Radisav D Vidic

List of Publications by Year
in descending order

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130 papers	8,249 citations	61984 43 h-index	48315 88 g-index

133 all docs	133 docs citations	133 times ranked	7045 citing authors

#	Article	IF	Citations
1	Role of biological granular activated carbon in contaminant removal and ultrafiltration membrane performance in a full-scale system. Journal of Membrane Science, 2022, 644, 120122.	8.2	12
2	Optimization-based modeling and economic comparison of membrane distillation configurations for application in shale gas produced water treatment. Desalination, 2022, 526, 115513.	8.2	3
3	Consideration of Potential Technologies for Ammonia Removal and Recovery from Produced Water. Environmental Science & Technology, 2022, 56, 3305-3308.	10.0	12
4	Laboratory and pilot-scale studies of membrane distillation for desalination of produced water from Permian Basin. Desalination, 2022, 537, 115853.	8.2	14
5	Impact of Organic and Volatile Compounds in Produced Water from Unconventional Reservoirs on Direct Contact Membrane Distillation Permeate Quality. ACS ES&T Water, 2022, 2, 1003-1012.	4.6	6
6	Optimization-based modeling and analysis of brine reflux osmotically assisted reverse osmosis for application toward zero liquid discharge systems. Desalination, 2022, 539, 115948.	8.2	6
7	A Critical Review of Membrane Wettability in Membrane Distillation from the Perspective of Interfacial Interactions. Environmental Science & Technology, 2021, 55, 1395-1418.	10.0	105
8	Pretreatment of brackish water reverse osmosis (BWRO) concentrate to enhance water recovery in inland desalination plants by direct contact membrane distillation (DCMD). Desalination, 2021, 508, 115050.	8.2	19
9	Comparison of calcium scaling in direct contact membrane distillation (DCMD) and nanofiltration (NF). Journal of Membrane Science, 2021, 638, 119647.	8.2	21
10	On-Site Treatment of Shale Gas Flowback and Produced Water in Sichuan Basin by Fertilizer Drawn Forward Osmosis for Irrigation. Environmental Science & Technology, 2020, 54, 10926-10935.	10.0	25
11	Rare Earth Elements Occurrence and Economical Recovery Strategy from Shale Gas Wastewater in the Sichuan Basin, China. ACS Sustainable Chemistry and Engineering, 2020, 8, 11914-11920.	6.7	40
12	Shale gas produced water management using membrane distillation: An optimization-based approach. Resources, Conservation and Recycling, 2020, 158, 104803.	10.8	27
13	Sulfate precipitation in produced water from Marcellus Shale for the control of naturally occurring radioactive material. Water Research, 2020, 177, 115765.	11.3	11
14	Influence of Chemical Cleaning on Physicochemical Characteristics and Ion Rejection by Thin Film Composite Nanofiltration Membranes. Environmental Science & Technology, 2019, 53, 10166-10176.	10.0	34
15	Resource Recovery and Reuse for Hydraulic Fracturing Wastewater in Unconventional Shale Gas and Oil Extraction. Environmental Science & Technology, 2019, 53, 13547-13548.	10.0	25
16	Impact of Operating Conditions on Measured and Predicted Concentration Polarization in Membrane Distillation. Environmental Science & Technology, 2019, 53, 11869-11876.	10.0	27
17	Accuracy of methods for reporting inorganic element concentrations and radioactivity in oil and gas wastewaters from the Appalachian Basin, U.S. based on an inter-laboratory comparison. Environmental Sciences: Processes and Impacts, 2019, 21, 224-241.	3.5	18
18	Concentration polarization in membrane distillation: I. Development of a laser-based spectrophotometric method for in-situ characterization. Journal of Membrane Science, 2019, 581, 462-471.	8.2	18

