# Ian M Power

List of Publications by Year
in descending order



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|---|---|---|---|
| 42 papers | 3,650 citations | 186265 28 h-index | 289244 40 g-index |
| 42 all docs | 42 docs citations | 42 times ranked | 2798 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Characterization of gas shale pore systems by porosimetry, pycnometry, surface area, and field emission scanning electron microscopy/transmission electron microscopy image analyses: Examples from the Barnett, Woodford, Haynesville, Marcellus, and Doig units. AAPG Bulletin, 2012, 96, 1099-1119. | 1.5 | 1,204 |
| 2 | Accelerated Carbonation of Brucite in Mine Tailings for Carbon Sequestration. Environmental Science & Technology, 2013, 47, 126-134. | 10.0 | 220 |
| 3 | Carbon Mineralization: From Natural Analogues to Engineered Systems. Reviews in Mineralogy and Geochemistry, 2013, 77, 305-360. | 4.8 | 174 |
| 4 | Characterizing the effect of carbon steel exposure in sulfide containing solutions to microbially induced corrosion. Corrosion Science, 2011, 53, 955-960. | 6.6 | 165 |
| 5 | Serpentinite Carbonation for CO2 Sequestration. Elements, 2013, 9, 115-121. | 0.5 | 123 |
| 6 | Biologically induced mineralization of dypingite by cyanobacteria from an alkaline wetland near Atlin, British Columbia, Canada. Geochemical Transactions, 2007, 8, 13. | 0.7 | 119 |
| 7 | The hydromagnesite playas of Atlin, British Columbia, Canada: A biogeochemical model for CO2 sequestration. Chemical Geology, 2009, 260, 286-300. | 3.3 | 114 |
| 8 | Offsetting of CO2 emissions by air capture in mine tailings at the Mount Keith Nickel Mine, Western Australia: Rates, controls and prospects for carbon neutral mining. International Journal of Greenhouse Gas Control, 2014, 25, 121-140. | 4.6 | 113 |
| 9 | Accelerating Mineral Carbonation Using Carbonic Anhydrase. Environmental Science & Technology, 2016, 50, 2610-2618. | 10.0 | 96 |
| 10 | Influence of surface passivation and water content on mineral reactions in unsaturated porous media: Implications for brucite carbonation and CO2 sequestration. Geochimica Et Cosmochimica Acta, 2015, 148, 477-495. | 3.9 | 94 |
| 11 | Microbially Mediated Mineral Carbonation: Roles of Phototrophy and Heterotrophy. Environmental Science & Technology, 2011, 45, 9061-9068. | 10.0 | 84 |
| 12 | Carbon sequestration via carbonic anhydrase facilitated magnesium carbonate precipitation. International Journal of Greenhouse Gas Control, 2013, 16, 145-155. | 4.6 | 80 |
| 13 | Bioleaching of Ultramafic Tailings by Acidithiobacillus spp. for CO<sub>2</sub> Sequestration. Environmental Science & Technology, 2010, 44, 456-462. | 10.0 | 70 |
| 14 | Subarctic Weathering of Mineral Wastes Provides a Sink for Atmospheric CO<sub>2</sub>. Environmental Science & Technology, 2011, 45, 7727-7736. | 10.0 | 69 |
| 15 | Assessing the carbon sequestration potential of magnesium oxychloride cement building materials. Cement and Concrete Composites, 2017, 78, 97-107. | 10.7 | 69 |
| 16 | Room Temperature Magnesite Precipitation. Crystal Growth and Design, 2017, 17, 5652-5659. | 3.0 | 66 |
| 17 | Reactive Transport Modeling of Natural Carbon Sequestration in Ultramafic Mine Tailings. Vadose Zone Journal, 2012, 11, vzj2011.0053. | 2.2 | 63 |
| 18 | Metagenomic analysis reveals that modern microbialites and polar microbial mats have similar taxonomic and functional potential. Frontiers in Microbiology, 2015, 6, 966. | 3.5 | 62 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Integrated Mineral Carbonation of Ultramafic Mine Depositsâ€"A Review. Minerals (Basel, Switzerland), 2018, 8, 147. | 2.0 | 60 |
| 20 | Chrysotile dissolution rates: Implications for carbon sequestration. Applied Geochemistry, 2013, 35, 244-254. | 3.0 | 59 |
