

Qilin Li

List of Publications by Year in descending order

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122
papers

15,399
citations

28190

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17546

121
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123
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times ranked

16750
citing authors

#	ARTICLE	IF	CITATIONS
1	In situ engineering of highly conductive TiO ₂ /carbon heterostructure fibers for enhanced electrocatalytic degradation of water pollutants. <i>Journal of Hazardous Materials</i> , 2022, 429, 128328.	6.5	21
2	Designing polymeric membranes with coordination chemistry for high-precision ion separations. <i>Science Advances</i> , 2022, 8, eabm9436.	4.7	50
3	Eggshell membrane derived nitrogen rich porous carbon for selective electrosorption of nitrate from water. <i>Water Research</i> , 2022, 216, 118351.	5.3	24
4	A Polysulfone/Cobalt Metal-Organic Framework Nanocomposite Membrane with Enhanced Water Permeability and Fouling Resistance. <i>ACS Applied Polymer Materials</i> , 2022, 4, 3532-3542.	2.0	4
5	Inorganic Scaling in Membrane Desalination: Models, Mechanisms, and Characterization Methods. <i>Environmental Science & Technology</i> , 2022, 56, 7484-7511.	4.6	60
6	Energy recovery in electrified capacitive deionization systems for wastewater treatment and desalination: A comprehensive review. <i>Chemical Engineering and Processing: Process Intensification</i> , 2022, 178, 109030.	1.8	6
7	Wetting-resistant photothermal nanocomposite membranes for direct solar membrane distillation. <i>Journal of Membrane Science</i> , 2021, 620, 118913.	4.1	46
8	Treatment of brackish water reverse osmosis brine using only solar energy. <i>Environmental Science: Water Research and Technology</i> , 2021, 7, 1840-1851.	1.2	1
9	Electrochemical ammonia synthesis via nitrate reduction on Fe single atom catalyst. <i>Nature Communications</i> , 2021, 12, 2870.	5.8	605
10	Selective membranes in water and wastewater treatment: Role of advanced materials. <i>Materials Today</i> , 2021, 50, 516-532.	8.3	106
11	Utilizing the broad electromagnetic spectrum and unique nanoscale properties for chemical-free water treatment. <i>Current Opinion in Chemical Engineering</i> , 2021, 33, 100709.	3.8	3
12	Electrochemically-active carbon nanotube coatings for biofouling mitigation: Cleaning kinetics and energy consumption for cathodic and anodic regimes. <i>Journal of Colloid and Interface Science</i> , 2021, 603, 391-397.	5.0	9
13	Enhanced Charge Efficiency and Electrode Separation Utilizing Magnetic Carbon in Flow Electrode Capacitive Deionization. <i>ACS ES&T Engineering</i> , 2021, 1, 340-347.	3.7	21
14	Mechanistic inference on the reaction kinetics of phenols and anilines in carbon nanotubes-activated peroxydisulfate systems: pp-LFERs and QSARs analyses. <i>Chemical Engineering Journal</i> , 2020, 385, 123923.	6.6	48
15	Predominant Effect of Material Surface Hydrophobicity on Gypsum Scale Formation. <i>Environmental Science & Technology</i> , 2020, 54, 15395-15404.	4.6	41
16	Bi-Polymer Electrospun Nanofibers Embedding Ag ₃ PO ₄ /P25 Composite for Efficient Photocatalytic Degradation and Anti-Microbial Activity. <i>Catalysts</i> , 2020, 10, 784.	1.6	5
17	Multifunctional nanocoated membranes for high-rate electrothermal desalination of hypersaline waters. <i>Nature Nanotechnology</i> , 2020, 15, 1025-1032.	15.6	88
18	A Hybrid Metal-Organic Framework-Reduced Graphene Oxide Nanomaterial for Selective Removal of Chromate from Water in an Electrochemical Process. <i>Environmental Science & Technology</i> , 2020, 54, 13322-13332.	4.6	78