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19	Development of Functionalized Proppant for the Control of NORM in Marcellus Shale Produced Water. Environmental Science & Technology, 2019, 53, 373-382.	10.0	9
20	Potential and implemented membrane-based technologies for the treatment and reuse of flowback and produced water from shale gas and oil plays: A review. Desalination, 2019, 455, 34-57.	8.2	233
21	Toward better hydraulic fracturing fluids and their application in energy production: A review of sustainable technologies and reduction of potential environmental impacts. Journal of Petroleum Science and Engineering, 2019, 173, 793-803.	4.2	47
22	Comparison of ceramic and polymeric nanofiltration membranes for treatment of abandoned coal mine drainage. Desalination, 2018, 440, 135-145.	8.2	43
23	Engaging over data on fracking and water quality. Science, 2018, 359, 395-397.	12.6	41
24	Importance of feed recirculation for the overall energy consumption in membrane distillation systems. Desalination, 2018, 428, 250-254.	8.2	59
25	Life Cycle Impact and Benefit Trade-Offs of a Produced Water and Abandoned Mine Drainage Cotreatment Process. Environmental Science & Technology, 2018, 52, 13995-14005.	10.0	7
26	Insights into the rejection of barium and strontium by nanofiltration membrane from experimental and modeling analysis. Journal of Membrane Science, 2018, 564, 742-752.	8.2	27
27	Influence of Active Layer on Separation Potentials of Nanofiltration Membranes for Inorganic Ions. Environmental Science & Technology, 2017, 51, 5658-5665.	10.0	58
28	A techno-economic assessment of membrane distillation for treatment of Marcellus shale produced water. Desalination, 2017, 416, 24-34.	8.2	101
29	Laboratory and Pilot-Scale Nanofiltration Treatment of Abandoned Mine Drainage for the Recovery of Products Suitable for Industrial Reuse. Industrial & Engineering Chemistry Research, 2017, 56, 7355-7364.	3.7	26
30	Integrating membrane distillation with waste heat from natural gas compressor stations for produced water treatment in Pennsylvania. Desalination, 2017, 413, 144-153.	8.2	99
31	Fouling in direct contact membrane distillation of produced water from unconventional gas extraction. Journal of Membrane Science, 2017, 524, 493-501.	8.2	81
32	Impact of Antiscalants on the Fate of Barite in the Unconventional Gas Wells. Environmental Engineering Science, 2016, 33, 745-752.	1.6	20
33	Application of microfiltration for the treatment of Marcellus Shale flowback water: Influence of floc breakage on membrane fouling. Journal of Membrane Science, 2016, 510, 348-354.	8.2	35
34	Co-treatment of abandoned mine drainage and Marcellus Shale flowback water for use in hydraulic fracturing. Water Research, 2016, 104, 425-431.	11.3	43
35	Systems-Level Analysis of Waste Heat Recovery Opportunities from Natural Gas Compressor Stations in the United States. ACS Sustainable Chemistry and Engineering, 2016, 4, 3618-3626.	6.7	28
36	Integrating external costs with life cycle costs of emissions from tertiary treatment of municipal wastewater for reuse in cooling systems. Journal of Cleaner Production, 2016, 112, 4733-4740.	9.3	22

