

# Jeffrey M Bielicki

## List of Publications by Year in descending order

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Version: 2024-02-01

70  
papers

2,231  
citations

236833

25  
h-index

233338

45  
g-index

77  
all docs

77  
docs citations

77  
times ranked

2138  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | A scalable infrastructure model for carbon capture and storage: SimCCS. Energy Policy, 2009, 37, 1052-1060.  | 4.2  | 239       |
| 2  | The production of Zn from ZnO in a high-temperature solar decomposition quench process. The scientific framework for the process. Chemical Engineering Science, 1998, 53, 2503-2517.                             | 1.9  | 160       |
| 3  | A comparison of electric power output of CO <sub>2</sub> Plume Geothermal (CPG) and brine geothermal systems for varying reservoir conditions. Applied Energy, 2015, 140, 365-377.                               | 5.1  | 115       |
| 4  | Environmental Indicators of Biofuel Sustainability: What About Context?. Environmental Management, 2013, 51, 291-306.  | 1.2  | 112       |
| 5  | On the importance of the thermosiphon effect in CPG (CO <sub>2</sub> plume geothermal) power systems. Energy, 2014, 69, 409-418.   | 4.5  | 97        |
| 6  | Heterogeneity-assisted carbon dioxide storage in marine sediments. Applied Energy, 2018, 225, 876-883.   | 5.1  | 89        |
| 7  | Generating candidate networks for optimization: The CO <sub>2</sub> capture and storage optimization problem. Computers, Environment and Urban Systems, 2012, 36, 18-29.   | 3.3  | 72        |
| 8  | An attainable global vision for conservation and human well-being. Frontiers in Ecology and the Environment, 2018, 16, 563-570.  | 1.9  | 71        |
| 9  | Comparing carbon capture and storage (CCS) with concentrating solar power (CSP): Potentials, costs, risks, and barriers. Energy Policy, 2012, 47, 447-455.   | 4.2  | 65        |
| 10 | Leakage risks of geologic CO <sub>2</sub> storage and the impacts on the global energy system and climate change mitigation. Climatic Change, 2017, 144, 151-163.  | 1.7  | 54        |
| 11 | Optimal Spatial Deployment of CO <sub>2</sub> Capture and Storage Given a Price on Carbon. International Regional Science Review, 2011, 34, 285-305.   | 1.0  | 52        |
| 12 | Managing geologic CO <sub>2</sub> storage with pre-injection brine production: a strategy evaluated with a model of CO <sub>2</sub> injection at SnÄhvit. Energy and Environmental Science, 2016, 9, 1504-1512. | 15.6 | 50        |
| 13 | A comprehensive carbon capture and storage infrastructure model. Energy Procedia, 2009, 1, 1611-1616.  | 1.8  | 47        |
| 14 | Acclimation and the response of hourly electricity loads to meteorological variables. Energy, 2018, 142, 473-485.  | 4.5  | 47        |
| 15 | CO <sub>2</sub> Deserts: Implications of Existing CO <sub>2</sub> Supply Limitations for Carbon Management. Environmental Science & Technology, 2014, 48, 11713-11720.   | 4.6  | 46        |
| 16 | Multifluid geo-energy systems: Using geologic CO <sub>2</sub> storage for geothermal energy production and grid-scale energy storage in sedimentary basins. , 2016, 12, 678-696.                                 |      | 41        |
| 17 | Causes and financial consequences of geologic CO <sub>2</sub> storage reservoir leakage and interference with other subsurface resources. International Journal of Greenhouse Gas Control, 2014, 20, 272-284.    | 2.3  | 39        |
| 18 | An examination of geologic carbon sequestration policies in the context of leakage potential. International Journal of Greenhouse Gas Control, 2015, 37, 61-75.  | 2.3  | 39        |

