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EXERGY

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IS-01	Gaucher, Kohl	A priori detection capability of a microseismic monitoring network
IS-02	Baujard, Badoux, Ollinger, Mégel	HEX-M: a new tool to predict the occurrence risk of large magnitude seismic events during geothermal reservoir stimulation and operation
IS-03	Troiano, Di Giuseppe, Troise, Tramelli , De Natale, Perillo	Modeling induced seismicity due to fluid injection and withdrawal in deep boreholes: a Coulomb stress approach.
IS-04	Van Wees, Buijze, Van Thienen-Visser, Wassing, Fokker, Nepveu, Orlic	Natural stress and fault controls in induced seismicity: what canwe learn from gas depletion in the Netherlands
IS-05	Caccavale, van Eck, Dost, Kraaijpoel	Evaluating non-stationary seismic hazard for gas fields in The Netherlands
IS-07	Schmittbuhl, Lengliné, Zaepfel, Cornet, Cuenot, Genter	Seismic and aseismic slip in EGS reservoir: an experimental approach

9 Shallow (SG)		
SG1-01	Mendrinos, Karytsas	Ground source heat pump technology development within the EU funded project Ground-Med
SG1-02	Ebnöther	The trend towards medium-deep geothermal systems
SG1-03	Wojtan, Pietrucha, Piemonte	State of the art of the technology of high temperature heat pumps for geothermal district heating applications
SG1-04	Poulsen	Industrial heat pump for high temperature district heating
SG1-05	Bottarelli, Georgiev, Aydin, Su, Yousif	Ground-Source Heat Pumps using Phase Change Materials
SG1-06	Sanner, Reuss, Konstantinidou	VDI 4640 – a German guideline for shallow geothermal energy use
SG1-07	Curtis, Pine, Wickins	Development of new ground loop sizing tools for domestic GSHP installations in the UK
SG1-08	Atam, Verhelst, Helsen	Borehole dynamics parameterization for thermal performance optimization under cost constraints
SG1-09	Conti, Grassi, Testi	Proposal of a Holistic Design Procedure for Ground Source Heat Pump Systems
SG1-10	Bayer, Beck, Paly	Mathematical optimization of borehole heat exchanger fields under variable conditions
SG1-11	Fossa, Rolando	An improved method for vertical geothermal borefield design using the Temperature Penalty approach
SG1-12	Emmi, De Carli, Zarrella, Galgaro	Energy efficiency of ground heat exchangers in geothermal anomaly zones
SG1-14	Casasso, Sethi	Finite-element flow and heat transport modelling of Borehole Heat Exchangers
SG1-17	Fossa, Paietta	Comparison of Multiple Load Aggregation Models for annual hourly simulations of ground heat exchangers
SG1-18	Monzó, Acuña, Fossa, Palm	Numerical generation of the temperature response factors for Multiple BHE fields
SG1-19	Montagud, Cervera-Vázquez, Corberán	Analysis of different GSHP system configurations: tank and control sensor position and its influence on the system performance
SG1-20	Montagud, Cervera-Vázquez, Corberán	Optimization methodology for GSHP installations based on the circulation pumps frequency variation
SG1-21	Rüther, Heidenreich, Walch, Sass	Research and Development of porous, high-density polyethylene screens for shallow geothermal well systems
SG1-22	Comina, Dietrich, Firmbach, Giordano, Kolditz, Mandrone, Vienken, Watanabe	Heat flow's propagation within porous media: analogical and numerical modeling
SG1-23	Marajh, Haraksingh, Bridge	Modeling & Simulation of a Horizontal Ground-Coupled Heat Exchanger to investigate Subsurface Heat Transfer for a Tropical Climate.
SG2-01	Piemonte, Porro	Palazzo Lombardia: Geothermal Heat Pump capacity world record for a single building
SG2-02	Grimm	Berufskolleg Duisburg – largest project of shallow geothermal use in Germany
SG2-03	Spadoni, Della Pona, Magon	Geothermal Heat Pump for District Heating Service in Milan (Italy)

