https://journal.ypidathu.or.id/index.php/rjl/

P - ISSN: 2988-4454 E - ISSN: 2988-4462

The Position of Judges in the Indonesian Legal Idea

Moh. Mujibur Rohman¹, Elladi Mark², Kailie Maharjan³

¹Institut Agama Islam Miftahul Ulum Pamekasan, Indonesia

²University of Alberta Edmonton, Canada

ABSTRACT

Background. Judges are state judicial officials authorized by law to adjudicate. The role of judges is very important in the judicial order in Indonesia.

Purpose. As we know, the Indonesian government system adheres to the trias politica, namely the legislative body as the legislator in this case the DPR, the executive body, namely the government and its cabinet and finally the judicial body, namely the judiciary.

Method. The writing of this article cannot be separated from the name of the research method, because in scientific writing the method is a necessity which is the perfect and effective condition of a research result

Results. In addition to the government system, the Indonesian legal system is known to follow the European-Continental legal system where the law will be based on the law or what is known as "law in book". Legal issues that are increasingly complex corner the enforcers of justice (read judges) are hit by many problems that are often not found in the law. Judges who must decide based on the law and on the other hand they cannot be absent from their profession in adjudicating, however they must decide for the sake of justice and human truth.

Conclusion. In this article, the author seeks to explain the position of judges in finding law by writing articles using a qualitative and normative (doctrinal) approach as a type of research.

KEYWORDS

Judges, Law Discovery, Position of Jugdes

INTRODUCTION

Judges are state judicial officials authorized by law to adjudicate. A judge has the function of resolving every conflict that occurs in the public sphere with the rules of law (Coppola dkk., 2019). With this judge, human life in society can gradually be built with human values (Di Vaio dkk., 2020). Therefore, a judge in carrying out his duties (adjudicating) must not take sides except for what is right and justice and human values (Affandi, 2011).

The judicial process in handling cases, reveals a legal method that still adheres to the teachings of syllogism, namely a legalistic view of law, the law is identified with the law or the law is the same as the law (Y. Yang dkk., 2019). So that the only law is the law because the law is considered complete and clearly regulates all

Citation: Rohman, M, M., Mark, E., Maharjan, K. (2023). The Position of Judges in the Indonesian Legal Idea. *Rechtsnormen Journal of Law*, *1*(2), 95–104. https://doi.org/10.55849/rjl.v1i2.392

Correspondence:

Moh. Mujibur Rohman, mujibur.rohman6568@gmail.com

Received: December 12, 2023
Accepted: December 15, 2023
Published: December 31, 2023



³Technical University of Munich, Germany

legal issues, as a result the judge cannot do anything other than apply or follow the law strictly. It is this dogma that ultimately makes the position of judges merely the mouthpiece and trumpet of the law or what is known in Latin as "la bouche de la loi".

Basically, judges must enforce the laws that exist in the legislation (Paul dkk., 2021). The existence of written law in the form of legislation is indeed a manifestation of the principle of legality that guarantees legal certainty, changing laws to follow changes in society is not an easy matter. But on the other hand, a complex and dynamic life like now is even more numerous and diverse whose solutions are required as soon as possible. As according to Mertokusumo, human life activities are very broad, countless in number and type, so it is impossible to be covered by legislation completely and clearly (Morel dkk., 2020). So what about the problems faced by judges if they are not found in the law, are judges in this position silent?

As an illustration, a judge's obligation is to adjudicate, follow and understand the values of law and justice that live in society (W.-Y. Yang dkk., 2019). In Indonesia as a state of law, judicial power is regulated in CHAPTER IX of the 1945 Constitution precisely in articles 24 and 25 (Luque dkk., 2019). In addition, it is also regulated in Article 1 of Law No. 48 of 2009 which reads "judicial power is an independent state power to administer justice in order to uphold law and justice based on Pancasila, for the implementation of the rule of law of the Republic of Indonesia" (Chandrasekar dkk., 2020). In addition, Article 10 of the same law states that "the court is prohibited from refusing to examine, hear and decide a case submitted on the pretext that the law is absent or unclear, but is obliged to examine and try it" (Karimi-Maleh dkk., 2022). Therefore, in writing this article, the author wants to examine the role and position of judges in finding law in Indonesia, is it only limited to the mouthpiece or trumpet of the law? Is it true that the state limits the space for judges, so that they cannot adjudicate outside the law?