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19	Low-cost high-efficiency solar membrane distillation for treatment of oil produced waters. Separation and Purification Technology, 2020, 250, 117170.	3.9	24
20	Effects of N-acyl-homoserine lactones-based quorum sensing on biofilm formation, sludge characteristics, and bacterial community during the start-up of bioaugmented reactors. Science of the Total Environment, 2020, 735, 139449.	3.9	36
21	Sweeping gas membrane distillation (SGMD) for wastewater treatment, concentration, and desalination: A comprehensive review. Chemical Engineering and Processing: Process Intensification, 2020, 153, 107960.	1.8	48
22	Low-cost desalination of seawater and hypersaline brine using nanophotonics enhanced solar energy membrane distillation. Environmental Science: Water Research and Technology, 2020, 6, 2180-2196.	1.2	10
23	Opportunities for nanotechnology to enhance electrochemical treatment of pollutants in potable water and industrial wastewater – a perspective. Environmental Science: Nano, 2020, 7, 2178-2194.	2.2	74
24	Scaling Resistance in Nanophotonics-Enabled Solar Membrane Distillation. Environmental Science & Technology, 2020, 54, 2548-2555.	4.6	45
25	The importance of system configuration for distributed direct potable water reuse. Nature Sustainability, 2020, 3, 548-555.	11.5	38
26	Specific ion effects on the aggregation behavior of aquatic natural organic matter. Journal of Colloid and Interface Science, 2019, 556, 734-742.	5.0	25
27	Field Demonstration of a Nanophotonics-Enabled Solar Membrane Distillation Reactor for Desalination. Industrial & Engineering Chemistry Research, 2019, 58, 18829-18835.	1.8	42
28	Self assembled, sulfonated pentablock copolymer cation exchange coatings for membrane capacitive deionization. Molecular Systems Design and Engineering, 2019, 4, 348-356.	1.7	19
29	Nanoparticle Enhanced Interfacial Solar Photothermal Water Disinfection Demonstrated in 3-D Printed Flow-Through Reactors. Environmental Science & Technology, 2019, 53, 7621-7631.	4.6	24
30	Removal of calcium ions from water by selective electrosorption using target-ion specific nanocomposite electrode. Water Research, 2019, 160, 445-453.	5.3	57
31	<i>In situ</i> remediation of subsurface contamination: opportunities and challenges for nanotechnology and advanced materials. Environmental Science: Nano, 2019, 6, 1283-1302.	2.2	65
32	Bio-derived ultrathin membrane for solar driven water purification. Nano Energy, 2019, 60, 567-575.	8.2	116
33	The Technology Horizon for Photocatalytic Water Treatment: Sunrise or Sunset?. Environmental Science & Technology, 2019, 53, 2937-2947.	4.6	493
34	Modification of hydrophobic commercial PVDF microfiltration membranes into superhydrophilic membranes by the mussel-inspired method with dopamine and polyethyleneimine. Separation and Purification Technology, 2019, 212, 641-649.	3.9	93
35	Threshold Concentrations of Silver Ions Exist for the Sunlight-Induced Formation of Silver Nanoparticles in the Presence of Natural Organic Matter. Environmental Science & Technology, 2018, 52, 4040-4050.	4.6	26
36	Detection and cell sorting of Pseudonocardia species by fluorescence in situ hybridization and flow cytometry using 16S rRNA-targeted oligonucleotide probes. Applied Microbiology and Biotechnology, 2018, 102, 3375-3386.	1.7	19

