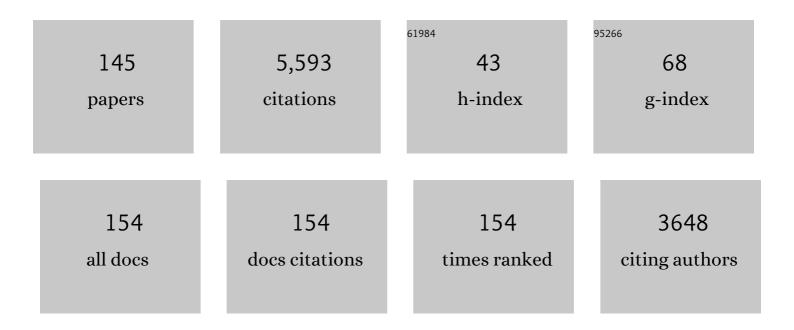
Curtis M Oldenburg

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Advanced monitoring and simulation for underground gas storage risk management. Journal of Petroleum Science and Engineering, 2022, 208, 109763.	4.2	13
2	Downwind dispersion of CO ₂ from a major subsea blowout in shallow offshore waters. , 2022, 12, 321-331.		2
3	Coupled Hydromechanical Modeling of Induced Seismicity From CO ₂ Injection in the Illinois Basin. Journal of Geophysical Research: Solid Earth, 2022, 127, .	3.4	12
4	Numerical investigation of air intrusion and aerobic reactions in municipal solid waste landfills. Waste Management, 2022, 147, 60-72.	7.4	7
5	Radial storage efficiency for CO 2 injection: Quantifying effectiveness of local flow control methods. , 2021, 11, 795-806.		1
6	Major CO ₂ blowouts from offshore wells are strongly attenuated in water deeper than 50Åm. , 2020, 10, 15-31.		10
7	CO2 plume evolution in a depleted natural gas reservoir: Modeling of conformance uncertainty reduction over time. International Journal of Greenhouse Gas Control, 2020, 97, 103026.	4.6	9
8	Effects of "soilâ€like―particle size on gas transport and water retention properties in aged municipal solid waste from a Sri Lankan open dumpsite. Soil Science Society of America Journal, 2020, 84, 1080-1093.	2.2	1
9	Thermodynamic analysis of a novel fossilâ€fuel–free energy storage system with a transâ€eritical carbon dioxide cycle and heat pump. International Journal of Energy Research, 2020, 44, 7924-7937.	4.5	12
10	Thermo-hydrologic processes in maar eruptions: The role of vapor transport and condensation. Journal of Volcanology and Geothermal Research, 2020, 393, 106809.	2.1	1
11	Modeling CO 2 flow in support of a shallow subsurface controlled leakage field test. , 2019, 9, 1027-1042.		3
12	Revisiting the Analytical Solutions of Heat Transport in Fractured Reservoirs Using a Generalized Multirate Memory Function. Water Resources Research, 2019, 55, 1405-1428.	4.2	15
13	Simulation Study Comparing Offshore Versus Onshore CO2 Well Blowouts. , 2019, , .		2
14	A metric for evaluating conformance robustness during geologic CO2 sequestration operations. International Journal of Greenhouse Gas Control, 2019, 85, 100-108.	4.6	8
15	On producing CO ₂ from subsurface reservoirs: simulations of liquidâ€gas phase change caused by decompression. , 2019, 9, 194-208.		4
16	Geologic Carbon Sequestration: Sustainability and Environmental Risk. , 2019, , 219-234.		0
17	Simulations of carbon dioxide push-pull into a conjugate fault system modeled after Dixie Valley—Sensitivity analysis of significant parameters and uncertainty prediction by data-worth analysis. Geothermics, 2018, 74, 121-134.	3.4	0
18	Methane Diffusion and Adsorption in Shale Rocks: A Numerical Study Using the Dusty Gas Model in TOUGH2/EOS7C-ECBM. Transport in Porous Media, 2018, 123, 521-531.	2.6	34

#	Article	IF	CITATIONS
19	Revisiting underground gas storage as a direct analogue for geologic carbon sequestration. , 2018, 8, 4-6.		5
20	Are we all in <i>concordance</i> with the meaning of the word <i>conformance</i> , and is our definition in <i>conformity</i> with standard definitions?. , 2018, 8, 210-214.		10
21	Modeling the Aliso Canyon underground gas storage well blowout and kill operations using the coupled well-reservoir simulator T2Well. Journal of Petroleum Science and Engineering, 2018, 161, 158-174.	4.2	21
22	Commemorating Dr. Gudmundur "Bo―Bodvarsson (1951–2006), a Leader of the Deep Unsaturated Flow and Transport Investigations. Water (Switzerland), 2018, 10, 18.	2.7	13
23	Pressure transient analysis during CO2 push-pull tests into faults for EGS characterization. Geothermics, 2018, 75, 180-191.	3.4	2