RESEARCH METHODOLOGY

The writing of this article cannot be separated from the name of the research method, because in scientific writing the method is a necessity which is the perfect and effective condition of a research result (Nosyk dkk., 2021). The article in front of this reader is an article with a qualitative research approach, which describes or describes a matter in the form of what it is, either in the form of written data, expressions or behaviors that are then observed through observations, interviews or document reviews (Reichstein dkk., 2019). with the type of normative research (doctrinal) means legal research that positions the law as a building system of norms (Riess dkk., 2019). In addition, because this research also includes library research. That is, utilizing library sources to obtain data in conducting research (Stuart dkk., 2019). So to obtain the necessary data, the author examines some literature in accordance with the object under study, in this case the author tries to examine legal discovery conceptually and find out the position and role of judges in legal discovery in Indonesia.

RESULT AND DISCUSSION

Conception of Legal Discovery

There are three terms that are often used by judges in the judicial system, namely legal discovery, law formation or creating law and law application. Of the three existing terms, the term legal discovery is the term most often used by judges, while other terms such as law formation are usually used by lawmaking institutions, namely the legislative body (DPR). Law formation is the formation of law carried out by law enforcement officials, in this case judges, or law enforcement officials who are tasked with applying general law to concrete events (Callhoff dkk., 2020). In

further development, the use of these three terms is intermingled, but all three lead to the understanding that the unclear (ambiguous) legal rules in a law require a legal discovery or legal formation carried out by a judge in deciding a case (Manan, 2013: 190).

The term legal discovery has a wider scope of work, because this legal discovery can be done by anyone, be it individuals, scientists, legal researchers, judges, prosecutors, police, advocates, lecturers, notaries, and others (Pretorius dkk., 2021). Furthermore, Sudikno Mertokusumo states that the profession that does the most legal discovery is judges, because every day they are faced with very concrete events or several conflicts that must be resolved. The discovery of law made by judges is considered a matter that contains authority, because the discovery of the law found has binding force as law, because the results of its findings are set forth in the form of a decision (Mertokusumo, 2001: 5).

Judges in finding the law do not necessarily trigger or decide a law in a vacuum. In the sense that in making legal discoveries, a method is needed in it:

Interpretation Method

The method of interpretation in Indonesia in its use in finding the law is divided into several types (Manan, 2013: 192-193):

1. Substantive Interpretation

This method of interpretation shows where the judge must apply a statutory text to a concrete case by entering into a more complicated reasoning meeting, but simply applying syllogism.

2. Grammatical Interpretation

This interpretation shows that laws and regulations are written in the form of written language, court decisions are also arranged in a logical systematic language. To find out the meaning of unclear statutory provisions, it needs to be interpreted by describing according to common everyday language (Stockwell dkk., 2021). This interpretation is easier than the others.

3. Systematic or Logical Interpretation

Interpreting the law by relating it to other laws or laws or to the entire legal system. In this method the law is seen as a unified whole.

4. Historical Interpretation

This interpretation is based on the history of the regulation. This interpretation in practice is divided into two: first, based on the history of the birth of the law (wetshistorisch) is to find the purpose of the formation of the law, in this case the will of the legislator is decisive (Mao dkk., 2019). Second, based on legal history (rechtshistorisch) is an interpretation that wants to understand the law in the context of all legal teachings (Scarabottolo dkk., 2022). Achmad Ali said that if you want to know the meaning contained in a statutory regulation, it is not enough to look at its history, but you must further examine the historical process that preceded it (Ali, 1996).

5. Sociological or Teleological Interpretation

This interpretation applies the meaning of the law based on societal goals. The judge will interpret according to the purpose of the formation of the law by focusing on the purpose of the law made not based on the sound of the words alone (Bojanic & Warnick, 2020). Outdated regulations are adjusted to the current or new social context.

6. Comparative Interpretation

This method interprets the law by comparing various legal systems. This interpretation is widely used in the field of international treaty law.

7. Restrictive Interpretation

This interpretation is to explain the law by limiting its scope, thus narrowing the meaning of a law by not contradicting the language.

8. Extensive Interpretation

It is a method of interpretation that makes an interpretation beyond the limits given by grammatical interpretation. Such as the word sell in Article 1576 of the Civil Code, which is interpreted not only in the sense of "buying and selling" but also in the "transfer of rights".

9. Futuristic Interpretation

This is an anticipatory interpretation of the law by referring to laws that do not yet have the force of law (ius constituendum). Such as draft laws that are still in process, but will definitely be enacted.

