

## DAFTAR PUSTAKA

- Adiat, K. A. N., Nawawi, M. N. M., & Abdullah, K. (2012). Assessing the accuracy of GIS-based elementary multi criteria decision analysis as a spatial prediction tool - A case of predicting potential zones of sustainable groundwater resources. *Journal of Hydrology*, 440–441, 75–89. <https://doi.org/10.1016/j.jhydrol.2012.03.028>
- Afrizal, H. (2023). Zona Kontaminasi Airtanah Dan Air Permukaan Dengan Metoda Indeks Pencemaran Di Lereng Gunung Manglayang Bagian Tenggara Wilayah Jatinangor Dan Sekitarnya.
- Aghir Lanyala, A. A., & Hasanah, U. (2016). Prediction of Erosion Rate in Different Land use at Kawatuna Watershed-Central Sulawesi Province. *Agrotekbis*, 4(6), 633–641.
- Aldharab, H. S., Ali, S. A., & Ghareb, J. I. S. A. (2019). Analysis of Basin Geometry in Ataq Region, Part of Shabwah Yemen: Using Remote Sensing and Geographic Information System Techniques. *Bulletin of Pure & Applied Sciences- Geology*, 38f(1), 1. <https://doi.org/10.5958/2320-3234.2019.00001.5>
- Alfa, M. I., Ajibike, M. A., Adie, D. B., & Mudiare, O. J. (2019). Hydrologic and Morphometric Analysis of Ofu River Sub-Basin using Remote Sensing and Geographic Information System. *Nigerian Journal of Technological Development*, 16(2), 49–55. <https://doi.org/10.4314/njtd.v16i2.1>

- Amani, M., Ghorbanian, A., Ahmadi, S. A., Kakooei, M., Moghimi, A., Mirmazloumi, S. M., Moghaddam, S. H. A., Mahdavi, S., Ghahremanloo, M., Parsian, S., Wu, Q., & Brisco, B. (2020). Google Earth Engine Cloud Computing Platform for Remote Sensing Big Data Applications: A Comprehensive Review. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, 13, 5326–5350. <https://doi.org/10.1109/JSTARS.2020.3021052>
- An, R., Wang, H. L., Feng, X. Z., Wu, H., Wang, Z., Wang, Y., Shen, X. J., Lu, C. H., Quaye-Ballard, J. A., Chen, Y. H., & Zhao, Y. H. (2017). Monitoring rangeland degradation using a novel local NPP scaling based scheme over the “Three-River Headwaters” region, hinterland of the Qinghai-Tibetan Plateau. *Quaternary International*, 444, 97–114. <https://doi.org/10.1016/j.quaint.2016.07.050>
- Aouragh, M. H., Essahlaoui, A., El Ouali, A., El Hmaidi, A., & Kamel, S. (2017a). Groundwater potential of Middle Atlas plateaus, Morocco, using fuzzy logic approach, GIS and remote sensing. *Geomatics, Natural Hazards and Risk*, 8(2), 194–206. <https://doi.org/10.1080/19475705.2016.1181676>
- Apip, Takara, K., Yamashiki, Y. et al. (2010) A distributed hydrological–geotechnical model using satellite-derived rainfall estimates for shallow landslide prediction system at a catchment scale. *Landslides* 7, 237–258. <https://doi.org/10.1007/s10346-010-0214-z>
- Arshad, A., Zhang, Z., Zhang, W., & Dilawar, A. (2020). Mapping favorable groundwater potential recharge zones using a GIS-based analytical

