Mark A Engle

List of Publications by Year
in descending order

70	3,383	147801 31	155660 55
papers	citations	h-index	g-index

83	83	83	3025
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Coal elemental (compositional) data analysis with hierarchical clustering algorithms. International Journal of Coal Geology, 2022, 249, 103892.	5.0	16
2	Compositional Closureâ€"Its Origin Lies Not in Mathematics but Rather in Nature Itself. Minerals (Basel,) Tj ETQq0 0 0 rgBT /Overlock 10	2.0	4
3	Characterization of produced water and surrounding surface water in the Permian Basin, the United States. Journal of Hazardous Materials, 2022, 430, 128409.	12.4	27
4	Dissolved organic matter within oil and gas associated wastewaters from U.S. unconventional petroleum plays: Comparisons and consequences for disposal and reuse. Science of the Total Environment, 2022, 838, 156331.	8.0	4
5	Predicting Rare Earth Element Potential in Produced and Geothermal Waters of the United States via Emergent Self-Organizing Maps. Energies, 2022, 15, 4555.	3.1	9
6	Weighted Symmetric Pivot Coordinates for Compositional Data with Geochemical Applications. Mathematical Geosciences, 2021, 53, 655-674.	2.4	8
7	Geochemical and geophysical indicators of oil and gas wastewater can trace potential exposure pathways following releases to surface waters. Science of the Total Environment, 2021, 755, 142909.	8.0	15
8	Insights on Geochemical, Isotopic, and Volumetric Compositions of Produced Water from Hydraulically Fractured Williston Basin Oil Wells. Environmental Science & Technology, 2021, 55, 10025-10034.	10.0	4
9	Machine Learning Can Assign Geologic Basin to Produced Water Samples Using Major Ion Geochemistry. Natural Resources Research, 2021, 30, 4147-4163.	4.7	3
10	The future low-temperature geochemical data-scape as envisioned by the U.S. geochemical community. Computers and Geosciences, 2021, 157, 104933.	4.2	3
11	Utica Shale Play Oil and Gas Brines: Geochemistry and Factors Influencing Wastewater Management. Environmental Science & Technology, 2020, 54, 13917-13925.	10.0	17
12	Direct Trace Element Determination in Oil and Gas Produced Waters with Inductively Coupled Plasmaâ€Optical Emission Spectrometry: Advantages of Highâ€Salinity Tolerance. Geostandards and Geoanalytical Research, 2020, 44, 385-397.	3.1	2
13	Origin and geochemistry of formation waters from the lower Eagle Ford Group, Gulf Coast Basin, south central Texas. Chemical Geology, 2020, 550, 119754.	3.3	21
14	Datasets associated with investigating the potential for beneficial reuse of produced water from oil and gas extraction outside of the energy sector. Data in Brief, 2020, 30, 105406.	1.0	2
15	Can we beneficially reuse produced water from oil and gas extraction in the U.S.?. Science of the Total Environment, 2020, 717, 137085.	8.0	111
16	Geochemical data for produced waters from conventional and unconventional oil and gas wells: Results from Colorado, USA. E3S Web of Conferences, 2019, 98, 03002.	0.5	0
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	Advances in self-organizing maps for their application to compositional data. Stochastic Environmental Research and Risk Assessment, 2019, 33, 817-826.	4.0	8