Construction Method

Legal practitioners who adhere to the European-Continental legal system do not strictly separate the interpretation method of legal discovery from the construction method of legal discovery. On the other hand, legal practitioners who adhere to the Anglo Saxon system firmly separate the two methods (interpretation-construction) (Manan, 2013: 193). Judges who use the construction method in finding and solving legal problems must know three main requirements, namely: (1) the judge is in charge of all positive laws concerned; (2) in carrying out the construction there should be no logical contradiction in it; (3) construction contains the meaning of beauty, in the sense that it is not contrived and unclear regulations can be found clarity. While the purpose of the construction itself is so that the judge's decision in a concrete event can meet the demands of justice and benefit justice seekers (Ali, 1996). There are several forms of legal construction in judicial practice (Manan, 2013: 194-196):

1. Analogical Argument

The construction of this model in the study of Islamic law is known as the qiyās method. This analogical construction is used when the judge must make a decision in a conflict that is not found in a rule, but the conflict is similar to that in the legislation. For example, Article 1756 of the Civil Code regulates currency (goldspecie). Are banknotes included in this rule, through this argumentum peranalogian, the interpretation also includes banknotes. In Indonesia, the use of the argumentum peranalogian method is still fairly limited to civil law only.

2. Argumentum A'contrario

Achmad Ali states that this method uses the reasoning that if the law stipulates certain things for certain events, it means that the regulation is limited to certain events and for events outside it the opposite applies (Ali, 1996). Different from Ali's opinion is the opinion of Mertokusumo who says that argumentum a'contrario emphasizes the uncertainty of events by enforcing the negative aspects of the law with the phrase "this regulation I apply to events that are not regulated, but in reverse" (Mertokusumo, 2001: 69). For example, a widower who wants to remarry has no specific regulation. However, there are events that are not the same but similar, namely widows through article 39 of PP No. 9/1975. For widows who want to remarry, they must wait for the iddah period. Then the article also applies to widowers by argumentum a'contrario, so that a widower who wants to remarry does not have to do a waiting period. The purpose of this argumentum a'contrario is to fill the legal vacuum or incompleteness of the law, so argumentum a'contrario is not an argument to justify the formulation of certain regulations.

3. Concretization of Law (Rechtsvervijnings)

There are those who call this model construction by smoothing the law and narrowing the law. This legal concretization is used in finding the law on a case being examined, a very broad legal problem is narrowed in scope so that it can be applied in a concrete case. For example, the definition of unlawful in Article 1365 of the Civil Code is broad in scope, because this regulation does not explain whether the loss must also be compensated by the injured, who are partly to blame for causing the loss. However, jurisprudence has determined that if there is fault on the part of the injured party, he can only claim part of the loss caused by him. So here there is a concretization of the scope of the notion of tort (Mertokusumo, 2001: 69).

4. Legal Fiction

This method is based on the principle of "in du bio pro reo", which states that every individual knows the law. Achmad Ali revealed that in using legal fiction the legislator consciously accepts something that is contrary to reality as something that is really real (Ali, 1996). Regarding the function of legal fiction itself is to fulfill the desire to create legal stability and fill the void of the law. Ali also emphasized that the fiction that has been contained in the judge's decision is no longer referred to as fiction but judge made law (has become reality). Legal fiction is very useful for proposing law, namely to overcome the clash between new demands and the existing system. The judge, in connecting the text of the law with a concrete event being adjudicated, is obliged to use his mind and reason to choose which method of discovery is most suitable and relevant which is then applied in a case.

The Legal Hermeneutic Method

This method of legal hermeneutics emerged in the 19th and early 20th centuries. What is meant by legal hermeneutics as Gadamer quoted Ahmad Rifai with his free translation: "Legal hermeneutics in reality is not a special / new case, but on the contrary, it only reconstructs the entire hermeneutic problem and then re-forms the hermeneutic unity as a whole, where jurists and theologians meet with humanities experts" (Rifai, 2010).

The function and purpose of legal hermeneutics is to clarify unclear things so that they become clearer (bringing the unclear in to clarity). While another goal of legal hermeneutics is to place contemporary legal debates within the framework of hermeneutics in general. The relevance of legal hermeneutics to legal discovery is the reciprocity between legal rules and facts, where hermeneutics will explain that a judge must classify a rule which will later be adjusted to the facts including in this modern legal discovery (Manan, 2013: 196). So it can be understood that legal hermeneutics is the interpretation of legal texts in understanding a normative text.

Ahmad Rifai emphasized that the advantages of this legal hermeneutic method lie in the way and scope of its sharp, deep and halistic interpretation in the frame of unity between text, context and contextualization. Legal events and laws and regulations are not only interpreted legally based on the sound of the text, but must be examined in depth from the factors behind the events or disputes that arise, the root of the problem, the presence or absence of political or other interventions that cause a decision, and the impact of a decision must be considered for the process of law enforcement and justice in the future (Rifai, 2010).

