Peer-Reviewed

Mallast, U., Kögler, S. (2017). Geometric and radiometric calibration of thermal infrared cameras. Submitted to Remote Sensing.

Böttcher, M., Mallast, U., Massmann, G., Moosorf, G., Müller-Petke, M., Waska, H. (2017). Coastal-Groundwater interfaces (subma-rine groundwater discharge). In: Krause et al. 2017. Ecohydrolog-ical Interfaces (accepted).

Mallast, U., Siebert, C. (2017). Small scale spatial and temporal SGD variability - UAV based thermal infrared indications. Remote Sensing of Environment (submitted).

Kottmeier, C., Agnon, A., Al-Halbouni, D., Alpert, P., Corsmeier, U., Dahm, T., Eshel, A., Geyer, S., Haas, M., Holohan, E., Kalthoff, N., Kishcha, P., Krawczyk, C., Lati, J., Laronne, J.B., Lott, F., Mallast, U., Merz, R., Metzger, J., Mohsen, A., Morin, E., Nied, M., Rödiger, T., Salameh, E., Sawarieh, A., Shannak, B., Siebert, C., Weber,. M. (2016). New perspectives on interdisciplinary earth science at the Dead Sea: The DESERVE project. Science of The Total Environment, 544, 1045-1058.

Schulz, S., Horovitz, M., Rausch, R., Michelsen, N., Mallast, U., Köhne, M., Siebert, C., Schüth, C., Al-Saud, M., Merz, R. (2015). Groundwater evaporation from salt pans: Examples from the eastern Arabian Peninsula, Journal of Hydrology, 531, 792-801.

Mallast, U., Siebert, C., Gloaguen, R., Friesen, J., Rödiger, T., Geyer, S. & Merz, R. (2014). How to identify groundwater caused ther-mal ano-malies in lakes based on long-term medium resolution images in semi-arid regions. . Hydrol. Earth Syst. Sci., 18, 2773-2787, doi:10.5194/hess-18-2773-2014.

Siebert, C., Rödiger, T., Mallast, U., Gräbe, A., Guttman, J., Laronne, J.B., Storz-Peretz, Y., Greenman, A., Salameh, E., Al-Raggad, M., Vachtman, D., Ben Zvi, A., Ionescu, D., Brenner, A., Merz, R., Geyer, S. (2014). Challenges to estimate surface- and groundwa-ter flow in arid regions: The Dead Sea catchment, Science of the Total Environment, 485–486, 828–841, http://dx.doi.org/10.1016/j.scitotenv.2014.04.010.

Schubert, M., Scholten, J., Schmidt, A., Comanducci, J.F., Pham Khang, M., Mallast, U., Knoeller, K. (2014). Focused submarine groundwater discharge at a single spot location: evaluation of dif-ferent detection approaches. Water 6, no. 3: 584-601.

Rödiger, T., Geyer, S., Mallast, U., Merz, R., Krause, P., Fischer, C., Siebert, C. (2014). Multi-response calibration of a conceptual hy-drological model in the semiarid catchment of Wadi al Arab, Jor-dan. Journal of Hydrology 509 (0):193-206. doi: http://dx.doi.org/10.1016/j.jhydrol.2013.11.026

Mallast, U., Schwonke, F., Gloaguen, R., Geyer, S., Sauter, M., Sie-bert, C. (2013). Airborne Thermal Data Identifies Groundwater Discharge at the North-Western Coast of the Dead Sea. Remote Sensing 5 (12):6361-6381.

Mallast, U., Siebert, C., Wagner, B., Sauter, M., Gloaguen, R., Geyer, S., Merz, R. (2013). Localisation and temporal variability of groundwater discharge into the Dead Sea using thermal satellite data. Environmental Earth Sciences, 69(2). 5087-603. doi: 10.1007/s12665-013-2371-6

Mallast, U., Gloaguen, R., Geyer, S., Rödiger, T., and Siebert, C.: (2011). Derivation of groundwater flow-paths based on semi-automatic extraction of lineaments from remote sensing data, Hydrol. Earth Syst. Sci., 15, 2665-2678

Non Peer-Reviewed

Mallast, U., Kögler S., Gründling, R. (2016): Vorerkundung aus der Luft, Earth System Knowledge Platform (ESKP). (http://www.eskp.de/vorerkundung-aus-der-luft/)

Mallast, U. (2015): Erkundung des Untergrundes aus der Luft. Earth System Knowledge Platform (ESKP). (http://www.eskp.de/erkundung-des-untergrundes-aus-der-luft/)

Mallast, U. (2013): Current status and long-term insights into the western Dead Sea groundwater system using multi-sensoral re-mote sensing. Dissertation. TU Freiberg.

