

DAFTAR PUSTAKA

- Abidin, A., Henita, V., Rahmawati, S., Maziya, F. (2021). Analisis Risiko Kesehatan Pajanan Debu Terhadap Fungsi Paru pada Pekerja di Home Industry C-Max. *Jurnal Sains dan Teknologi Lingkungan*, 13(1):34-39. <https://doi.org/10.20885/jstl.vol13.iss1.art3>
- Adeyanju, E., Okeke, C. (2019). Exposure effect to cement dust pollution: a mini review. *SN Applied Sciences* 1:1572. *SN Applied Sciences*, 1:1572 <https://doi.org/10.1007/s42452-019-1583-0>
- Adishes, A., Waters-Banker, C. (2021): Causes, diagnosis, and progression of COPD following workplace exposure to vapours, gases, dust and fumes, *Methods*, 2, Q6.
- Agency for Toxic Substances and Disease Registry (ATSDR). (2021). *Guidance for inhalation exposures*. U.S. Department of Health and Human Services, Public Health Service.
- Agustina, S. U. (2018). Analisis Pajanan Debu dengan Kapasitas Vital Paru pada Pekerja Mebel Informal di Desa Rambigundam Jember. Surabaya: Universitas Airlangga.
- Álvarez, R. F., González, C. M., Martínez A. Q., Pérez, J. J. B., Fernández L. C., Fernández, A. P. (2015). Guidelines for the diagnosis and monitoring of silicosis. *Archivos de Bronconeumologia*. 51(2):86-93. <https://doi.org/10.1016/j.arbres.2014.07.010>
- American Conference of Governmental Industrial Hygiene (ACGIH). (2025). *TLVs and BEIs, Based on the documentation of the threshold limit values for chemical substances and physical agents and biological exposure indices*. Cincinnati, Ohio, The United States.
- Applied Research Associated (ARA). (2020). MPPD: *Multiple-Path Particle Dosimetry Model-ARA*. <https://www.ara.com/mppd/>
- Apsari, L., Budiyo, Setiani, O. (2018). Hubungan pajanan debu terhirup dengan gangguan fungsi paru pada pekerja pertambangan pasir dan batu Perusahaan X Rowosari Kota Semarang. *Jurnal Kesehatan Masyarakat*, 6(4):463- 476. <https://doi.org/10.14710/jkm.v6i4.21455>
- Asgharian, B., Price, O., Hofmann, W. (2006b). Prediction of particle deposition in the human lung using realistic models of lung ventilation. *Journal of Aerosol Science*. 37(10):1209-1221.
- Asgharian, B., Price, O., Oberdörster, G. A. (2006a). Modeling Study of the Effect of Gravity on Airflow Distribution and Particle Deposition in the Lung. *Inhalation Toxicology*. 18(7):473-481.
- Baluchova, M. M., Bačík, P., Mamova, A. (2019). The Health Impact of Mineral Dust Air Pollution on the Global and Local Scale (on the example from Slovakia). *Neuroendocrinology Letter*. 8;40(Suppl1):24-28. <https://pubmed.ncbi.nlm.nih.gov/31785223/>
- Barnes, H., Goh, N. S. L., Leong, T. L., Hoy, R. (2019). Silica-associated lung disease: an old-world exposure in modern industries. *Respirology*, 24(12):1165-1175. <https://doi.org/10.1111/resp.13695>

- Barton, C. (2015): Fibrogenic Dusts, 935–948 dalam Hamilton & Hardy's Industrial Toxicology, John Wiley & Sons, Ltd. <https://doi.org/10.1002/9781118834015.ch92>
- Bisesi, M. S. (2004). *Bisesi and Kohn's Industrial Hygiene Evaluation Methods*, 2nd Edition. CRC Press LLC: United States of America.