Throughout legal events in Indonesia, the existence of this legal hermeneutic method is very rarely used in the scope of justice as a method of legal discovery. This is due to the many legal practitioners who have been imprinted with the previous methods, namely interpretation and construction. Abdul Manan considers this method as the best method, on the grounds that this

method does not only interpret the law from the text alone, but also considers how the legal contexts will be born and their application in the present and future (Manan, 2013: 197).

From the three methods and classifications therein, it shows that the role of judges is very significant in finding a law. This means that judges are not merely judges who are sometimes thought of as people who only need to decide a case. However, with this, we will actually think that the role of judges in deciding a law (read legal discovery) is not very easy with various methods that must be understood and legal issues that exist in society that are increasingly complex and sometimes outside the text of legal guidelines or laws, so that it does mobilize a lot of thought in this regard.

The Position of Judges in the Discovery of Law in Indonesia

The existence of legal discovery is carried out because judges in examining and deciding cases often face the fact that the existing law does not properly answer and resolve the dispute at hand. Judges must seek completeness by finding the law themselves. Sudikno Mertokusumo argues that the activities of human life are very broad, countless in number and type, so it is impossible to be covered in a statutory regulation completely and clearly (Mertokusumo, 1993: 10). The absence of law in the text, known in the Islamic world with a jargon stating that "legal texts are limited in number and legal events are unlimited" (النصوص تناهي و الرقائع لا تنتاهي و الرقائع الأ تتناهي و الرقائع المعاونة و الرقائع المعاونة و المعاون

This shows the very important role of judges in finding a law. As Bagir Manan suggests in the quote from Idris et al, there are three main things why the role of judges is considered important. (1) judges embody the law, in a concrete sense that the law (law) is realized through judicial decisions. (2) judges not only determine (whack) the law for those who dispute or litigate, but their decisions are also generally applicable. (3) judges ensure the actualization of the law including developing the law (Idris et.al, 2012). This shows that judges have a role that cannot be underestimated in the rule of law.

The state of law or what is known as rechtstaat, such as Indonesia, where judges in upholding law and justice are part of the main and main joints (Mulyadi, 2012). Through such an understanding, the expression "rule of law" needs to be interpreted as "supremacy of law" not as "supremacy of law". This is in accordance with Article 24 of the 1945 Constitution: "judicial power is an independent power to administer justice in order to uphold law and justice". Included in the word "independence" is the independence of a judge in terms of interpreting legal values and a sense of justice, so that the existence of judges in Indonesia is not absolutely located with the law (funnel law) as the legal system used is the European-Continental system.

We all know that Indonesia adheres to the European-Continental legal system, but on the one hand we should not close our eyes that Indonesia is also influenced by the Common Law legal system. Therefore, we must position judges partially based on these two systems. On the one hand, we should not assume that the law is only based on the principles of codification and certainty (the law), so that judges seem to be like the mouthpiece of the law. On the other hand, Indonesia does not absolutely follow the Common Law legal system which stipulates that the rule of law is based on judicial decisions and living law. Basically, the judiciary in Indonesia absorbs both systems and combines them with an urgency approach to concrete legal events, which in fact on the one hand

depends on the choice of law in the law, but on the other hand does not shackle judges on the pretext of justice and expediency (Hoesein, 2013).

Article 5 paragraph (1) of Law No. 48/2009 on Judicial Power affirms "Judges and constitutional judges are obliged to explore, follow, and understand the legal values and sense of justice that live in society". It must be understood that judges are formulators and diggers of legal values that live among the people (Mulyadi, 2012). In addition to the above article, Article 10 paragraph (1) of Law No. 48/2009 on Judicial Power also states "the court is prohibited from refusing to examine, hear and decide a case submitted on the pretext that the law is absent or unclear, but is obliged to examine and hear it". Mulyadi emphasized that the provisions in this article are based on the principle of ius curia novit. In fact, he also emphasized that if the judge does not find written law or legislation that has not regulated the case or problem he is handling, then the judge must act by using his own initiative in resolving the case (Mulyadi, 2012). In addition, Atja Sonjaya as quoted by Idris et al, argued that in these conditions judges must play an active role in finding and forming new laws and developing them (Idris et.al, 2012).

