review. *Environmental Science & Technology*, **2016**, 50, 7276-89	10.3	282
438	Removal of sulfamethoxazole and ciprofloxacin from aqueous solutions by graphene oxide. *Journal of Hazardous Materials*, **2015**, 282, 201-7	12.8	277
437	Biochar-supported zerovalent iron for removal of various contaminants from aqueous solutions. *Bioresource Technology*, **2014**, 152, 538-42	11	275
436	Minireview of potential applications of hydrochar derived from hydrothermal carbonization of biomass. *Journal of Industrial and Engineering Chemistry*, **2018**, 57, 15-21	6.3	268
435	Removal of lead(II) from aqueous solution by adsorption onto manganese oxide-coated carbon nanotubes. *Separation and Purification Technology*, **2007**, 58, 17-23	8.3	268
434	Manganese oxide-modified biochars: preparation, characterization, and sorption of arsenate and lead. *Bioresource Technology*, **2015**, 181, 13-7	11	254
433	Removal of lead, copper, cadmium, zinc, and nickel from aqueous solutions by alkali-modified biochar: Batch and column tests. *Journal of Industrial and Engineering Chemistry*, **2016**, 33, 239-245	6.3	245
432	Sorption of heavy metals on chitosan-modified biochars and its biological effects. *Chemical Engineering Journal*, **2013**, 231, 512-518	14.7	241
431	Carbon nanotubes/titanium dioxide (CNTs/TiO2) nanocomposites prepared by conventional and novel surfactant wrapping sol–gel methods exhibiting enhanced photocatalytic activity. *Applied Catalysis B: Environmental*, **2009**, 89, 503-509	21.8	240
430	Characterization and environmental applications of clay–biochar composites. *Chemical Engineering Journal*, **2014**, 242, 136-143	14.7	232

429	Synthesis, characterization, and dye sorption ability of carbon nanotubeBiochar nanocomposites. *Chemical Engineering Journal*, **2014**, 236, 39-46	14.7	216
428	Pyrolytic temperatures impact lead sorption mechanisms by bagasse biochars. *Chemosphere*, **2014**, 105, 68-74	8.4	214
427	Adsorptive removal of arsenate from aqueous solutions by biochar supported zero-valent iron nanocomposite: Batch and continuous flow tests. *Journal of Hazardous Materials*, **2017**, 322, 172-181	12.8	210
426	Biochar amendment improves crop production in problem soils: A review. *Journal of Environmental Management*, **2019**, 232, 8-21	7.9	210
425	Biochar technology in wastewater treatment: A critical review. *Chemosphere*, **2020**, 252, 126539	8.4	209
424	Engineered carbon (biochar) prepared by direct pyrolysis of Mg-accumulated tomato tissues: characterization and phosphate removal potential. *Bioresource Technology*, **2013**, 138, 8-13	11	209
423	Recent advances in engineered biochar productions and applications. *Critical Reviews in Environmental Science and Technology*, **2017**, 47, 2158-2207	11.1	202
422	Carbon dioxide capture using biochar produced from sugarcane bagasse and hickory wood. *Chemical Engineering Journal*, **2014**, 249, 174-179	14.7	200
421	Adsorption of sulfamethoxazole on biochar and its impact on reclaimed water irrigation. *Journal of Hazardous Materials*, **2012**, 209-210, 408-13	12.8	198
420	The Interfacial Behavior between Biochar and Soil Minerals and Its Effect on Biochar Stability. *Environmental Science & Technology*, **2016**, 50, 2264-71	10.3	192
419	Phosphate removal ability of biochar/MgAl-LDH ultra-fine composites prepared by liquid-phase deposition. *Chemosphere*, **2013**, 92, 1042-7	8.4	190
418	Effects of ball milling on the physicochemical and sorptive properties of biochar: Experimental observations and governing mechanisms. *Environmental Pollution*, **2018**, 233, 54-63	9.3	188
417	Removal of Cu(II), Cd(II) and Pb(II) ions from aqueous solutions by biochars derived from potassium-rich biomass. *Journal of Cleaner Production*, **2018**, 180, 437-449	10.3	183
416	Enhanced Lead Sorption by Biochar Derived from Anaerobically Digested Sugarcane Bagasse. *Separation Science and Technology*, **2011**, 46, 1950-1956	2.5	179
415	Carbon Dots with Red Emission for Sensing of Pt, Au, and Pd and Their Bioapplications in Vitro and in Vivo. *ACS Applied Materials & Interfaces*, **2018**, 10, 1147-1154	9.5	177
414	Integrated adsorption and photocatalytic degradation of volatile organic compounds (VOCs) using carbon-based nanocomposites: A critical review. *Chemosphere*, **2019**, 218, 845-859	8.4	165
413	Biochar-supported nZVI (nZVI/BC) for contaminant removal from soil and water: A critical review. *Journal of Hazardous Materials*, **2019**, 373, 820-834	12.8	164
412	Experimental and modeling investigations of ball-milled biochar for the removal of aqueous methylene blue. *Chemical Engineering Journal*, **2018**, 335, 110-119	14.7	160

411	Carbon nanotube/titanium dioxide (CNT/TiO2) core–shell nanocomposites with tailored shell thickness, CNT content and photocatalytic/photoelectrocatalytic properties. *Applied Catalysis B: Environmental*, **2011**, 110, 50-57	21.8	160
410	Transport of engineered nanoparticles in saturated porous media. *Journal of Nanoparticle Research*, **2010**, 12, 2371-2380	2.3	160
409	Straining of colloidal particles in saturated porous media. *Water Resources Research*, **2006**, 42,	5.4	160
408	Synthesis, characterization, and environmental implications of graphene-coated biochar. *Science of the Total Environment*, **2012**, 435-436, 567-72	10.2	158
407	Functionalizing biochar with Mg–Al and Mg–Fe layered double hydroxides for removal of phosphate from aqueous solutions. *Journal of Industrial and Engineering Chemistry*, **2017**, 47, 246-253	6.3	157
406	SMART biochar technology–A shifting paradigm towards advanced materials and healthcare research. *Environmental Technology and Innovation*, **2015**, 4, 206-209	7	155
405	Adsorption and desorption of ammonium by maple wood biochar as a function of oxidation and pH. *Chemosphere*, **2015**, 138, 120-6	8.4	153
404	Transport, retention, and size perturbation of graphene oxide in saturated porous media: effects of input concentration and grain size. *Water Research*, **2015**, 68, 24-33	12.5	144
403	Humic acid facilitates the transport of ARS-labeled hydroxyapatite nanoparticles in iron oxyhydroxide-coated sand. *Environmental Science & Technology*, **2012**, 46, 2738-45	10.3	144
402	Hydrochars derived from plant biomass under various conditions: Characterization and potential applications and impacts. *Chemical Engineering Journal*, **2015**, 267, 253-259	14.7	141
401	Physicochemical and sorptive properties of biochars derived from woody and herbaceous biomass. *Chemosphere*, **2015**, 134, 257-62	8.4	140
400	Effects of chemical oxidation on surface oxygen-containing functional groups and adsorption behavior of biochar. *Chemosphere*, **2018**, 207, 33-40	8.4	136
399	Environmental occurrences, fate, and impacts of microplastics. *Ecotoxicology and Environmental Safety*, **2019**, 184, 109612	7	135
398	A sustainable biochar catalyst synergized with copper heteroatoms and CO2 for singlet oxygenation and electron transfer routes. *Green Chemistry*, **2019**, 21, 4800-4814	10	133
397	Rapid and highly selective removal of lead from water using graphene oxide-hydrated manganese oxide nanocomposites. *Journal of Hazardous Materials*, **2016**, 314, 32-40	12.8	127
396	Alginate-based composites for environmental applications: A critical review. *Critical Reviews in Environmental Science and Technology*, **2018**, 49, 318-356	11.1	127
395	Ball milling as a mechanochemical technology for fabrication of novel biochar nanomaterials. *Bioresource Technology*, **2020**, 312, 123613	11	124
394	Biochar for volatile organic compound (VOC) removal: Sorption performance and governing mechanisms. *Bioresource Technology*, **2017**, 245, 606-614	11	123

393	Adsorption of emerging contaminants from water and wastewater by modified biochar: A review. *Environmental Pollution*, **2021**, 273, 116448	9.3	122
392	Ball-Milled Carbon Nanomaterials for Energy and Environmental Applications. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 9568-9585	8.3	118
391	In-situ fabrication of needle-shaped MIL-53(Fe) with 1T-MoS2 and study on its enhanced photocatalytic mechanism of ibuprofen. *Chemical Engineering Journal*, **2019**, 359, 254-264	14.7	114
390	Enhanced lead and cadmium removal using biochar-supported hydrated manganese oxide (HMO) nanoparticles: Behavior and mechanism. *Science of the Total Environment*, **2018**, 616-617, 1298-1306	10.2	112
389	Continuous immobilization of cadmium and lead in biochar amended contaminated paddy soil: A five-year field experiment. *Ecological Engineering*, **2016**, 93, 1-8	3.9	110
388	Immobilization of hexavalent chromium in contaminated soils using biochar supported nanoscale iron sulfide composite. *Chemosphere*, **2018**, 194, 360-369	8.4	107
387	Sorption and cosorption of lead and sulfapyridine on carbon nanotube-modified biochars. *Environmental Science and Pollution Research*, **2015**, 22, 1868-76	5.1	106
386	Deposition and transport of graphene oxide in saturated and unsaturated porous media. *Chemical Engineering Journal*, **2013**, 229, 444-449	14.7	101
385	Review of key factors controlling engineered nanoparticle transport in porous media. *Journal of Hazardous Materials*, **2016**, 318, 233-246	12.8	97
384	N-doped biochar synthesized by a facile ball-milling method for enhanced sorption of CO2 and reactive red. *Chemical Engineering Journal*, **2019**, 368, 564-572	14.7	96
383	High efficiency and selectivity of MgFe-LDH modified wheat-straw biochar in the removal of nitrate from aqueous solutions. *Journal of the Taiwan Institute of Chemical Engineers*, **2016**, 63, 312-317	5.3	95
382	Effects of pH and ionic strength on sulfamethoxazole and ciprofloxacin transport in saturated porous media. *Journal of Contaminant Hydrology*, **2011**, 126, 29-36	3.9	94
381	Sorption and desorption of Pb(II) to biochar as affected by oxidation and pH. *Science of the Total Environment*, **2018**, 634, 188-194	10.2	93
380	Chemically activated hydrochar as an effective adsorbent for volatile organic compounds (VOCs). *Chemosphere*, **2019**, 218, 680-686	8.4	93
379	Reclaiming phosphorus from secondary treated municipal wastewater with engineered biochar. *Chemical Engineering Journal*, **2019**, 362, 460-468	14.7	91
378	Effects of graphene on seed germination and seedling growth. *Journal of Nanoparticle Research*, **2015**, 17, 1	2.3	90
377	Sorption of lead and methylene blue onto hickory biochars from different pyrolysis temperatures: Importance of physicochemical properties. *Journal of Industrial and Engineering Chemistry*, **2016**, 37, 261-267	6.3	90
376	Removal of hexavalent chromium by biochar supported nZVI composite: Batch and fixed-bed column evaluations, mechanisms, and secondary contamination prevention. *Chemosphere*, **2019**, 217, 85-94	8.4	88