- hierarchical process and probability frequency ratio model: A case study from an agro-urban region of Pakistan. *Geoscience Frontiers*, 11(5), 1805–1819. <https://doi.org/10.1016/j.gsf.2019.12.013>
- Arulbalaji, P., Padmalal, D., & Sreelash, K. (2019). GIS and AHP Techniques Based Delineation of Groundwater Potential Zones: a case study from Southern Western Ghats, India. *Scientific Reports*, 9(1). <https://doi.org/10.1038/s41598-019-38567-x>
- Atmaja, R. R. S., Putra, D. P. E., & Setijadji, L. D. (2019). Delineation of groundwater potential zones using remote sensing, GIS, and AHP techniques in southern region of Banjarnegara, Central Java, Indonesia. 23. <https://doi.org/10.1117/12.2548473>
- Bemmelen, R.W., (1949) *The Geology of Indonesia, Volume I A*. The Hague Martinus Nijhoff, Netherland.
- Britanica, E. of E. (2015). Water cycle | Definition, Steps, Diagram, & Facts | Britannica. Encyclopedia Britannica. <https://www.britannica.com/science/water-cycle>
- Cakratiwi, E., Sigit, H., & Murti, B. S. (2020). Pemanfaatan Citra PJ Dan SIG untuk Penentuan Tingkat Bahaya Erosi di Sub Das Merawu, DAS Serayu.
- Chakraborty, R., Pal, S. C., Malik, S., & Das, B. (2018). Modeling and mapping of groundwater potentiality zones using AHP and GIS technique: a case study of Raniganj Block, Paschim Bardhaman, West Bengal. *Modeling Earth Systems and Environment*, 4(3), 1085–1110. <https://doi.org/10.1007/s40808-018-0471-8>

- Chen, Y., Yu, J., & Khan, S. (2013). The spatial framework for weight sensitivity analysis in AHP-based multi-criteria decision making. *Environmental Modelling and Software*, 48, 129–140. <https://doi.org/10.1016/j.envsoft.2013.06.010>
- Das, B., Bordoloi, R., Thungon, L. T., Paul, A., Pandey, P. K., Mishra, M., & Tripathi, O. P. (2020). An integrated approach of GIS, RUSLE and AHP to model soil erosion in West Kameng watershed, Arunachal Pradesh. *Journal of Earth System Science*, 129(1). <https://doi.org/10.1007/s12040-020-1356-6>
- Daruati, Dini, & Apip (2015) Integrasi Spasial Daya Serap Tanah dan Lahan Kritis untuk Penentuan Lokasi Prioritas Perbaikan DAS.
- Duitasari. (2017). Penggunaan Lahan Di Das Cimanuk Hulu: Perubahan Dan Keterkaitannya Dengan Faset Lahan.
- Ekumah, B., Armah, F. A., Afrifa, E. K. A., Aheto, D. W., Odoi, J. O., & Afitiri, A. R. (2020). Geospatial assessment of ecosystem health of coastal urban wetlands in Ghana. *Ocean and Coastal Management*, 193. <https://doi.org/10.1016/j.ocecoaman.2020.105226>
- Fadhil, M. Y., Hidayat, Y., & Baskoro, D. P. T. (2021). Identifikasi Perubahan Penggunaan Lahan dan Karakteristik Hidrologi DAS Citarum Hulu. *Jurnal Ilmu Pertanian Indonesia*, 26(2), 213–220. <https://doi.org/10.18343/jipi.26.2.213>
- Febrinza, Audi Fikri; Nana Sulaksana; dan Murni Sulastri. (2021) Morfotektonik Sub Daerah Aliran Sungai Cikeruh, Kabupaten Bandung, Jawa Barat.