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37	Aqueous-Processed, High-Capacity Electrodes for Membrane Capacitive Deionization. <i>Environmental Science & Technology</i> , 2018, 52, 5859-5867.	4.6	65
38	Quantitative structure–activity relationship for the oxidation of aromatic organic contaminants in water by TAML/H ₂ O ₂ . <i>Water Research</i> , 2018, 140, 354-363.	5.3	69
39	Porous Electrospun Fibers Embedding TiO ₂ for Adsorption and Photocatalytic Degradation of Water Pollutants. <i>Environmental Science & Technology</i> , 2018, 52, 4285-4293.	4.6	286
40	d-Tyrosine loaded nanocomposite membranes for environmental-friendly, long-term biofouling control. <i>Water Research</i> , 2018, 130, 105-114.	5.3	22
41	Elevated Levels of Pathogenic Indicator Bacteria and Antibiotic Resistance Genes after Hurricane Harvey’s Flooding in Houston. <i>Environmental Science and Technology Letters</i> , 2018, 5, 481-486.	3.9	65
42	Novel Composite Electrodes for Selective Removal of Sulfate by the Capacitive Deionization Process. <i>Environmental Science & Technology</i> , 2018, 52, 9486-9494.	4.6	79
43	Polymer-Coated Nanoparticles for Reversible Emulsification and Recovery of Heavy Oil. <i>Langmuir</i> , 2018, 34, 6522-6528.	1.6	55
44	The effect of DOM on floc formation and membrane fouling in coagulation/ultrafiltration process for treating TiO ₂ nanoparticles in various aquatic media. <i>Chemical Engineering Journal</i> , 2017, 316, 429-437.	6.6	23
45	Novel regenerable antimicrobial nanocomposite membranes: Effect of silver loading and valence state. <i>Journal of Membrane Science</i> , 2017, 531, 68-76.	4.1	34
46	Sunlight Promotes Fast Release of Hazardous Cadmium from Widely-Used Commercial Cadmium Pigment. <i>Environmental Science & Technology</i> , 2017, 51, 6877-6886.	4.6	39
47	Nanophotonics-enabled solar membrane distillation for off-grid water purification. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 6936-6941.	3.3	348
48	Phosphate Changes Effect of Humic Acids on TiO ₂ Photocatalysis: From Inhibition to Mitigation of Electron–Hole Recombination. <i>Environmental Science & Technology</i> , 2017, 51, 514-521.	4.6	102
49	Photothermal nanocomposite membranes for direct solar membrane distillation. <i>Journal of Materials Chemistry A</i> , 2017, 5, 23712-23719.	5.2	129
50	Adsorption of Low-Molecular-Weight Amines in Aqueous Solutions to Zeolites: An Approach to Impeding Low-Molecular-Weight Amines from Regenerating <i>N</i> -Nitrosamines. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 12024-12031.	1.8	6
51	Selective Degradation of Organic Pollutants Using an Efficient Metal-Free Catalyst Derived from Carbonized Polypyrrole via Peroxymonosulfate Activation. <i>Environmental Science & Technology</i> , 2017, 51, 11288-11296.	4.6	514
52	Advanced Materials, Technologies, and Complex Systems Analyses: Emerging Opportunities to Enhance Urban Water Security. <i>Environmental Science & Technology</i> , 2017, 51, 10274-10281.	4.6	129
53	Aggregation Behavior of Dissolved Black Carbon: Implications for Vertical Mass Flux and Fractionation in Aquatic Systems. <i>Environmental Science & Technology</i> , 2017, 51, 13723-13732.	4.6	95
54	Microbial fuel cell fed by Barnett Shale produced water: Power production by hypersaline autochthonous bacteria and coupling to a desalination unit. <i>Biochemical Engineering Journal</i> , 2017, 117, 87-91.	1.8	53