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19	Considerations in the application of machine learning to aqueous geochemistry: Origin of produced waters in the northern U.S. Gulf Coast Basin. Applied Computing and Geosciences, 2019, 3-4, 100012.	2.2	6
20	Spatial variability of produced-water quality and alternative-source water analysis applied to the Permian Basin, USA. Hydrogeology Journal, 2019, 27, 2889-2905.	2.1	20
21	The isometric log-ratio (ilr)-ion plot: A proposed alternative to the Piper diagram. Journal of Geochemical Exploration, 2018, 190, 130-141.	3.2	38
22	Hydrogeochemical controls on brackish groundwater and its suitability for use in hydraulic fracturing: The Dockum Aquifer, Midland Basin, Texas. Environmental Geosciences, 2018, 25, 37-63.	0.6	6
23	Cadmium isotope fractionation during coal combustion: Insights from two U.S. coal-fired power plants. Applied Geochemistry, 2018, 96, 100-112.	3.0	24
24	Gas emissions, tars, and secondary minerals at the Ruth Mullins and Tiptop coal mine fires. International Journal of Coal Geology, 2018, 195, 304-316.	5.0	18
25	Methane and Benzene in Drinking-Water Wells Overlying the Eagle Ford, Fayetteville, and Haynesville Shale Hydrocarbon Production Areas. Environmental Science & Technology, 2017, 51, 6727-6734.	10.0	45
26	Wastewater Disposal from Unconventional Oil and Gas Development Degrades Stream Quality at a West Virginia Injection Facility. Environmental Science & Technology, 2016, 50, 5517-5525.	10.0	118
27	Quantifying chemical weathering rates along a precipitation gradient on Basse-Terre Island, French Guadeloupe: New insight from U-series isotopes in weathering rinds. Geochimica Et Cosmochimica Acta, 2016, 195, 29-67.	3.9	14
28	Geochemistry of formation waters from the Wolfcamp and â€œClineâ€•shales: Insights into brine origin, reservoir connectivity, and fluid flow in the Permian Basin, USA. Chemical Geology, 2016, 425, 76-92.	3.3	124
29	Volatile-organic molecular characterization of shale-oil produced water from the Permian Basin. Chemosphere, 2016, 148, 126-136.	8.2	85
30	Hydraulic fracturing water use variability in the <scp>U</scp>nited <scp>S</scp>tates and potential environmental implications. Water Resources Research, 2015, 51, 5839-5845.	4.2	169
31	Geochemical and isotopic evolution of water produced from Middle Devonian Marcellus shale gas wells, Appalachian basin, Pennsylvania. AAPG Bulletin, 2015, 99, 181-206.	1.5	127
32	Statistical analysis of soil geochemical data to identify pathfinders associated with mineral deposits: An example from the Coles Hill uranium deposit, Virginia, USA. Journal of Geochemical Exploration, 2015, 154, 238-251.	3.2	19
33	The Role of Water in Unconventional in Situ Energy Resource Extraction Technologies. , 2015, , 183-215.		4
34	Atmospheric particulate matter in proximity to mountaintop coal mines: sources and potential environmental and human health impacts. Environmental Geochemistry and Health, 2015, 37, 529-544.	3.4	49
35	Pore characteristics of Wilcox Group Coal, U.S. Gulf Coast Region: Implications for the occurrence of coalbed gas. International Journal of Coal Geology, 2015, 139, 80-94.	5.0	40
36	High Mercury Wet Deposition at a â€œClean Airâ€•Site in Puerto Rico. Environmental Science & Technology, 2015, 49, 12474-12482.	10.0	26

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37	Organic substances in produced and formation water from unconventional natural gas extraction in coal and shale. International Journal of Coal Geology, 2014, 126, 20-31.	5.0	274
38	Geochemical evolution of produced waters from hydraulic fracturing of the Marcellus Shale, northern Appalachian Basin: A multivariate compositional data analysis approach. International Journal of Coal Geology, 2014, 126, 45-56.	5.0	116
39	Three-way compositional analysis of water quality monitoring data. Environmental and Ecological Statistics, 2014, 21, 565-581.	3.5	22
40	Surface disposal of produced waters in western and southwestern Pennsylvania: Potential for accumulation of alkali-earth elements in sediments. International Journal of Coal Geology, 2014, 126, 162-170.	5.0	56
41	Discharges of produced waters from oil and gas extraction via wastewater treatment plants are sources of disinfection by-products to receiving streams. Science of the Total Environment, 2014, 466-467, 1085-1093.	8.0	109
42	The role of climate in increasing salt loads in dryland rivers. Journal of Arid Environments, 2014, 111, 7-13.	2.4	20
43	Environmental geology and the unconventional gas revolution: Introduction to the Special Issue. International Journal of Coal Geology, 2014, 126, 1-3.	5.0	2
44	Application of near-surface geophysics as part of a hydrologic study of a subsurface drip irrigation system along the Powder River floodplain near Arvada, Wyoming. International Journal of Coal Geology, 2014, 126, 128-139.	5.0	5
45	Linking compositional data analysis with thermodynamic geochemical modeling: Oilfield brines from the Permian Basin, USA. Journal of Geochemical Exploration, 2014, 141, 61-70.	3.2	31
46	Using simulated maps to interpret the geochemistry, formation and quality of the Blue Gem coal bed, Kentucky, USA. International Journal of Coal Geology, 2013, 112, 26-35.	5.0	14
47	Atmospheric mercury and fine particulate matter in coastal New England: Implications for mercury and trace element sources in the northeastern United States. Atmospheric Environment, 2013, 79, 760-768.	4.1	16
48	Direct estimation of diffuse gaseous emissions from coal fires: Current methods and future directions. International Journal of Coal Geology, 2013, 112, 164-172.	5.0	27
49	Interpretation of Naâ€"Clâ€"Br Systematics in Sedimentary Basin Brines: Comparison of Concentration, Element Ratio, and Isometric Log-ratio Approaches. Mathematical Geosciences, 2013, 45, 87-101.	2.4	58
50	Whole-coal versus ash basis in coal geochemistry: A mathematical approach to consistent interpretations. International Journal of Coal Geology, 2013, 113, 41-49.	5.0	43
51	Partitioning of selected trace elements in coal combustion products from two coal-burning power plants in the United States. International Journal of Coal Geology, 2013, 113, 116-126.	5.0	64
52	Gas emissions, minerals, and tars associated with three coal fires, Powder River Basin, USA. Science of the Total Environment, 2012, 420, 146-159.	8.0	87
53	Tracking solutes and water from subsurface drip irrigation application of coalbed methaneâ€"produced waters, Powder River Basin, Wyoming. Environmental Geosciences, 2011, 18, 169-187.	0.6	11
54	Quantifying greenhouse gas emissions from coal fires using airborne and ground-based methods. International Journal of Coal Geology, 2011, 88, 147-151.	5.0	41