Conversely, if the judge is reluctant to adjudicate by arguing that there is no legislation, lack of clarity, incomplete or other pretexts as an alibi for not adjudicating. Then, he has the right to be prosecuted (punished) for refusing not in accordance with his role. This is also regulated in article 22 A.B (Algemen Bepaligen van Wetgeving voor Indonesia). This regulation is a Dutch East Indies regulation made on April 30, 1847 which issued the Algemen Bepaligen van Wetgeving voor Indonesia, referred to as A.B, which if translated into Indonesian is "general provisions on legislation for Indonesia". In Staatblad 1847 No. 23 which until now is still valid based on the provisions of article II of the transitional rules of the 1945 Constitution which states, "all state bodies and existing regulations are still directly valid as long as no new ones have been made according to this Constitution" (Kamil & Fauzan, 2008). Based on this, judges are given the right and authority to create law (Judge Made Law), especially for cases that have no law at all, but have entered the court. In fact, judges may even depart from the provisions of the written law that already exist but have outdated their existence so that they are deemed not in accordance with the time (era) and place, which if used no longer fulfills a sense of public justice (Contra Legem) (Kamil & Fauzan, 2008).

So the judge is required to be creative with the right train of thought if the law or written regulations do not explain the case at hand. He must not be absent on the grounds that there is no law or lack of clarity, because in fact it shows that he is running away from the authority he faces as a judge. In relation to the expression that judges are the mouthpiece of the law, it must be partially positioned based on the legal system, be it European-Continental or Common Law.

CONCLUSION

Based on the explanation above, it can be understood that the position of judges in the Indonesian legal system has a very urgent role. Why is that? Laws are increasingly complex due to the wider human social space that requires many changes, especially in the world of law. Regarding issues that are not found in the law, judges must be creative by interpreting the law or even deciding a law based on their thoughts or ijtihad patterns as long as they do not get out of the corridors of justice and are humanly correct. Apart from that, this writing will not be free from mistakes. So, dear readers, wherever you find this paper, if there is any discrepancy or contradiction with the general knowledge. The author asks not to make references and send constructive suggestions for the author in an effort to develop his paper.

AUTHORS' CONTRIBUTION

Author 1: Conceptualization; ; Data curation; In-vestigation, Formal analysis; Methodology, Project administration; Validation; Writing - review and editing.

REFERENCES

- Bojanic, D. C., & Warnick, R. B. (2020). The Relationship between a Country's Level of Tourism and Environmental Performance. *Journal of Travel Research*, 59(2), 220–230. https://doi.org/10.1177/0047287519827394
- Callhoff, J., Albrecht, K., Redeker, I., Lange, T., Goronzy, J., Günther, K., Zink, A., Schmitt, J., Saam, J., & Postler, A. (2020). Disease Burden of Patients With Osteoarthritis: Results of a Cross-Sectional Survey Linked to Claims Data. *Arthritis Care & Research*, 72(2), 193–200. https://doi.org/10.1002/acr.24058
- Chandrasekar, R., Chandrasekhar, S., Sundari, K. K. S., & Ravi, P. (2020). Development and validation of a formula for objective assessment of cervical vertebral bone age. *Progress in Orthodontics*, 21(1), 38. https://doi.org/10.1186/s40510-020-00338-0
- Coppola, L., Cianflone, A., Grimaldi, A. M., Incoronato, M., Bevilacqua, P., Messina, F., Baselice, S., Soricelli, A., Mirabelli, P., & Salvatore, M. (2019). Biobanking in health care: Evolution and future directions. *Journal of Translational Medicine*, *17*(1), 172. https://doi.org/10.1186/s12967-019-1922-3
- Di Vaio, A., Palladino, R., Hassan, R., & Escobar, O. (2020). Artificial intelligence and business models in the sustainable development goals perspective: A systematic literature review. *Journal of Business Research*, 121, 283–314. https://doi.org/10.1016/j.jbusres.2020.08.019
- Elvén, M., Kerstis, B., Stier, J., Hellström, C., Von Heideken Wågert, P., Dahlen, M., & Lindberg, D. (2022). Changes in Physical Activity and Sedentary Behavior before and during the COVID-19 Pandemic: A Swedish Population Study. *International Journal of Environmental Research and Public Health*, 19(5), 2558. https://doi.org/10.3390/ijerph19052558
- Karimi-Maleh, H., Darabi, R., Shabani-Nooshabadi, M., Baghayeri, M., Karimi, F., Rouhi, J., Alizadeh, M., Karaman, O., Vasseghian, Y., & Karaman, C. (2022). Determination of D&C Red 33 and Patent Blue V Azo dyes using an impressive electrochemical sensor based on carbon paste electrode modified with ZIF-8/g-C3N4/Co and ionic liquid in mouthwash and toothpaste as real samples. *Food and Chemical Toxicology*, *162*, 112907. https://doi.org/10.1016/j.fct.2022.112907
- Luque, A., Carrasco, A., Martín, A., & De Las Heras, A. (2019). The impact of class imbalance in classification performance metrics based on the binary confusion matrix. *Pattern Recognition*, 91, 216–231. https://doi.org/10.1016/j.patcog.2019.02.023
- Makdessi, C. J., Day, C., & Chaar, B. B. (2019). Challenges faced with opioid prescriptions in the community setting Australian pharmacists' perspectives. *Research in Social and Administrative Pharmacy*, 15(8), 966–973. https://doi.org/10.1016/j.sapharm.2019.01.017
- Mao, S.-J., Shen, J., Xu, F., & Zou, C.-C. (2019). Quality of life in caregivers of young children with Prader–Willi syndrome. *World Journal of Pediatrics*, 15(5), 506–510. https://doi.org/10.1007/s12519-019-00311-w
- Morel, L., Yao, Z., Cladé, P., & Guellati-Khélifa, S. (2020). Determination of the fine-structure constant with an accuracy of 81 parts per trillion. *Nature*, 588(7836), 61–65. https://doi.org/10.1038/s41586-020-2964-7
- Nosyk, B., Slaunwhite, A., Urbanoski, K., Hongdilokkul, N., Palis, H., Lock, K., Min, J. E., Zhao, B., Card, K. G., Barker, B., Meilleur, L., Burmeister, C., Thomson, E., Beck-McGreevy, P., & Pauly, B. (2021). Evaluation of risk mitigation measures for people with substance use disorders to address the dual public health crises of COVID-19 and overdose in British Columbia: A mixed-method study protocol. *BMJ Open*, *11*(6), e048353. https://doi.org/10.1136/bmjopen-2020-048353