24	Geologic Carbon Sequestration: Sustainability and Environmental Risk. , 2018, , 1-17.		0
25	Simulations of CO2 injection into fractures and faults for improving their geophysical characterization at EGS sites. Geothermics, 2017, 69, 189-201.	3.4	17
26	Coupled thermal–hydrological–mechanical modeling of CO2-enhanced coalbed methane recovery. International Journal of Coal Geology, 2017, 179, 81-91.	5.0	49
27	Fully coupled two-phase flow and poromechanics modeling of coalbed methane recovery: Impact of geomechanics on production rate. Journal of Natural Gas Science and Engineering, 2017, 45, 474-486.	4.4	71
28	Approximate solutions for diffusive fractureâ€matrix transfer: Application to storage of dissolved CO ₂ in fractured rocks. Water Resources Research, 2017, 53, 1746-1762.	4.2	19
29	Revisiting the Fundamental Analytical Solutions of Heat and Mass Transfer: The Kernel of Multirate and Multidimensional Diffusion. Water Resources Research, 2017, 53, 9960-9979.	4.2	9
30	Informing Geologic CO2 Storage Site Management Decisions under Uncertainty: Demonstration of NRAP's Integrated Assessment Model (NRAP-IAM-CS) Application. Energy Procedia, 2017, 114, 4330-4337.	1.8	5
31	Bringing research findings to the real world is an essential and rewarding experience. , 2017, 7, 4-5.		0
32	Effect of subsurface soil moisture variability and atmospheric conditions on methane gas migration in shallow subsurface. International Journal of Greenhouse Gas Control, 2016, 55, 105-117.	4.6	40
33	How the low price of oil can spur CCS research innovation. , 2016, 6, 1-2.		4
34	On the use of Darcy's law and invasionâ€percolation approaches for modeling largeâ€scale geologic carbon sequestration. , 2016, 6, 19-33.		30
35	Coupled geomechanics and flow modeling of thermally induced compaction in heavy oil diatomite reservoirs under cyclic steaming. Journal of Petroleum Science and Engineering, 2016, 147, 474-484.	4.2	12
36	Thermodynamic analysis of a compressed carbon dioxide energy storage system using two saline aquifers at different depths as storage reservoirs. Energy Conversion and Management, 2016, 127, 149-159.	9.2	125

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37	The National Risk Assessment Partnership's integrated assessment model for carbon storage: A tool to support decision making amidst uncertainty. International Journal of Greenhouse Gas Control, 2016, 52, 175-189.	4.6	70
38	Comparison of compressed air energy storage process in aquifers and caverns based on the Huntorf CAES plant. Applied Energy, 2016, 181, 342-356.	10.1	78
39	Geologic carbon sequestration injection wells in overpressured storage reservoirs: estimating area of review. , 2016, 6, 775-786.		7
40	Fast estimation of dense gas dispersion from multiple continuous CO2 surface leakage sources for risk assessment. International Journal of Greenhouse Gas Control, 2016, 49, 323-329.	4.6	7
41	Will mercury impurities impact CO ₂ injectivity in deep sedimentary formations? I. Condensation and net porosity reduction. , 2015, 5, 64-71.		5
42	Will mercury impurities impact CO ₂ injectivity in deep sedimentary formations? II. Mineral dissolution and precipitation. , 2015, 5, 72-90.		2
43	CO2 migration and pressure evolution in deep saline aquifers. International Journal of Greenhouse Gas Control, 2015, 40, 203-220.	4.6	119
44	The Northwest Geysers EGS Demonstration Project, California: Pre-stimulation Modeling and Interpretation of the Stimulation. Mathematical Geosciences, 2015, 47, 3-29.	2.4	67
45	T2Well—An integrated wellbore–reservoir simulator. Computers and Geosciences, 2014, 65, 46-55.	4.2	137