375	Rainfall induced chemical transport from soil to runoff: theory and experiments. *Journal of Hydrology*, **2004**, 295, 291-304	6	87
374	Slow-release fertilizer encapsulated by graphene oxide films. *Chemical Engineering Journal*, **2014**, 255, 107-113	14.7	86
373	Enhanced adsorption performance and governing mechanisms of ball-milled biochar for the removal of volatile organic compounds (VOCs). *Chemical Engineering Journal*, **2020**, 385, 123842	14.7	86
372	Filtration and transport of heavy metals in graphene oxide enabled sand columns. *Chemical Engineering Journal*, **2014**, 257, 248-252	14.7	85
371	Interfacial coupling effects in g-C3N4/SrTiO3 nanocomposites with enhanced H2 evolution under visible light irradiation. *Applied Catalysis B: Environmental*, **2019**, 247, 1-9	21.8	84
370	High mobility of SDBS-dispersed single-walled carbon nanotubes in saturated and unsaturated porous media. *Journal of Hazardous Materials*, **2011**, 186, 1766-72	12.8	83
369	Investigating raindrop effects on transport of sediment and non-sorbed chemicals from soil to surface runoff. *Journal of Hydrology*, **2005**, 308, 313-320	6	77
368	Engineered biochar from biofuel residue: characterization and its silver removal potential. *ACS Applied Materials & Interfaces*, **2015**, 7, 10634-40	9.5	75
367	Removal of levofloxacin from aqueous solution using rice-husk and wood-chip biochars. *Chemosphere*, **2016**, 150, 694-701	8.4	75
366	Sorption of perfluorooctanoic acid, perfluorooctane sulfonate and perfluoroheptanoic acid on granular activated carbon. *Chemosphere*, **2016**, 144, 2336-42	8.4	74
365	Colloid Deposition and Release in Soils and Their Association With Heavy Metals. *Critical Reviews in Environmental Science and Technology*, **2011**, 41, 336-372	11.1	74
364	Removal of sulfamethoxazole and sulfapyridine by carbon nanotubes in fixed-bed columns. *Chemosphere*, **2013**, 90, 2597-605	8.4	73
363	Carbon dioxide capture using various metal oxyhydroxide–Biochar composites. *Chemical Engineering Journal*, **2016**, 283, 826-832	14.7	71
362	Entrapment of ball-milled biochar in Ca-alginate beads for the removal of aqueous Cd(II). *Journal of Industrial and Engineering Chemistry*, **2018**, 61, 161-168	6.3	71
361	Deposition and transport of functionalized carbon nanotubes in water-saturated sand columns. *Journal of Hazardous Materials*, **2012**, 213-214, 265-72	12.8	69
360	Ball milled biochar effectively removes sulfamethoxazole and sulfapyridine antibiotics from water and wastewater. *Environmental Pollution*, **2020**, 258, 113809	9.3	68
359	Deposition and mobilization of clay colloids in unsaturated porous media. *Water Resources Research* , **2004**, 40,	5.4	66
358	Sustainable remediation with an electroactive biochar system: mechanisms and perspectives. *Green Chemistry*, **2020**, 22, 2688-2711	10	64

357	Sorption and cosorption of lead (II) and methylene blue on chemically modified biomass. *Bioresource Technology*, **2014**, 167, 569-73	11	63
356	Colloid-facilitated Pb transport in two shooting-range soils in Florida. *Journal of Hazardous Materials*, **2010**, 177, 620-5	12.8	63
355	Grain Surface-Roughness Effects on Colloidal Retention in the Vadose Zone. *Vadose Zone Journal*, **2009**, 8, 11-20	2.7	63
354	Pore-scale mechanisms of colloid deposition and mobilization during steady and transient flow through unsaturated granular media. *Water Resources Research*, **2006**, 42,	5.4	63
353	Bio-based Interpenetrating Network Polymer Composites from Locust Sawdust as Coating Material for Environmentally Friendly Controlled-Release Urea Fertilizers. *Journal of Agricultural and Food Chemistry*, **2016**, 64, 5692-700	5.7	63
352	Enhanced arsenic removal by biochar modified with nickel (Ni) and manganese (Mn) oxyhydroxides. *Journal of Industrial and Engineering Chemistry*, **2016**, 37, 361-365	6.3	63
351	Solvent-free synthesis of magnetic biochar and activated carbon through ball-mill extrusion with FeO nanoparticles for enhancing adsorption of methylene blue. *Science of the Total Environment*, **2020**, 722, 137972	10.2	62
350	Sorption of arsenic onto Ni/Fe layered double hydroxide (LDH)-biochar composites. *RSC Advances*, **2016**, 6, 17792-17799	3.7	62
349	Graphene oxide as filter media to remove levofloxacin and lead from aqueous solution. *Chemosphere*, **2016**, 150, 759-764	8.4	62
348	Investigating ponding depth and soil detachability for a mechanistic erosion model using a simple experiment. *Journal of Hydrology*, **2003**, 277, 116-124	6	62
347	Magnetic-Sensitive Nanoparticle Self-Assembled Superhydrophobic Biopolymer-Coated Slow-Release Fertilizer: Fabrication, Enhanced Performance, and Mechanism. *ACS Nano*, **2019**, 13, 3320-3333	16.7	62
346	Biochar-supported carbon nanotube and graphene oxide nanocomposites for Pb(II) and Cd(II) removal. *RSC Advances*, **2016**, 6, 24314-24319	3.7	61
345	Removal mechanisms of Cr(VI) and Cr(III) by biochar supported nanosized zero-valent iron: Synergy of adsorption, reduction and transformation. *Environmental Pollution*, **2020**, 265, 115018	9.3	60
344	Synthesis of a multifunctional graphene□carbon nanotube aerogel and its strong adsorption of lead from aqueous solution. *RSC Advances*, **2013**, 3, 21099	3.7	60
343	Transport of polystyrene nanoplastics in natural soils: Effect of soil properties, ionic strength and cation type. *Science of the Total Environment*, **2020**, 707, 136065	10.2	60
342	Biomimetic Superhydrophobic Biobased Polyurethane-Coated Fertilizer with Atmosphere "Outerwear". *ACS Applied Materials & Interfaces*, **2017**, 9, 15868-15879	9.5	59
341	Biochar-supported zerovalent iron reclaims silver from aqueous solution to form antimicrobial nanocomposite. *Chemosphere*, **2014**, 117, 801-5	8.4	57
340	Biochar/iron (BC/Fe) composites for soil and groundwater remediation: Synthesis, applications, and mechanisms. *Chemosphere*, **2020**, 246, 125609	8.4	57

339	Sorption of arsenate onto magnetic iron–manganese (Fe–Mn) biochar composites. *RSC Advances*, **2015**, 5, 67971-67978	3.7	56
338	Methods of using carbon nanotubes as filter media to remove aqueous heavy metals. *Chemical Engineering Journal*, **2012**, 210, 557-563	14.7	56
337	Phosphogypsum as a novel modifier for distillers grains biochar removal of phosphate from water. *Chemosphere*, **2020**, 238, 124684	8.4	56
336	Effects of surfactant type and concentration on graphene retention and transport in saturated porous media. *Chemical Engineering Journal*, **2015**, 262, 1187-1191	14.7	55
335	Fire Phoenix facilitates phytoremediation of PAH-Cd co-contaminated soil through promotion of beneficial rhizosphere bacterial communities. *Environment International*, **2020**, 136, 105421	12.9	55
334	Bio-based elastic polyurethane for controlled-release urea fertilizer: Fabrication, properties, swelling and nitrogen release characteristics. *Journal of Cleaner Production*, **2019**, 209, 528-537	10.3	55
333	Facile low-temperature one-step synthesis of pomelo peel biochar under air atmosphere and its adsorption behaviors for Ag(I) and Pb(II). *Science of the Total Environment*, **2018**, 640-641, 73-79	10.2	55
332	Adsorption of tetracycline hydrochloride onto ball-milled biochar: Governing factors and mechanisms. *Chemosphere*, **2020**, 255, 127057	8.4	54
331	Highly efficient removal of nitrogen and phosphorus in an electrolysis-integrated horizontal subsurface-flow constructed wetland amended with biochar. *Water Research*, **2018**, 139, 301-310	12.5	54
330	Novel biochar-impregnated calcium alginate beads with improved water holding and nutrient retention properties. *Journal of Environmental Management*, **2018**, 209, 105-111	7.9	54
329	Superhydrophobic controlled-release fertilizers coated with bio-based polymers with organosilicon and nano-silica modifications. *Journal of Materials Chemistry A*, **2017**, 5, 19943-19953	13	53
328	Functionalization, pH, and ionic strength influenced sorption of sulfamethoxazole on graphene. *Journal of Environmental Chemical Engineering*, **2014**, 2, 310-315	6.8	52
327	Capillary retention of colloids in unsaturated porous media. *Water Resources Research*, **2008**, 44,	5.4	52
326	Impact of dissolved organic matter on colloid transport in the vadose zone: deterministic approximation of transport deposition coefficients from polymeric coating characteristics. *Water Research*, **2011**, 45, 1691-701	12.5	51
325	Removal of sulfamethoxazole (SMX) and sulfapyridine (SPY) from aqueous solutions by biochars derived from anaerobically digested bagasse. *Environmental Science and Pollution Research*, **2018**, 25, 25659-25667	5.1	50
324	Release of soluble elements from biochars derived from various biomass feedstocks. *Environmental Science and Pollution Research*, **2016**, 23, 1905-15	5.1	50
323	Effect of solution chemistry on multi-walled carbon nanotube deposition and mobilization in clean porous media. *Journal of Hazardous Materials*, **2012**, 231-232, 79-87	12.8	50
322	Visualization of unstable water flow in a fuel cell gas diffusion layer. *Journal of Power Sources*, **2009** , 190, 493-498	8.9	50