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55	Exploring Topological Effects on Water Distribution System Performance Using Graph Theory and Statistical Models. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2017, 143, .	1.3	42
56	Humic acid-mediated visible-light degradation of phenol on phosphate-modified and Nafion-modified TiO ₂ surfaces. <i>Chinese Journal of Catalysis</i> , 2017, 38, 2076-2084.	6.9	40
57	Overcoming implementation barriers for nanotechnology in drinking water treatment. <i>Environmental Science: Nano</i> , 2016, 3, 1241-1253.	2.2	101
58	Trihalomethane (THM) formation from synergic disinfection of biologically treated municipal wastewater: Effect of ultraviolet (UV) irradiation and titanium dioxide photocatalysis on dissolve organic matter fractions. <i>Chemical Engineering Journal</i> , 2016, 303, 252-260.	6.6	33
59	Inhibition of biofilm formation by D-tyrosine: Effect of bacterial type and D-tyrosine concentration. <i>Water Research</i> , 2016, 92, 173-179.	5.3	68
60	Photochemistry of Dissolved Black Carbon Released from Biochar: Reactive Oxygen Species Generation and Phototransformation. <i>Environmental Science & Technology</i> , 2016, 50, 1218-1226.	4.6	252
61	Total Synthesis of Codeine. <i>Chemistry - A European Journal</i> , 2015, 21, 16379-16382.	1.7	24
62	Multi-endpoint, High-Throughput Study of Nanomaterial Toxicity in <i>Caenorhabditis elegans</i> . <i>Environmental Science & Technology</i> , 2015, 49, 2477-2485.	4.6	91
63	Inhibitory effect of natural organic matter or other background constituents on photocatalytic advanced oxidation processes: Mechanistic model development and validation. <i>Water Research</i> , 2015, 84, 362-371.	5.3	125
64	Regenerable antimicrobial activity in polyamide thin film nanocomposite membranes. <i>Journal of Membrane Science</i> , 2015, 476, 119-127.	4.1	45
65	Enhanced photocatalytic performance of N-nitrosodimethylamine on TiO ₂ nanotube based on the role of singlet oxygen. <i>Chemosphere</i> , 2015, 120, 521-526.	4.2	38
66	Microbial fuel cells under extreme salinity: performance and microbial analysis. <i>Environmental Chemistry</i> , 2015, 12, 293.	0.7	36
67	Impact of Polymer Flocculants on Treated Water Quality in Surface Water Treatment by Coagulation-Microfiltration. <i>Separation Science and Technology</i> , 2014, 49, 682-690.	1.3	4
68	Nanotechnology-Enabled Water Disinfection and Microbial Control. , 2014, , 319-327.		3
69	Arsenic Removal by Nanoscale Magnetite in Guanajuato, Mexico. <i>Environmental Engineering Science</i> , 2014, 31, 393-402.	0.8	23
70	Regional Variation in Water-Related Impacts of Shale Gas Development and Implications for Emerging International Plays. <i>Environmental Science & Technology</i> , 2014, 48, 8298-8306.	4.6	111
71	Modulating Particle Adhesion with Micro-patterned Surfaces. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 8199-8207.	4.0	14
72	Studying the impact of RO membrane surface functional groups on alginate fouling in seawater desalination. <i>Journal of Membrane Science</i> , 2014, 458, 120-127.	4.1	67

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73	Trading oxidation power for efficiency: Differential inhibition of photo-generated hydroxyl radicals versus singlet oxygen. <i>Water Research</i> , 2014, 60, 259-266.	5.3	145
74	Comparison of nanosilver removal by flocculent and granular sludge and short- and long-term inhibition impacts. <i>Water Research</i> , 2014, 58, 62-70.	5.3	76
75	Effects of d-amino acids and norspermidine on the disassembly of large, old-aged microbial aggregates. <i>Water Research</i> , 2014, 54, 247-253.	5.3	39
76	Impact of polymer flocculants on coagulation-microfiltration of surface water. <i>Water Research</i> , 2013, 47, 4538-4546.	5.3	36
77	A scoring mechanism for the rank aggregation of network robustness. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2013, 18, 2722-2732.	1.7	9
78	Photochemical Transformation of Carboxylated Multiwalled Carbon Nanotubes: Role of Reactive Oxygen Species. <i>Environmental Science & Technology</i> , 2013, 47, 14080-14088.	4.6	93
79	Nanotechnology for a Safe and Sustainable Water Supply: Enabling Integrated Water Treatment and Reuse. <i>Accounts of Chemical Research</i> , 2013, 46, 834-843.	7.6	607
80	The role of photochemical transformations in the aggregation and deposition of carboxylated multiwall carbon nanotubes suspended in water. <i>Carbon</i> , 2013, 55, 81-89.	5.4	33
81	Photocatalytic generation of multiple ROS types using low-temperature crystallized anodic TiO ₂ nanotube arrays. <i>Journal of Hazardous Materials</i> , 2013, 260, 434-441.	6.5	41
82	Applications of nanotechnology in water and wastewater treatment. <i>Water Research</i> , 2013, 47, 3931-3946.	5.3	1,919
83	Progress towards the responsible application of nanotechnology for water treatment. <i>Water Research</i> , 2013, 47, 3865.	5.3	8
84	Silica Decorated TiO ₂ for Virus Inactivation in Drinking Water – Simple Synthesis Method and Mechanisms of Enhanced Inactivation Kinetics. <i>Environmental Science & Technology</i> , 2013, 47, 6463-6470.	4.6	65
85	Alumoxane/ferroxane nanoparticles for the removal of viral pathogens: the importance of surface functionality to nanoparticle activity. <i>Nanoscale</i> , 2012, 4, 5627.	2.8	27
86	Control of nanofiltration membrane biofouling by <i>Pseudomonas aeruginosa</i> using d-tyrosine. <i>Journal of Membrane Science</i> , 2012, 423-424, 487-494.	4.1	58
87	Impact of Sunlight and Humic Acid on the Deposition Kinetics of Aqueous Fullerene Nanoparticles (nC ₆₀). <i>Environmental Science & Technology</i> , 2012, 46, 13455-13462.	4.6	58
88	Single walled carbon nanotubes (SWNTs) as templates for the growth of TiO ₂ : the effect of silicon in coverage and the positive and negative synergies for the photocatalytic degradation of Congo red dye. <i>New Journal of Chemistry</i> , 2011, 35, 400-406.	1.4	32
89	Nanostructure on Taro Leaves Resists Fouling by Colloids and Bacteria under Submerged Conditions. <i>Langmuir</i> , 2011, 27, 10035-10040.	1.6	124
90	Studying the Role of Common Membrane Surface Functionalities on Adsorption and Cleaning of Organic Foulants Using QCM-D. <i>Environmental Science & Technology</i> , 2011, 45, 6309-6315.	4.6	136