- Boente, C., Zafra-Pérez, A., Fernández-Caliani, J. C., Sánchez de la Campa, A., Sánchez-Rodas, D., de la Rosa, J. D. (2023). Source apportionment of potentially toxic PM10 near a vast metallic ore mine and health risk assessment for residents exposed. *Atmospheric Environment*. 301:119696. <https://doi.org/10.1016/j.atmosenv.2023.119696>
- Boffetta, P., Hashim, D. (2017). Exposure to silicon carbide and cancer risk: a systematic review. *International Archieve of Occupational and Environmental Health*. 90:1-12. <https://doi.org/10.1007/s00420-016-1169-8>
- Brown, J. S., Gordon, T., Price, O., Asgharian, B. (2013): Thoracic and respirable particle definitions for human health risk assessment. *Particle and Fibre Toxicology*. 10(12). <https://doi.org/10.1186/1743-8977-10-12>
- Brown, J. S. (2015). Chapter 27 - *Deposition of Particles*. Comparative Biology of the Normal Lung (Second Edition). San Diego: Academic Press. 513-536. <https://www.sciencedirect.com/science/article/pii/B9780124045774000278>
- Căluțu, I.-M., Smărăndescu, R.-A., Rașcu, A. (2022). Biomonitoring exposure and early diagnosis in silicosis: a comprehensive review of the current literature. *Biomedicines*. 11(1):100. <https://doi.org/10.3390/biomedicines11010100>
- Canadian Centre for Occupational Health and Safety (CCOHS). (2021). *Silika Kristalin*. Hazard Awareness Bulletin. 3M. <https://multimedia.3m.com/mws/media/22744940/psd-ia-hazard-awareness-bulletin-crystalline-silica-id.pdf>
- Castranova, V., Vallyathan, V. (2000). Silicosis and coal workers' pneumoconiosis. *Environmental Health Perspective*. 108:(Suppl.4):675-684. <https://doi.org/10.1289/ehp.00108s467>
- Cecala, A. B., O'Brien, A. D., Schall, J., Colinet, J. F., Fox, W. R., Franta, R. J., Schultz, M. J., Haas, E. J., Robinson, J. E., Patts, J. R., Holen, B. M., Stein, R. R., Jake Weber, Strebel, M., Wilson, L., Ellis, M. (2019). *Dust Control Handbook for Industrial Minerals Mining and Processing: Second Edition*. <https://stacks.cdc.gov/view/cdc/76769>
- Chanvirat, K., Chaiear, N., Choosong, T. (2018). Determinants of respirable crystalline silica exposure among sand-stone workers. *American Journal of Public Health Research*. 6(2):44-50. <https://doi.org/10.12691/ajphr-6-2-4>
- Chen, Y. H., Nguyen, D., Brindley, S., Ma, T., Xia, T., Brune, J., Brown, J. M., Tsai, C. S. (2023). The dependence of particle size on cell toxicity for modern mining dust. *Scientific Report*. 13(1):5101. <https://doi.org/10.1038/s41598-023-31215-5>
- Cyrus, J., Pitz, M., Heinrich, J., Wichmann, H. E., Peters, A. (2008). Spatial and temporal variation of particle number concentration in Augsburg, Germany. *Science of the Total Environment*. 401(1-3):168-175.

- Darmawan, A. (2016). Penyakit Sistem Respirasi Akibat Kerja. *Jambi Medical Journal: Jurnal Kedokteran Dan Kesehatan*. 1(1):68-83. <https://doi.org/10.22437/jmj.v1i1.2691>
- Dharwal, V., Paudel, K. R., Hansbro, P. M. (2020): Impact of bushfire smoke on respiratory health. *Medical Journal of Australia*. 213(6). <https://doi.org/10.5694/mja2.50754>
- European Committee for Standardization (CEN). (1993). Workplace Atmospheres. Size Fraction Definitions for Measurement of Airborne Particles. *European Committee for Standardization*. Brussels: Belgium.