Krüger, J. & Mallast, U. (2010): Modellierung zu zwei fundamentalen ökologischen Fragestellungen. In: Neumeister, H. (Hrsg.) (2010): Oberflächennahe Erdsysteme. Projekte Verlag. Halle.

Konferenzpräsentation/ Poster

Oehler, T., Mallast, U., Putra, D., Bakti, H., Lubis, R.F., Schnetger, B., Adyasari, D., Moosdorf, N. (2016). A Ra/Rn study of submarine groundwater discharge on Java and Lombok, Indonesia. 6th International Ra-Rn workshop, Girona. 18.-21.07.2016

Neehaul, Y., Mallast, U., Marie, D., Scholten, J. (2016). Identification of the submarine groundwater discharge locations around the tropical island of Mauritius. 6th International Ra-Rn workshop, Girona. 18.-21.07.2016.

Siebert, C., Merkel, B., Pohl, T., Ionescu, D., Mallast, U., (2015). Ex-ploration of SGD structures by remote sensing technologies and aquatic geochemistry, EGU, Vienna. 12.-17.04.2015. EGU2015-3686

Hennig, H., Mallast, U., Merz, R., (2015). Multi-temporal thermal anal-yses for submarine groundwater discharge (SGD) detection over large spatial scales in the Mediterranean,EGU Vienna. 12.-17.04.2015. EGU2015-4929

Siebert, C., Mallast, U., Rödiger, T., Ionescu, D., Schwonke, F., Hall, J.K., Sade, A.R., Pohl, T., Merkel, B. (2014). Multiple sensor tracking of submarine groundwater discharge: concept study along the Dead Sea. EGU, Vienna. 27.04.-02.05.2014. EGU2014-11217

Siebert, C., Mallast, U., Rödiger, T., Strey, M., Ionescu, D., Häusler, S., Noriega, B., Pohl, T., Merkel, B., (2014). Submarine ground-water discharge at the Dead Sea. In: Wiederhold, H., Michael-sen, J., Hinsby, K., Nommensen, B., (eds.). SWIM 2014 : 23rd Salt Water Intrusion Meeting; Programme and Proceedings Leib-niz-Institut für Angewandte Geophysik, Hannover, p. 366 - 370

Mallast, U., Siebert, C., Schwonke, F., Gloaguen, R., Rödiger, T., Geyer, S., Sauter, M., & Merz, R. (2013). Airborne thermal data reveal groundwater discharge at the north-western coast of the Dead Sea. EGU, Vienna. 07.-12.04.2013. Vol. 15., EGU2012.

Mallast, U., Schubert, M., Schmidt, A., Knöller, K., Stollberg, R., Sie-bert, C. & Merz, R. (2012). Combination of satellite based thermal remote sensing and in situ radon measurements and field obser-vations to detect (submarine) groundwater discharge. AGU Fall Meeting 2012, 03.-07.12.2012, San Francisco, USA.

Mallast, U., Siebert, C., Gloaguen, R., Wagner, B., Schwonke, F., Rödiger, T., Geyer, S., Krieg, R., Sauter, M., Kühn, F., and Merz, R. (2012). Remote sensing application possibilities on groundwa-ter characterization in arid regions at the example of the Dead Sea. EGU, Vienna. 23.-27.04.2012. Vol 14., EGU2012-5273.

Illiger, P., Hese, S., Mallast, U., Rödiger, T. Siebert, C. Geyer, S. & Merz, R., (2012). Skalen-übergreifende zeitliche und räumliche Analyse von RapidEye und MODIS Daten hinsichtlich der Vege-tationsentwicklung im mediterranen bis ariden Raum in Israel/ Palästina. In: Borg, E., Deadelow, H., Johnson, R. (Eds.), RapidEye Science Archive (RESA) - Vom Algorithmus zum Produkt – 4. RESA Workshop. GITO mbH Verlag, Berlin.

Mallast, U., Siebert, C., Schwonke, F., Wagner, B., Rödiger, T., Gey-er, S., Gloaguen, R., Sauter, M., Kühn, F. & Merz, R., (2012). Application of thermal data for groundwater studies in arid re-gions at the example of the Dead Sea. In: Rausch, R., Schüth, C., Himmelsbach, T. (Eds.), Hydrogeology of Arid Environments. Borntraeger Science Publishers, Hannover.

Mallast, U., Schwonke, F., Siebert, C., Maraschek, U., Kemper, G., Geyer, S., Kühn, F. (2011). Hochauflösende flugzeuggestützte Thermalfernerkundung zur Kartierung submariner und terrestri-scher Grundwasserquellen in der hochsalinaren Uferzone des Toten Meeres. Beiträge zur DGPF-Jahrestagung, DGPF Ta-gungsband 20/2011.