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55	Third Year of Subsurface Drip Irrigation Monitoring Using GEM2 Electromagnetic Surveys, Powder River Basin, Wyoming. , 2010, , .		2
56	Patterns of mercury dispersion from local and regional emission sources, rural Central Wisconsin, USA. Atmospheric Chemistry and Physics, 2010, 10, 4467-4476.	4.9	15
57	CO2, CO, and Hg emissions from the Truman Shepherd and Ruth Mullins coal fires, eastern Kentucky, USA. Science of the Total Environment, 2010, 408, 1628-1633.	8.0	113
58	Comparison of atmospheric mercury speciation and deposition at nine sites across central and eastern North America. Journal of Geophysical Research, 2010, 115, .	3.3	84
59	The Tiptop coal-mine fire, Kentucky: Preliminary investigation of the measurement of mercury and other hazardous gases from coal-fire gas vents. International Journal of Coal Geology, 2009, 80, 63-67.	5.0	74
60	Application of environmental groundwater tracers at the Sulphur Bank Mercury Mine, California, USA. Hydrogeology Journal, 2008, 16, 559-573.	2.1	4
61	Mercury, Trace Elements and Organic Constituents in Atmospheric Fine Particulate Matter, Shenandoah National Park, Virginia, USA: A Combined Approach to Sampling and Analysis. Geostandards and Geoanalytical Research, 2008, 32, 279-293.	3.1	18
62	Characterization and cycling of atmospheric mercury along the central US Gulf Coast. Applied Geochemistry, 2008, 23, 419-437.	3.0	72
63	Atmospheric mercury emissions from substrates and fumaroles associated with three hydrothermal systems in the western United States. Journal of Geophysical Research, 2006, 111, .	3.3	50
64	Mercury exchange between the atmosphere and low mercury containing substrates. Applied Geochemistry, 2006, 21, 1913-1923.	3.0	84
65	Mercury distribution in two Sierran forest and one desert sagebrush steppe ecosystems and the effects of fire. Science of the Total Environment, 2006, 367, 222-233.	8.0	84
66	The influence of ozone on atmospheric emissions of gaseous elemental mercury and reactive gaseous mercury from substrates. Atmospheric Environment, 2005, 39, 7506-7517.	4.1	81
67	Atmospheric Mercury Emissions and Speciation at the Sulphur Bank Mercury Mine Superfund Site, Northern California. Environmental Science & Technology, 2004, 38, 1977-1983.	10.0	44
68	Atmospheric mercury emissions from mine wastes and surrounding geologically enriched terrains. Environmental Geology, 2003, 43, 339-351.	1.2	120
69	Scaling of atmospheric mercury emissions from three naturally enriched areas: Flowery Peak, Nevada; Peavine Peak, Nevada; and Long Valley Caldera, California. Science of the Total Environment, 2002, 290, 91-104.	8.0	47
70	Quantifying natural source mercury emissions from the Ivanhoe Mining District, north-central Nevada, USA. Atmospheric Environment, 2001, 35, 3987-3997.	4.1	135