- Farjana, S., Huda, N., Mahmud, M. (2019). Life cycle analysis of copper-gold-lead-silver-zinc beneficiation process. *Science of the Total Environment*, 659:41-52. <https://doi.org/10.1016/j.scitotenv.2018.12.318>
- Fikri, E., Dewi, D. R., Juariah, L. (2025). Analisis Risiko Kesehatan Lingkungan (ARKL) Pajanan PM2.5 dan PM10 Pada Pekerja PT. Beton Elemenindo Perkasa Tahun 2024. *Jurnal Kesehatan Lingkungan Indonesia*. 24(1):115-122. <https://doi.org/10.14710/jkli.67628>
- Fubini, B., Hubbard, A. (2003). Reactive oxygen species and fibrogenesis. *Free Radical Biology and Medicine*. 34(12):1507-1516. [https://doi.org/10.1016/S0891-5849\(03\)00149-7](https://doi.org/10.1016/S0891-5849(03)00149-7)
- Garcia, D. D., Latorre, P. R., Sultan, N. M., Yerba, O. R., Palacios, E. A., Cano, A. D. (2019). Silicosis: origins and consequences. *American Journal of Medical Science and Medicine*. 7(3):60-63. <https://pubs.sciepub.com/ajmsm/7/3/2>
- Gholami, A., Tajik, R., Atif, K., Zarei, A. A., Abbaspour, S., Teimori-Boghsani, G., Attar, M. (2020). Respiratory Symptoms and Diminished Lung Functions Associated with Occupational Dust Exposure Among Iron Ore Mine Workers in Iran. *The Open Respiratory Medicine Journal*. 14(1):1-7. <https://doi.org/10.2174/1874306402014010001>
- Hall, J. E. (2016): *Guyton and Hall Textbook of Medical Physiology*. Jordanian Edition E-Book: Elsevier Health Sciences.
- Hanafı, M., Wibisono, D., Mangkusubroto, Siallagan, M., dan Badriyah, M. (2019). Designing smelter industry investment competitiveness policy in Indonesia through system dynamics model. *Journal of Science and Technology Policy Management*, 10(3):617-641. DOI10.1108/JSTPM-06-2018-0064
- Hashimoto, H., Yamada, K., Hori, H., Kumagai, S., Murata, M., Nagoya, T., Nakahara, H., Mochida, N. (2018). Guidelines for personal exposure monitoring of chemicals: Part III., *Journal of Occupational Health*. 60(1):3-9. <https://doi.org/10.1539/joh.17-0294-R>
- GBD. (2016). Occupational Chronic Respiratory Risk Factors Collaborators (2020): GBD 2016 occupational chronic respiratory risk factors collaborators. Global and regional burden of chronic respiratory disease in 2016 arising from non-infectious airborne occupational exposures: a systematic analysis for the Global Burden of Disease Study 2016. *Occupational & Environmental Medicine*. 77(3):142-150. <https://doi.org/10.1136/oemed-2019-106013>
- Gwinn, M. R., Vallyathan, V. (2006). Respiratory burst: role in signal transduction

- in alveolar macrophages. *Journal of Toxicology and Environmental Health*. Part B, 9(1), 27–39. <https://doi.org/10.1080/15287390500196081>
- International Commission on Radiological Protection (ICRP). (1994). Human Respiratory Tract Model for Radiological Protection. ICRP Publication 66. *Annals of the ICRP*. 24:(1-3). https://journals.sagepub.com/doi/pdf/10.1177/ANIB_24_1-3
- International Labour Organization (ILO). (2019) Keselamatan dan Kesehatan Kerja di Tempat Kerja. Jakarta: International Labour Organization. https://webapps.ilo.org/static/english/osh/en/story_content/external_files/fs_st_1-ILO_5_en.pdf
- International Organisation for Standardization (ISO). (1995): ISO 7708:1995(E) Air quality—particle size fraction definitions for health-related sampling.
- Islam, M. S., Saha, S. C., Sauret, E., Gemci, T., Gu, Y. (2017). Pulmonary aerosol transport and deposition analysis in upper 17 generations of the human respiratory tract. *Journal of Aerosol Science*. 108:29-43.
- Ivanov, A., Strizhenok, V. (2017). Efficiency of dust suppression with aerosol guns–fogging machines with air-and-fluid jets. *Journal of Mining Sciences*. 53(1):176-180. <https://doi.org/10.1134/S1062739117011994>
- Izydorczyk, G., Mikula, K., Skrzypczak, D., Moustakas, K., Witek-Krowiak, A., dan Chojnacka, K. (2021). Potential environmental pollution from copper metallurgy and methods of management. *Environmental Research*, 197, 111050. <https://doi.org/10.1016/j.envres.2021.111050>
- Jenkins, G., Tortora, G. J. (2016): *Anatomy and Physiology*. Wiley.