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91	Fouling of microfiltration membranes by organic polymer coagulants and flocculants: Controlling factors and mechanisms. <i>Water Research</i> , 2011, 45, 357-365.	5.3	53
92	Virus inactivation by silver doped titanium dioxide nanoparticles for drinking water treatment. <i>Water Research</i> , 2011, 45, 535-544.	5.3	217
93	Nanotechnology-enabled water treatment and reuse: emerging opportunities and challenges for developing countries. <i>Trends in Food Science and Technology</i> , 2011, 22, 618-624.	7.8	135
94	Simple Route to Enhanced Photocatalytic Activity of P25 Titanium Dioxide Nanoparticles by Silica Addition. <i>Environmental Science & Technology</i> , 2011, 45, 1563-1568.	4.6	124
95	Addition of a magnetite layer onto a polysulfone water treatment membrane to enhance virus removal. <i>Water Science and Technology</i> , 2011, 63, 2346-2352.	1.2	13
96	The Combined Colloid-Organic Fouling on Nanofiltration Membrane for Wastewater Treatment and Reuse. <i>Separation Science and Technology</i> , 2010, 45, 935-940.	1.3	14
97	Does Aqueous Fullerene Inhibit the Growth of <i>Saccharomyces cerevisiae</i> or <i>Escherichia coli</i> ? <i>Applied and Environmental Microbiology</i> , 2010, 76, 8239-8242.	1.4	31
98	Characterizing Photochemical Transformation of Aqueous nC_{60} under Environmentally Relevant Conditions. <i>Environmental Science & Technology</i> , 2010, 44, 3008-3013.	4.6	100
99	Bioaccumulation of $^{14}C_{60}$ by the Earthworm <i>Eisenia fetida</i> . <i>Environmental Science & Technology</i> , 2010, 44, 9170-9175.	4.6	54
100	UV Irradiation and Humic Acid Mediate Aggregation of Aqueous Fullerene (nC_{60}) Nanoparticles. <i>Environmental Science & Technology</i> , 2010, 44, 7821-7826.	4.6	95
101	Ultrafiltration of dissolved organic matter in surface water by a polyvinylchloride hollow fiber membrane. <i>Journal of Membrane Science</i> , 2009, 327, 254-263.	4.1	24
102	Combined fouling of nanofiltration membranes: Mechanisms and effect of organic matter. <i>Journal of Membrane Science</i> , 2009, 327, 87-95.	4.1	137
103	Fundamental Mechanisms of Three-Component Combined Fouling with Experimental Verification. <i>Langmuir</i> , 2009, 25, 7815-7827.	1.6	22
104	Polysulfone ultrafiltration membranes impregnated with silver nanoparticles show improved biofouling resistance and virus removal. <i>Water Research</i> , 2009, 43, 715-723.	5.3	718
105	Kinetics of C_{60} Fullerene Dispersion in Water Enhanced by Natural Organic Matter and Sunlight. <i>Environmental Science & Technology</i> , 2009, 43, 3574-3579.	4.6	113
106	Nanotechnology-Enabled Water Disinfection and Microbial Control: Merits and Limitations. , 2009, , 157-166.		8
107	Effect of soil sorption and aquatic natural organic matter on the antibacterial activity of a fullerene water suspension. <i>Environmental Toxicology and Chemistry</i> , 2008, 27, 1888-1894.	2.2	132
108	Degradation of natural organic matter by TiO ₂ photocatalytic oxidation and its effect on fouling of low-pressure membranes. <i>Water Research</i> , 2008, 42, 1142-1150.	5.3	210