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37	Life cycle impact analysis of tertiary treatment alternatives to treat secondary municipal wastewater for reuse in cooling systems. Environmental Progress and Sustainable Energy, 2015, 34, 178-187.	2.3	12
38	Water Treatment Chemicals. , 2015, , 169-191.		1
39	Fate of Radium in Marcellus Shale Flowback Water Impoundments and Assessment of Associated Health Risks. Environmental Science & Technology, 2015, 49, 9347-9354.	10.0	39
40	Analysis of Radium-226 in High Salinity Wastewater from Unconventional Gas Extraction by Inductively Coupled Plasma-Mass Spectrometry. Environmental Science & Technology, 2015, 49, 2969-2976.	10.0	44
41	Changes in Carbon Electrode Morphology Affect Microbial Fuel Cell Performance with Shewanella oneidensis MR-1. Energies, 2015, 8, 1817-1829.	3.1	23
42	Lack of correlation between Legionella colonization and microbial population quantification using heterotrophic plate count and adenosine triphosphate bioluminescence measurement. Environmental Monitoring and Assessment, 2015, 187, 393.	2.7	30
43	Effect of CO₂ stripping on pH in openâ€recirculating cooling water systems. Environmental Progress and Sustainable Energy, 2014, 33, 275-282.	2.3	1
44	Inhibition of Copper Corrosion by Tolyltriazole in Cooling Systems Using Treated Municipal Wastewater as Makeup Water. Arabian Journal for Science and Engineering, 2014, 39, 7741-7749.	1.1	13
45	Scaling Control for Heat Exchangers in Recirculating Cooling Systems Using Treated Municipal Wastewater. Industrial & Engineering Chemistry Research, 2014, 53, 16366-16373.	3.7	7
46	Kinetics and Equilibrium of Barium and Strontium Sulfate Formation in Marcellus Shale Flowback Water. Journal of Environmental Engineering, ASCE, 2014, 140, .	1.4	46
47	Co-precipitation of Radium with Barium and Strontium Sulfate and Its Impact on the Fate of Radium during Treatment of Produced Water from Unconventional Gas Extraction. Environmental Science & Technology, 2014, 48, 4596-4603.	10.0	148
48	Impact of Tertiary Treatment Processes on the Effectiveness of Chloramination for Biological Growth Control in Recirculating Cooling Systems Using Treated Municipal Wastewater. Journal of Environmental Engineering, ASCE, 2014, 140, 04013003.	1.4	1
49	Water resource impacts during unconventional shale gas development: The Pennsylvania experience. International Journal of Coal Geology, 2014, 126, 140-156.	5.0	241
50	Microfiltration in recycling of Marcellus Shale flowback water: Solids removal and potential fouling of polymeric microfiltration membranes. Journal of Membrane Science, 2014, 462, 88-95.	8.2	57
51	Management of Marcellus Shale Produced Water in Pennsylvania: A Review of Current Strategies and Perspectives. Energy Technology, 2014, 2, 968-976.	3.8	25
52	Ammonia stripping in openâ€recirculating cooling water systems. Environmental Progress and Sustainable Energy, 2013, 32, 489-495.	2.3	7
53	Comprehensive Evaluation of Biological Growth Control by Chlorine-Based Biocides in Power Plant Cooling Systems Using Tertiary Effluent. Environmental Engineering Science, 2013, 30, 324-332.	1.6	7
54	Utilization of municipal wastewater for cooling in thermoelectric power plants. Fuel, 2013, 111, 103-113.	6.4	15

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55	Process Based Life-Cycle Assessment of Natural Gas from the Marcellus Shale. Environmental Science & Technology, 2013, 47, 5459-5466.	10.0	74
56	Spatial and Temporal Correlation of Water Quality Parameters of Produced Waters from Devonian-Age Shale following Hydraulic Fracturing. Environmental Science & Technology, 2013, 47, 2562-2569.	10.0	341
57	Suggested Reporting Parameters for Investigations of Wastewater from Unconventional Shale Gas Extraction. Environmental Science & Technology, 2013, 47, 13220-13221.	10.0	24
58	Impact of Shale Gas Development on Regional Water Quality. Science, 2013, 340, 1235009.	12.6	1,135
59	Microbial Community Changes in Hydraulic Fracturing Fluids and Produced Water from Shale Gas Extraction. Environmental Science & Technology, 2013, 47, 13141-13150.	10.0	149
60	Project Asks What's in the Water After Fracking at Depth. Eos, 2013, 94, 409-411.	0.1	1
61	Microbial communities in flowback water impoundments from hydraulic fracturing for recovery of shale gas. FEMS Microbiology Ecology, 2013, 86, 567-580.	2.7	113
62	Use of Abandoned Mine Drainage for the Development of Unconventional Gas Resources. Disruptive Science and Technology, 2013, 1, 169-176.	1.0	27
63	Life cycle costs to treat secondary municipal wastewater for reuse in cooling systems. Journal of Water Reuse and Desalination, 2013, 3, 224-238.	2.3	8
64	Impacts of advanced municipal wastewater treatment processes on monochloramine effectiveness in recirculating cooling systems. Proceedings of the Water Environment Federation, 2012, 2012, 4658-4671.	0.0	0
65	Control of biological growth in recirculating cooling systems using treated secondary effluent as makeup water with monochloramine. Water Research, 2012, 46, 6508-6518.	11.3	25
66	Corrosiveness of Different Treated Municipal Wastewaters Used as Power Plant Cooling System Makeup Water: A Bench-Scale Evaluation. ECS Transactions, 2012, 41, 1-3.	0.5	0
67	Development of an Instantaneous Corrosion Rate Monitoring System for Metal and Metal Alloys in Recirculating Cooling Systems. Industrial & Engineering Chemistry Research, 2012, 51, 4230-4239.	3.7	10
68	Mineral scaling mitigation in cooling systems using tertiary-treated municipal wastewater. Water Research, 2012, 46, 4488-4498.	11.3	24
69	Corrosion management in power plant cooling systems using tertiary-treated municipal wastewater as makeup water. Corrosion Science, 2012, 61, 231-241.	6.6	36
70	Electrochemical Impedance Spectroscopy (EIS) Based Characterization of Mineral Deposition from Precipitation Reactions. Industrial & Engineering Chemistry Research, 2012, 51, 2821-2829.	3.7	24
71	Escalating Water Demand for Energy Production and the Potential for Use of Treated Municipal Wastewater. Environmental Science & Technology, 2011, 45, 4195-4200.	10.0	73
72	Water Management Challenges Associated with the Production of Shale Gas by Hydraulic Fracturing. Elements, 2011, 7, 181-186.	0.5	736

