

## DAFTAR PUSTAKA

- Aaker, D. A., & Keller, K. L. (1990). Consumer Evaluations of Brand Extensions. *Journal of Marketing*, 54(1), 27. <http://doi.org/10.2307/1252171>
- Abedifar, P., Molyneux, P., & Tarazi, A. (2013). Risk in islamic banking. *Review of Finance*, 17(6), 2035–2096. <http://doi.org/10.1093/rof/rfs041>
- Al-Dmour, H. H., Algharabat, R. S., Khawaja, R., & Al-Dmour, R. H. (2019). Investigating the impact of ECRM success factors on business performance: Jordanian commercial banks. *Asia Pacific Journal of Marketing and Logistics*, 31(1), 105–127. <http://doi.org/10.1108/APJML-10-2017-0270>
- Al-Smadi, M. O., & Al-Wabel, S. A. (2011). The impact of E- banking on the performance of Jordanian banks. *Journal of Internet Banking and Commerce*, 16(2).
- Alton, R. G., & Hazen, J. H. (2001). As economy flounders, do we see a rise in problem loans. *Federal Reserve Bank of St. Louis*, 11.
- Anouze, A. L. M., & Alamro, A. S. (2019). Factors affecting intention to use e-banking in Jordan. *International Journal of Bank Marketing*, 38(1), 86–112. <http://doi.org/10.1108/IJBM-10-2018-0271>
- Aria, P. (2020). Sepanjang Pandemi, Pengguna BNI Mobile Banking Meningkat 84%. Retrieved March 24, 2021, from <https://katadata.co.id/pingitaria/berita/5ebf599a9bfab/sepanjang-pandemi-pengguna-bni-mobile-banking-meningkat-84>
- Arif, M., & Masdupi, E. (2020). Pengaruh Internet Banking Terhadap Kinerja Perbankan. *Jurnal Ecogen*, 3(4), 598–614. Retrieved from <http://ejournal.unp.ac.id/students/index.php/pek/index>
- Arofany, A., & Tandika, D. (2019). Pengaruh Transaksi Digital Banking, Kualitas Aset, dan Aspek Permodalan terhadap Profitabilitas (Studi Kasus pada Bank Umum yang terdaftar di Bursa Efek Indonesia Tahun 2013-2017). *Prosiding Manajemen*, 5(1), 310–318. Retrieved from <http://karyailmiah.unisba.ac.id/index.php/manajemen/article/view/15335>
- Berger, A. N., & Humphrey, D. B. (2005). Efficiency of Financial Institutions: International Survey and Directions for Future Research. *SSRN Electronic Journal*. <http://doi.org/10.2139/ssrn.2140>
- Berger, A. N., & Mester, L. J. (2003). Explaining the dramatic changes in performance of US banks: Technological change, deregulation, and dynamic changes in competition. *Journal of Financial Intermediation*.

- [http://doi.org/10.1016/S1042-9573\(02\)00006-2](http://doi.org/10.1016/S1042-9573(02)00006-2)
- Bogdanova, B., Fender, I., & Takats, E. (2018). The ABCs of bank PBRs. *BIS Quarterly Review*.
- Boussemart, J. P., Leleu, H., Shen, Z., Vardanyan, M., & Zhu, N. (2019). Decomposing banking performance into economic and credit risk efficiencies. *European Journal of Operational Research*, 277(2), 719–726. <http://doi.org/10.1016/j.ejor.2019.03.006>
- Chamberlain, T., Hidayat, S., & Abdul Khokhar, R. (2020). Credit risk in Islamic banking: evidence from the GCC. *Journal of Islamic Accounting and Business Research*. <http://doi.org/https://doi.org/10.1108/JIABR-09-2017-0133>
- Chauhan, V., Yadav, R., & Choudhary, V. (2019). Analyzing the impact of consumer innovativeness and perceived risk in internet banking adoption: A study of Indian consumers. *International Journal of Bank Marketing*, 37(1), 323–339. <http://doi.org/10.1108/IJBM-02-2018-0028>
- Cheng, M., Lee, C., Pham, Q. N. T., & Chen, H. (2016). Factors affect NPL in Taiwan banking industry. *Journal of Accounting, Finance and Economics*, 6(1), 65–87.
- Cheng, M., & Qu, Y. (2020). Does bank FinTech reduce credit risk? Evidence from China. *Pacific Basin Finance Journal*, 63. <http://doi.org/10.1016/j.pacfin.2020.101398>
- Cuneyt, K., & Berrin, S. (2011). The Effect of Non-Performing Loans on Private Sector Loans and Investments. *Dumlupınar University Journal of Social Sciences*.
- Del Gaudio, B. L., Porzio, C., Sampognaro, G., & Verdoliva, V. (2020). How do mobile, internet and ICT diffusion affect the banking industry? An empirical analysis. *European Management Journal*. <http://doi.org/10.1016/j.emj.2020.07.003>
- Demsetz, R., & Saidenberg, M. (1996). Banks with something to lose: The disciplinary role of franchise value. *FRBNY Economic Policy Review*, October(1996), 1–14. Retrieved from [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1028769](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1028769)
- DeYoung, R., Lang, W. W., & Nolle, D. L. (2007). How the Internet affects output and performance at community banks. *Journal of Banking and Finance*, 31(4), 1033–1060. <http://doi.org/10.1016/j.jbankfin.2006.10.003>
- Dong, J., Yin, L., Liu, X., Hu, M., & Li, X. (2020). International Review of Financial Analysis Impact of internet finance on the performance of commercial banks in China. *International Review of Financial Analysis*, 72(October 2019), 101579. <http://doi.org/10.1016/j.irfa.2020.101579>