321	Kaolinite Enhances the Stability of the Dissolvable and Undissolvable Fractions of Biochar via Different Mechanisms. *Environmental Science & Technology*, **2018**, 52, 8321-8329	10.3	50
320	Physically (CO2) activated hydrochars from hickory and peanut hull: preparation, characterization, and sorption of methylene blue, lead, copper, and cadmium. *RSC Advances*, **2016**, 6, 24906-24911	3.7	48
319	Effect of synthesis conditions on the photocatalytic degradation of Rhodamine B of MIL-53(Fe). *Materials Letters*, **2019**, 237, 92-95	3.3	48
318	Thiol-modified biochar synthesized by a facile ball-milling method for enhanced sorption of inorganic Hg and organic CHHg. *Journal of Hazardous Materials*, **2020**, 384, 121357	12.8	48
317	Environmentally Friendly Slow-Release Urea Fertilizers Based on Waste Frying Oil for Sustained Nutrient Release. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 6036-6045	8.3	47
316	Oxide-based RRAM switching mechanism: A new ion-transport-recombination model **2008**,		47
315	Modeling soil solute release into runoff with infiltration. *Journal of Hydrology*, **2007**, 347, 430-437	6	46
314	Ammonium retention by oxidized biochars produced at different pyrolysis temperatures and residence times. *RSC Advances*, **2016**, 6, 41907-41913	3.7	46
313	N/P Codoped Porous Carbon/One-Dimensional Hollow Tubular Carbon Heterojunction from Biomass Inherent Structure for Supercapacitors. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 1337-1346	8.3	46
312	Retention and transport of graphene oxide in water-saturated limestone media. *Chemosphere*, **2017**, 180, 506-512	8.4	45
311	Combined application of biochar and sulfur regulated growth, physiological, antioxidant responses and Cr removal capacity of maize (Zea mays L.) in tannery polluted soils. *Journal of Environmental Management*, **2020**, 259, 110051	7.9	45
310	Oxide-based RRAM: Unified microscopic principle for both unipolar and bipolar switching **2011**,		45
309	Effects of laboratory biotic aging on the characteristics of biochar and its water-soluble organic products. *Journal of Hazardous Materials*, **2020**, 382, 121071	12.8	45
308	Amino Acid Protic Ionic Liquids: Multifunctional Carbon Precursor for N/S Codoped Hierarchically Porous Carbon Materials toward Supercapacitive Energy Storage. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 9281-9290	8.3	44
307	Efficient removal of Cd(II) from aqueous solution by pinecone biochar: Sorption performance and governing mechanisms. *Environmental Pollution*, **2020**, 265, 115001	9.3	44
306	Biochar filters reduced the toxic effects of nickel on tomato (Lycopersicon esculentum L.) grown in nutrient film technique hydroponic system. *Chemosphere*, **2016**, 149, 254-62	8.4	44
305	Siloxane and polyether dual modification improves hydrophobicity and interpenetrating polymer network of bio-polymer for coated fertilizers with enhanced slow release characteristics. *Chemical Engineering Journal*, **2018**, 350, 1125-1134	14.7	44
304	Self-assembly of needle-like layered double hydroxide (LDH) nanocrystals on hydrochar: characterization and phosphate removal ability. *RSC Advances*, **2014**, 4, 28171	3.7	44

303	Comparative study of calcium alginate, ball-milled biochar, and their composites on aqueous methylene blue adsorption. *Environmental Science and Pollution Research*, **2019**, 26, 11535-11541	5.1	44
302	Ball milling biochar iron oxide composites for the removal of chromium (Cr(VI)) from water: Performance and mechanisms. *Journal of Hazardous Materials*, **2021**, 413, 125252	12.8	44
301	Sorption of lead ions onto oxidized bagasse-biochar mitigates Pb-induced oxidative stress on hydroponically grown chicory: Experimental observations and mechanisms. *Chemosphere*, **2018**, 208, 887-898	8.4	43
300	Transport of titanium dioxide nanoparticles in saturated porous media under various solution chemistry conditions. *Journal of Nanoparticle Research*, **2012**, 14, 1	2.3	43
299	Adsorption, immobilization, and activity of beta-glucosidase on different soil colloids. *Journal of Colloid and Interface Science*, **2010**, 348, 565-70	9.3	43
298	Effects of grain size and structural heterogeneity on the transport and retention of nano-TiO2 in saturated porous media. *Science of the Total Environment*, **2016**, 563-564, 987-95	10.2	43
297	Adsorptional-photocatalytic removal of fast sulphon black dye by using chitin-cl-poly(itaconic acid-co-acrylamide)/zirconium tungstate nanocomposite hydrogel. *Journal of Hazardous Materials*, **2021**, 416, 125714	12.8	43
296	Kaolinite and Lead in Saturated Porous Media: Facilitated and Impeded Transport. *Journal of Environmental Engineering, ASCE*, **2010**, 136, 1305-1308	2	42
295	MgO modified biochar produced through ball milling: A dual-functional adsorbent for removal of different contaminants. *Chemosphere*, **2020**, 243, 125344	8.4	42
294	Facile and green synthesis of 3D honeycomb-like N/S-codoped hierarchically porous carbon materials from bio-protic salt for flexible, temperature-resistant supercapacitors. *Applied Surface Science*, **2019**, 467-468, 382-390	6.7	42
293	Biochar provides a safe and value-added solution for hyperaccumulating plant disposal: A case study of Phytolacca acinosa Roxb. (Phytolaccaceae). *Chemosphere*, **2017**, 178, 59-64	8.4	41
292	Enhanced removal of hexavalent chromium by engineered biochar composite fabricated from phosphogypsum and distillers grains. *Science of the Total Environment*, **2019**, 697, 134119	10.2	41
291	Selective Separation of Metal Ions via Monolayer Nanoporous Graphene with Carboxyl Groups. *Analytical Chemistry*, **2016**, 88, 10002-10010	7.8	41
290	Synergistic adsorption-photocatalysis processes of graphitic carbon nitrate (g-C3N4) for contaminant removal: Kinetics, models, and mechanisms. *Chemical Engineering Journal*, **2019**, 375, 122019	14.7	40
289	Impregnation of multiwall carbon nanotubes in alginate beads dramatically enhances their adsorptive ability to aqueous methylene blue. *Chemical Engineering Research and Design*, **2018**, 133, 235-242	5.5	40
288	The sorptive and reductive capacities of biochar supported nanoscaled zero-valent iron (nZVI) in relation to its crystallite size. *Chemosphere*, **2017**, 186, 495-500	8.4	40
287	Chemical activation of hickory and peanut hull hydrochars for removal of lead and methylene blue from aqueous solutions. *Chemical Speciation and Bioavailability*, **2017**, 29, 197-204		40
286	Stimulation of peanut seedling development and growth by zero-valent iron nanoparticles at low concentrations. *PLoS ONE*, **2015**, 10, e0122884	3.7	40

285	Biomass-facilitated production of activated magnesium oxide nanoparticles with extraordinary CO2 capture capacity. *Chemical Engineering Journal*, **2018**, 334, 81-88	14.7	39
284	Waste-art-paper biochar as an effective sorbent for recovery of aqueous Pb(II) into value-added PbO nanoparticles. *Chemical Engineering Journal*, **2017**, 308, 863-871	14.7	39
283	A novel stabilized carbon-coated nZVI as heterogeneous persulfate catalyst for enhanced degradation of 4-chlorophenol. *Environment International*, **2020**, 138, 105639	12.9	38
282	Facile ball-milling synthesis of CeO2/g-C3N4 Z-scheme heterojunction for synergistic adsorption and photodegradation of methylene blue: Characteristics, kinetics, models, and mechanisms. *Chemical Engineering Journal*, **2021**, 420, 127719	14.7	38
281	Effects of temperature on graphene oxide deposition and transport in saturated porous media. *Journal of Hazardous Materials*, **2017**, 331, 28-35	12.8	37
280	Concurrent aggregation and transport of graphene oxide in saturated porous media: Roles of temperature, cation type, and electrolyte concentration. *Environmental Pollution*, **2018**, 235, 350-357	9.3	37
279	Influence of Biochar on Microbial Activities of Heavy Metals Contaminated Paddy Fields. *BioResources*, **2013**, 8,	1.3	37
278	Products derived from waste plastics (PC, HIPS, ABS, PP and PA6) via hydrothermal treatment: Characterization and potential applications. *Chemosphere*, **2018**, 207, 742-752	8.4	37
277	Reduction, detoxification and recycling of solid waste by hydrothermal technology: A review. *Chemical Engineering Journal*, **2020**, 390, 124651	14.7	36
276	Carboxymethyl cellulose stabilized ZnO/biochar nanocomposites: Enhanced adsorption and inhibited photocatalytic degradation of methylene blue. *Chemosphere*, **2018**, 197, 20-25	8.4	36
275	Oxygen-Content-Controllable Graphene Oxide from Electron-Beam-Irradiated Graphite: Synthesis, Characterization, and Removal of Aqueous Lead [Pb(II)]. *ACS Applied Materials & Interfaces*, **2016**, 8, 25289-96	9.5	36
274	Facile Ball-Milling Synthesis of CuO/Biochar Nanocomposites for Efficient Removal of Reactive Red 120. *ACS Omega*, **2020**, 5, 5748-5755	3.9	35
273	Removal of Methylene Blue from Aqueous Solution using Porous Biochar Obtained by KOH Activation of Peanut Shell Biochar. *BioResources*, **2015**, 10,	1.3	35
272	Short-term effects of rice straw biochar on sorption, emission, and transformation of soil NH⊞-N. *Environmental Science and Pollution Research*, **2015**, 22, 9184-92	5.1	35
271	A physical based analytic model of RRAM operation for circuit simulation **2012**,		35
270	Colloid retention at the meniscus-wall contact line in an open microchannel. *Water Research*, **2012**, 46, 295-306	12.5	35
269	Ball milling biochar with ammonia hydroxide or hydrogen peroxide enhances its adsorption of phenyl volatile organic compounds (VOCs). *Journal of Hazardous Materials*, **2021**, 403, 123540	12.8	35
268	Solvent-Free Synthesis of N/S-Codoped Hierarchically Porous Carbon Materials from Protic Ionic Liquids for Temperature-Resistant, Flexible Supercapacitors. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 13494-13503	8.3	35