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73	Control of mineral scale deposition in cooling systems using secondary-treated municipal wastewater. Water Research, 2011, 45, 748-760.	11.3	96
74	Corrosion Control when Using Passively Treated Abandoned Mine Drainage as Alternative Makeup Water for Cooling Systems. Water Environment Research, 2011, 83, 807-814.	2.7	1
75	Temperature and pressure dependence of molecular adsorption on single wall carbon nanotubes and the existence of an â€œadsorption/desorption pressure gapâ€• Carbon, 2010, 48, 1867-1875.	10.3	19
76	Carbon Nanotube/Platinum (Pt) Sheet as an Improved Cathode for Microbial Fuel Cells. Energy & Fuels, 2010, 24, 5897-5902.	5.1	35
77	Bridging Gravimetric and Electrochemical Approaches To Determine the Corrosion Rate of Metals and Metal Alloys in Cooling Systems: Bench Scale Evaluation Method. Industrial & Engineering Chemistry Research, 2010, 49, 9117-9123.	3.7	17
78	Effect of Tolyltriazole on the Corrosion Protection of Copper against Ammonia and Disinfectants in Cooling Systems. Industrial & Engineering Chemistry Research, 2010, 49, 7313-7322.	3.7	23
79	Corrosion Control When Using Secondary Treated Municipal Wastewater as Alternative Makeup Water for Cooling Tower Systems. Water Environment Research, 2010, 82, 2346-2356.	2.7	42
80	Legionella control by chlorine dioxide in hospital water systems. Journal - American Water Works Association, 2009, 101, 117-127.	0.3	22
81	Recent Developments in CO2 Emission Control Technology. Journal of Environmental Engineering, ASCE, 2009, 135, 377-377.	1.4	1
82	Impact of Fly Ash Composition on Mercury Speciation in Simulated Flue Gas. Journal of the Air and Waste Management Association, 2009, 59, 1331-1338.	1.9	48
83	Effect of pipe corrosion scales on chlorine dioxide consumption in drinking water distribution systems. Water Research, 2008, 42, 129-136.	11.3	84
84	Interaction of Acetone with Single Wall Carbon Nanotubes at Cryogenic Temperatures: A Combined Temperature Programmed Desorption and Theoretical Study. Langmuir, 2008, 24, 7848-7856.	3.5	30
85	Factors affecting activated carbon-based catalysts for selective hydrogen sulfide oxidation. Main Group Chemistry, 2008, 7, 239-250.	0.8	6
86	Safety and Efficacy of Chlorine Dioxide for Legionella Control in a Hospital Water System. Infection Control and Hospital Epidemiology, 2007, 28, 1009-1012.	1.8	28
87	Possible phosphate interference with copperâ€“silver ionization for Legionella control. Journal of Hospital Infection, 2006, 62, 119.	2.9	8
88	Use of Hydrophilic and Hydrophobic Microfiltration Membranes to Remove Microorganisms and Organic Pollutants from Primary Effluents. Water Environment Research, 2006, 78, 557-564.	2.7	8
89	Effect of flow regimes on the presence of Legionella within the biofilm of a model plumbing system. Journal of Applied Microbiology, 2006, 101, 437-442.	3.1	49
90	Detection of low concentration oxygen containing functional groups on activated carbon fiber surfaces through fluorescent labeling. Carbon, 2006, 44, 1203-1209.	10.3	43