46	Delineating Area of Review in a System with Pre-injection Relative Overpressure. Energy Procedia, 2014, 63, 3715-3722.	1.8	4
47	Impact of Induced Seismic Events on Seal Integrity, Texas Gulf Coast. Energy Procedia, 2014, 63, 4807-4815.	1.8	2
48	Porous Media Compressed-Air Energy Storage (PM-CAES): Theory and Simulation of the Coupled Wellbore–Reservoir System. Transport in Porous Media, 2013, 97, 201-221.	2.6	63
49	Regional evaluation of brine management for geologic carbon sequestration. International Journal of Greenhouse Gas Control, 2013, 14, 39-48.	4.6	31
50	The role of CO ₂ in CH ₄ exsolution from deep brine: Implications for geologic carbon sequestration. , 2013, 3, 359-377.		14
51	Reply to comments by Schnaar et al. on "Brine flow up a well caused by pressure perturbation from geologic carbon sequestration: Static and dynamic evaluations―by Birkholzer et al. (2011). International Journal of Greenhouse Gas Control, 2013, 17, 544-545.	4.6	Ο
52	Simulation of CO2-EGS in a Fractured Reservoir with Salt Precipitation. Energy Procedia, 2013, 37, 6617-6624.	1.8	28
53	Quantification of Risk Profiles and Impacts of Uncertainties as part of US DOE's National Risk Assessment Partnership (NRAP). Energy Procedia, 2013, 37, 4765-4773.	1.8	29
54	Analysis of potential leakage pathways at the Cranfield, MS, U.S.A., CO2 sequestration site. International Journal of Greenhouse Gas Control, 2013, 18, 388-400.	4.6	36

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55	Monitoring deformation at the Geysers Geothermal Field, California using Câ€band and Xâ€band interferometric synthetic aperture radar. Geophysical Research Letters, 2013, 40, 2567-2572.	4.0	50
56	Selected papers from the 11 th US annual conference on Carbon Capture, Utilization, and Sequestration. , 2013, 3, 1-2.		5
57	Introduction to the Special Issue on Simulation of Geologic Carbon Sequestration with the TOUGH codes. , 2013, 3, 425-426.		Ο
58	Simulationâ€based estimates of safety distances for pipeline transportation of carbon dioxide. , 2013, 3, 66-83.		19
59	Utilization of CO ₂ as cushion gas for porous media compressed air energy storage. , 2013, 3, 124-135.		33
60	Numerical simulations of the Macondo well blowout reveal strong control of oil flow by reservoir permeability and exsolution of gas. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 20254-20259.	7.1	22
61	Measuring and modeling fault density for CO2 storage plume-fault encounter probability estimation. AAPG Bulletin, 2012, 97, 597-618.	1.5	3
62	The risk of induced seismicity: is capâ€rock integrity on shaky ground?. , 2012, 2, 217-218.		13
63	Assessing health impacts of CO2 leakage from a geological storage site into buildings: Role of attenuation in the unsaturated zone and building foundation. International Journal of Greenhouse Gas Control, 2012, 9, 322-333.	4.6	31
64	Numerical simulation of salt precipitation in the fractures of a CO2-enhanced geothermal system. Geothermics, 2012, 44, 13-22.	3.4	115
65	Why we need the â€~and' in â€~CO ₂ utilization and storage'. , 2012, 2, 1-2.		8
66	Simulations of longâ€column flow experiments related to geologic carbon sequestration: effects of outer wall boundary condition on upward flow and formation of liquid CO ₂ . , 2012, 2, 279-303.		14
67	Brine flow up a well caused by pressure perturbation from geologic carbon sequestration: Static and dynamic evaluations. International Journal of Greenhouse Gas Control, 2011, 5, 850-861.	4.6	79
68	Comparative Assessment of Status and Opportunities for Carbon Dioxide Capture and Storage and Radioactive Waste Disposal in North America. Advances in Global Change Research, 2011, , 367-393.	1.6	1
69	Analytical solution for two-phase flow in a wellbore using the drift-flux model. Advances in Water Resources, 2011, 34, 1656-1665.	3.8	65