267	Applications of carbonaceous adsorbents in the remediation of polycyclic aromatic hydrocarbon-contaminated sediments: A review. *Journal of Cleaner Production*, **2020**, 255, 120263	10.3	34
266	Graphene oxide-facilitated transport of levofloxacin and ciprofloxacin in saturated and unsaturated porous media. *Journal of Hazardous Materials*, **2018**, 348, 92-99	12.8	34
265	Effect of surface modification on single-walled carbon nanotube retention and transport in saturated and unsaturated porous media. *Journal of Hazardous Materials*, **2012**, 239-240, 333-9	12.8	34
264	DLVO interactions of carbon nanotubes with isotropic planar surfaces. *Langmuir*, **2013**, 29, 3976-88	4	34
263	Reduced raindrop-impact driven soil erosion by infiltration. *Journal of Hydrology*, **2007**, 342, 331-335	6	34
262	Effects of Humic Acid and Solution Chemistry on the Retention and Transport of Cerium Dioxide Nanoparticles in Saturated Porous Media. *Water, Air, and Soil Pollution*, **2014**, 225, 1	2.6	33
261	5-Hydroxymethylfurfural modified rhodamine B dual-function derivative: Highly sensitive and selective optical detection of pH and Cu(2+). *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2016**, 152, 327-35	4.4	32
260	Retention and Release of Graphene Oxide in Structured Heterogeneous Porous Media under Saturated and Unsaturated Conditions. *Environmental Science & Technology*, **2016**, 50, 10397-10405	10.3	32
259	Removal of tetrachloroethylene from homogeneous and heterogeneous porous media: Combined effects of surfactant solubilization and oxidant degradation. *Chemical Engineering Journal*, **2016**, 283, 595-603	14.7	32
258	ZnO/biochar nanocomposites via solvent free ball milling for enhanced adsorption and photocatalytic degradation of methylene blue. *Journal of Hazardous Materials*, **2021**, 415, 125511	12.8	32
257	Removal of Pb(II) and malachite green from aqueous solution by modified cellulose. *Cellulose*, **2014** , 21, 2797-2809	5.5	31
256	Invasive plants as feedstock for biochar and bioenergy production. *Bioresource Technology*, **2013**, 140, 439-42	11	31
255	Formation and mechanisms of nano-metal oxide-biochar composites for pollutants removal: A review. *Science of the Total Environment*, **2021**, 767, 145305	10.2	31
254	Production of hierarchically porous carbon from natural biomass waste for efficient organic contaminants adsorption. *Journal of Cleaner Production*, **2020**, 263, 121352	10.3	30
253	Removal of perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) from water by carbonaceous nanomaterials: A review. *Critical Reviews in Environmental Science and Technology*, **2020**, 50, 2379-2414	11.1	30
252	Biocontrol effects of Brevibacillus laterosporus AMCC100017 on potato common scab and its impact on rhizosphere bacterial communities. *Biological Control*, **2017**, 106, 89-98	3.8	29
251	One-pot synthesis and characterization of engineered hydrochar by hydrothermal carbonization of biomass with ZnCl. *Chemosphere*, **2020**, 254, 126866	8.4	29
250	Adsorption of Polycyclic Aromatic Hydrocarbons from aqueous solution by Organic Montmorillonite Sodium Alginate Nanocomposites. *Chemosphere*, **2020**, 251, 126074	8.4	28

249	Nanoscale Zero-Valent Iron Supported on Biochar: Characterization and Reactivity for Degradation of Acid Orange 7 from Aqueous Solution. *Water, Air, and Soil Pollution*, **2014**, 225, 1	2.6	28
248	Pore-scale quantification of colloid transport in saturated porous media. *Environmental Science & Technology*, **2008**, 42, 517-23	10.3	28
247	Bright hydrophilic and organophilic fluorescence carbon dots: One-pot fabrication and multi-functional applications at visualized Au3+ detection in cell and white light-emitting devices. *Sensors and Actuators B: Chemical*, **2019**, 281, 905-911	8.5	28
246	Characteristics of organo-mineral complexes in contaminated soils with long-term biochar application. *Journal of Hazardous Materials*, **2020**, 384, 121265	12.8	28
245	Invasive plants as potential sustainable feedstocks for biochar production and multiple applications: A review. *Resources, Conservation and Recycling*, **2021**, 164, 105204	11.9	28
244	Environmental-friendly coal gangue-biochar composites reclaiming phosphate from water as a slow-release fertilizer. *Science of the Total Environment*, **2021**, 758, 143664	10.2	28
243	Biomass facilitated phase transformation of natural hematite at high temperatures and sorption of Cd and Cu. *Environment International*, **2019**, 124, 473-481	12.9	27
242	Accelerated antimony and copper removal by manganese oxide embedded in biochar with enlarged pore structure. *Chemical Engineering Journal*, **2020**, 402, 126021	14.7	27
241	Filtration of engineered nanoparticles in carbon-based fixed bed columns. *Chemical Engineering Journal*, **2013**, 220, 221-227	14.7	27
240	Removing Gaseous NH3 Using Biochar as an Adsorbent. *Agriculture (Switzerland)*, **2015**, 5, 991-1002	3	27
239	Adsorption of acetone and cyclohexane onto CO activated hydrochars. *Chemosphere*, **2020**, 245, 125664	8.4	27
238	Hydrothermal Treatment of E-Waste Plastics for Tertiary Recycling: Product Slate and Decomposition Mechanisms. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 1464-1473	8.3	27
237	A critical review on remediation of bisphenol S (BPS) contaminated water: Efficacy and mechanisms. *Critical Reviews in Environmental Science and Technology*, **2020**, 50, 476-522	11.1	27
236	Chitosan and Graphene Oxide Nanocomposites as Coatings for Controlled-Release Fertilizer. *Water, Air, and Soil Pollution*, **2019**, 230, 1	2.6	26
235	Transport and retention of perfluorooctanoic acid (PFOA) in natural soils: Importance of soil organic matter and mineral contents, and solution ionic strength. *Journal of Contaminant Hydrology* , **2019**, 225, 103477	3.9	26
234	High photoluminescent nitrogen-doped carbon dots with unique double wavelength fluorescence emission for cell imaging. *Materials Letters*, **2018**, 216, 84-87	3.3	26
233	Biosorbents based on agricultural wastes for ionic liquid removal: An approach to agricultural wastes management. *Chemosphere*, **2016**, 165, 94-99	8.4	26
232	Removal of Cr(VI) from Aqueous Solution by Nanoscale Zero-Valent Iron Grafted on Acid-Activated Attapulgite. *Water, Air, and Soil Pollution*, **2014**, 225, 1	2.6	26

231	Effects of ionic strength, particle size, flow rate, and vegetation type on colloid transport through a dense vegetation saturated soil system: Experiments and modeling. *Journal of Hydrology*, **2013**, 499, 316-323	6	26
230	Effects of Cu and Ca cations and Fe/Al coating on ciprofloxacin sorption onto sand media. *Journal of Hazardous Materials*, **2013**, 252-253, 375-81	12.8	26
229	Transport and retention of colloidal particles in partially saturated porous media: Effect of ionic strength. *Water Resources Research*, **2009**, 45,	5.4	26
228	Quantifying colloid retention in partially saturated porous media. *Water Resources Research*, **2006**, 42,	5.4	26
227	Facile one-step synthesis of graphitic carbon nitride-modified biochar for the removal of reactive red 120 through adsorption and photocatalytic degradation. *Biochar*, **2019**, 1, 89-96	10	25
226	Urea formaldehyde modified alginate beads with improved stability and enhanced removal of Pb, Cd, and Cu. *Journal of Hazardous Materials*, **2020**, 396, 122664	12.8	25
225	Synthesis, characterization and adsorption capacity of magnetic carbon composites activated by CO2: implication for the catalytic mechanisms of iron salts. *Journal of Materials Chemistry A*, **2016**, 4, 18942-18951	13	25
224	Influence of Cu and Ca cations on ciprofloxacin transport in saturated porous media. *Journal of Hazardous Materials*, **2013**, 262, 805-11	12.8	25
223	Value-Added Humic Acid Derived from Lignite Using Novel Solid-Phase Activation Process with Pd/CeO2 Nanocatalyst: A Physiochemical Study. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 10099-10110	8.3	24
222	Sorption and cosorption of organic contaminant on surfactant-modified soils. *Chemosphere*, **2001**, 43, 1095-102	8.4	24
221	Recycling supercapacitor activated carbons for adsorption of silver (I) and chromium (VI) ions from aqueous solutions. *Chemosphere*, **2020**, 238, 124638	8.4	24
220	Degradation of anthraquinone dye reactive blue 19 using persulfate activated with Fe/Mn modified biochar: Radical/non-radical mechanisms and fixed-bed reactor study. *Science of the Total Environment*, **2021**, 758, 143584	10.2	24
219	Physicochemical factors controlling the retention and transport of perfluorooctanoic acid (PFOA) in saturated sand and limestone porous media. *Water Research*, **2018**, 141, 251-258	12.5	24
218	Engineered biochar derived from eggshell-treated biomass for removal of aqueous lead. *Ecological Engineering*, **2018**, 121, 124-129	3.9	23
217	Effects of temperature on aggregation kinetics of graphene oxide in aqueous solutions. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2018**, 538, 63-72	5.1	23
216	Effects of pH and surface metal oxyhydroxides on deposition and transport of carboxyl-functionalized graphene in saturated porous media. *Journal of Nanoparticle Research*, **2013**, 15, 1	2.3	23
215	A laboratory study of colloid and solute transport in surface runoff on saturated soil. *Journal of Hydrology*, **2011**, 402, 159-164	6	23
214	Chemo-mechanical modification of cottonwood for Pb(2+) removal from aqueous solutions: Sorption mechanisms and potential application as biofilter in drip-irrigation. *Chemosphere*, **2016**, 161, 1-9	8.4	23