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109	Antimicrobial nanomaterials for water disinfection and microbial control: Potential applications and implications. <i>Water Research</i> , 2008, 42, 4591-4602.	5.3	2,019
110	Impact of Natural Organic Matter on the Physicochemical Properties of Aqueous C ₆₀ Nanoparticles. <i>Environmental Science & Technology</i> , 2008, 42, 2853-2859.	4.6	170
111	Fouling of reverse osmosis membranes by biopolymers in wastewater secondary effluent: Role of membrane surface properties and initial permeate flux. <i>Journal of Membrane Science</i> , 2007, 290, 173-181.	4.1	291
112	Competitive Effects of Natural Organic Matter: Parametrization and Verification of the Three-Component Adsorption Model COMPSORB. <i>Environmental Science & Technology</i> , 2006, 40, 350-356.	4.6	37
113	Synergistic effects in combined fouling of a loose nanofiltration membrane by colloidal materials and natural organic matter. <i>Journal of Membrane Science</i> , 2006, 278, 72-82.	4.1	174
114	Pore Blockage Effects on Atrazine Adsorption in a Powdered Activated Carbon/Membrane System. I: Model Development. <i>Journal of Environmental Engineering, ASCE</i> , 2004, 130, 1242-1252.	0.7	8
115	Pore Blockage Effects on Atrazine Adsorption in a Powdered Activated Carbon/Membrane System. II: Model Verification and Application. <i>Journal of Environmental Engineering, ASCE</i> , 2004, 130, 1253-1262.	0.7	6
116	Organic Fouling and Chemical Cleaning of Nanofiltration Membranes: Measurements and Mechanisms. <i>Environmental Science & Technology</i> , 2004, 38, 4683-4693.	4.6	700
117	In situ monitoring techniques for concentration polarization and fouling phenomena in membrane filtration. <i>Advances in Colloid and Interface Science</i> , 2004, 107, 83-108.	7.0	174
118	Three-Component Competitive Adsorption Model for Flow-Through PAC Systems. 1. Model Development and Verification with a PAC/Membrane System. <i>Environmental Science & Technology</i> , 2003, 37, 2997-3004.	4.6	39
119	Three-Component Competitive Adsorption Model for Flow-Through PAC Systems. 2. Model Application to a PAC/Membrane System. <i>Environmental Science & Technology</i> , 2003, 37, 3005-3011.	4.6	12
120	Pore blockage effect of NOM on atrazine adsorption kinetics of PAC: the roles of PAC pore size distribution and NOM molecular weight. <i>Water Research</i> , 2003, 37, 4863-4872.	5.3	174
121	Elucidating competitive adsorption mechanisms of atrazine and NOM using model compounds. <i>Water Research</i> , 2003, 37, 773-784.	5.3	153
122	Displacement Effect of NOM on Atrazine Adsorption by PACs with Different Pore Size Distributions. <i>Environmental Science & Technology</i> , 2002, 36, 1510-1515.	4.6	33