

PUBLICATIONS

PAPERS IN PEER REVIEWED JOURNALS (#6)

1. **M. Aydin**, M. Onur and A. Sisman, “A new method for analysis of constant temperature thermal response tests” *Geothermics*, 78, pp.1-8, (2019).
2. A. Gultekin, **M. Aydin**, A. Sisman. “Effects of arrangement geometry and number of boreholes on thermal interaction coefficient of multi-borehole heat exchangers”, *Applied Energy*, 237, pp.163-170, (2019).
3. B. Dehghan, **M. Aydin**, E. Kükreer. “A new 1D analytical model for investigating the long-term heat transfer rate of a borehole ground heat exchanger by Green's function method”, *Renewable Energy* 114, 1036-1037, 2017. + Original article: *Renewable Energy*, 108, 615-621, (2017).
4. A. Gultekin, **M. Aydin** and A. Sisman, “Thermal performance analysis of multiple borehole heat exchangers”, *Energy Conversion and Management*, 122, pp.544-551, (2016)
5. B. Dehghan, A. Sisman and **M. Aydin**, “Parametric investigation of helical ground heat exchangers for heat pump applications”, *Energy and Buildings*, 127, pp.999-1007, (2016)
6. **M. Aydin** and A. Sisman, “Experimental and computational investigation of multi U-tube boreholes”, *Applied Energy*, 145, pp. 163-171, (2015)

INTERNATIONAL CONFERENCE PAPERS (#14)

1. **M. Aydin** and A. Gultekin, “Optimum waiting duration between Thermal Response Tests in borehole heat exchangers”, proceedings of 14th International Conference on Energy Storage, 25-28 April 2018, Adana, (Turkey).
2. **M. Aydin** and R. Bracke, “Thermal Conductivity measuring method for water filled open boreholes”, European Geosciences Union General Assembly, 9-13 April 2018, Vienna, (Austria), DOI → <https://www.essoar.org/doi/pdf/10.1002/essoar.10500020.1>
3. **M. Aydin** and A. Gultekin, “Modeling of horizontal ground source heat pump system for greenhouse heating”, COMSOL Conference, October 18-20, 2017, Rotterdam (Netherlands)
4. A. Gultekin, **M. Aydin** and A. Sisman, “An investigation on thermal interaction coefficient for multiple borehole heat exchangers”, Proceedings of 12nd IEA Heat Pump Conference, May 15-18, 2017, Rotterdam, (Netherlands)
5. **M. Aydin**, A. Gultekin and A. Sisman, “The effects of test temperature and duration on the results of constant temperature thermal response test”, Proceedings of 12nd IEA Heat Pump Conference, May 15-18, 2017, Rotterdam, (Netherlands)
6. **M. Aydin**, M. Onur and A. Sisman, “A new method for constant temperature thermal response tests”, Proceedings of 42nd Stanford Geothermal Workshop, Stanford University, February 13-15, 2017, Stanford/California, (USA)
7. **M. Aydin**, A. Sisman, A. Gultekin and B. Dehghan, “An experimental performance comparison between different shallow ground heat exchangers”, Proceedings of World Geothermal Congress (WGC) 2015, April 19-24 2015, Melbourne, (Australia)
8. B. Dehghan, A. Sisman and **M. Aydin**, “Long Term Performance Prediction of a Borehole Ground Heat Exchanger by Green's Function Method”, Proceedings of World Geothermal Congress (WGC) 2015, April 19-24 2015, Melbourne, (Australia)
9. B. Dehghan, A. Sisman and **M. Aydin**, “Optimizing the Distance between Boreholes with Helical Shaped Ground Heat Exchanger”, Proceedings of World Geothermal Congress (WGC) 2015, April 19-24 2015, Melbourne, (Australia)

10. **M. Aydin**, A. Sisman, A. Gultekin, S. Dincer and C. Erdogan, “*Experimental measurement and long term predictions of a multi-U tube borehole performance for ground source heat pumps*”, Proceedings of 11th International Energy Agency (IEA) Heat Pump Conference 2014, May 12-16 **2014**, Montréal/Québec, (Canada)
11. A. Gultekin, **M. Aydin**, A. Sisman, S. Dincer and C. Erdogan, “*An experimental investigation of the effects of some design and operational parameters on heat transfer rate per unit borehole length*”, Proceedings of 11th International Energy Agency (IEA) Heat Pump Conference 2014, May 12-16, **2014**, Montréal/Québec, (Canada)
12. **M. Aydin**, A. Sisman and A. Gultekin, “*Long Term Performance Prediction of a Borehole and Determination of Optimal Thermal Response Test Duration*”, Proceedings of 39th Workshop on Geothermal Reservoir Engineering, Stanford University, February 24-26, **2014**, Stanford/California, (USA)
13. A. Gultekin, **M. Aydin** and A. Sisman, “*Determination of Optimal Distance Between Boreholes*”, Proceedings of 39th Workshop on Geothermal Reservoir Engineering, Stanford University, February 24-26, **2014**, Stanford/California, (USA)
14. **M. Aydin** and A. Sisman, “*2D Modelling of a PEM Fuel Cell*”, Proceedings of IHEC2007 (International Hydrogen Energy Congress and Exhibition 2007), 13-15 July **2007**, Istanbul, (Turkey)

NATIONAL CONFERENCE PAPERS (#2)

1. **M. Aydin**, M. Onur and A. Sisman, “*A new application methodology for constant temperature thermal response tests*”, 13. National HVAC & Sanitary Congress and Exhibition, TESKON2013, Izmir, 19-22 April **2017**, Turkey.
2. **M. Aydin**, A. Sisman, S. Dincer, C. Erdogan and A. Gultekin, “*Thermal response test and analytical prediction of borehole performance for ground source heat pumps*”, 11. National HVAC & Sanitary Congress and Exhibition, TESKON2013, Izmir, 17-20 April **2013**, Turkey.

OTHER JOURNAL ARTICLES (#2)

1. **M. Aydin**, “*Toprak ısısından faydalanmanın yolları (revised) (Eng:Methods of utilizing ground heat sources-shortened)* ”, Ekoloji Teknik, Issue:10, **2010**.
2. **M. Aydin**, “*Toprak ısısından faydalanmanın yolları (Eng:Methods of utilizing ground heat sources)*, Quarterly Bulletin, 1/**2012**, Baran Entrepreneurs Association, Istanbul.

ARTICLE IN PROGRESS

1. **M. Aydin** “*Thermal conductivity measuring method for water filled open boreholes*”, **2019**, (under review)