

SCCER-SoE Publications Geo-energy

Title	Authors	Title of journal	Year of publication	DOI
Geologic controls on supercritical geothermal resources above magmatic intrusions	Samuel Scott, Thomas Driesner & Philipp Weis	nature Communications	2015	10.1038/ncomms8837
Simulating Supercritical Water Jets with a Variable Turbulent Prandtl Number	Martin J. Schuler, Tobias Rothenfluh, Panagiotis Stathopoulos, Dragana Brkic, Thierry Meier, Philipp Rudolf von Rohr	Chemical Engineering & Technology, Volume 37, Issue 11, pages 1896–1902	2014	10.1002/ceat.201300661
Stagnation flow heat transfer of confined, impinging hot water jets under supercritical pressures	Martin J. Schuler, Tobias Rothenfluh, Philipp Rudolf von Rohr	The Journal of Supercritical Fluids, 99: 51-60, 2015	2015	10.1016/j.supflu.2015.01.011
Hot surface ignition of oxygen-ethanol hydrothermal flames	T. Meier, P. Stathopoulos, Ph. Rudolf von Rohr	The Journal of Supercritical Fluids	2014	10.1016/j.supflu.2014.11.012
Seismic Velocity Structure of a Fossilized Icelandic Geothermal System - A Combined Laboratory and Field Study	Grab, M., Zürcher B., Maurer, H., & Greenhalgh, S	Geothermics	2015	10.1016/j.geothermics.2015.06.004
Seismic Velocity Structure of a Fossilized Icelandic Geothermal System - A Combined Laboratory and Field Study	Grab, M., Maurer, H., & Greenhalgh, S	77th EAGE Conference and Exhibition	2015	10.3997/2214-4609.201413156
Constructive optimization of electrode locations for target-focused resistivity monitoring	F. M. Wagner, T. Günther, C. Schmidt-Hattenberger, H. Maurer	Geophysics	2015	http://dx.doi.org/10.1190/geo2014-0214.1
Migration Monitoring by Means of Electrical Resistivity Tomography (ERT) - Review on Five Years of Operation of a Permanent ERT System at the Ketzin Pilot Site	C. Schmidt-Hattenberger, P. Bergmann, T. Labitzke, F. M. Wagner	Energy Procedia	2014	http://dx.doi.org/10.1016/j.egypro.2014.11.471
Direct current (DC) resistivity and induced polarization (IP) monitoring of active layer dynamics at high temporal resolution	Doetsch, J., Ingeman-Nielsen, T., Christiansen, A.V., Fiandaca, G., Auken, E., Elberling, B	Cold Regions Science and Technology	2015	10.1016/j.coldregions.2015.07.002
Field scale time-domain spectral induced polarization monitoring of geochemical changes induced by injected CO2 in a shallow aquifer	Doetsch, J., Fiandaca, G., Auken, E., Christiansen, A.V., Cahill, A.G., Jakobsen, R.	Geophysics	2015	10.1190/GEO2014-0315.1.
Evaluating the effect of network density and geometric distribution on kinematic source inversion models.	Y. Zhang, L.A. Dalgner, S.G. Song, J. Clinton & D. Giardini	Geophys. J. Int., 200, 1-16	2015	10.1093/gji/ggu252
New predictive equations and site amplification estimates for the next-generation Swiss ShakeMaps.	C. Cauzzi, B. Edwards, D. Fäh, J. Clinton, S. Wiemer, Ph. Kästli, G. Cua & D. Giardini:	Geophys. J. Int., 200, 421-438	2015	10.1093/gji/ggu404
Global seismic hazard assessment program – GSHAP legacy.	L. Danciu & D. Giardini:	Annals of Geophysics, 58, S0109	2015	10.4401/ag-6734
Reassessment of the Maximum Fault Rupture Length of Strike-Slip Earthquakes and Inference on M-max in the Anatolian Peninsula, Turkey.	A. Mignan, L. Danciu & D. Giardini:	Seismological Research Letters, 86, 890-900,	2015	10.1785/0220140252
High performance reactive transport simulations examining the effects of thermal, hydraulic, and chemical (THC) gradients on fluid injectivity at carbonate CCUS reservoir scales	Tutolo, B.M., X.-Z. Kong, W.E. Seyfried Jr., and M.O. Saar	Int. J. Greenhouse Gas Control	2015	
CO2 sequestration in feldspar-rich sandstone: Coupled evolution of fluid chemistry, mineral reaction rates, and hydrogeochemical properties	Tutolo, B.M., A.J. Luhmann , X.-Z. Kong,	Geochimica et Cosmochimica Acta	2015	10.1016/j.gca.2015.04.002
Brine displacement by CO2, energy extraction rates, and lifespan of a CO2-limited CO2 Plume Geothermal (CPG) system with a horizontal production well	Garapati, N., J.B. Randolph, and M.O. Saar	Geothermics	2015	
A Comparison of Electric Power Output of CO2 Plume Geothermal (CPG) and Brine Geothermal Systems for Varying Reservoir Conditions	Adams, B.M., T.H. Kuehn, J.M. Bielicki, J. Luhmann, A.J., M. D. Covington, J.M. Myre, M. Perne, S.W. Jones, E.C.	Applied Energy	2015	
Thermal damping and retardation in karst conduits	Alexander, Jr., and M.O. Saar	Hydrology and Earth System Sciences (HESS)	2015	10.5194/hess-19-137-2015
Numerical Study of Multi-Fluid and Multi-Level Geothermal System Performance	Saar, M.O., T.A. Buscheck, P. Jenny, N. Garapati, J.B. Randolph, D.C. Karvounis, M. Chen, Y. Sun, and J.M. Bielicki	Peer-Reviewed Proceedings of the World Geothermal Congress, Melbourne, Australia	2015	
Multi-Fluid Sedimentary Geothermal Energy Systems for Dispatchable Renewable Electricity	Buscheck, T.A., J.M. Bielicki, M. Chen, Y. Sun, Y. Hao, T.A. Edmunds, J.B. Randolph, and M.O. Saar	Proceedings to the World Geothermal Congress, Melbourne, Australia, 19-25 April	2015	
Volumetric Properties of Na2SO4-H2O and Na2SO4-NaCl-H2O Solutions to 523.15 K, 70 MPa	Denis Zezin, Thomas Driesner & Carmen Sanchez-Valle	Journal of Chemical and Engineering Data	2015	10.1021/je501152a
Realistic simulation of an aquifer thermal energy storage: Effects of injection temperature, well placement and groundwater flow	Alina Yapparova, Stephan Matthaei & Thomas Driesner	Energy	2014	10.1016/j.energy.2014.09.018
Characterisation of Natural Fractures and Fracture Zones of the Basel EGS Reservoir inferred from Geophysical Logging of the Basel-1 Well	Martin Ziegler, Benoit Valley & Keith Evans	WGC2015 Conf. Proceedings	2015	https://pangea.stanford.edu/ERE/db/WGC/papers/WGC/2015/31003.pdf
A Stochastic Approach to Characterize Discrete Fracture Network Patterns of Heterogeneous Media.	Jalali, M.R., Jimenez Parras, S., Somogyvari M. and Bayer P. (2015).	AGU Chapman Conference	2015	
An Interdisciplinary Decameter-scale Reservoir Stimulation Practice at the Grimsel Test Site	Jalali, M.R., Doetsch J., Gischtig V., Madonna, C. and Ammann F.	2nd EAGE Workshop on Geomechanics and Energy. Celle, Germany.	2015	
Relative Importance of THM Effects during Non-isothermal Fluid Injection in Fractured Media	Jalali, M.R., Evans, K.F., Valley, B.C. and Dusseault, M.B	US Rock Mechanics / Geomechanics Symposium. San Francisco, CA.	2015	
Hydromechanical and Thermomechanical Behavior of Elastic Fractures during Thermal Stimulation of Naturally Fractured Reservoirs	Jalali, M.R. and Valley B.C	Geophysical Research Abstract. 17, EGU2015-8370.	2015	