213	Effective removal of ionic liquid using modified biochar and its biological effects. *Journal of the Taiwan Institute of Chemical Engineers*, **2016**, 67, 318-324	5.3	23
212	Bio-based Large Tablet Controlled-Release Urea: Synthesis, Characterization, and Controlled-Released Mechanisms. *Journal of Agricultural and Food Chemistry*, **2018**, 66, 11265-11272	5.7	23
211	Bamboo Biochar Pyrolyzed at Low Temperature Improves Tomato Plant Growth and Fruit Quality. *Agriculture (Switzerland)*, **2018**, 8, 153	3	23
210	Adsorption of phosphorus by different biochars. *Spectroscopy Letters*, **2017**, 50, 73-80	1.1	22
209	Self-Assembly of Hydrophobic and Self-Healing Bionanocomposite-Coated Controlled-Release Fertilizers. *ACS Applied Materials & Interfaces*, **2020**, 12, 27598-27606	9.5	22
208	Simulated photocatalytic aging of biochar in soil ecosystem: Insight into organic carbon release, surface physicochemical properties and cadmium sorption. *Environmental Research*, **2020**, 183, 109241	7.9	22
207	Interactions between carbon nanotubes and sulfonamide antibiotics in aqueous solutions under various physicochemical conditions. *Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering*, **2013**, 48, 1136-44	2.3	22
206	Biocolloid retention in partially saturated soils. *Biologia (Poland)*, **2006**, 61, S229-S233	1.5	22
205	Enhanced removal of ammonium from water by ball-milled biochar. *Environmental Geochemistry and Health*, **2020**, 42, 1579-1587	4.7	22
204	Removal of aqueous Cr(VI) by Zn- and Al-modified hydrochar. *Chemosphere*, **2020**, 260, 127610	8.4	22
203	Comparative investigation of characteristics and phosphate removal by engineered biochars with different loadings of magnesium, aluminum, or iron. *Science of the Total Environment*, **2020**, 747, 141277	10.2	22
202	Scavenging effect of oxidized biochar against the phytotoxicity of lead ions on hydroponically grown chicory: An anatomical and ultrastructural investigation. *Ecotoxicology and Environmental Safety*, **2019**, 170, 363-374	7	22
201	Effects of ionic strength and cation type on the transport of per□orooctanoic acid (PFOA) in unsaturated sand porous media. *Journal of Hazardous Materials*, **2021**, 403, 123688	12.8	22
200	One-step synthesis of superhydrophobic and multifunctional nano copper-modified bio-polyurethane for controlled-release fertilizers with □multilayer air shields□new insight of improvement mechanism. *Journal of Materials Chemistry A*, **2019**, 7, 9503-9509	13	21
199	Insights into the effects of long-term biochar loading on water-soluble organic matter in soil: Implications for the vertical co-migration of heavy metals. *Environment International*, **2020**, 136, 105439	12.9	21
198	Effect of hydrofracking fluid on colloid transport in the unsaturated zone. *Environmental Science & Technology*, **2014**, 48, 8266-74	10.3	21
197	Activated-Lignite-Based Super Large Granular Slow-Release Fertilizers Improve Apple Tree Growth: Synthesis, Characterizations, and Laboratory and Field Evaluations. *Journal of Agricultural and Food Chemistry*, **2017**, 65, 5879-5889	5.7	21
196	Facile preparation of 3D GO/CNCs composite with adsorption performance towards [BMIM][Cl] from aqueous solution. *Journal of Hazardous Materials*, **2017**, 337, 27-33	12.8	21

195	Mechanisms and adsorption capacities of hydrogen peroxide modified ball milled biochar for the removal of methylene blue from aqueous solutions. *Bioresource Technology*, **2021**, 337, 125432	11	21
194	Ball-milled biochar for alternative carbon electrode. *Environmental Science and Pollution Research*, **2019**, 26, 14693-14702	5.1	20
193	Montmorillonite enhanced ciprofloxacin transport in saturated porous media with sorbed ciprofloxacin showing antibiotic activity. *Journal of Contaminant Hydrology*, **2015**, 173, 1-7	3.9	20
192	Transport and interactions of kaolinite and mercury in saturated sand media. *Journal of Hazardous Materials*, **2012**, 213-214, 93-9	12.8	20
191	Effect of dense vegetation on colloid transport and removal in surface runoff. *Journal of Hydrology*, **2012**, 434-435, 1-6	6	20
190	Quantification of colloid retention and release by straining and energy minima in variably saturated porous media. *Environmental Science & Technology*, **2013**, 47, 8256-64	10.3	20
189	The Stability of Biochar in the Environment **2013**, 1-40		20
188	Boosting catalytic degradation efficiency by incorporation of MIL-53(Fe) with Ti3C2Tx nanosheeets. *Journal of Molecular Liquids*, **2020**, 311, 113201	6	19
187	Ultrafast sequestration of cadmium and lead from water by manganese oxide supported on a macro-mesoporous biochar. *Chemical Engineering Journal*, **2020**, 387, 124095	14.7	19
186	Porous nano-cerium oxide wood chip biochar composites for aqueous levofloxacin removal and sorption mechanism insights. *Environmental Science and Pollution Research*, **2018**, 25, 25629-25637	5.1	19
185	Single collector attachment efficiency of colloid capture by a cylindrical collector in laminar overland flow. *Environmental Science & Technology*, **2012**, 46, 8878-86	10.3	19
184	Robust and Real-Time Traffic Lights Recognition in Complex Urban Environments. *International Journal of Computational Intelligence Systems*, **2011**, 4, 1383-1390	3.4	19
183	Vehicle Localization at an Intersection Using a Traffic Light Map. *IEEE Transactions on Intelligent Transportation Systems*, **2019**, 20, 1432-1441	6.1	18
182	Co-adsorption performance and mechanism of nitrogen and phosphorus onto eupatorium adenophorum biochar in water. *Bioresource Technology*, **2021**, 340, 125696	11	18
181	Transport of sulfacetamide and levofloxacin in granular porous media under various conditions: Experimental observations and model simulations. *Science of the Total Environment*, **2016**, 573, 1630-1637	10.2	17
180	Impacts of straw biochar additions on agricultural soil quality and greenhouse gas fluxes in karst area, Southwest China. *Soil Science and Plant Nutrition*, **2016**, 62, 526-533	1.6	17
179	Fuel properties and combustion kinetics of hydrochar derived from co-hydrothermal carbonization of tobacco residues and graphene oxide. *Biomass Conversion and Biorefinery*, **2020**, 10, 189-201	2.3	17
178	Effect of biochar addition on short-term NO and CO emissions during repeated drying and wetting of an anthropogenic alluvial soil. *Environmental Geochemistry and Health*, **2017**, 39, 635-647	4.7	16

177	Multifunctional Slow-Release Fertilizer Prepared from Lignite Activated by a 3D-Molybdate-Sulfur Hierarchical Hollow Nanosphere Catalyst. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 10533-10543	8.3	16
176	Colloid filtration in surface dense vegetation: experimental results and theoretical predictions. *Environmental Science & Technology*, **2014**, 48, 3883-90	10.3	16
175	Graphene-coated pyrogenic carbon as an anode material for lithium battery. *Chemical Engineering Journal*, **2013**, 229, 399-403	14.7	16
174	Polyethyleneimine-modified biochar for enhanced phosphate adsorption. *Environmental Science and Pollution Research*, **2020**, 27, 7420-7429	5.1	16
173	A green catalyst for hydrolysis of cellulose: Amino acid protic ionic liquid. *Journal of the Taiwan Institute of Chemical Engineers*, **2018**, 93, 667-673	5.3	16
172	Concurrent agglomeration and straining govern the transport of C-labeled few-layer graphene in saturated porous media. *Water Research*, **2017**, 115, 84-93	12.5	15
171	Sorption of tetracycline on H2O2-modified biochar derived from rape stalk. *Environmental Pollutants and Bioavailability*, **2019**, 31, 198-207	2.8	15
170	Advantageous Interfacial Effects of AgPd/g-C N for Photocatalytic Hydrogen Evolution: Electronic Structure and H O Dissociation. *Chemistry - A European Journal*, **2019**, 25, 5058-5064	4.8	15
169	Phosphate removal by lead-exhausted bioadsorbents simultaneously achieving lead stabilization. *Chemosphere*, **2017**, 168, 748-755	8.4	15
168	Immobilization of heavy metals (Cd, Zn, and Pb) in different contaminated soils with swine manure biochar. *Environmental Pollutants and Bioavailability*, **2021**, 33, 55-65	2.8	15
167	Effects of Wet Oxidation Process on Biochar Surface in Acid and Alkaline Soil Environments. *Materials*, **2018**, 11,	3.5	15
166	Adsorption and interaction mechanism of uranium (VI) from aqueous solutions on phosphate-impregnation biochar cross-linked Mg Al layered double-hydroxide composite. *Applied Clay Science*, **2021**, 209, 106146	5.2	15
165	Microplastic pollution in soils and groundwater: Characteristics, analytical methods and impacts. *Chemical Engineering Journal*, **2021**, 425, 131870	14.7	15
164	Effects of surface active agents on DNAPL migration and distribution in saturated porous media. *Science of the Total Environment*, **2016**, 571, 1147-54	10.2	14
163	Photovoltaic electrolysis improves nitrogen and phosphorus removals of biochar-amended constructed wetlands. *Ecological Engineering*, **2019**, 138, 71-78	3.9	14
162	Influence of modified soils on the removal of diesel fuel oil from water and the growth of oil degradation micro-organism. *Chemosphere*, **2000**, 41, 419-26	8.4	14
161	New insights into CO2 sorption on biochar/Fe oxyhydroxide composites: Kinetics, mechanisms, and in situ characterization. *Chemical Engineering Journal*, **2020**, 384, 123289	14.7	14
160	Distribution of endocrine-disrupting chemicals in colloidal and soluble phases in municipal secondary effluents and their removal by different advanced treatment processes. *Chemosphere*, **2019**, 219, 730-739	8.4	14