- Foster, S. S. D., Morris, B. L. and Lawrence, A. R. (1993) Effects of Urbanization on Groundwater Recharge, in Groundwater Problems in Urban Areas, ICE International Conference, London.
- Gupita, D. D., & Sigit Heru Murti, B. S. (2017). Soil erosion and its correlation with vegetation cover: An assesment using multispectral imagery and pixel-based geographic information system in Gesing Sub-Watershed, Central Java, Indonesia. IOP Conference Series: Earth and Environmental Science, 54(1). <https://doi.org/10.1088/1755-1315/54/1/012047>
- Githinji, Tabitha Wambui; Edwin Wandubi Dindi; Zacharia Njuguna Kuria; dan Daniel Ochieng Olago (2022) Application of analytical hierarchy process and integrated fuzzy-analytical hierarchy process for mapping potential groundwater recharge zone using GIS in the arid areas of Ewaso Ng'iro – Lagh Dera Basin, Kenya.
- Hadian, M. S. D., Barkah, M. N., Sistanto, B. A., & Helmi, F. (2017). Zonasi daerah rawan dan kritis kontaminasi air tanah dangkal di daerah Jatinangor dan sekitarnya. Seminar Nasional Fakultas Teknik Geologi Ke-3 Universitas Padjadjaran “Peran Geologi dalam Pengembangan Pengelolaan Sumber Daya Alam dan Kebencanaan”, 24–25. Universitas Padjadjaran.
- Hao, S., Zhu, F., & Cui, Y. (2021). Land use and land cover change detection and spatial distribution on the Tibetan Plateau. Scientific Reports, 11(1). <https://doi.org/10.1038/s41598-021-87215-w>
- Huda, A. S., Nugraha, A. L., & Bashit, N. (2019). Analisis Perubahan Laju Erosi Periode Tahun 2013 dan Tahun 2018 Berbasis Data Penginderaan Jauh dan

- Sistem Informasi Geografis (Studi Kasus : DAS Garang). Jurnal Geodesi UNDIP, 9(1), 106-114. Diambil dari: <https://ejournal3.undip.ac.id/index.php/geodesi/article/view/26109>
- Isnain, Z., & Akhir, J. M. (2017). Integrated GIS based approach in mapping groundwater potential zones in Kota Kinabalu, Sabah, Malaysia. Indonesian Journal on Geoscience, 4(2), 111–120. <https://doi.org/10.17014/ijog.4.2.111-120>
- Jati, M. A. I. (2016). Pemetaan Dan Perhitungan Recharge Air Tanah Berdasarkan Data Curah Hujan Di Kabupaten Sleman.
- Juniyanti, L., Prasetyo, L. B., Aprianto, D. P., Purnomo, H., & Kartodihardjo, H. (2020). Perubahan Penggunaan dan Tutupan Lahan, Serta Faktor Penyebabnya di Pulau Bengkalis, Provinsi Riau (periode 1990-2019). Jurnal Pengelolaan Sumberdaya Alam dan Lingkungan (Journal of Natural Resources and Environmental Management), 10(3), 419–435. <https://doi.org/10.29244/jpsl.10.3.419-435>
- Kabalmay, B. C., & Yuningsih, T. (2023). Geologi Daerah Cirangkong Dan Sekitarnya, Kecamatan Cijambe, Kabupaten Subang, Provinsi Jawa Barat.
- Kementrian ESDM. (2017). Peraturan Menteri Energi Dan Sumber Daya Mineral Republik Indonesia Nomor 2 Tahun 2017.
- Lee, S., Hyun, Y., Lee, S., & Lee, M. J. (2020). Groundwater potential mapping using remote sensing and GIS-based machine learning techniques. Remote Sensing, 12(7). <https://doi.org/10.3390/rs12071200>

- Mahbubah, Rizki Azah (2020) Pemetaan Potensi Daerah Resapan Air Tanah di Kabupaten Blora Dengan Menggunakan Sistem Informasi Geografis.
- Machiwal, D., Jha, M. K., & Mal, B. C. (2011). Assessment of Groundwater Potential in a Semi-Arid Region of India Using Remote Sensing, GIS and MCDM Techniques. *Water Resources Management*, 25(5), 1359–1386. <https://doi.org/10.1007/s11269-010-9749-y>
- Manap, M. A., Sulaiman, W. N. A., Ramli, M. F., Pradhan, B., & Surip, N. (2013). A knowledge-driven GIS modeling technique for groundwater potential mapping at the Upper Langat Basin, Malaysia. *Arabian Journal of Geosciences*, 6(5), 1621–1637. <https://doi.org/10.1007/s12517-011-0469-2>
- Marbun, F., Yan, T., Iskandarsyah, W. M., Suganda, B. R., Nursiyam Barkah, M., Setiawan, T., Sapari, M., & Hadian, D. (2022). Potensi Airtanah Berdasarkan Neraca Air Pada Daerah Aliran Sungai Cikapundung Wilayah Cekungan Bandung, Jawa Barat.
- Massinai, M. A. (2020). Mapping Groundwater Potential based on Geospatial Analysis and Multi-criteria Decision Analysis in Gowa Regency, South Sulawesi, Indonesia. *Journal of Advanced Research in Dynamical and Control Systems*, 12(5), 550–561. <https://doi.org/10.5373/jardcs/v12i5/20201974>
- Mishra, A., Singh, S., Jani, M., Singh, K., Pande, C., Varade, A. (2022) Assessment of water quality index using Analytic Hierarchy Process (AHP) and GIS: a case study of a struggling Asan River, *International Journal of*