Small-Scale Reservoir Stimulation Experiments in the Deep Underground Laboratory at the Grimsel Test Site	Gischig V., Doetsch J., Jalali, M.R., Madonna, C. and Ammann F.	Schatzalp Workshop on Induced Seismicity, Davos, Switzerland.	2015	
Rupture propagation behavior and the largest possible earthquake induced by fluid injection into deep reservoirs	Gischig, V. S. (2015),	Geophys. Res. Lett., 42,	2015	10.1002/2015GL065072.
DEVELOPMENT OF HIGH ORDER LES SOLVER FOR HEAT TRANSFER APPLICATIONS BASED ON THE OPEN SOURCE OPENFOAM FRAMEWORK	Luca Mangani *, David Roos Launchbury , Ernesto Casartelli , Giulio Romanelli	ASME Turbo Expo	2015	10.1115/GT2015-43279
Predictive modelling of mineral scaling, corrosion and the performance of solute geothermometers in a granitoid-hosted, enhanced geothermal system	L. W. Diamond & P. Alt-Epping	Applied Geochemistry	2014	10.1016/j.apgeochem.2014.09.017
Time-lapse pressure tomography for characterizing CO2 plume evolution in a deep saline aquifer	Hu, L., Bayer, P., Alt-Epping, P., Tatomir, A., Sauter, M., Brauchler, R.	Intl. J. of Greenhouse Gas Control	2015	10.1016/j.ijggc.2015.04.013
Benchmark reactive transport simulations of a column experiment in compacted bentonite with multispecies diffusion and explicit treatment of electrostatic effects	Alt-Epping, P., Tourmassat, C., Rasouli, P., Steefel, C.I., Mayer, K.U., Jenni, A., Maeder, U., Sengor, S.S., Fernandez, R.	Computational Geosciences	2015	10.1007/s10596-014-9451-x
Implementation and evaluation of permeability-porosity and tortuosity-porosity relationships linked to mineral dissolution-precipitation	Xie, M., Mayer, K.U., Claret, F., Alt-Epping, P., Jacques, D., Steefel, C., Chiaberge, C., Simunek, J.	Computational Geosciences	2015	10.1007/s10596-014-9458-3
Pore-water squeezing from indurated shales	Mazurek, M., Oyama, T., Wersin, P., Alt-Epping, P.	Chemical Geology	2015	10.1016/j.chemgeo.2015.02.008
Geologic controls on supercritical geothermal resources above magmatic intrusions	Samuel Scott, Thomas Driesner & Philipp Weis	nature Communications	2015	10.1038/ncomms8837