SG2-04	Mands	Optimisation of industrial size cold production from a ground source heat pump plant using borehole heat exchangers
SG2-05	Kralj	Ground–Med Demo Project No.4 – Benedikt, Slovenia
SG2-06	Bohne, Wohlfahrt, Harhausen, Sanner, Mands, Sauer, Grundmann	Results and lessons learned from geothermal monitoring of eight nonresidential buildings with heat and cold production in Germany
SG2-07	Duque, Pascoal	An attempt to increase the performance of a climatizing system using water from boreholes, in an old building
SG3-01	Sanner, Hellström, Spitler, Gehlin	More than 15 years of mobile Thermal Response Test – a summary of experiences and prospects
SG3-02	Bruno, Mercuri, Tinti, Witte	Probabilistic approach to TRT analysis: evaluation of groundwater flow effects and machine -borehole interaction
SG3-03	Fossa, Rolando, Priarone, Vaccaro	Numerical evaluation of the Ground Response to a Thermal Response Test Experiment
SG3-04	Di Spio, Galgaro, Destro, Giaretta, Chiesa, Manzella, VIGOR Team	Thermal conductivity of rocks and regional mapping
SG3-05	Bertermann, Bialas, Morper-Busch, Klug, Rohn, Stollhofen, Psyk, Jaudin, Maragna, Einarsson, Vikingsson, Orosz, Jordan, Vîjdea, Lewis, Lawley, Latham, Declercq, Petitclerc, Zacherl, Arvanitis, Stefouli	ThermoMap – An Open-Source Web Mapping Application for Illustrating the very Shallow Geothermal Potential in Europe and selected Case Study Areas
SG3-07	Montero, Urchueguía, Martos, Badenes	Ground temperature recovery time after BHE insertion
SG3-08	Montero, Urchueguía, Martos, Badenes, Picard	Ground temperature profile while thermal response testing
SG3-11	Drefke, Stegner Sass	Changes of thermophysical and hydraulic properties in unsaturated soils caused by heat transfer (Poster)
SG3-13	Stegner, Drefke, Hentschel, Sass	Efficiency of buried cables depending on hydrogeological and geothermal properties of trench fill materials
SG3-14	Sauer	Evaluating improper response test data by using superposition of line source approximation
SG3-15	Bording, Balling, Nielsen	Laboratory measurements of rock thermal properties
SG4-01	Bourne-Webb	Overview of observed thermal and thermo-mechanical response of piled energy foundations
SG4-02	Burlon, Habert, Szymkievicz, Suryatriyastuti, Mroueh	Towards a design approach of bearing capacity of thermo-active piles
SG4-03	Di Donna, Dupray, Laloui	THM processes affecting the geotechnical performance of energy pile foundation
SG4-04	Suryatriyastuti, Mroueh, Burlon	Numerical analysis of thermo-active piles under thermal cyclic solicitation

SG4-05	de Groot Viana, de Santiago, Pardo, Arcos, Martín, Urchueguía, Badenes	Heating and cooling an energy pile under working load in Valencia
SG4-06	McCartney	Applications of Geothermal Heat Exchange in Civil Engineering Infrastructure
SG5-01	Björn, Henrik	Borehole Thermal Energy Storage in combination with District Heating
SG5-02	Sommer, Drijver, Verburg, Slenders, de Vries, Dinkla, Leusbrock, Grotenhuis	Combining geothermal energy and groundwater remediation – Results from the Dutch national research program
SG5-03	Hartog, Drijver, Dinkla, Bonte	Impact of Underground Thermal Energy Storage (UTES) on groundwater composition – Results from the Dutch national research program
SG5-04	Homuth, Rühaak, Bär, Sass	Medium Deep High Temperature Heat Storage
SG5-05	Coelho, Tavares, Lourenço, Joyce, Madureira, Costa	An outlook of geothermal energy and underground thermal storage legal status in Portugal
SG5-08	McCartney, Reed, Ge, Lu, Smits	Soil-Borehole Thermal Energy Storage Systems for District Heating