- Jones, C. M., Pasricha, S. S., Heinze, S. B., MacDonald, S. (2020). Silicosis in artificial stone workers: Spectrum of radiological high-resolution CT chest findings. *Journal of Medical Imaging and Radiation Oncology*, 64(2):241-249. <https://doi.org/10.1111/1754-9485.13015>
- Kementerian Kesehatan RI (Kemenkes RI). (2014). Pedoman analisis risiko kesehatan lingkungan (ARKL). *Direktorat Jenderal PP dan PL Kementerian Kesehatan*. <https://perpustakaan.kemkes.go.id/nlslite3/opac/detail-opac?id=8151>
- Kim, H. R., Kim, B., Jo, B. S., Lee, J. W. (2018). Silica exposure and work-relatedness evaluation for occupational cancer in Korea. *Annals of Occupational and Environmental Medicine*, 30(1):4. <https://doi.org/10.1186/s40557-018-0216-1>
- Kurth, L., Laney, A. S., Blackley, D. J., Halldin, C. N. (2020). Prevalence of spirometry-defined airflow obstruction in never-smoking working US coal miners by pneumoconiosis status. *Occupational and Environmental Medicine*. 77(4):265–267. <https://doi.org/10.1136/oemed-2019-106213>
- Kusumarini, A. T., Tualeka, A. R., Martiana, T. (2023). Mengukur Risiko Kesehatan dengan Pendekatan dan Penilaian Risiko untuk Mengidentifikasi serta Mengelola Potensi Bahaya Kesehatan. *LANCAH: Jurnal Inovasi Dan Tren*. 1(2):239-245. <https://doi.org/10.35870/ljit.v1i2.2166>
- Leidel, N. A., Busch, K. A., Lynch, J. (1977). *Occupational exposure sampling strategy manual*. <https://www.cdc.gov/niosh/docket/archive/pdfs/NIOSH->

091/0091-010177-document.pdf

- Leung, C. C., Yu, I. T. S., Chen, W. (2012). Silicosis. *The Lancet*. 379(9830):2008-2018. [https://doi.org/10.1016/S0140-6736\(12\)60235-9](https://doi.org/10.1016/S0140-6736(12)60235-9)
- Li, H., Wang, J., Wang, P., Liu, J., Yuan, X., Han, H. (2022). Effect of the installation angle of nozzle on the atomizing performance of air-assisted spraying dust suppression device. *Atmosphere*. 13(4):520. <https://doi.org/10.3390/atmos13040520>
- Liu, G., Cooley, M. A., Jarnicki, A. G., Borghuis, T., Nair, P. M., Tjin, G, et al. (2019). Fibulin-1c regulates transforming growth factor- β activation in pulmonary tissue fibrosis. *JCI Insight*, 4(16). <https://insight.jci.org/articles/view/124529>
- Liu, J., Song, H. Y., Zhu, B. L., Pan, L. P., Qian, X. L. (2019). The effect of silica dust exposure on the serum clara cell protein 16 levels in chinese workers. *Biomedical and Environmental Science*. 32(1):47-50. <https://doi.org/10.3967/bes2019.007>
- Longhin, E., Holme, J. A., Gutzkow, K. B., Arlt, V. M., Kucab, J. E., Camatini, M., Gualtieri, M. (2013): Cell cycle alterations induced by urban PM2.5 in bronchial epithelial cells: characterization of the process and possible mechanisms involved. *Particle and Fibre Toxicology*. 10(1):63. <https://doi.org/10.1186/1743-8977-10-63>
- Ma, Q., Nie, W., Yang, S., Xu, C., Peng, H., Liu, Z., Guo, C., Cai, X. (2020). Effect of spraying on coal dust diffusion in a coal mine based on a numerical simulation, *Environmental Pollution*. 264:114717. <https://doi.org/10.1016/j.envpol.2020.114717>
- Margan, A., Verlak, D., Roj, G., Fikfak, M. D. (2022). Occupational exposure to silica dust in Slovenia is grossly underestimated. *Archives of Industrial Hygiene and Toxicology*, 73(4):297-302. <https://doi.org/10.2478/aiht-2022-73-3668>
- Marieb, E. N. (2012). *The Respiratory System* (10th ed.) Essentials of Human Anatomy and Physiology. Pearson Education Inc: San Francisco.