- Dong, J., Yin, L., Liu, X., Hu, M., Li, X., & Liu, L. (2020). Impact of internet finance on the performance of commercial banks in China. *International Review of Financial Analysis*, 72. <http://doi.org/10.1016/j.irfa.2020.101579>
- Egan, R., & Prawoto, H. (2013). Pengaruh Internet Banking Terhadap Kinerja Perbankan di Indonesia (Studi Empiris Pada Bank yang Listing di BEI). *Jurnal Akuntansi Bisnis*, 11(22), 138–153.
- Ege Oruç, Ö., & Tatar, Ç. (2017). An investigation of factors that affect internet banking usage based on structural equation modeling. *Computers in Human Behavior*, 66, 232–235. <http://doi.org/10.1016/j.chb.2016.09.059>
- Ekinci, R., & Poyraz, G. (2019). The Effect of Credit Risk on Financial Performance of Deposit Banks in Turkey. In *Procedia Computer Science* (Vol. 158, pp. 979–987). <http://doi.org/10.1016/j.procs.2019.09.139>
- Esin, O. (2002). Risk and Crisis in Turkish Banking Sector. *Istanbul Commerce University Journal*.
- European Central Bank. (2017). Guidance to banks on non- performing loans. *Banking Supervision, European Central Bank*, (March), 1–131.
- Fahmi, I. (2012). *Analisis Kinerja Keuangan*. Bandung: Alfabeta.
- Festić, M., Kavkler, A., & Repina, S. (2011). The macroeconomic sources of systemic risk in the banking sectors of five new EU member states. *Journal of Banking and Finance*, 35(2), 310–322. <http://doi.org/10.1016/j.jbankfin.2010.08.007>
- Fliginskikh, T. N., Vaganova, O. V., Usatova, L. V., Solovjeva, N. E., Bykanova, N. I., & Ragheed, Y. (2020). The impact of e-banking on performance of banks: Evidence from Russia. *Journal of Advanced Research in Dynamical and Control Systems*, 12(4 Special Issue), 231–239. <http://doi.org/10.5373/JARDCS/V12SP4/20201485>
- Foos, D., Norden, L., & Weber, M. (2010). Loan growth and riskiness of banks. *Journal of Banking and Finance*, 34(12), 2929–2940. <http://doi.org/10.1016/j.jbankfin.2010.06.007>
- Fujii, H., Managi, S., & Matousek, R. (2014). Indian bank efficiency and productivity changes with undesirable outputs: A disaggregated approach. *Journal of Banking and Finance*, 38(1), 41–50. <http://doi.org/10.1016/j.jbankfin.2013.09.022>
- Furst, K., Lang, W. W., & Nolle, D. E. (2002). Internet banking. *Journal of Financial Services Research*. <http://doi.org/10.1023/A:1016012703620>
- Godlewski, C. J. (2008). Bank capital and credit risk taking in emerging market economies. *Journal of Banking Regulation*, 6(2), 128–145.