Environmental Analytical Chemistry,  
<https://doi.org/10.1080/03067319.2022.2032015>

Morris, B. L., Lawrence, A. R., and Stuart, M. E. (1994) The Impact of Urbanisation on Groundwater Quality, Technical Report WC/94/56, British Geological Survey, Nottingham.

Mulyadi, A., & Jupri, D. (2016). Kajian Lahan Kritis Sub Daerah Aliran Ci Keruh Di Kawasan Cekungan Bandung. Dalam Prosiding Seminar Nasional Geografi UMS.

Nasiri, V., Deljouei, A., Moradi, F., Sadeghi, S. M. M., & Borz, S. A. (2022). Land Use and Land Cover Mapping Using Sentinel-2, Landsat-8 Satellite Images, and Google Earth Engine: A Comparison of Two Composition Methods. *Remote Sensing*, 14(9). <https://doi.org/10.3390/rs14091977>

O, S. A., & A, A. A. (2018a). Aquifer, Classification and Characterization. Dalam *Aquifers - Matrix and Fluids*. InTech. <https://doi.org/10.5772/intechopen.72692>

Omolaiye, G. E., Oladapo, I. M., Ayolabi, A. E., Akinwale, R. P., Akinola, A. A., Omolaye, K. L., & Sanuade, O. A. (2020). Integration of remote sensing, GIS and 2D resistivity methods in groundwater development. *Applied Water Science*, 10(6). <https://doi.org/10.1007/s13201-020-01219-x>

Ouma, Y. O., & Tateishi, R. (2014). Urban flood vulnerability and risk mapping using integrated multi-parametric AHP and GIS: Methodological overview and case study assessment. *Water (Switzerland)*, 6(6), 1515–1545. <https://doi.org/10.3390/w6061515>



- Panahi, M. R., Mousavi, S. M., & Rahimzadegan, M. (2017). Delineation of groundwater potential zones using remote sensing, GIS, and AHP technique in Tehran–Karaj plain, Iran. *Environmental Earth Sciences*, 76(23). <https://doi.org/10.1007/s12665-017-7126-3>
- Perwitasari, S., & Bafdal, N. (2016). Irrigation Scheduling Base on Crop Water Balance on Runoff Harvesting System for Dry Land Farming. *Jurnal Keteknikan Pertanian*, 04(2), 1–8. <https://doi.org/10.19028/jtep.04.2.219-226>
- Pinto, D., Shrestha, S., Babel, M. S., & Ninsawat, S. (2017). Delineation of groundwater potential zones in the Comoro watershed, Timor Leste using GIS, remote sensing and analytic hierarchy process (AHP) technique. *Applied Water Science*, 7(1), 503–519. <https://doi.org/10.1007/s13201-015-0270-6>
- Radwan, F., Alazba, A. A., & Mossad, A. (2019). Flood risk assessment and mapping using AHP in arid and semiarid regions. *Acta Geophysica*, 67(1), 215–229. <https://doi.org/10.1007/s11600-018-0233-z>
- Rahman, A., Budidaya Pertanian, J., Pertanian, F., Tadulako, U., Soekarno -Hatta Km, J., & Tengah Telp, S. (2009). The Influence of The Area of Land Use Patterns and Physical Environment Condition on Water Debit and Sedimentation at Various Catchment Areas in The Upper Cimanuk Sub Watershed West Java. *Dalam J. Agroland (Vol. 16, Nomor 3)*.
- Rahmati, O., Nazari Samani, A., Mahdavi, M., Pourghasemi, H. R., & Zeinivand, H. (2015). Groundwater potential mapping at Kurdistan region of Iran using