10 Geothermal Markets -Deep (MA)		
MA-01	Dumas, Sanner, Angelino	EGEC Geothermal Market report 2012
MA-02	Cataldi, Grassi, Passaleva	Geothermal Development in Italy 2010-2030: a challenge to win
MA-03	Boissavy	The geothermal energy market in France for heating and cooling
MA-04	Bruhn, Huenges, Nardini	R&D-strategy of the EERA joint geothermal programme
MA-05	Landolina, Sanner	Strategic Research Agenda for Renewable Heating & Cooling
MA-06	Buonasorte, Franci	Policies for the promotion of geothermal energy in Italy: Objectives or 2020 regulations and incentives
MA-07	Mijnlieff,Ramsak,Lako, Groen,Smeets,Veldkamp	Geothermal energy in the support scheme SDE+ in the Netherlands
MA-08	Büscher	Advantages and disadvantages of Feed-in Tariffs
MA-09	Nádor,Rotár Szalkai,Prestor,Tóth,Goetzl, Lapanje,Rman,Szőcs, Cernak,Schubert,Svasta	Transboundary geothermal energy resources of Slovenia, Austria, Hungary and Slovakia (TRANSENERGY)
MA-10	Mertoglu,Basarir	Significant Progress of Geothermal MA-Development Activities in Turkey -a Success Story
MA-11	Angelino	EU Legal Framework for Geothermal Energy: State of Play and Future Developments
MA-12	Prestor, Nádor, Lapanje, Rman, Szőcs, Černák, Marcin, Benkova, Götzl, Weibold, Bruestle	A comprehensive overview on the existing regulatory and financial barriers on geothermal energy utilization in Austria, Hungary, Slovakia and Slovenia
MA-13	Bartels, Richter	Comparison of regulatory framework Germany / Italy
MA-14	Falcone, Gnoni, Harrison, Alimonti	Classification and Reporting Requirements for Geothermal Resources
MA-15	Trumpy, Bertani, Manzella, Sander	The web-oriented framework of the world geothermal production database: a business intelligence platform for wide data distribution and analysis
MA-16	Karytsas, Mendrinos	Global Geothermal Power Market
MA-17	Popovska-Vasilevska	Annual utilization factor -prerequisite for feasibility of direct geothermal energy use
MA-19	Dumas, Angelino	A Third electricity scenario

11 Geothermal Markets -Shallow (SG6)		
SG6-01	Cetin, Paksoy	Shallow Geothermal Applications in Turkey
SG6-02	Cuevas, Jaudin, Bezelgues-Courtade	REGEOCITIES, a European initiative for the overcoming of the regulatory barriers for SGE
SG6-03	Vienken, Schelenz, Firmbach, Dietrich	Strategies towards a sustainable thermal use of the shallow subsurface
SG6-04	Burger, Urich, Sitzenfrei, Rauch	Assessment of heating and cooling demand of buildings as part of a regional analysis of shallow geothermal potential
SG6-05	Sanner, Fernandez, Dumas	The need for coordinated training of shallow geothermal designers and drillers in Europe, and how Geotrainet is trying to respond to this need
SG6-07	Menberg, Bayer, Blum	Elevated temperatures beneath cities: An enhanced geothermal resource
SG6-08	Destro, Galgaro, Di Sipio, Chiesa, Teza, Manzella	GIS-mapping model of low entalphy geothermal potential in Southern Italy (VIGOR PROJECT)
SG6-10	Masciale, Caputo, De Carlo	Exploitation of low enthalpy geothermal resource: case study of a coastal area affected by seawater intrusion
SG6-11	Abesser, Lewis	The open loop ground source heat pump screening tool for England and Wales
SG6-12	Petitclerc, Dusar, Declercq, Hoes, Laenen, Dagrain, Vanbrabant	Overview and perspectives on shallow geothermal energy in Belgium
SG6-13	Grimm, Engelmann	erdwaermeLIGA – the shallow georthermal Bundesliga
SG6-14	Ditlefsen, Vangkilde-Pedersen, Sørensen, Bjørn, Højberg, Møller	GeoEnergy – a national shallow geothermal research project

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