159	Novel ball-milled biochar-vermiculite nanocomposites effectively adsorb aqueous As(V). *Chemosphere*, **2020**, 260, 127566	8.4	13
158	Removal of acid orange 7 by surfactant-modified iron nanoparticle supported on palygorskite: Reactivity and mechanism. *Applied Clay Science*, **2018**, 152, 173-182	5.2	13
157	Nanotechnology for drinking water purification **2017**, 75-118		13
156	Foamed urea-formaldehyde microspheres for removal of heavy metals from aqueous solutions. *Chemosphere*, **2020**, 241, 125004	8.4	13
155	Transport characteristics of fragmental polyethylene glycol terephthalate (PET) microplastics in porous media under various chemical conditions. *Chemosphere*, **2021**, 276, 130214	8.4	13
154	Review on upgrading organic waste to value-added carbon materials for energy and environmental applications. *Journal of Environmental Management*, **2021**, 296, 113128	7.9	13
153	Sulfidation enhances stability and mobility of carboxymethyl cellulose stabilized nanoscale zero-valent iron in saturated porous media. *Science of the Total Environment*, **2020**, 718, 137427	10.2	12
152	Organic silicone-modified transgenic soybean oil as bio-based coating material for controlled-release urea fertilizers. *Journal of Applied Polymer Science*, **2016**, 133,	2.9	12
151	Effective removal of high concentration of phosphate by starch-stabilized nanoscale zerovalent iron (SNZVI). *Journal of the Taiwan Institute of Chemical Engineers*, **2016**, 61, 181-187	5.3	12
150	Simple approach for large-scale production of reduced graphene oxide films. *Chemical Engineering Journal*, **2014**, 243, 340-346	14.7	12
149	Analytical and experimental analysis of solute transport in heterogeneous porous media. *Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering*, **2014**, 49, 338-43	2.3	12
148	Fulvic acid-like substance and its characteristics, an innovative waste recycling material from pulp black liquor. *Journal of Cleaner Production*, **2020**, 243, 118585	10.3	12
147	End-to-end learning for high-precision lane keeping via multi-state model. *CAAI Transactions on Intelligence Technology*, **2018**, 3, 185-190	9.7	12
146	Biochar modulates mineral nitrogen dynamics in soil and terrestrial ecosystems: A critical review. *Chemosphere*, **2021**, 278, 130378	8.4	12
145	Biochar addition can reduce NOx gas emissions from a calcareous soil. *Environmental Pollutants and Bioavailability*, **2019**, 31, 38-48	2.8	11
144	Rigid Point Set Registration Based on Cubature Kalman Filter and Its Application in Intelligent Vehicles. *IEEE Transactions on Intelligent Transportation Systems*, **2018**, 19, 1754-1765	6.1	11
143	Phytotoxicity of ionic liquids with different structures on wheat seedlings and evaluation of their toxicity attenuation at the presence of modified biochar by adsorption effect. *Chemosphere*, **2018**, 196, 331-338	8.4	11
142	Retention and Transport of Bisphenol A and Bisphenol S in Saturated Limestone Porous Media. *Water, Air, and Soil Pollution*, **2018**, 229, 1	2.6	11

141	Effects of elevated CO on the phytoremediation efficiency of Noccaea caerulescens. *Environmental Pollution*, **2019**, 255, 113169	9.3	11
140	Ibuprofen degradation by a synergism of facet-controlled MIL-88B(Fe) and persulfate under simulated visible light.. *Journal of Colloid and Interface Science*, **2021**, 612, 1-12	9.3	11
139	Ball-milled, solvent-free Sn-functionalisation of wood waste biochar for sugar conversion in food waste valorisation. *Journal of Cleaner Production*, **2020**, 268, 122300	10.3	11
138	An in-situ Technique for Producing Low-Cost Agricultural Biochar. *Pedosphere*, **2018**, 28, 690-695	5	11
137	Visualization of graphene oxide transport in two-dimensional homogeneous and heterogeneous porous media. *Journal of Hazardous Materials*, **2019**, 369, 334-341	12.8	10
136	Multi-phase distribution and risk assessment of endocrine disrupting chemicals in the surface water of the Shaying River, -Huai River Basin, China. *Ecotoxicology and Environmental Safety*, **2019**, 173, 45-53	7	10
135	Carbon Dioxide Capture: An Effective Way to Combat Global Warming. *Springer Briefs in Molecular Science*, **2015**,	0.6	10
134	Importance of Al/Fe oxyhydroxide coating and ionic strength in perfluorooctanoic acid (PFOA) transport in saturated porous media. *Water Research*, **2020**, 175, 115685	12.5	10
133	Lead and copper-induced hormetic effect and toxicity mechanisms in lettuce (Lactuca sativa L.) grown in a contaminated soil. *Science of the Total Environment*, **2020**, 741, 140440	10.2	10
132	Removal of the Pesticide Pymetrozine from Aqueous Solution by Biochar Produced from Brewer's Spent Grain at Different Pyrolytic Temperatures. *BioResources*, **2014**, 9,	1.3	10
131	Experimental analysis of colloid capture by a cylindrical collector in laminar overland flow. *Environmental Science & Technology*, **2011**, 45, 7777-84	10.3	10
130	Correlation equation for predicting attachment efficiency (α) of organic matter-colloid complexes in unsaturated porous media. *Environmental Science & Technology*, **2011**, 45, 10096-101	10.3	10
129	Indole Carbonized Polymer Dots Boost Full-Color Emission by Regulating Surface State. *IScience*, **2020**, 23, 101546	6.1	10
128	Importance of surface roughness on perfluorooctanoic acid (PFOA) transport in unsaturated porous media. *Environmental Pollution*, **2020**, 266, 115343	9.3	10
127	Effects of Surfactant and Electrolyte Concentrations, Cation Valence, and Temperature on Graphene Oxide Retention and Transport in Saturated Porous Media. *Water, Air, and Soil Pollution*, **2019**, 230, 1	2.6	10
126	Biochar improves soil physical characteristics and strengthens root architecture in Muscadine grape (Vitis rotundifolia L.). *Chemical and Biological Technologies in Agriculture*, **2021**, 8,	4.4	10
125	Riparian Vadose Zone Preferential Flow: Review of Concepts, Limitations, and Perspectives. *Vadose Zone Journal*, **2018**, 17, 1-20	2.7	10
124	Removal of fluoride from aqueous solution by TiO2-based composites. *Journal of the Taiwan Institute of Chemical Engineers*, **2017**, 74, 205-210	5.3	9

123	Activation of fulvic acid-like in paper mill effluents using HO/TiO catalytic oxidation: Characterization and salt stress bioassays. *Journal of Hazardous Materials*, **2019**, 378, 120702	12.8	9
122	Efficient biosorption of Pb(II) from aqueous solutions by a PAH-degrading strain Herbaspirillum chlorophenolicum FA1. *Journal of Industrial and Engineering Chemistry*, **2018**, 57, 64-71	6.3	9
121	Graphene-mediated self-assembly of zeolite-based microcapsules. *Chemical Engineering Journal*, **2013**, 223, 556-562	14.7	9
120	Experimental Study on the Determination and Degradation of Pyoluteorin in Soil via CE with Soxhlet□ Extraction and Field-Amplified Sample Stacking. *Chromatographia*, **2011**, 73, 609-612	2.1	9
119	Physical and Combustion Properties of Binder-Assisted Hydrochar Pellets from Hydrothermal Carbonization of Tobacco Stem. *Waste and Biomass Valorization*, **2020**, 11, 6369-6382	3.2	9
118	Experimental and model investigations of vegetative filter strips for contaminant removal: A review. *Ecological Engineering*, **2019**, 126, 25-36	3.9	9
117	Simultaneous reclaiming phosphate and ammonium from aqueous solutions by calcium alginate-biochar composite: Sorption performance and governing mechanisms. *Chemical Engineering Journal*, **2022**, 429, 132166	14.7	9
116	Preparing lead oxide nanoparticles from waste electric and electronic equipment by high temperature oxidation-evaporation and condensation. *Powder Technology*, **2017**, 308, 30-36	5.2	8
115	Biochar Immobilizes and Degrades 2,4,6-Trichlorophenol in Soils. *Environmental Toxicology and Chemistry*, **2019**, 38, 1364-1371	3.8	8
114	Functional models for colloid retention in porous media at the triple line. *Environmental Science and Pollution Research*, **2014**, 21, 9067-80	5.1	8
113	In situ measurements of colloid transport and retention using synchrotron X-ray fluorescence. *Water Resources Research*, **2006**, 42,	5.4	8
112	Sorption of reactive red by biochars ball milled in different atmospheres: Co-effect of surface morphology and functional groups. *Chemical Engineering Journal*, **2021**, 413, 127468	14.7	8
111	Electrochemical adsorption of perfluorooctanoic acid on a novel reduced graphene oxide aerogel loaded with Cu nanoparticles and fluorine. *Journal of Hazardous Materials*, **2021**, 416, 125866	12.8	8
110	Hydrological Evaluation of Septic Disposal Field Design in Sloping Terrains. *Journal of Environmental Engineering, ASCE*, **2006**, 132, 1289-1297	2	7
109	Straw and wood based biochar for CO2 capture: Adsorption performance and governing mechanisms. *Separation and Purification Technology*, **2022**, 287, 120592	8.3	7
108	Tailoring acidity and porosity of alumina catalysts via transition metal doping for glucose conversion in biorefinery. *Science of the Total Environment*, **2020**, 704, 135414	10.2	7
107	Effects of long-term zinc smelting activities on the distribution and health risk of heavy metals in agricultural soils of Guizhou province, China. *Environmental Geochemistry and Health*, **2020**, 1	4.7	7
106	Borax-assisted hydrothermal carbonization to fabricate monodisperse carbon spheres with high thermostability. *Materials Research Express*, **2019**, 6, 065615	1.7	6