| 21 | Strategizing Carbon-Neutral Mines: A Case for Pilot Projects. Minerals (Basel, Switzerland), 2014, 4, 399-436. | 2.0 | 58 |
| 22 | A depositional model for hydromagnesiteâ€"magnesite playas near Atlin, British Columbia, Canada. Sedimentology, 2014, 61, 1701-1733. | 3.1 | 50 |
| 23 | Potential for offsetting diamond mine carbon emissions through mineral carbonation of processed kimberlite: an assessment of De Beers mine sites in South Africa and Canada. Mineralogy and Petrology, 2018, 112, 755-765. | 1.1 | 47 |
| 24 | A Greenhouse-Scale Photosynthetic Microbial Bioreactor for Carbon Sequestration in Magnesium Carbonate Minerals. Environmental Science & Technology, 2014, 48, 9142-9151. | 10.0 | 46 |
| 25 | Prospects for CO2 mineralization and enhanced weathering of ultramafic mine tailings from the Baptiste nickel deposit in British Columbia, Canada. International Journal of Greenhouse Gas Control, 2020, 94, 102895. | 4.6 | 44 |
| 26 | The impact of evolving mineralâ€"waterâ€"gas interfacial areas on mineralâ€"fluid reaction rates in unsaturated porous media. Chemical Geology, 2016, 421, 65-80. | 3.3 | 43 |
| 27 | Modern carbonate microbialites from an asbestos open pit pond, Yukon, Canada. Geobiology, 2011, 9, 180-195. | 2.4 | 40 |
| 28 | Magnesite formation in playa environments near Atlin, British Columbia, Canada. Geochimica Et Cosmochimica Acta, 2019, 255, 1-24. | 3.9 | 33 |
| 29 | Carbon Sequestration in Biogenic Magnesite and Other Magnesium Carbonate Minerals. Environmental Science & Technology, 2019, 53, 3225-3237. | 10.0 | 32 |
| 30 | Evaluating feedstocks for carbon dioxide removal by enhanced rock weathering and CO2 mineralization. Applied Geochemistry, 2021, 129, 104955. | 3.0 | 21 |
| 31 | Carbonation, Cementation, and Stabilization of Ultramafic Mine Tailings. Environmental Science & Technology, 2021, 55, 10056-10066. | 10.0 | 18 |
| 32 | Enhanced silicate weathering is not limited by silicic acid saturation. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, E41; author reply E42. | 7.1 | 17 |
| 33 | Structural and biological control of the Cenozoic epithermal uranium concentrations from the Sierra PeÃ±a Blanca, Mexico. Mineralium Deposita, 2012, 47, 859-874. | 4.1 | 15 |
| 34 | Direct measurement of CO2 drawdown in mine wastes and rock powders: Implications for enhanced rock weathering. International Journal of Greenhouse Gas Control, 2022, 113, 103554. | 4.6 | 15 |
| 35 | Thermogravimetric analysisâ€"mass spectrometry (TGAâ€"MS) of hydromagnesite from Dujiali Lake in Tibet, China. Journal of Thermal Analysis and Calorimetry, 2018, 133, 1429-1437. | 3.6 | 14 |
| 36 | Rates of atmospheric CO2 capture using magnesium oxide powder. International Journal of Greenhouse Gas Control, 2022, 119, 103701. | 4.6 | 10 |

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|---|---|---|---|
| 37 | Rare earth element and strontium isotope geochemistry in Dujiali Lake, central Qinghai-Tibet Plateau, China: Implications for the origin of hydromagnesite deposits. Chemie Der Erde, 2019, 79, 337-346. | 2.0 | 9 |
| 38 | Cation Exchange in Smectites as a New Approach to Mineral Carbonation. Frontiers in Climate, 0, 4, . | 2.8 | 9 |
| 39 | Particleâ€scale characterization of volcaniclastic dust sources within Iceland. Sedimentology, 2021, 68, 1137-1158. | 3.1 | 8 |
| 40 | 9. Carbon Mineralization: From Natural Analogues to Engineered Systems. , 2013, , 305-360. | | 8 |
| 41 | Trace and rare earth element geochemistry of Holocene hydromagnesite from Dujiali Lake, central Qinghaiâ€“Tibetan Plateau, China. Carbonates and Evaporites, 2019, 34, 1265-1279. | 1.0 | 7 |
| 42 | Accelerating mineral carbonation in hydraulic fracturing flowback and produced water using CO2-rich gas. Applied Geochemistry, 2022, 143, 105380. | 3.0 | 2 |