70	Implementation and Usability Evaluation of a Cloud Platform for Scientific Computing as a Service (SCaaS). , 2011, , .		10
71	Estimating the probability of CO ₂ plumes encountering faults. , 2011, 1, 160-174.		10
72	Health, safety, and environmental risks from energy production: a yearâ€long reality check. , 2011, 1, 102-104.		2

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73	Transient CO ₂ leakage and injection in wellboreâ€reservoir systems for geologic carbon sequestration. , 2011, 1, 335-350.		71
74	On carbon footprints and growing energy use. , 2011, 1, 5-7.		1
75	Injection, Flow, and Mixing of CO2 in Porous Media with Residual Gas. Transport in Porous Media, 2011, 90, 201-218.	2.6	33
76	Buoyancy Effects on Upward Brine Displacement Caused by CO2 Injection. Transport in Porous Media, 2011, 87, 525-540.	2.6	62
77	Leakage risk assessment of the In Salah CO2 storage project: Applying the certification framework in a dynamic context. Energy Procedia, 2011, 4, 4154-4161.	1.8	26
78	LUCI: A facility at DUSEL for large-scale experimental study of geologic carbon sequestration. Energy Procedia, 2011, 4, 5050-5057.	1.8	2
79	Analytical solution for Joule–Thomson cooling during CO2 geo-sequestration in depleted oil and gas reservoirs. International Journal of Greenhouse Gas Control, 2010, 4, 806-810.	4.6	68
80	Percolation-theory and fuzzy rule-based probability estimation of fault leakage at geologic carbon sequestration sites. Environmental Earth Sciences, 2010, 59, 1447-1459.	2.7	21
81	A shallow subsurface controlled release facility in Bozeman, Montana, USA, for testing near surface CO2 detection techniques and transport models. Environmental Earth Sciences, 2010, 60, 227-239.	2.7	146
82	Time-window-based filtering method for near-surface detection of leakage from geologic carbon sequestration sites. Environmental Earth Sciences, 2010, 60, 359-369.	2.7	2
83	Origin of the patchy emission pattern at the ZERT CO2 release test. Environmental Earth Sciences, 2010, 60, 241-250.	2.7	18
84	Modeling Gas Transport in the Shallow Subsurface During the ZERT CO2 Release Test. Transport in Porous Media, 2010, 82, 77-92.	2.6	45
85	Transport in Geologic CO2 Storage Systems. Transport in Porous Media, 2010, 82, 1-2.	2.6	2
86	Certification framework based on effective trapping for geologic carbon sequestration. International Journal of Greenhouse Gas Control, 2009, 3, 444-457.	4.6	99
87	Short-Range Atmospheric Dispersion of Carbon Dioxide. Boundary-Layer Meteorology, 2009, 133, 17-34.	2.3	13
88	The consequences of failure should be considered in siting geologic carbon sequestration projects. International Journal of Greenhouse Gas Control, 2009, 3, 658-663.	4.6	23
89	Probability estimation of CO2 leakage through faults at geologic carbon sequestration sites. Energy Procedia, 2009, 1, 41-46.	1.8	17
90	Pressure perturbations from geologic carbon sequestration: Area-of-review boundaries and borehole leakage driving forces. Energy Procedia, 2009, 1, 47-54.	1.8	43

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91	Case studies of the application of the Certification Framework to two geologic carbon sequestration sites. Energy Procedia, 2009, 1, 63-70.	1.8	7
92	Wellbore flow model for carbon dioxide and brine. Energy Procedia, 2009, 1, 71-78.	1.8	48
93	Modeling the effects of topography and wind on atmospheric dispersion of CO2 surface leakage at geologic carbon sequestration sites. Energy Procedia, 2009, 1, 1925-1932.	1.8	23
94	A controlled field pilot for testing near surface CO2 detection techniques and transport models. Energy Procedia, 2009, 1, 2143-2150.	1.8	35