- analytic hierarchy process and GIS. *Arabian Journal of Geosciences*, 8(9), 7059–7071. <https://doi.org/10.1007/s12517-014-1668-4>
- Rauf, L.F., Ali, S.S. & Al-Ansari, N. Indicator of suitability for evaluating the aquifer thermal energy storage using the GIS-based MCDA technique in the Halabja-Khurmal sub-basin. *Appl Water Sci* 13, 117 (2023). <https://doi.org/10.1007/s13201-023-01918-1>
- Rai, P. K., Mohan, K., Mishra, S., Ahmad, A., & Mishra, V. N. (2017). A GIS-based approach in drainage morphometric analysis of Kanhar River Basin, India. *Applied Water Science*, 7(1), 217–232. <https://doi.org/10.1007/s13201-014-0238-y>
- Risma Pandapotan Sitorus, S., Leonataris, C., Dyah Retno Panuju, (2012). Analysis of Land Use Change Pattern and Regional Development in Bekasi City, West Java Provinces. *J. Tanah Lingk*, 14(1), 21–28.
- Saaty, T.L. (1980) *The analytic hierarchy process: planning, priority setting, resource allocation*. McGraw-Hill, New York.
- Saha, S. (2017). Groundwater potential mapping using analytical hierarchical process: a study on Md. Bazar Block of Birbhum District, West Bengal. *Spatial Information Research*, 25(4), 615–626. <https://doi.org/10.1007/s41324-017-0127-1>
- Samekto, C., Ewin, D., & Winata, S. (2016). *Potensi Sumber Daya Air di Indonesia*. Seminar Nasional Aplikasi Teknologi Penyediaan Air Bersih untuk Kabupaten/Kota di Indonesia.

- Santosa, S. S., Suryadi, E., & Kendarto, D. R. (2021). Analisis Kekritisan Daerah Resapan Air Menggunakan Metode Skoring di Sub DAS Cikeruh. *Jurnal Keteknikan Pertanian Tropis dan Biosistem*, 9(1), 79–89. <https://doi.org/10.21776/ub.jkptb.2021.009.01.09>
- Saraf, A. K., & Choudhury, P. R. (1998a). Integrated remote sensing and gis for groundwater exploration and identification of artificial recharge sites. *International Journal of Remote Sensing*, 19(10), 1825–1841. <https://doi.org/10.1080/014311698215018>
- Sentosa, A. K., Asdak, C., & Suryadi, E. (2021). Estimasi Volume Limpasan dan Debit Puncak Sub DAS Cikeruh Menggunakan Metode SCS-CN (Soil Conservation Service-Curve Number). *Jurnal Keteknikan Pertanian Tropis dan Biosistem*, 9(1), 90–98. <https://doi.org/10.21776/ub.jkptb.2021.009.01.10>
- Silitonga, P. H. (2003). Peta geologi lembar Bandung, Jawa . Pusat Penelitian dan Pengembangan Geologi
- Shidqi, Rakean Falih (2022) Penentuan Wilayah Potensi Resapan Air Tanah Dengan Metode Analytical Hierarchy Process (AHP) di Daerah Aliran Sungai (DAS) Kedunglarangan, Kabupaten Pasuruan, Jawa Timur.
- Soetrisno (1999) Groundwater Management Problems: Comparative City Case Studies of Jakarta and Bandung, Indonesia in Groundwater in the Urban Environment, Selected City.
- Sukiyah, E., Sunardi, E., Sulaksana, N., & Raditya Rendra, P. P. (2018). Tectonic Geomorphology of Upper Cimanuk Drainage Basin, West Java, Indonesia.

International Journal on Advanced Science Engineering Information Technology, 8(3).