- Mensah, M. K., Mensah-Darkwa, K., Drebenstedt, C., Annam, B. V., Armah, E. K. (2020). Occupational respirable mine dust and diesel particulate matter hazard assessment in an underground gold mine in Ghana. *Journal of Health and Pollution*. 10(25):200305. <https://doi.org/10.5696/2156-9614-10.25.200305>
- Mihelcic, J. R., Zimmerman, J. B. (2012). *Chapter 6: Environmental Risk (2nd ed.)*. *Environmental Engineering: Fundamentals, Sustainability, Design*. Willey: United States.
- Miller, F. J., Asgharian, B., Schroeter, J. D., Price, O. (2016). Improvements and additions to the Multiple Path Particle Dosimetry model. *Journal of Aerosol Science*. 99:14-26.
- Moghadam, S. R., Khanjani, N., Mohamadyan, M., Emkani, M., Yari, S., Tizabi, M. N. L., Ganjali, A. (2020). Changes in spirometry indices and lung cancer mortality risk estimation in concrete workers exposed to crystalline silica. *Asian Pacific Journal of Cancer Prevention*, 21(9):2811-2817. <https://doi.org/10.31557/APJCP.2020.21.9.2811>

- Nahin, M., Nahian, S., Islam, M. Salam, A. (2022). Estimation and health risk assessment of respirable silica in the ambient particulate matter of Dhaka City. *Dhaka University Journal of Science*. 70(20):35-41. <https://doi.org/10.3329/dujs.v70i2.62604>
- National Institute for Occupational Safety and Health (NIOSH). (2002). *NIOSH Hazard Review: Health Effects of Occupational Exposure to Respirable Crystalline Silica*. U.S. Department of Health and Human Services. <https://www.cdc.gov/niosh/docs/2002-129/default.html>
- National Institute for Occupational Safety and Health (NIOSH). (1998). *NIOSH Manual of Analytical Methods 4th Edition – Method No. 0600: Particulates not otherwise regulated, respirable 0600*. <https://www.cdc.gov/niosh/docs/2003-154/pdfs/0600.pdf>
- National Institute for Occupational Safety and Health (NIOSH). (2003). *NIOSH Manual of Analytical Methods 4th Edition – Method No. 7500: Silica, Crystalline, by XRD (filter redeposition)*. <https://www.cdc.gov/niosh/docs/2003-154/pdfs/7500.pdf>
- Neophytou, A. M., Ferguson, J. M., Costello, S., Picciotto, S., Balmes, J. R., Koutros, S., Silverman, D. T., Eisen, E. A. (2024). Diesel exhaust and respiratory dust exposure in miners and chronic obstructive pulmonary disease (COPD) mortality in DEMS II. *Environment International*. 185: 108528. <https://doi.org/10.1016/j.envint.2024.108528>
- Normohammadi, M., Kakooei, H., Omidi, L., Yari, S., Alimi, R. (2016). Risk assessment of exposure to silica dust in building demolition sites. *Safety and Health at Work*. 7(3):251-255. <https://doi.org/10.1016/j.shaw.2015.12.006>
- Omidianidost, A., Ghasemkhani, M., Kakooei, H., Shahtaheri, S. J., Ghanbari, M. (2016). Risk assessment of occupational exposure to crystalline silica in small foundries in Pakdasht, Iran. *Iranian Journal of Public Health*. 45(1):70-75.