- Paul, D., Sanap, G., Shenoy, S., Kalyane, D., Kalia, K., & Tekade, R. K. (2021). Artificial intelligence in drug discovery and development. *Drug Discovery Today*, 26(1), 80–93. https://doi.org/10.1016/j.drudis.2020.10.010
- Pretorius, B., Ambuko, J., Papargyropoulou, E., & Schönfeldt, H. C. (2021). Guiding Nutritious Food Choices and Diets along Food Systems. *Sustainability*, 13(17), 9501. https://doi.org/10.3390/su13179501
- Riess, A. G., Casertano, S., Yuan, W., Macri, L. M., & Scolnic, D. (2019). Large Magellanic Cloud Cepheid Standards Provide a 1% Foundation for the Determination of the Hubble Constant and Stronger Evidence for Physics beyond ΛCDM. *The Astrophysical Journal*, 876(1), 85. https://doi.org/10.3847/1538-4357/ab1422
- Scarabottolo, C. C., Tebar, W. R., Gobbo, L. A., Ohara, D., Ferreira, A. D., Da Silva Canhin, D., & Christofaro, D. G. D. (2022). Analysis of different domains of physical activity with health-related quality of life in adults: 2-year cohort. *Health and Quality of Life Outcomes*, 20(1), 71. https://doi.org/10.1186/s12955-022-01981-3
- Stuart, T., Butler, A., Hoffman, P., Hafemeister, C., Papalexi, E., Mauck, W. M., Hao, Y., Stoeckius, M., Smibert, P., & Satija, R. (2019). Comprehensive Integration of Single-Cell Data. *Cell*, 177(7), 1888-1902.e21. https://doi.org/10.1016/j.cell.2019.05.031
- Tambe, P., Cappelli, P., & Yakubovich, V. (2019). Artificial Intelligence in Human Resources Management: Challenges and a Path Forward. *California Management Review*, 61(4), 15–42. https://doi.org/10.1177/0008125619867910
- Yang, W.-Y., Melgarejo, J. D., Thijs, L., Zhang, Z.-Y., Boggia, J., Wei, F.-F., Hansen, T. W., Asayama, K., Ohkubo, T., Jeppesen, J., Dolan, E., Stolarz-Skrzypek, K., Malyutina, S., Casiglia, E., Lind, L., Filipovský, J., Maestre, G. E., Li, Y., Wang, J.-G., ... for The International Database on Ambulatory Blood Pressure in Relation to Cardiovascular Outcomes (IDACO) Investigators. (2019). Association of Office and Ambulatory Blood Pressure With Mortality and Cardiovascular Outcomes. *JAMA*, 322(5), 409. https://doi.org/10.1001/jama.2019.9811
- Yang, Y., Gao, W., Guo, S., Mao, Y., & Yang, Y. (2019). Introduction to BeiDou-3 navigation satellite system. *Navigation*, 66(1), 7–18. https://doi.org/10.1002/navi.291
- Zhang, S., Yao, L., Sun, A., & Tay, Y. (2020). Deep Learning Based Recommender System: A Survey and New Perspectives. *ACM Computing Surveys*, 52(1), 1–38. https://doi.org/10.1145/3285029
- Abuhassna, H., Al-Rahmi, W. M., Yahya, N., Zakaria, M. A. Z. M., Kosnin, A. Bt. M., & Darwish, M. (2020). Development of a new model on utilizing online learning platforms to improve students' academic achievements and satisfaction. *International Journal of Educational Technology in Higher Education*, 17(1), 38. https://doi.org/10.1186/s41239-020-00216-z
- Adegbeye, M. J., Ravi Kanth Reddy, P., Obaisi, A. I., Elghandour, M. M. M. Y., Oyebamiji, K. J., Salem, A. Z. M., Morakinyo-Fasipe, O. T., Cipriano-Salazar, M., & Camacho-Díaz, L. M. (2020). Sustainable agriculture options for production, greenhouse gasses and pollution alleviation, and nutrient recycling in emerging and transitional nations—An overview. *Journal of Cleaner Production*, 242, 118319. https://doi.org/10.1016/j.jclepro.2019.118319
- Ali, H., Khan, E., & Ilahi, I. (2019). Environmental Chemistry and Ecotoxicology of Hazardous Heavy Metals: Environmental Persistence, Toxicity, and Bioaccumulation. *Journal of Chemistry*, 2019, 1–14. https://doi.org/10.1155/2019/6730305
- Carleo, G., Cirac, I., Cranmer, K., Daudet, L., Schuld, M., Tishby, N., Vogt-Maranto, L., & Zdeborová, L. (2019). Machine learning and the physical sciences. *Reviews of Modern Physics*, 91(4), 045002. https://doi.org/10.1103/RevModPhys.91.045002
- Cheng, Y., Luo, R., Wang, K., Zhang, M., Wang, Z., Dong, L., Li, J., Yao, Y., Ge, S., & Xu, G. (2020). Kidney disease is associated with in-hospital death of patients with COVID-19. *Kidney International*, 97(5), 829–838. https://doi.org/10.1016/j.kint.2020.03.005
- Glare, P., Aubrey, K. R., & Myles, P. S. (2019). Transition from acute to chronic pain after surgery. *The Lancet*, *393*(10180), 1537–1546. https://doi.org/10.1016/S0140-6736(19)30352-6