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|----|---|------|-----------|
| 19 | The Leakage Risk Monetization Model for Geologic CO <sub>2</sub> Storage. Environmental Science & Technology, 2016, 50, 4923-4931.  | 4.6  | 39        |
| 20 | Why market rules matter: Optimizing pumped hydroelectric storage when compensation rules differ. Energy Economics, 2014, 46, 10-19.   | 5.6  | 38        |
| 21 | Vulnerability of existing and planned coal-fired power plants in Developing Asia to changes in climate and water resources. Energy and Environmental Science, 2019, 12, 3164-3181.  | 15.6 | 38        |
| 22 | Pre-injection brine production in CO <sub>2</sub> storage reservoirs: An approach to augment the development, operation, and performance of CCS while generating water. International Journal of Greenhouse Gas Control, 2016, 54, 499-512. | 2.3  | 35        |
| 23 | Heat depletion in sedimentary basins and its effect on the design and electric power output of CO <sub>2</sub> Plume Geothermal (CPG) systems. Renewable Energy, 2021, 172, 1393-1403.  | 4.3  | 30        |
| 24 | Analysis of cost savings from networking pipelines in CCS infrastructure systems. Energy Procedia, 2011, 4, 2808-2815.  | 1.8  | 28        |
| 25 | Increased Power Generation due to Exothermic Water Exsolution in CO <sub>2</sub> Plume Geothermal (CPG) Power Plants. Geothermics, 2020, 88, 101865.  | 1.5  | 28        |
| 26 | Jumpstarting commercial-scale CO <sub>2</sub> capture and storage with ethylene production and enhanced oil recovery in the US Gulf. , 2015, 5, 241-253.  |      | 27        |
| 27 | Development of robust pressure management strategies for geologic CO <sub>2</sub> sequestration. International Journal of Greenhouse Gas Control, 2017, 64, 43-59.  | 2.3  | 26        |
| 28 | Stakeholder Perspectives on Sustainability in the Food-Energy-Water Nexus. Frontiers in Environmental Science, 2019, 7, .   | 1.5  | 26        |
| 29 | Comparing Scales of Environmental Effects from Gasoline and Ethanol Production. Environmental Management, 2013, 51, 307-338.  | 1.2  | 25        |
| 30 | Assessment of the Acute and Chronic Health Hazards of Hydraulic Fracturing Fluids. Journal of Occupational and Environmental Hygiene, 2015, 12, 611-624.  | 0.4  | 25        |
| 31 | Geothermal Energy Production at Geologic CO <sub>2</sub> Sequestration sites: Impact of Thermal Drawdown on Reservoir Pressure. Energy Procedia, 2013, 37, 6625-6635.   | 1.8  | 24        |
| 32 | The geospatial and economic viability of CO <sub>2</sub> storage in hydrocarbon depleted fractured shale formations. International Journal of Greenhouse Gas Control, 2018, 75, 8-23.   | 2.3  | 24        |
| 33 | The value of bulk energy storage for reducing CO <sub>2</sub> emissions and water requirements from regional electricity systems. Energy Conversion and Management, 2019, 181, 674-685.   | 4.4  | 24        |
| 34 | Pre-injection Brine Production for Managing Pressure in Compartmentalized CO <sub>2</sub> Storage Reservoirs. Energy Procedia, 2014, 63, 5333-5340.   | 1.8  | 21        |
| 35 | Advancing Sustainable Bioenergy: Evolving Stakeholder Interests and the Relevance of Research. Environmental Management, 2013, 51, 339-353.   | 1.2  | 20        |
| 36 | Integrating CO <sub>2</sub> Storage with Geothermal Resources for Dispatchable Renewable Electricity. Energy Procedia, 2014, 63, 7619-7630.   | 1.8  | 20        |

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|----|--|------|-----------|
| 37 | Identifying geologic characteristics and operational decisions to meet global carbon sequestration goals. <i>Energy and Environmental Science</i> , 2020, 13, 5000-5016.                                     | 15.6 | 20        |
| 38 | Learning about carbon capture and storage: Changing stakeholder perceptions with expert information. <i>Energy Procedia</i> , 2009, 1, 4655-4663.  | 1.8  | 19        |
| 39 | A Tale of Two Technologies: Hydraulic Fracturing and Geologic Carbon Sequestration. <i>Environmental Science &amp; Technology</i> , 2011, 45, 5075-5076.   | 4.6  | 17        |
| 40 | A Hybrid Geothermal Energy Conversion Technology - A Potential Solution for Production of Electricity from Shallow Geothermal Resources. <i>Energy Procedia</i> , 2017, 114, 7107-7117.                      | 1.8  | 17        |
| 41 | CO <sub>2</sub> Earth Storage: Enhanced Geothermal Energy and Water Recovery and Energy Storage. <i>Energy Procedia</i> , 2017, 114, 6870-6879.  | 1.8  | 17        |
| 42 | Great SCOT! Rapid tool for carbon sequestration science, engineering, and economics. <i>Applied Computing and Geosciences</i> , 2020, 7, 100035.   | 1.0  | 17        |
| 43 | Jumpstarting CCS using refinery CO <sub>2</sub> for enhanced oil recovery. <i>Energy Procedia</i> , 2011, 4, 2185-2191.  | 1.8  | 16        |
| 44 | Physicochemical factors impacting CO <sub>2</sub> sequestration in depleted shale formations: The case of the Utica shale. <i>Energy Procedia</i> , 2014, 63, 5153-5163.                                     | 1.8  | 15        |
| 45 | Flexible CO <sub>2</sub> -plume geothermal (CPG-F): Using geologically stored CO <sub>2</sub> to provide dispatchable power and energy storage. <i>Energy Conversion and Management</i> , 2022, 253, 115082. | 4.4  | 15        |
| 46 | Spatial clustering and carbon capture and storage deployment. <i>Energy Procedia</i> , 2009, 1, 1691-1698.   | 1.8  | 13        |
| 47 | The Leakage Impact Valuation (LIV) Method for Leakage from Geologic CO <sub>2</sub> Storage Reservoirs. <i>Energy Procedia</i> , 2013, 37, 2819-2827.  | 1.8  | 13        |
| 48 | Innovation in emerging energy technologies: A case study analysis to inform the path forward for algal biofuels. <i>Energy Policy</i> , 2013, 61, 1595-1607.   | 4.2  | 11        |
| 49 | The stationarity of two statistical downscaling methods for precipitation under different choices of cross-validation periods. <i>International Journal of Climatology</i> , 2018, 38, e330.                 | 1.5  | 11        |
| 50 | Injectivity Evaluation for Offshore CO <sub>2</sub> Sequestration in Marine Sediments. <i>Energy Procedia</i> , 2017, 114, 2921-2932.  | 1.8  | 10        |
| 51 | National corridors for climate change mitigation: managing industrial CO <sub>2</sub> emissions in France. , 2014, 4, 262-277.   |      | 9         |
| 52 | An Alternative Pathway for Stimulating Regional Deployment of Carbon Dioxide Capture and Storage. <i>Energy Procedia</i> , 2014, 63, 7215-7224.  | 1.8  | 9         |
| 53 | Managing Geologic CO <sub>2</sub> Storage with Pre-injection Brine Production in Tandem Reservoirs. <i>Energy Procedia</i> , 2017, 114, 4757-4764.   | 1.8  | 9         |
| 54 | The value of CO <sub>2</sub> -Bulk energy storage with wind in transmission-constrained electric power systems. <i>Energy Conversion and Management</i> , 2021, 228, 113548.                                 | 4.4  | 9         |