- Paluchamy, B., Mishra, D., Panigrahi, D. (2021). Airborne respirable dust in fully mechanised underground metalliferous mines e Generation, health impacts and control measures for cleaner production. *Journal of Cleaner Production*, 45:2291-2308. <https://doi.org/10.1016/j.jclepro.2021.126524>
- Parks, C. G., Conrad, K., Cooper, G. S. (1999). Occupational exposure to crystalline silica and autoimmune disease. *Environmental Health Perspectives*. 107(Suppl 5):793–802. <https://doi.org/10.1289/ehp.99107s5793>
- Pasaribu, G. C., Susanto, A. (2025). Dampak Pajanan Debu Batubara Bagi Kesehatan Pekerja Tambang Batubara: Tinjauan Literatur Sistematis. *Jurnal Kesehatan Tambusai*, 6(2):5832-5842. <https://doi.org/10.31004/jkt.v6i2.44193>
- Peixoto, M. S., de Oliveira Galvão, M. F., Batistuzzo de Medeiros, S. R. (2017). Cell death pathways of particulate matter toxicity. *Chemosphere*. 188:32-48. <https://doi.org/10.1016/j.chemosphere.2017.08.076>
- Perret, J. L., Plush, B., Lachapelle, P., Hinks, T. S. C., Walter, C., Clarke, P., Irving, L., Brady, P., Dharmage, S. C., Stewart, A. (2017): Coal mine dust lung disease in the modern era. *Respirology*, 22(4):662-670. <https://doi.org/10.1111/resp.13034>

- Priestly, B. (2012). *Australian Centre for Human and Health Risk Assessment: Environmental health risk assessment-guidelines for assessing human health risks from environmental hazards*. enHealth: Monash University.
- PT Freeport Indonesia (PTFI). (2023). *Hasil Pengukuran Debu di Pabrik Pengolahan Bijih*. Annual Report 2023.
- Putri, A. N., Marlia, A., Mar'ah, E. C. F., Suswoyo, F. I. H., Hanief, M. A., Firdaus, V. A. (2021). Review sistematik: identifikasi bahaya pajanan debu silika pada pekerja tambang. *CoMPHI Journal: Community Medicine and Public Health of Indonesia Journal*. 1(3):162-169. <https://doi.org/10.37148/comphijournal.v1i3.30>
- Putro, E. K., Kusnadi, S. N. F., Susanto, A., Zannah, M., Mahlisa, R., Manuel, A. A. Penilaian risiko pajanan debu silika terhadap pekerja di industri pengolahan bijih mineral. *Jurnal Kesehatan Vokasional*, 9(1):76-87. <https://doi.org/10.22146/jkesvo.87667>
- Raanan, R., Zack, O., Ruben, M., Perluk, I., Moshe, S. (2022). Occupational silica exposure and dose-response for related disorders—silicosis, pulmonary TB, aids and renal diseases: results of a 15-year Israeli surveillance. *International Journal of Environmental Research and Public Health*. 19(22):15010. <https://doi.org/10.3390/ijerph192215010>
- Rumchev, K., Van Hoang, D., Lee, A.H. (2023). Exposure to dust and respiratory health among Australian miners. *International Archive of Occupational and Environmental Health*. 96:355-363. <https://doi.org/10.1007/s00420-022-01922-z>
- Sairanen, M., Rinne, M. (2019). Dust emission from crushing of hard rock aggregates. *Atmospheric Pollution Research*. 10(2):656-664. <https://doi.org/10.1016/j.apr.2018.11.007>
- Sato, T., Shimosato, T., Klinman, D. M. (2018). Silicosis and lung cancer: current perspectives. *Lung Cancer*, 9: 91-101. <https://doi.org/10.2147/lctt.s156376>
- Saurabh, K., Chaulya, S., Singh, R., Kumar, S., Mishra, K. (2020). Intelligent dry fog dust suppression system: an efficient technique for controlling air pollution in the mineral processing plant. *Clean Technologies and Environmental Policy*. 24:1037-1051. <https://doi.org/10.1007/s10098-020-01991-z>