- Johdi, N. A., & Sukor, N. F. (2020). Colorectal Cancer Immunotherapy: Options and Strategies. *Frontiers in Immunology*, 11, 1624. https://doi.org/10.3389/fimmu.2020.01624
- Kampf, G., Todt, D., Pfaender, S., & Steinmann, E. (2020). Persistence of coronaviruses on inanimate surfaces and their inactivation with biocidal agents. *Journal of Hospital Infection*, 104(3), 246–251. https://doi.org/10.1016/j.jhin.2020.01.022
- Lisio, M.-A., Fu, L., Goyeneche, A., Gao, Z., & Telleria, C. (2019). High-Grade Serous Ovarian Cancer: Basic Sciences, Clinical and Therapeutic Standpoints. *International Journal of Molecular Sciences*, 20(4), 952. https://doi.org/10.3390/ijms20040952
- Lurie, N., Saville, M., Hatchett, R., & Halton, J. (2020). Developing Covid-19 Vaccines at Pandemic Speed. *New England Journal of Medicine*, 382(21), 1969–1973. https://doi.org/10.1056/NEJMp2005630
- Norris, P., & Inglehart, R. (2019). *Cultural Backlash: Trump, Brexit, and Authoritarian Populism* (1 ed.). Cambridge University Press. https://doi.org/10.1017/9781108595841
- Parisi, G. I., Kemker, R., Part, J. L., Kanan, C., & Wermter, S. (2019). Continual lifelong learning with neural networks: A review. *Neural Networks*, 113, 54–71. https://doi.org/10.1016/j.neunet.2019.01.012
- Phillips, J. C., Hardy, D. J., Maia, J. D. C., Stone, J. E., Ribeiro, J. V., Bernardi, R. C., Buch, R., Fiorin, G., Hénin, J., Jiang, W., McGreevy, R., Melo, M. C. R., Radak, B. K., Skeel, R. D., Singharoy, A., Wang, Y., Roux, B., Aksimentiev, A., Luthey-Schulten, Z., ... Tajkhorshid, E. (2020). Scalable molecular dynamics on CPU and GPU architectures with NAMD. *The Journal of Chemical Physics*, 153(4), 044130. https://doi.org/10.1063/5.0014475
- Van Trotsenburg, P., Stoupa, A., Léger, J., Rohrer, T., Peters, C., Fugazzola, L., Cassio, A., Heinrichs, C., Beauloye, V., Pohlenz, J., Rodien, P., Coutant, R., Szinnai, G., Murray, P., Bartés, B., Luton, D., Salerno, M., De Sanctis, L., Vigone, M., ... Polak, M. (2021). Congenital Hypothyroidism: A 2020–2021 Consensus Guidelines Update—An ENDO-European Reference Network Initiative Endorsed by the European Society for Pediatric Endocrinology and the European Society for Endocrinology. *Thyroid*, *31*(3), 387–419. https://doi.org/10.1089/thy.2020.0333
- Walsh, E. E., Frenck, R. W., Falsey, A. R., Kitchin, N., Absalon, J., Gurtman, A., Lockhart, S., Neuzil, K., Mulligan, M. J., Bailey, R., Swanson, K. A., Li, P., Koury, K., Kalina, W., Cooper, D., Fontes-Garfias, C., Shi, P.-Y., Türeci, Ö., Tompkins, K. R., ... Gruber, W. C. (2020). Safety and Immunogenicity of Two RNA-Based Covid-19 Vaccine Candidates. *New England Journal of Medicine*, 383(25), 2439–2450. https://doi.org/10.1056/NEJMoa2027906
- Wang, G., Ye, J. C., & De Man, B. (2020). Deep learning for tomographic image reconstruction. *Nature Machine Intelligence*, 2(12), 737–748. https://doi.org/10.1038/s42256-020-00273-z
- Wang, Y., Xu, Y., Tabari, H., Wang, J., Wang, Q., Song, S., & Hu, Z. (2020). Innovative trend analysis of annual and seasonal rainfall in the Yangtze River Delta, eastern China. *Atmospheric Research*, 231, 104673. https://doi.org/10.1016/j.atmosres.2019.104673
- Wang, Z., Li, C., & Domen, K. (2019). Recent developments in heterogeneous photocatalysts for solar-driven overall water splitting. *Chemical Society Reviews*, 48(7), 2109–2125. https://doi.org/10.1039/C8CS00542G
- Yatabe, Y., Dacic, S., Borczuk, A. C., Warth, A., Russell, P. A., Lantuejoul, S., Beasley, M. B., Thunnissen, E., Pelosi, G., Rekhtman, N., Bubendorf, L., Mino-Kenudson, M., Yoshida, A., Geisinger, K. R., Noguchi, M., Chirieac, L. R., Bolting, J., Chung, J.-H., Chou, T.-Y., ... Moreira, A. L. (2019). Best Practices Recommendations for Diagnostic Immunohistochemistry in Lung Cancer. *Journal of Thoracic Oncology*, 14(3), 377–407. https://doi.org/10.1016/j.jtho.2018.12.005
- Zemek, R. M., De Jong, E., Chin, W. L., Schuster, I. S., Fear, V. S., Casey, T. H., Forbes, C., Dart, S. J., Leslie, C., Zaitouny, A., Small, M., Boon, L., Forrest, A. R. R., Muiri, D. O., Degli-Esposti, M. A., Millward, M. J., Nowak, A. K., Lassmann, T., Bosco, A., ... Lesterhuis, W. J. (2019). Sensitization to immune checkpoint blockade through activation of a STAT1/NK axis