105	Does Biochar Alter the Speciation of Cd and Pb in Aqueous Solution?. *BioResources*, **2014**, 10,	1.3	6
104	Molecular Composition of Size-Fractionated Fulvic Acid-Like Substances Extracted from Spent Cooking Liquor and Its Relationship with Biological Activity. *Environmental Science & Technology*, **2019**, 53, 14752-14760	10.3	6
103	Transport of N-doped graphene in saturated porous media. *Chemical Engineering Journal*, **2019**, 360, 24-29	14.7	6
102	Novel environment-friendly superhydrophobic bio-based polymer derived from liquefied corncob for controlled-released fertilizer. *Progress in Organic Coatings*, **2021**, 151, 106018	4.8	6
101	Production of activated biochar via a self-blowing strategy-supported sulfidated nanoscale zerovalent iron with enhanced reactivity and stability for Cr(VI) reduction. *Journal of Cleaner Production*, **2021**, 315, 128108	10.3	6
100	Hydrothermal carbonization of distillers grains with clay minerals for enhanced adsorption of phosphate and methylene blue. *Bioresource Technology*, **2021**, 340, 125725	11	6
99	Fabrication and environmental applications of metal-containing solid waste/biochar composites: A review. *Science of the Total Environment*, **2021**, 799, 149295	10.2	6
98	Exploring the use of Dicranopteris pedata ash as a rare earth fertilizer to Ipomoea aquatica Forsskal. *Journal of Hazardous Materials*, **2020**, 400, 123207	12.8	5
97	Nutrient stability and sorption of sewage sludge biochar prepared from co-pyrolysis of sewage sludge and stalks / mineral materials. *Environmental Pollutants and Bioavailability*, **2020**, 32, 12-18	2.8	5
96	Role of controlled and slow release fertilizers in fruit crop nutrition **2020**, 555-566		5
95	Retention and Transport of PAH-Degrading Bacterium Herbaspirillum chlorophenolicum FA1 in Saturated Porous Media Under Various Physicochemical Conditions. *Water, Air, and Soil Pollution*, **2017**, 228, 1	2.6	5
94	Changes in surface characteristics and adsorption properties of 2,4,6-trichlorophenol following Fenton-like aging of biochar. *Scientific Reports*, **2021**, 11, 4293	4.9	5
93	Investigations of Cr(VI) removal by millet bran biochar modified with inorganic compounds: Momentous role of additional lactate. *Science of the Total Environment*, **2021**, 793, 148098	10.2	5
92	Environmental behaviors and degradation methods of microplastics in different environmental media.. *Chemosphere*, **2022**, 134354	8.4	5
91	Importance of Organic Matter to the Retention and Transport of Bisphenol A and Bisphenol S in Saturated Soils. *Water, Air, and Soil Pollution*, **2019**, 230, 1	2.6	4
90	Effect of cation type in mixed Ca-Na systems on transport of sulfonamide antibiotics in saturated limestone porous media. *Environmental Science and Pollution Research*, **2019**, 26, 11170-11178	5.1	4
89	Activation of Humic Acid in Lignite Using Molybdate-Phosphorus Hierarchical Hollow Nanosphere Catalyst Oxidation: Molecular Characterization and Rice Seed Germination-Promoting Performances. *Journal of Agricultural and Food Chemistry*, **2020**, 68, 13620-13631	5.7	4
88	Laser Radar based Vehicle Localization in GPS Signal Blocked Areas. *International Journal of Computational Intelligence Systems*, **2011**, 4, 1100-1109	3.4	4

87	Improved Intelligent Vehicle Localization Using Magnetic Ruler. *International Journal of Computational Intelligence Systems*, **2011**, 4, 394-401	3.4	4
86	Nanobiochar-rhizosphere interactions: Implications for the remediation of heavy-metal contaminated soils.. *Environmental Pollution*, **2022**, 299, 118810	9.3	4
85	Effect of root exudates on the stability and transport of graphene oxide in saturated porous media. *Journal of Hazardous Materials*, **2021**, 413, 125362	12.8	4
84	Migration and transformation of chromium in unsaturated soil during groundwater table fluctuations induced by rainfall. *Journal of Hazardous Materials*, **2021**, 416, 126229	12.8	4
83	Preparation of ammonium-modified cassava waste-derived biochar and its evaluation for synergistic adsorption of ternary antibiotics from aqueous solution. *Journal of Environmental Management*, **2021**, 298, 113530	7.9	4
82	Mesoporous ball-milling iron-loaded biochar for enhanced sorption of reactive red: Performance and mechanisms. *Environmental Pollution*, **2021**, 290, 117992	9.3	4
81	Photoacoustic Study of (mathrm{Y}^{3+})-, (mathrm{Tb}^{3+})- , and (mathrm{Er}^{3+})-Doped Zinc Oxide Nanocrystals. *International Journal of Thermophysics*, **2015**, 36, 1336-1341	2.1	3
80	Adsorption Behaviour of Pymetrozine by Four Kinds of Biochar from Aqueous Solution. *Adsorption Science and Technology*, **2013**, 31, 477-487	3.6	3
79	A New Approach to High-accuracy Road Orthophoto Mapping Based on Wavelet Transform. *International Journal of Computational Intelligence Systems*, **2011**, 4, 1367-1374	3.4	3
78	Transport of perfluorooctanoic acid in unsaturated porous media mediated by SDBS. *Journal of Hydrology*, **2022**, 607, 127479	6	3
77	Electroactive Fe-biochar for redox-related remediation of arsenic and chromium: Distinct redox nature with varying iron/carbon speciation. *Journal of Hazardous Materials*, **2022**, 430, 128479	12.8	3
76	Degradation of Congo red by integration of supported nanoscale zero-valent iron with photo-catalytic oxidation82, 114-120		3
75	A Novel System for Guiding Unmanned Vehicles Based on Human Gesture Recognition **2020**,		3
74	Remediation of saline-sodic soil using organic and inorganic amendments: physical, chemical, and enzyme activity properties. *Journal of Soils and Sediments*, **2020**, 20, 1454-1467	3.4	3
73	Sorption behavior of dimethyl phthalate in biochar-soil composites: Implications for the transport of phthalate esters in long-term biochar amended soils. *Ecotoxicology and Environmental Safety*, **2020**, 205, 111169	7	3
72	Modified nanoscale zero-valent iron in persulfate activation for organic pollution remediation: a review. *Environmental Science and Pollution Research*, **2021**, 28, 34229-34247	5.1	3
71	Nano-soy-protein microcapsule-enabled self-healing biopolyurethane-coated controlled-release fertilizer: preparation, performance, and mechanism. *Materials Today Chemistry*, **2021**, 20, 100413	6.2	3
70	Slow-released bio-organic□hemical fertilizer improved tomato growth: synthesis and pot evaluations. *Journal of Soils and Sediments*, **2021**, 21, 319-327	3.4	3

69	P-enriched hydrochar for soil remediation: Synthesis, characterization, and lead stabilization. *Science of the Total Environment*, **2021**, 783, 146983	10.2	3
68	Selective adsorption behavior and mechanism of phosphate in water by different lanthanum modified biochar. *Journal of Environmental Chemical Engineering*, **2022**, 10, 107476	6.8	3
67	Carbon defects in biochar facilitated nitrogen doping: The significant role of pyridinic nitrogen in peroxymonosulfate activation and ciprofloxacin degradation. *Chemical Engineering Journal*, **2022**, 441, 135864	14.7	3
66	Microwave-assisted pyrolysis derived biochar for volatile organic compounds treatment: Characteristics and adsorption performance.. *Bioresource Technology*, **2022**, 355, 127274	11	3
65	Influence of changes in river system structure on hydrological processes in Taihu Basin, China. *Hydrological Sciences Journal*, **2019**, 64, 2093-2104	3.5	2
64	Cotransport of Herbaspirillum chlorophenolicum FA1 and heavy metals in saturated porous media: Effect of ion type and concentration. *Environmental Pollution*, **2019**, 254, 112940	9.3	2
63	CyberTORCS: An Intelligent Vehicles Simulation Platform for Cooperative Driving. *International Journal of Computational Intelligence Systems*, **2011**, 4, 378-385	3.4	2
62	Stabilization of heavy metals in biochar derived from plants in antimony mining area and its environmental implications.. *Environmental Pollution*, **2022**, 300, 118902	9.3	2
61	Treatment technologies for selenium contaminated water: A critical review.. *Environmental Pollution*, **2022**, 118858	9.3	2
60	Stoichiometric carbocatalysis via epoxide-like C-S-O configuration on sulfur-doped biochar for environmental remediation.. *Journal of Hazardous Materials*, **2022**, 428, 128223	12.8	2
59	Recent advances in the treatment of contaminated soils by ball milling technology: Classification, mechanisms, and applications. *Journal of Cleaner Production*, **2022**, 340, 130821	10.3	2
58	Physical separation of catalytic oxidation and reduction sites onto photocatalyst assisted by surface functional groups for enhanced hydrogen evolution. *Journal of Cleaner Production*, **2021**, 324, 129259	10.3	2
57	Characterization of residues from non-woody pulping process and its function as fertilizer. *Chemosphere*, **2021**, 262, 127906	8.4	2
56	Microwave biochars produced with activated carbon catalyst: Characterization and sorption of volatile organic compounds (VOCs).. *Science of the Total Environment*, **2022**, 153996	10.2	2
55	Biochar as a potential strategy for remediation of contaminated mining soils: Mechanisms, applications, and future perspectives.. *Journal of Environmental Management*, **2022**, 313, 114973	7.9	2
54	Nano-biochar: A novel solution for sustainable agriculture and environmental remediation.. *Environmental Research*, **2022**, 210, 112891	7.9	2
53	Effects of ionic surfactants on the aggregate stability and water repellency of silt loam soil. *Journal of Soils and Sediments*, **2017**, 17, 2438-2448	3.4	1
52	Lossy substrate integrated waveguide filter with flat passband **2016**,		1

51	Palygorskite-supported sul□e-modi□d nanoscale zero-valent iron for Congo red removal. *Environmental Pollutants and Bioavailability*, **2019**, 31, 233-239	2.8	1
50	Effect of Residual NAPLs on the Transport of Bisphenol A and Bisphenol S in Saturated Porous Media. *Water, Air, and Soil Pollution*, **2019**, 230, 1	2.6	1
49	Transport of a PAH-degrading bacterium in saturated limestone media under various physicochemical conditions: Common and unexpected retention and remobilization behaviors. *Journal of Hazardous Materials*, **2019**, 380, 120858	12.8	1
48	Cu(II)-Based Water-Dispersible Humic Acid: Synthesis, Characterizations, and Antifungal and Growth-Promoting Performances. *Journal of Agricultural and Food Chemistry*, **2019**, 67, 12987-13000	5.7	1
47	Reply to comment on □nvestigating ponding depth and soil detachability for a mechanistic erosion model using a simple experiment□by Gao, B., et al., 2003. Journal of Hydrology 277, 116□124. *Journal of Hydrology*, **2004**, 289, 307-308	6	1
46	Fate and transport of microplastics in soils and groundwater **2022**, 301-329		1
45	Synthesis of hickory biochar via one-step acidic ball milling: Characteristics and titan yellow adsorption. *Journal of Cleaner Production*, **2022**, 338, 130575	10.3	1
44	Release characteristics of phosphate from ball-milled biochar and its potential effects on plant growth.. *Science of the Total Environment*, **2022**, 821, 153256	10.2	1
43	Preparation of biosorbent for the removal of organic dyes from aqueous solution via one-step alkaline ball milling of hickory wood.. *Bioresource Technology*, **2022**, 348, 126831	11	1
42	Ball-milled bismuth oxybromide/biochar composites with enhanced removal of reactive red owing to the synergy between adsorption and photodegradation.. *Journal of Environmental Management*, **2022**, 308, 114652	7.9	1
41	Porous biochar supported Ag3PO4 photocatalyst for □wo-in-one□synergistic adsorptive-photocatalytic removal of methylene blue under visible light irradiation. *Journal of Environmental Chemical Engineering*, **2021**, 9, 106753	6.8	1
40	Gas-solid phase flow synthesis of Cu-Co-1,3,5-benzenetricarboxylate for electrocatalytic oxygen evolution. *Chemical Communications*, **2021**, 57, 12297-12300	5.8	1
39	Retention of nano PbO in saturated columns and its dissolution kinetics in soils. *Environmental Science and Pollution Research*, **2020**, 27, 1167-1174	5.1	1
38	Physicochemical disintegration of biochar: a potentially important process for long-term cadmium and lead sorption. *Biochar*,1	10	1
37	Autonomous Exploration for Automated Valet Parking Based on Road Structure **2019**,		1
36	Greenhouse Evaluation of Pinewood Biochar Effects on Nutrient Status and Physiological Performance in Muscadine Grape (Vitis rotundifolia L.). *Hortscience: A Publication of the American Society for Hortcultural Science*, **2021**, 56, 277-285	2.4	1
35	Monocular Visual-Inertial Odometry Based on Sparse Feature Selection with Adaptive Grid **2018**,		1
34	Quantifying the effects of Sn on □-Al2Cu precipitation kinetics in Al□Cu alloys. *Materials Science and Technology*, **2021**, 37, 979-992	1.5	1

33	Ball-milled bismuth oxychloride/biochar nanocomposites with rich oxygen vacancies for reactive red-120 adsorption in aqueous solution. *Biochar*, **2022**, 4, 1	10	1
32	Adsorption behavior and performance of ammonium onto sorghum straw biochar from water.. *Scientific Reports*, **2022**, 12, 5358	4.9	1
31	Quantifying the Effects of Grain Refiners Al-Ti-B and La on the Microstructure and Mechanical Properties of W319 Alloy. *Metals*, **2022**, 12, 627	2.3	1
30	Removal performance, mechanisms, and influencing factors of biochar for air pollutants: a critical review. *Biochar*, **2022**, 4,	10	1
29	Rainfall induced chemical transport from soil to runoff: theory and experiments. *Journal of Hydrology*, **2004**, 295, 291-291	6	0
28	Pyrolysis temperature and feedstock affected Cr(VI) removal capacity of sulfidated zerovalent iron: Importance of surface area and electrical conductivity.. *Chemosphere*, **2022**, 296, 133927	8.4	0
27	Effects of anionic hydrocarbon surfactant on the transport of perfluorooctanoic acid (PFOA) in natural soils. *Environmental Science and Pollution Research*, **2021**, 1	5.1	0
26	Interactive effects of biochar amendment and lead toxicity on soil microbial community.. *Journal of Hazardous Materials*, **2022**, 425, 127921	12.8	0
25	Mechanochemical modification of biochar-attapulgite nanocomposites for cadmium removal: Performance and mechanisms. *Biochemical Engineering Journal*, **2022**, 179, 108332	4.2	0
24	Potential management practices of saltwater intrusion impacts on soil health and water quality: a review. *Journal of Water and Climate Change*, **2021**, 12, 1327-1343	2.3	0
23	Real-Time Trajectory Planning for On-road Autonomous Tractor-Trailer Vehicles. *Journal of Shanghai Jiaotong University (Science)*, **2021**, 26, 722-730	0.6	0
22	Dispersion and transport of microplastics in three water-saturated coastal soils. *Journal of Hazardous Materials*, **2021**, 424, 127614	12.8	0
21	Quantifying the Influences of Carbides and Porosities on the Fatigue Crack Evolution of a Ni-Based Single-Crystal Superalloy using X-ray Tomography. *Acta Metallurgica Sinica (English Letters)*,1	2.5	0
20	Phosphorus-modified biochar cross-linked Mg-Al layered double-hydroxide stabilizer reduced U and Pb uptake by Indian mustard (Brassica juncea L.) in uranium contaminated soil.. *Ecotoxicology and Environmental Safety*, **2022**, 234, 113363	7	0
19	Effective Sb(V) removal from aqueous solution using phosphogypsum-modified biochar.. *Environmental Pollution*, **2022**, 119032	9.3	0
18	Insights into Cr(VI) removal mechanism in water by facile one-step pyrolysis prepared coal gangue-biochar composite.. *Chemosphere*, **2022**, 134334	8.4	0
17	Combined Effects of Fe/Al Oxyhydroxide Coating and pH on Polystyrene Nanoplastic Transport in Saturated Sand Media. *Water, Air, and Soil Pollution*, **2022**, 233, 1	2.6	0
16	Synergetic effect of co-pyrolysis of sewage sludge and lignin on biochar production and adsorption of methylene blue. *Fuel*, **2022**, 324, 124587	7.1	0

15	Application of biochar immobilized microorganisms for pollutants removal from wastewater: A review.. *Science of the Total Environment*, **2022**, 837, 155563	10.2	0
14	Preparation and evaluation of fine-tuned micropore biochar by lignin impregnation for CO2 and VOCs adsorption. *Separation and Purification Technology*, **2022**, 295, 121295	8.3	0
13	Facile Synthesis of Sodium Lignosulfonate/Polyethyleneimine/Sodium Alginate Beads With Ultra-high Adsorption Capacity for Cr(VI) Removal From Water. *Journal of Hazardous Materials*, **2022**, 129270	12.8	0
12	Photoacoustic Spectral Study of Lanthanide Complexes Doped in Silica Matrix. *International Journal of Thermophysics*, **2015**, 36, 905-909	2.1	
11	Adsorbents for CO2 Capture. *Springer Briefs in Molecular Science*, **2015**, 25-41	0.6	
10	Sorption of BTX in simulated groundwater by cationic surfactants modified soils. *Toxicological and Environmental Chemistry*, **1999**, 72, 135-144	1.4	
9	Occurrences and impacts of microplastics in soils and groundwater **2022**, 253-299		
8	Occurrences and impacts of engineered nanoparticles in soils and groundwater **2022**, 165-204		
7	Fate and transport of engineered nanoparticles in soils and groundwater **2022**, 205-251		
6	Occurrences and impacts of pharmaceuticals and personal care products in soils and groundwater **2022**, 5-47		
5	Collision-Free Path Planning with Kinematic Constraints in Urban Scenarios. *Journal of Shanghai Jiaotong University (Science)*, **2021**, 26, 731-738	0.6	
4	Technology of Acid Soil Improvement with Biochar: A Review. *IOP Conference Series: Earth and Environmental Science*, **2021**, 692, 042098	0.3	
3	Double Coating as a Novel Technology for Controlling Urea Dissolution in Soil: A Step toward Improving the Sustainability of Nitrogen Fertilization Approaches. *Sustainability*, **2021**, 13, 10707	3.6	
2	Nanoparticles and Their Impacts on Seed Germination. *Nanotechnology in the Life Sciences*, **2021**, 21-31	1.1	
1	Effects of cooling rates on microporosity in DC casting Al-Li alloy. *China Foundry*, **2022**, 19, 177-190	0.8	