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91	Sulfurization of carbon surface for vapor phase mercury removal â€“ I: Effect of temperature and sulfurization protocol. Carbon, 2006, 44, 2990-2997.	10.3	68
92	Sulfurization of a carbon surface for vapor phase mercury removal â€“ II: Sulfur forms and mercury uptake. Carbon, 2006, 44, 2998-3004.	10.3	130
93	Sulfur Impregnation on Activated Carbon Fibers through H2S Oxidation for Vapor Phase Mercury Removal. Journal of Environmental Engineering, ASCE, 2006, 132, 292-300.	1.4	44
94	Pilot Scale Demonstration of Cross-Flow Ceramic Membrane Microfiltration for Treatment of Combined and Sanitary Sewer Overflows. Journal of Environmental Engineering, ASCE, 2005, 131, 1532-1539.	1.4	9
95	Sensitivity of Ammonia Interaction with Single-Walled Carbon Nanotube Bundles to the Presence of Defect Sites and Functionalities. Journal of the American Chemical Society, 2005, 127, 10533-10538.	13.7	167
96	Adsorption of Hydrogen Sulfide onto Activated Carbon Fibers:Â Effect of Pore Structure and Surface Chemistry. Environmental Science & Technology, 2005, 39, 9744-9749.	10.0	154
97	Investigating Role of Growing Adsorbent Bed in a Dead-End PAC/UF Process. Journal of Environmental Engineering, ASCE, 2005, 131, 1583-1588.	1.4	3
98	Application of Cross-Flow Microfiltration for the Treatment of Combined Sewer Overflow Wastewater. Journal of Environmental Engineering, ASCE, 2004, 130, 1442-1449.	1.4	9
99	A Vibrational Spectroscopic Study of the Fate of Oxygen-Containing Functional Groups and Trapped CO2in Single-Walled Carbon Nanotubes During Thermal Treatment. Journal of Physical Chemistry B, 2004, 108, 19949-19954.	2.6	42
100	Modeling Sorbent Injection for Mercury Control in Baghouse Filters: Iâ€”Model Development and Sensitivity Analysis. Journal of the Air and Waste Management Association, 2003, 53, 478-488.	1.9	31
101	Modeling Sorbent Injection for Mercury Control in Baghouse Filters: IIâ€”Pilot-Scale Studies and Model Evaluation. Journal of the Air and Waste Management Association, 2003, 53, 489-496.	1.9	18
102	Negative Effect of High pH on Biocidal Efficacy of Copper and Silver Ions in Controlling Legionella pneumophila. Applied and Environmental Microbiology, 2002, 68, 2711-2715.	3.1	98
103	Impact of Surface Heterogeneity on Mercury Uptake by Carbonaceous Sorbents under UHV and Atmospheric Pressure. Environmental Science & Technology, 2002, 36, 4162-4169.	10.0	27
104	Combined Experimental and Theoretical Investigation of Polar Organic Adsorption/Desorption from Model Carbonaceous Surfaces:Â Acetone on Graphite. Langmuir, 2002, 18, 2595-2600.	3.5	21
105	Layering and orientational ordering of propane on graphite: An experimental and simulation study. Journal of Chemical Physics, 2002, 117, 7719-7731.	3.0	23
106	Influence of Humidity on Butane-Working-Capacity of Different Activated Carbons. Chemie-Ingenieur-Technik, 2001, 73, 736-736.	0.8	0
107	Vapor-phase elemental mercury adsorption by activated carbon impregnated with chloride and chelating agents. Carbon, 2001, 39, 3-14.	10.3	175
108	Evaluation of Two Sulfur Impregnation Methods on Activated Carbon and Bentonite for the Production of Elemental Mercury Sorbents. Environmental Engineering Science, 2000, 17, 303-313.	1.6	31