<http://doi.org/10.1057/palgrave.jbr.2340187>

- Gunawan, M. A. (2015). *Statistik Penelitian Bidang Pendidikan, Psikologi dan Sosial* (1st ed.). Yogyakarta: Parama Publishing.
- H., Q., & Huang. (2018). Influence of fintech on traditional bank behavior – from the perspective of internet financing. *Financ.*
- Halkos, G. E., & Tzeremes, N. G. (2010). Corruption and economic efficiency: Panel data evidence. *Global Economic Review*, 39(4), 441–454. <http://doi.org/10.1080/1226508X.2010.533854>
- Harelimana, J. B. (2018). Impact of Mobile Banking on Financial Performance of Unguka Microfinance Bank Ltd, Rwanda . *Journal of Harmonized Research in Management*, 4(1), 26. <http://doi.org/10.30876/johr.4.1.2018.26-40>
- Hasan, N. I. (2014). *Pengantar Perbankan*. Jakarta: Gaung Persada Press Group.
- Herington, C., & Weaven, S. (2009). E-retailing by banks: E-service quality and its importance to customer satisfaction. *European Journal of Marketing*, 43(9), 1220–1231. <http://doi.org/10.1108/03090560910976456>
- Hery. (2015). *Analisis Laporan Keuangan* (1st ed.). Yogyakarta: Center For Academic Publishing Services.
- Hess, D. (2009). Catalyzing corporate commitment to combating corruption. *Journal of Business Ethics*, 88(SUPPL. 4), 781–790. <http://doi.org/10.1007/s10551-009-0322-7>
- Hunjra, A. I., Mehmood, A., Nguyen, H. P., & Tayachi, T. (2020). Do firm-specific risks affect bank performance? *International Journal of Emerging Markets*. <http://doi.org/10.1108/IJOEM-04-2020-0329>
- Ikatan Bankir Indonesia (IBI), & Banker Association for Risk Management (BARa). (2017). *MANAJEMEN RISIKO 1* (Ketiga). Jakarta: PT Gramedia Pustaka Utama.
- Jakšić, M., & Marinč, M. (2019). Relationship banking and information technology: the role of artificial intelligence and FinTech. *Risk Management*, 21(1). <http://doi.org/10.1057/s41283-018-0039-y>
- Jumingan. (2006). *Analisis Laporan Keuangan*. Jakarta: PT. Bumi Aksara.
- Kasmir. (2019). *Pengantar Manajemen Keuangan*, Jakarta: Kencana Prenada Media Group. Jakarta: Kencana Prenada Media Group.
- Kesharwani, A., & Bisht, S. S. (2012). The impact of trust and perceived risk on internet banking adoption in India: An extension of technology acceptance model. *International Journal of Bank Marketing*, 30(4), 303–322. <http://doi.org/10.1108/02652321211236923>

- Khan, M. A., Siddique, A., & Sarwar, Z. (2020). Determinants of non-performing loans in the banking sector in developing state. *Asian Journal of Accounting Research*, 5(1), 135–145. <http://doi.org/10.1108/ajar-10-2019-0080>
- Laucereno, S. F. (2020). BCA Cetak Laba Bersih Rp 28,6 T Sepanjang 2019. *detikFinance*.
- Liberti, J. M., & Petersen, M. A. (2019). Information: Hard and soft. *Review of Corporate Finance Studies*, 8(1), 1–41. <http://doi.org/10.1093/rcfs/cfy009>
- Liu, X., Yang, F., & Wu, J. (2020). DEA considering technological heterogeneity and intermediate output target setting: the performance analysis of Chinese commercial banks. *Annals of Operations Research*, 291(1–2), 605–626. <http://doi.org/10.1007/s10479-019-03413-w>
- Lukman, D. (2009). Manajemen Perbankan, Edisi 2. *Cetakan Kedua Bogor: Ghalia Indonesia*.
- Malik, N., Oktavia, A., Suliswanto, M. S. W., & Anindyntha, F. A. (2020). Financial banking performance of ASEAN-5 countries in the digital era. *Jurnal Keuangan Dan Perbankan*, 24(1). <http://doi.org/10.26905/jkdp.v24i1.2641>
- Mardi, M., & Faradila, L. (2016). Pengaruh Non Performing Loan (NPL) Dan Bunga Pinjaman Terhadap Tingkat Profitabilitas Bank Umum Swasta Nasional. *Jurnal Organisasi Dan Manajemen*, 12(1), 79–88. <http://doi.org/https://doi.org/10.33830/jom.v12i1.49.2016>
- Mason, R. O. (1978). Measuring information output: A communication systems approach. *Information and Management*, 1(4), 219–234. [http://doi.org/10.1016/0378-7206\(78\)90028-9](http://doi.org/10.1016/0378-7206(78)90028-9)
- Miremadi, A. R., Ghalamakri, S., & Ramezani, A. A. (2012). Challenges in trust and security by implementation of E-CRM among banks and financial institution: A case study of e-banking in iran". *International Journal of Information Science and Management*, 10(SPL.ISSUE), 99–118.
- Morgan, N. A. (2012). Marketing and business performance. *Journal of the Academy of Marketing Science*, 40(1), 102–119. <http://doi.org/10.1007/s11747-011-0279-9>
- Muljono, T. P. (1992). *Analisa Laporan Keuangan Untuk Perbankan* (4th ed.). Jakarta: Djambatan.
- Mulyono. (2018). *Berprestasi Menuju JFP*. Sleman: Deepublish.
- Munawir, S. (2010). *Analisis Informasi Keuangan* (4th ed.). Yogyakarta: Liberty.
- Nobanee, H., Atayah, O. F., & Mertzanis, C. (2020). Does anti-corruption disclosure affect banking performance? *Journal of Financial Crime*, 27(4),

- 1161–1172. <http://doi.org/10.1108/JFC-04-2020-0047>
- OJK. (2020a). Laporan Profil Industri Perbankan Triwulan III 2020. *Otoritas Jasa Keuangan*.
- OJK. (2020b). *Statistik Perbankan Indonesia - Desember 2020*. Retrieved from <https://www.ojk.go.id/id/kanal/perbankan/data-dan-statistik/statistik-perbankan-indonesia/Pages/Statistik-Perbankan-Indonesia---Desember-2020.aspx>
- Onay, C., & Ozsoz, E. (2013). The Impact of Internet-Banking on Brick and Mortar Branches: The Case of Turkey. *Journal of Financial Services Research*, 44(2), 187–204. <http://doi.org/10.1007/s10693-011-0124-9>
- Otoritas Jasa Keuangan. (2015). Bijak Ber-eBanking. *Otoritas Jasa Keuangan*, 1–91.
- Owusu Kwateng, K., Agyei, J., & Amanor, K. (2019). Examining the efficiency of IT applications and bank performance. *Industrial Management and Data Systems*, 119(9), 2072–2090. <http://doi.org/10.1108/IMDS-03-2019-0129>
- Owusu Kwateng, K., Osei-Wusu, E. E., & Amanor, K. (2019). Exploring the effect of online banking on bank performance using data envelopment analysis. *Benchmarking*, 27(1), 137–165. <http://doi.org/10.1108/BIJ-06-2018-0154>
- Ozili, P. K. (2019). Non-performing loans and financial development: new evidence. *Journal of Risk Finance*, 20(1), 59–81. <http://doi.org/10.1108/JRF-07-2017-0112>
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A Conceptual Model of Service Quality and Its Implications for Future Research. *Journal of Marketing*, 49(4), 41. <http://doi.org/10.2307/1251430>
- Partovi, E., & Matousek, R. (2019). Bank efficiency and non-performing loans: Evidence from Turkey. *Research in International Business and Finance*, 48, 287–309. <http://doi.org/10.1016/j.ribaf.2018.12.011>
- Phan, D. H. B., Narayan, P. K., Rahman, R. E., & Hutabarat, A. R. (2020). Do financial technology firms influence bank performance? *Pacific Basin Finance Journal*, 62. <http://doi.org/10.1016/j.pacfin.2019.101210>
- Pikkarainen, T., Pikkarainen, K., Karjaluoto, H., & Pahnila, S. (2004). Consumer acceptance of online banking: An extension of the technology acceptance model. *Internet Research*. <http://doi.org/10.1108/10662240410542652>
- Prayitno, R. H. (2010). Peranan Analisa Laporan Keuangan dalam Mengukur Kinerja Keuangan Perusahaan (Studi Ksus pada PT. X). *Jurnal Managemen*, 2(1), 9.
- Raharjo, B. (2010). *Akuntansi Manajemen Informasi untuk Pengambilan*

- Keputusan Strategis.* Yogyakarta: UGM Press.
- Rahi, S., Abd. Ghani, M., Alnaser, F. M. I., & Ngah, A. H. (2018). Investigating the role of unified theory of acceptance and use of technology (UTAUT) in internet banking adoption context. *Management Science Letters*, 8(3), 173–186. <http://doi.org/10.5267/j.msl.2018.1.001>
- Rahi, S., & Abd.Ghani, M. (2019). Integration of DeLone and McLean and self-determination theory in internet banking continuance intention context. *International Journal of Accounting and Information Management*, 27(3), 512–528. <http://doi.org/10.1108/IJAIM-07-2018-0077>
- Rahi, S., Ghani, M. A., & Alnaser, F. M. I. (2017). Predicting customer's intentions to use internet banking: The role of technology acceptance model (TAM) in e-banking. *Management Science Letters*, 7(11), 513–524. <http://doi.org/10.5267/j.msl.2017.8.004>
- Ranjan, R., & Dhal, S. C. (2003). Non-Performing Loans and Terms of Credit of Public Sector Banks in India: An Empirical Assessment. *Reserve Bank of India Occasional Papers*, 24(3), 81–121.
- Raza, A., Umer, A., Asif Qureshi, M., & Dahri, A. S. (2020). Internet banking service quality, e-customer satisfaction and loyalty: the modified e-SERVQUAL model. *THE TQM JOURNAL*. <http://doi.org/https://doi.org/10.1108/TQM-02-2020-0019>
- Riedl, J. (2013). Crowdfunding technology innovation. *Computer*, 46(3), 100–103. <http://doi.org/10.1109/MC.2013.89>
- Riswandi, B. A. (2005). *Aspek Hukum Internet Banking* (1st ed.). Jakarta: PT RajaGrafindo Persada.
- Salas, V., & Saurina, J. (2002). Credit risk in two institutional regimes: Spanish commercial and savings banks. *Journal of Financial Services Research*. <http://doi.org/10.1023/A:1019781109676>
- Sathye, M. (1999). Intention to use of Internet banking by Australian consumers: an empirical investigation. *International Journal of Bank Marketing*, 17.
- Scott, S. V., Van Reenen, J., & Zachariadis, M. (2017). The long-term effect of digital innovation on bank performance: An empirical study of SWIFT adoption in financial services. *Research Policy*, 46(5), 984–1004. <http://doi.org/10.1016/j.respol.2017.03.010>
- Sharifi, S., Haldar, A., & Rao, S. V. D. N. (2019). The relationship between credit risk management and non-performing assets of commercial banks in India. *Managerial Finance*, 45(3), 399–412. <http://doi.org/10.1108/MF-06-2018-0259>

- Sharma, R., Singh, G., & Sharma, S. (2020). Modelling internet banking adoption in Fiji: A developing country perspective. *International Journal of Information Management*, 53. <http://doi.org/10.1016/j.ijinfomgt.2020.102116>
- Sheng, T. (2020). The effect of fintech on banks' credit provision to SMEs: Evidence from China. *Finance Research Letters*. <http://doi.org/10.1016/j.frl.2020.101558>
- Siamat, D. (2005). Manajemen Lembaga Keuangan. "Kebijakan Moneter dan Perbankan." *Jakarta: Fakultas Ekonomi Universitas Indonesia, Edisi Kesatu*, (May 2017), 21.
- Simoens, M., & Vennet, R. Vander. (2020). Bank performance in Europe and the US: A divergence in market-to-book ratios. *Finance Research Letters*. <http://doi.org/10.1016/j.frl.2020.101672>
- Sinambela, E., & Rohani. (2017). Pengaruh Penyediaan Layanan Internet Banking Terhadap Kinerja Keuangan Perbankan di Bursa Efek Indonesia. In *When Fintech Meets Accounting : Opportunity and Risk* (Vol. 6, pp. 87–94). Retrieved from <http://fkbi.akuntansi.upi.edu/>
- Skarica, B. (2014). Determinants of non-performing loans in Central and Eastern European countries. *Financial Theory and Practice*, 38(1), 37–59. <http://doi.org/10.3326/fintp.38.1.2>
- Sobarsyah, M., Soedarmono, W., Yudhi, W. S. A., Trinugroho, I., Warokka, A., & Pramono, S. E. (2020). Loan growth, capitalization, and credit risk in Islamic banking. *International Economics*, 163, 155–162. <http://doi.org/10.1016/j.inteco.2020.02.001>
- Staub, R. B., da Silva e Souza, G., & Tabak, B. M. (2010). Evolution of bank efficiency in Brazil: A DEA approach. *European Journal of Operational Research*, 202(1), 204–213. <http://doi.org/10.1016/j.ejor.2009.04.025>
- Sugiyono. (2015). *Metode Penelitian Pendidikan: Pendekatan Kuantitatif, Kualitatif, dan R&D*. Bandung: Alvabeta CV.
- Sugiyono. (2017). Sugiyono, Metode Penelitian. *Penelitian*, 34–45.
- Suharyadi, & Purwanto, S. K. (2009). *Statistika untuk Ekonomi dan Keuangan Modern. Statistika: Untuk Ekonomi dan Keuangan Modern (Kedua)*. Salemba Empat.
- Tabari, N. A. Y., Ahmadi, M., & Emami, M. (2013). The effect of liquidity risk management on financial performance of commercial banks. *International Research Journal of Applied and Basic Sciences*, 4(6), 1624–1631.
- Tam, C., & Oliveira, T. (2016). Understanding the impact of m-banking on individual performance: DeLone & McLean and TTF perspective. *Computers*

- in Human Behavior*, 61, 233–244. <http://doi.org/10.1016/j.chb.2016.03.016>
- Tam, C., & Oliveira, T. (2019). Does culture influence m-banking use and individual performance? *Information and Management*, 56(3), 356–363. <http://doi.org/10.1016/j.im.2018.07.009>
- The Basel Committee, & Basel Committee On Banking Supervision. (2000). Principle for the Management of Credit Risk. *Bank for International Settlements*, (September), 1–26. Retrieved from <https://www.bis.org/publ/bcbs75.pdf>
- Treacy, W. F., & Carey, M. (2000). Credit risk rating systems at large US banks. *Journal of Banking and Finance*, 24(1–2), 167–201. [http://doi.org/10.1016/S0378-4266\(99\)00056-4](http://doi.org/10.1016/S0378-4266(99)00056-4)
- Villeroy de Galhau, F. (2016). Constructing the possible trinity of innovation, stability and regulation for digital finance. *Financial Stability Review*, 7–16.
- Wulandari, S., & Novitasari, N. (2020). Pengaruh Internet Banking, Risiko Kredit dan Ukuran Perusahaan Terhadap Kinerja Keuangan Perbankan Yang Terdaftar Di Bursa Efek Indonesia Periode 2017 - 2019. *Jesya (Jurnal Ekonomi & Ekonomi Syariah)*, 4(1), 166–177. <http://doi.org/10.36778/jesya.v4i1.327>
- Xu, G., & Zhou, Z. (2020). Assessing the efficiency of financial supply chain for Chinese commercial banks: a two-stage AR-DEA model. *Industrial Management and Data Systems*. <http://doi.org/10.1108/IMDS-01-2020-0022>
- Xue, M., Hitt, L. M., & Chen, P. Y. (2011). Determinants and outcomes of internet banking adoption. *Management Science*, 57(2), 291–307. <http://doi.org/10.1287/mnsc.1100.1187>
- Yang, D. (2018). Supervising and regulating science and technology: supervisory challenges and dimensional construction of financial technology. *Social Sci.*
- Yurttadur, M., Celiktas, E., & Celiktas, E. (2019). The Place of Non-performing Loans in the Turkish Banking Sector. In *Procedia Computer Science* (Vol. 158, pp. 766–771). <http://doi.org/10.1016/j.procs.2019.09.113>
- Zhu, Q., Li, X., Li, F., & Zhou, D. (2020). The potential for energy saving and carbon emission reduction in China's regional industrial sectors. *Science of the Total Environment*, 716. <http://doi.org/10.1016/j.scitotenv.2019.135009>