95	Detection of CO2 leakage by eddy covariance during the ZERT project's CO2 release experiments. Energy Procedia, 2009, 1, 2301-2306.	1.8	19
96	Predictions of long-term behavior of a large-volume pilot test for CO2 geological storage in a saline formation in the Central Valley, California. Energy Procedia, 2009, 1, 3291-3298.	1.8	5
97	Eddy covariance observations of surface leakage during shallow subsurface CO ₂ releases. Journal of Geophysical Research, 2009, 114, .	3.3	49
98	Aqueous and gaseous nitrogen losses induced by fertilizer application. Journal of Geophysical Research, 2009, 114, .	3.3	24
99	Screening and ranking framework for geologic CO2 storage site selection on the basis of health, safety, and environmental risk. Environmental Geology, 2008, 54, 1687-1694.	1.2	78
100	The role of optimality in characterizing CO2 seepage from geologic carbon sequestration sites. International Journal of Greenhouse Gas Control, 2008, 2, 640-652.	4.6	42
101	A mechanistic treatment of the dominant soil nitrogen cycling processes: Model development, testing, and application. Journal of Geophysical Research, 2008, 113, .	3.3	97
102	Surface CO ₂ leakage during two shallow subsurface CO ₂ releases. Geophysical Research Letters, 2007, 34, .	4.0	90
103	Joule-Thomson cooling due to CO2 injection into natural gas reservoirs. Energy Conversion and Management, 2007, 48, 1808-1815.	9.2	165
104	System-level modeling for economic evaluation of geological CO2 storage in gas reservoirs. Energy Conversion and Management, 2007, 48, 1827-1833.	9.2	27
105	Interpreting Velocities from Heat-Based Flow Sensors by Numerical Simulation. Ground Water, 2006, 44, 386-393.	1.3	12
106	On leakage and seepage of CO2 from geologic storage sites into surface water. Environmental Geology, 2006, 50, 691-705.	1.2	75
107	Geologic Carbon Sequestration: CO2 Transport in Depleted Gas Reservoirs. , 2006, , 419-426.		8
108	An improved strategy to detect CO2leakage for verification of geologic carbon sequestration. Geophysical Research Letters, 2005, 32, n/a-n/a.	4.0	45

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109	Modeling of Near-Surface Leakage and Seepage of CO2 for Risk Characterization. , 2005, , 1205-1216.		2
110	Storage Integrity Preface. , 2005, , 685-686.		0
111	Coupled Vadose Zone and Atmospheric Surface‣ayer Transport of Carbon Dioxide from Geologic Carbon Sequestration Sites. Vadose Zone Journal, 2004, 3, 848-857.	2.2	51
112	Comparison of Aerobic and Anaerobic Biotreatment of Municipal Solid Waste. Journal of the Air and Waste Management Association, 2004, 54, 815-822.	1.9	84
113	Mixing of Stably Stratified Gases in Subsurface Reservoirs: A Comparison of Diffusion Models. Transport in Porous Media, 2004, 54, 323-334.	2.6	27
114	Economic feasibility of carbon sequestration with enhanced gas recovery (CSEGR). Energy, 2004, 29, 1413-1422.	8.8	101
115	Code intercomparison builds confidence in numerical simulation models for geologic disposal of CO2. Energy, 2004, 29, 1431-1444.	8.8	174
116	Modeling of recent volcanic episodes at Phlegrean Fields (Italy): geochemical variations and ground deformation. Geothermics, 2004, 33, 531-547.	3.4	100
117	Vadose Zone Remediation of Carbon Dioxide Leakage from Geologic Carbon Dioxide Sequestration Sites. Vadose Zone Journal, 2004, 3, 858-866.	2.2	4
118	Vadose Zone Remediation of Carbon Dioxide Leakage from Geologic Carbon Dioxide Sequestration Sites. Vadose Zone Journal, 2004, 3, 858-866.	2.2	29
119	Research Advances in Vadose Zone Hydrology through Simulations with the TOUGH Codes: Preface from the Guest Editors. Vadose Zone Journal, 2004, 3, 737-737.	2.2	Ο
120	Flow and transport in unsaturated fractured rock: effects of multiscale heterogeneity of hydrogeologic properties. Journal of Contaminant Hydrology, 2003, 60, 1-30.	3.3	42
121	Fault-matrix interactions in nonwelded tuff of the Paintbrush Group at Yucca Mountain. Journal of Contaminant Hydrology, 2003, 62-63, 269-286.	3.3	17
122	Carbon Dioxide as Cushion Gas for Natural Gas Storage. Energy & amp; Fuels, 2003, 17, 240-246.	5.1	111
123	On Leakage and Seepage from Geologic Carbon Sequestration Sites: Unsaturated Zone Attenuation. Vadose Zone Journal, 2003, 2, 287-296.	2.2	95
124	On Leakage and Seepage from Geologic Carbon Sequestration Sites: Unsaturated Zone Attenuation. Vadose Zone Journal, 2003, 2, 287-296.	2.2	27
125	On Leakage and Seepage from Geologic Carbon Sequestration Sites. Vadose Zone Journal, 2003, 2, 287.	2.2	12
126	Water flow within a fault in altered nonwelded tuff. Water Resources Research, 2001, 37, 3043-3056.	4.2	19

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127	Process Modeling of CO2 Injection into Natural Gas Reservoirs for Carbon Sequestration and Enhanced Gas Recovery. Energy & amp; Fuels, 2001, 15, 293-298.	5.1	260
128	Simulation of propagating fronts in geothermal reservoirs with the implicit Leonard total variation diminishing scheme. Geothermics, 2000, 29, 1-25.	3.4	28
129	Numerical Simulation of Ferrofluid Flow for Subsurface Environmental Engineering Applications. Transport in Porous Media, 2000, 38, 319-344.	2.6	107
130	Experimental Studies of the Flow of Ferrofluid in Porous Media. Transport in Porous Media, 2000, 41, 61-80.	2.6	79
131	Restricted interval guelph permeameter: Theory and application. Water Resources Research, 2000, 36, 1373-1380.	4.2	4
132	Plume separation by transient thermohaline convection in porous media. Geophysical Research Letters, 1999, 26, 2997-3000.	4.0	24
133	Layered Thermohaline Convection in Hypersaline Geothermal Systems. Transport in Porous Media, 1998, 33, 29-63.	2.6	64
134	On uncertainty in remediation analysis: variance propagation from subsurface transport to exposure modeling. Reliability Engineering and System Safety, 1998, 62, 117-129.	8.9	16
135	Linear and Monte Carlo uncertainty analysis for subsurface contaminant transport simulation. Water Resources Research, 1997, 33, 2495-2508.	4.2	60
136	Reply [to "Comment on †Dispersive Transport Dynamics in a Strongly Coupled Groundwater-Brine Flow System' by Curtis M. Oldenburg and Karsten Pruessâ€]. Water Resources Research, 1996, 32, 3411-3412.	4.2	12
137	Mixing with first-order decay in variable-velocity porous media flow. Transport in Porous Media, 1996, 22, 161-180.	2.6	8
138	Simulations of convection with crystallization in the system KAlSi ₂ O ₆ -CaMgSi ₂ O ₆ ; implications for compositionally zoned magma bodies. American Mineralogist, 1995, 80, 1188-1207.	1.9	71
139	Dispersive Transport Dynamics in a Strongly Coupled Groundwater-Brine Flow System. Water Resources Research, 1995, 31, 289-302.	4.2	145
140	On numerical modeling of capillary barriers. Water Resources Research, 1993, 29, 1045-1056.	4.2	104
141	HYBRID MODEL FOR SOLIDIFICATION AND CONVECTION. Numerical Heat Transfer, Part B: Fundamentals, 1992, 21, 217-229.	0.9	79
142	Numerical modeling of solidification and convection in a viscous pure binary eutectic system. International Journal of Heat and Mass Transfer, 1991, 34, 2107-2121.	4.8	44
143	Self-organization in convective magma mixing. Earth-Science Reviews, 1990, 29, 331-348.	9.1	45
144	Magma zonation: Effects of chemical buoyancy and diffusion. Geophysical Research Letters, 1989, 16, 1387-1390.	4.0	13

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145	Dynamic mixing in magma bodies: Theory, simulations, and implications. Journal of Geophysical Research, 1989, 94, 9215-9236.	3.3	134