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109	Optimization of High Temperature Sulfur Impregnation on Activated Carbon for Permanent Sequestration of Elemental Mercury Vapors. Environmental Science & Technology, 2000, 34, 483-488.	10.0	75
110	Impact of Flue Gas Conditions on Mercury Uptake by Sulfur-Impregnated Activated Carbon. Environmental Science & Technology, 2000, 34, 154-159.	10.0	149
111	Inactivation of Mycobacterium avium by copper and silver ions. Water Research, 1998, 32, 1997-2000.	11.3	177
112	The effect of surface metal oxides on activated carbon adsorption of phenolics. Water Research, 1998, 32, 1841-1851.	11.3	25
113	Optimization of Sulfur Impregnation Protocol for Fixed-Bed Application of Activated Carbon-Based Sorbents for Gas-Phase Mercury Removal. Environmental Science & Technology, 1998, 32, 531-538.	10.0	163
114	Modeling Powdered Activated Carbon Injection for the Uptake of Elemental Mercury Vapors. Journal of the Air and Waste Management Association, 1998, 48, 1051-1059.	1.9	27
115	Kinetics of Vapor-Phase Mercury Uptake by Virgin and Sulfur-Impregnated Activated Carbons. Journal of the Air and Waste Management Association, 1998, 48, 247-255.	1.9	56
116	Legionella in water distribution systems. Journal - American Water Works Association, 1998, 90, 112-122.	0.3	58
117	Effect of Sulfur Impregnation Method on Activated Carbon Uptake of Gas-Phase Mercury. Environmental Science & Technology, 1997, 31, 2319-2325.	10.0	194
118	Impact of Oxygen-Containing Surface Functional Groups on Activated Carbon Adsorption of Phenols. Environmental Science & Technology, 1997, 31, 1872-1878.	10.0	205
119	Uptake of Elemental Mercury Vapors by Activated Carbons. Journal of the Air and Waste Management Association, 1996, 46, 241-250.	1.9	53
120	Individual and combined effects of copper and silver ions on inactivation of Legionella pneumophila. Water Research, 1996, 30, 1905-1913.	11.3	121
121	Use of centrifuge for pretreatment of combined wastewaters from a plasticizer manufacturing facility. Water Environment Research, 1996, 68, 893-899.	2.7	6
122	Impact of oxygen mediated oxidative coupling on adsorption kinetics. Water Research, 1994, 28, 263-268.	11.3	15
123	Oxidative coupling of phenols on activated carbon: impact on adsorption equilibrium. Environmental Science & Technology, 1993, 27, 2079-2085.	10.0	125
124	Competitive Adsorption of Phenols on GAC. II: Adsorption Dynamics under Anoxic Conditions. Journal of Environmental Engineering, ASCE, 1993, 119, 1044-1057.	1.4	11
125	Competitive Adsorption of Phenols on GAC. I: Adsorption Equilibrium. Journal of Environmental Engineering, ASCE, 1993, 119, 1026-1043.	1.4	31
126	Molecular oxygen and the adsorption of phenolsâ€"effect of functional groups. Water Environment Research, 1993, 65, 156-161.	2.7	29

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127	Effect of GAC characteristics on adsorption of organic pollutants. Water Environment Research, 1993, 65, 53-57.	2.7	35
128	Operating capacity of GAC adsorbers-dissolved oxygen and extended service life. Water Environment Research, 1992, 64, 798-804.	2.7	10
129	Selecting Batch Studies for Adsorber Design: Molecular Oxygen's Role. Journal - American Water Works Association, 1992, 84, 101-109.	0.3	16
130	Role of dissolved oxygen on the adsorptive capacity of activated carbon for synthetic and natural organic matter. Environmental Science & Technology, 1991, 25, 1612-1618.	10.0	121