- Schlünssen, V., Mandrioli, D., Pega, F., Momen, N. C., Ádám, B., Chen, W., Cohen, R. A., Godderis, L., Göen, T., Hadkhale, K., Kunpuek, W., Lou, J., Mandic-Rajcevic, S., Masci, F., Nemery, B., Popa, M., Rajatanavin, N., Sgargi, D., Siriruttanapruk, S., Sun, X., Suphanchaimat, R., Thammawijaya, P., Ujita, Y., van der Mierden, S., Vangelova, K., Ye, M., Zungu, M., Scheepers, P. T. J. (2023). The prevalences and levels of occupational exposure to dusts and/or fibres (silica, asbestos and coal): A systematic review and meta-analysis from the WHO/ILO Joint Estimates of the Work-related Burden of Disease and Injury. *Environment International*, 78:107980. <https://doi.org/10.1016/j.envint.2023.107980>
- Sepadi, M. M., Chadyiwa, M., Nkosi, V. (2020). Platinum Mine Workers' Exposure to Dust Particles Emitted at Mine Waste Rock Crusher Plants in Limpopo, South Africa. *International Journal of Environmental Research and Public*

- Health*. 17(2):655. <https://doi.org/10.3390/ijerph17020655>
- Setyaningsih, Y., Wahyuni, I., Kurniawan, B., Ekawati, E. (2023). Konsentrasi Debu Lingkungan Kerja dan Kapasitas Kerja sebagai Determinan Penurunan Kapasitas Fungsi Paru. *Jurnal Kesehatan Lingkungan Indonesia*. 22(2):214-220. <https://doi.org/10.14710/jkli.22.2.214-220>
- Sharma, B. B., Mishra, D. K., Singh, T., Nargotra, N., Sharma, R. K., Gupta, P. (2020). Radiological manifestation of progressive massive fibrosis as a complication of silicosis-case report. *Nepalese Journal of Radiology*. 10(1):34-37. <https://doi.org/10.3126/njr.v10i1.29514>
- Shen, T., Sheng, L., Chen, Y., Cheng, L., Du, X. (2020). High incidence of radiation pneumonitis in lung cancer patients with chronic silicosis treated with radiotherapy, *Journal of Radiation Research*. 61(1):117-122. <https://doi.org/10.1093/jrr/rrz084>
- Sinaga, N. N., Hutagalung, P. (2020). Waspada Pneumokoniosis pada Pekerja di Industri Pertambangan. *Jurnal Kedokteran*. 8(1):935-945. <http://repository.uki.ac.id/1914/1/WASPADAPNEUMOKONIOSISPADAPEKERJA.pdf>
- Soemirat, J. (2013). *Analisis risiko kesehatan lingkungan*. UGM Press: Yogyakarta.
- Sofya, A., Novita, N. C., Afgani, M. W., Isnaini, M. (2024). Metode survey: explanatory survey dan cross sectional dalam penelitian kuantitatif. *Edu Society: Jurnal Pendidikan, Ilmu Sosial dan Pengabdian Kepada Masyarakat*. 4(3):1695-1708. <https://doi.org/10.56832/edu.v4i3.556>
- Sogl, M., Taeger, D., Pallapies, D., Brüning, T., Dufey, F., Schnelzer, M., Kreuzer, M. (2012). Quantitative relationship between silica exposure and lung cancer mortality in German uranium miners, 1946-2003. *British Journal of Cancer*. 107(7):1188-1194. <https://doi.org/10.1038/bjc.2012.374>
- Steenland, K., Goldsmith, D. F. (1995). Silica exposure and autoimmune diseases. *American Journal of Industrial Medicine*. 28(3):291-300. <https://doi.org/10.1002/ajim.4700280505>
- Susanto, A., Putro, E. K., Kusnadi, S. N. F., Santoso, D. R. M., Manuel, A. A. (2024a). Risk assessment of respirable dust exposure to workers in the mineral ore processing industry. *The Indonesian Journal of Occupational Safety and Health*, 13(1):109-115. <https://doi.org/10.20473/ijosh.v13i1.2024.109-115>
- Susanto, A., Kusnadi, N. F. K., Putro, E. K., Santoso, D. R. M., Manuel, A. A. (2024b). Tinjauan efisiensi pengendalian debu dengan dry fog system di industri pengolahan bijih mineral. *Jurnal Ilmu Lingkungan*, 22(3):712-719. <https://doi.org/10.14710/jil.22.3.712-719>
- Susanto, A., Yudhiantara, M. R., Kara, P., Putro, E. K., Manuel, A. A., Hidayah, N. (2025). Multiple Path Particulate Dosimetry Model Total Dust Among Mineral Ore Processing Workers. *Jurnal Media Kesehatan Masyarakat Indonesia*, 21(1):56-65. <https://doi.org/10.30597/mkmi.v21i1.42224>
- Swarjana, I. K. (2023). *Metodologi Penelitian Kesehatan: Edisi Terbaru*. Penerbit Andi: Yogyakarta.