- in the tumor microenvironment. *Science Translational Medicine*, 11(501), eaav7816. https://doi.org/10.1126/scitranslmed.aav7816
- Zhou, M., Wang, H., Zeng, X., Yin, P., Zhu, J., Chen, W., Li, X., Wang, L., Wang, L., Liu, Y., Liu, J., Zhang, M., Qi, J., Yu, S., Afshin, A., Gakidou, E., Glenn, S., Krish, V. S., Miller-Petrie, M. K., ... Liang, X. (2019). Mortality, morbidity, and risk factors in China and its provinces, 1990–2017: A systematic analysis for the Global Burden of Disease Study 2017. *The Lancet*, 394(10204), 1145–1158. https://doi.org/10.1016/S0140-6736(19)30427-1
- Zong, Q., Yang, H., Wang, Q., Zhang, Q., Zhu, Y., Wang, H., & Shen, Q. (2019). Three-dimensional coral-like NiCoP@C@Ni(OH)2 core-shell nanoarrays as battery-type electrodes to enhance cycle stability and energy density for hybrid supercapacitors. *Chemical Engineering Journal*, 361, 1–11. https://doi.org/10.1016/j.cej.2018.12.041

Copyright Holder:

© Moh. Mujibur Rohman et al. (2023)

First Publication Right:

© Rechtsnormen Journal of Law

This article is under:





