NRR Turns 30, with a Blast: An Impact Factor of 5.146!

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This year 2021, the Natural Resources Research (NRR) journal publishes its 30th volume! The icing on the cake for this celebration is NRR's 2020 impact factor (IF)* of 5.146! This is just NRR's fourth IF. The previous ones were 2017 IF of 3.094, 2018 IF of 2.000, and 2019 IF of 3.708. Therefore, we are looking forward to NRR's first 5-year IF next year.

NRR is recognized customarily for papers on methodologies for estimation/assessment of mineral resources and modeling/mapping of mineral potential or prospectivity (Carranza, 2017, 2018). Indeed, the NRR articles that contributed significantly to its first three IF were mostly (if not all) concerned with mineral resources (Carranza, 2019, 2020). However, since 2018 when our journal got its first IF, we have published several articles about other types of nat-

ural resources, particular groundwater and energy resources (Fig. 1). This has been fruitful because the top-10 NRR papers that contributed significantly to 2020 IF of 5.146 are concerned with not only mineral resources but also groundwater and energy resources (Table 1). Thus, in recent years, we have come to achieve NRR's aim/scope:

Natural Resources Research publishes peer-reviewed, quantitative geoscientific studies on the search for and development of natural resources, including associated environmental, economical, and risk-related aspects. Reports regarding petroleum or energy-mineral resources are of interest, as are investigations on the exploitation of any metallic or non-metallic mineral resource. Typical articles use geoscientific data or analyses to assess, test, or compare resource-related activities. NRR reports cover a wide variety of resources, including coal, water, vegetation, and heavy oil. Case studies are particularly welcome.

Nevertheless, in this 30th anniversary issue of NRR we publish a special collection of papers that were presented in the 15th International Symposium on Mineral Exploration (ISME-XV) entitled "Toward Sustainable Society with Natural Resources – Development of Resource Exploration Technology in the Past Thirty Years and for the Future", which was held at Kyoto University, Japan, during 26–28 November 2018. Next year 2022, we will publish another special issue on mineral resources, namely about "Statistical Assessment of Mineral Resources". However, as in 2019 when we published a special issue on "Forest, Agriculture, and Environmental Protection as Path to Sustainable Develop-

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* The impact factor (IF) or journal impact factor (JIF) is a metric calculated by Clarivate Analytics from data indexed in the Clarivate Analytics' Web of Science Core Collection. A metric that accompanies the IF, which is calculated by Clarivate Analytics, is the Eigenfactor Score. It reflects the density of the network of citations around a journal using 5 years of cited content as cited by the current year excluding journal self-citations. NRR's Eigenfactor Score has been steadily increasing from 0.00067 (2017) to 0.00055 (2018) to 0.0096 (2019) to 0.00150 (2020). Another metric accompanying the IF and calculated by Clarivate Analytics as well is the Immediacy Index, which is the count of citations in the current year to a journal that reference content in the same year. NRR's Immediacy Index has also been steadily increasing from 0.636 (2017) to 1.156 (2018) to 1.541 (2019) to 2.272 (2020).

Figure 1. Clouds (or graphical histograms) of words from titles of NRR articles published during: **a** 2015–2016; **b** 2016–2017; **c** 2017–2018; **d** 2018–2019; and **e** 2019–2020. Word clouds were created using free online app (<https://www.wordclouds.com/>).

Table 1. Top 10 most cited NRR articles published in 2018 and 2019 that contributed significantly to NRR's 2020 IF

Article title	Author(s)	Volume	Issue	Page range	Citations counted for NRR's 2020 IF
The rare earth elements: demand, global resources, and challenges for resourcing future generations	Goodenough, K. M., Wall, F., & Merriman, D	27	2	201–216	50
Novel hybrid integration approach of bagging-based fisher's linear discriminant function for groundwater potential analysis	Chen, W., Pradhan, B., Li, S., Shahabi, H., Rizeei, H. M., Hou, E., & Wang, S	28	4	1239–1258	46
Predicting blast-induced air overpressure: a robust artificial intelligence system based on artificial neural networks and random forest	Nguyen, H., & Bui, X. N	28	3	893–907	36
Permeability characteristics of broken coal and rock under cyclic loading and unloading	Zhang, C., & Zhang, L	28	3	1055–1069	25
Big data analytics of identifying geochemical anomalies supported by machine learning methods	Zuo, R., & Xiong, Y	27	1	5–13	20
Experimental study of adsorption effects on shale permeability	Zhao, Y., Wang, C., Zhang, Y., & Liu, Q	28	4	1575–1586	16
Self-learning random forests model for mapping groundwater yield in data-scarce areas	Sameen, M. I., Pradhan, B., & Lee, S	28	3	757–775	15
Groundwater potential mapping in a rural river basin by union (OR) and intersection (AND) of four multi-criteria decision-making models	Mahato, S., & Pal, S	28	2	523–545	12
Multi-region modeling of daily global solar radiation with artificial intelligence ensemble	Nourani, V., Elkiran, G., Abdullahi, J., & Tahsin, A	28	4	1217–1238	11
Groundwater quality assessment in a hyper-arid region of Rajasthan, India	Bhakar, P., & Singh, A. P	28	2	505–522	10

ment”, we hope also to publish in future special issues of papers focusing on other natural resources as long as they are consistent with the above-mentioned aim/scope of NRR.

On behalf of NRR's editorial board, we thank all the authors for their contributions to our journal especially the authors of papers that contributed significantly to NRR's 2020 IF of 5.146 (Table 1) and to NRR's three previous IF. We emphasize that keeping the standard of papers in this journal in check depends on the generous time and effort spent by the reviewers, and so we sincerely thank all of them.

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