- Warlanyo, A. S., Jiangfeng, L. (2021). Evaluating the environmental and economic impact of mining for post-mined land restoration and land-use: A review. *Journal of Environmental Management*, 279:111623. <https://doi.org/10.1016/j.jenvman.2020.111623>.
- Triyadi, D., Nurjazuli, Dangiran, H. (2016). Analisis risiko kesehatan akibat pajanan benzene melalui inhalasi pada petugas Stasiun Pengisian Bahan Bakar Umum (SPBU) di sekitar kawasan Universitas Diponegoro Semarang. *Jurnal Kesehatan Masyarakat*, 4(4):907-916. <https://doi.org/10.14710/jkm.v4i4.14386>
- United Nations Environment Programme International Labour Organization, World Health Organization. Crystalline Silica, Quartz. Report No. 24. Geneva, ILO, 2000.
- United States of Environmental Protection Agency (USEPA). (1989): *Risk Assessment Guidance for Superfund: Human health evaluation manual*. Washington: D.C.
- Valavanidis, A., Vlachogianni, T., Fiotakis, K., Loidas, S. (2013): Pulmonary oxidative stress, inflammation and cancer: respirable particulate matter, fibrous dusts and ozone as major causes of lung carcinogenesis through reactive oxygen species mechanisms. *International Journal of Environmental Research and Public Health*. 10(9):3886-3907. <https://doi.org/10.3390/ijerph10093886>
- Vanka, K. S., Shukla, S., Gomez, H. M., James, C., Palanisami, T., Williams, K., Chambers, D. C., Britton, W. J., Ilic, D., Hansbro, P. M., Horvat, J. C. (2022). Understanding the pathogenesis of occupational coal and silica dust-associated lung disease. *European Respiratory Review*, 31(165):210250. <https://doi.org/10.1183/16000617.0250-2021>
- Wang, D., Zhou, M., Liu, Y., Ma, J., Yang, M., Shi, T., Chen, W. (2020). Comparison of risk of silicosis in metal mines and pottery factories: a 44-year cohort study. *Chest*. 158(3):1050-1059. <https://doi.org/10.1016/j.chest.2020.03.054>
- Wijaya, I. P. E. K., Rai, I. B. N., Andrika, I. P. (2019). Hubungan antara pajanan debu silika dengan transforming growth factor- β 1 serum pada pekerja industri pengolahan batu. *Jurnal Penyakit Dalam Indonesia*, 6(2): 64. <https://doi.org/10.7454/jpdi.v6i2.311>
- Wippich, C., Koppisch, D., Pitzke, K., Breuer, D. (2021). Estimating nickel exposure in respirable dust from nickel in inhalable dust. *International Journal of Hygiene and Environmental Health*. 238:113838. <https://doi.org/10.1016/j.ijheh.2021.113838>
- Wood, C., Yates, D. (2020). Respiratory surveillance in mineral dust-exposed workers. *Breathe*. 16(1):190632. <https://doi.org/10.1183/20734735.0362-2019>
- World Health Organization (WHO). (2021): *WHO global air quality guidelines: particulate matter (PM_{2.5} and PM₁₀), ozone, nitrogen dioxide, sulfur dioxide and carbon monoxide*.
- Xie, Z., Huang, C., Zhao, Z., Xiao, Y. Zhao, Q., Lin, J. (2022). Review and prospect

the development of dust suppression technology and influencing factors for blasting construction. *Tunnelling, and Underground Space Technology*. 125:104532. <https://doi.org/10.1016/j.tust.2022.104532>

Zhang Y., Shi, T., Wang, A., Huang Q. (2022). Air pollution, health shocks, and labor mobility. *International Journal of Environmental Research and Public Health*. 19(3):1382. <https://doi.org/10.3390/ijerph19031382>

Zilaout, H., Houba, R., Kromhout, H. (2020). Temporal trends in respirable dust and respirable quartz concentrations within the European industrial minerals sector over a 15-year period (2002– 2016). *Occupational & Environmental Medicine*. 77(4):268-275. <https://doi.org/10.1136/oemed-2019-106074corr1>