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|----|--|-----|-----------|
| 55 | Integrated CO2 Storage and Brine Extraction. Energy Procedia, 2017, 114, 6331-6336.  | 1.8 | 8         |
| 56 | A Methodology for Monetizing Basin-Scale Leakage Risk and Stakeholder Impacts. Energy Procedia, 2013, 37, 4665-4672.   | 1.8 | 7         |
| 57 | Environmental Consequences of Potential Strategies for China to Prepare for Natural Gas Import Disruptions. Environmental Science & Technology, 2022, 56, 1183-1193.               | 4.6 | 6         |
| 58 | Assessment of Sites for CO2 Storage and CO2 Capture, Utilization, and Storage Systems in Geothermal Reservoirs. Energy Procedia, 2017, 114, 7009-7017.                             | 1.8 | 5         |
| 59 | Recovering Rare Earth Elements from Coal Mine Drainage Using Industrial Byproducts: Environmental and Economic Consequences. Environmental Engineering Science, 2022, 39, 770-783. | 0.8 | 5         |
| 60 | Industrial CO2 and Carbon Capture: Near-term Benefit, Long-term Necessity. Energy Procedia, 2017, 114, 7601-7605.  | 1.8 | 4         |
| 61 | The Value of CO2-Bulk Energy Storage to Reducing CO2 Emissions. Energy Procedia, 2017, 114, 6886-6892.   | 1.8 | 3         |
| 62 | Policy implications of Monetized Leakage Risk from Geologic CO2 Storage Reservoirs. Energy Procedia, 2014, 63, 6852-6863.  | 1.8 | 1         |
| 63 | Shifting Sands in a CO2 Desert: Replacing Extracted CO2 with By-product CO2 for Use in Enhanced Oil Recovery. Energy Procedia, 2014, 63, 6557-6564.                                | 1.8 | 1         |
| 64 | Monetizing Leakage Risk with Secondary Trapping in Intervening Stratigraphic Layers. Energy Procedia, 2017, 114, 4256-4261.  | 1.8 | 0         |
| 65 | Response of Integrated CO2 Capture and Storage Systems in Saline Aquifers and Fractured Shale Formations to Changes in CO2 Capture Costs. Energy Procedia, 2017, 114, 4099-4105.   | 1.8 | 0         |
| 66 | Keeping Up With the Times: Modelling Temporally Phased CO2 Capture and Storage Infrastructure. SSRN Electronic Journal, 0, , .   | 0.4 | 0         |
| 67 | Beyond Regional CCS: Scalable Algorithms for Designing Massive CO2 Capture and Storage Infrastructure. SSRN Electronic Journal, 0, , .   | 0.4 | 0         |
| 68 | Mechanisms of Geologically Stored CO2 for Energy Storage. SSRN Electronic Journal, 0, , .  | 0.4 | 0         |
| 69 | The role of environmental law. , 2018, , 298-303.  |     | 0         |
| 70 | Operational Characteristics of a Geologic CO2 Storage Bulk Energy Storage Technology. SSRN Electronic Journal, 0, , .  | 0.4 | 0         |