Sulistyo, B. (2017). Absolute Accuracy of the Erosion Model of DEM-NDVI and it's Modification RS method development for mangrove ecosystem parameters View project Weather Hazard Risk Assesment View project. Dalam Article in International Journal of Geoinformatics. <https://www.researchgate.net/publication/317544434>

Talukdar, S., Singha, P., Mahato, S., Shahfahad, Pal, S., Liou, Y. A., & Rahman, A. (2020). Land-use land-cover classification by machine learning classifiers for satellite observations-A review. Dalam Remote Sensing (Vol. 12, Nomor 7). MDPI AG. <https://doi.org/10.3390/rs12071135>

Trisnadiansyah, M. R., Listiawan, Y., Barkah, M. N., Sukiyah, E., & Hadian, M. S. D. (2022). Karakteristik fisika air tanah dan air permukaan serta hubungannya dengan kondisi geologi di lereng selatan Gunung Manglayang, Sumedang, Jawa Barat. Jurnal Pendidikan Geografi, 27(1), 88–101. <https://doi.org/10.17977/um017i12022p88-101>

User, S. (2014). Fakta Potensi - Citarum. Cita-Citarum. <http://www.citarum.org/tentang-kami/fakta-citarum/fakta-potensi.html>

Vaddadi, N., Vansarochana, C., & Raghavan, V. (2023). Identification of Potential Groundwater Recharge Zones Using GIS Based Multi-Criteria and AHP Technique: A Case Study of Pune City, Western Maharashtra. Environment and Natural Resources Journal, 21(3), 1–13. <https://doi.org/10.32526/ennrj/21/202200257>

- Viron, Alexander; Hari Wibowo; Mochammad Meddy Danial. (2020) Analisa Lahan Kritis Pada Sub Das Ambawang dengan Software Geographic Information System Studi Kasus : Teluk Bakung, Sungai Ambawang, Kubu Raya. JeLAST : Jurnal PWK, Laut, Sipil, Tambang Vol 7 No 3.
- Wahyudi (2019) Karakteristik Airtanah Pada Akifer Bebas di Beberapa Lokasi Pemanfaatan Lahan di Wilayah Jatinangor dan Sekitarnya. Tesis. Universitas Padjadjaran. Sumedang.
- Wahyudi, W., Suganda, B. R., Sendjaja, Y. A., Hadian, M. S. D., & Irawan, B. (2019). Karakteristik kimia organik pada akifer bebas di beberapa lokasi pemanfaatan lahan daerah Jatinangor dan sekitarnya. Bulletin of Scientific Contribution: Geology, 17(3), 205–212.
- Widi, S. (2022, Desember 23). Produksi Air Bersih Indonesia 5,25 Miliar Meter Kubik pada 2021. Data Indonesia. <https://dataindonesia.id/sektor-riil/detail/produksi-air-bersih-indonesia-525-miliar-meter-kubik-pada-2021>
- Wijayanti, Dessy Ayu dan Totok Gunawan (2017) Pemanfaatan Citra Penginderaan Jauh untuk Ekstraksi Parameter Laju Erosi-sedimentasi di Daerah Aliran Sungai Grindulu, Pacitan.
- Wirasembada, Yanuar Chandra; Setiawan, Budi Indra; Saptomo, Satyanto K (2014) Analisis Efektivitas Zero Runoff System pada Lahan Miring di DAS Cidanau, Banten.
- Zachry, F. (2017). Prosiding Seminar Nasional XII "Rekayasa Teknologi Industri dan Informasi.

Zarkasih, M. R., Rohmat, D., & Nur, D. M. (2018). Evaluasi Ketersediaan Dan Tingkat Pemenuhan Kebutuhan Air Di Sub Das Cikeruh. Dalam Gea. Jurnal Pendidikan Geografi (Vol. 18, Nomor 1).

Zghibi, A., Mirchi, A., Msaddek, M. H., Merzougui, A., Zouhri, L., Taupin, J. D., Chekirbane, A., Chenini, I., & Tarhouni, J. (2020). Using analytical hierarchy process and multi-influencing factors to map groundwater recharge zones in a semi-arid mediterranean coastal aquifer. Water (Switzerland), 12(9). <https://doi.org/10.3390/w12092525>