

DAFTAR PUSTAKA

- [1] K. Sugimoto, H. Kurashiki, Y. Xu, M. Takemi, and K. Amano, "Electroencephalographic biomarkers of relaxation: A systematic review and meta-analysis," *bioRxiv*, preprint, Mar. 28, 2024. [Online]. Available: <https://doi.org/10.1101/2024.03.27.586444>
- [2] T. Ikeda, P. Sripian, Y. Nakagawa, C. Feng, T. Tazawa, S. Sakai, and M. Sugaya, "Study on the psychological states of olfactory stimuli using electroencephalography and heart rate variability," *Sensors*, vol. 23, no. 8, art. 4026, pp. 1–15, 2023. [Online]. Available: <https://www.mdpi.com/1424-8220/23/8/4026>
- [3] J. Her and M.-K. Cho, "Effect of aromatherapy on sleep quality of adults and elderly people: A systematic literature review and meta-analysis," *Complement. Ther. Med.*, vol. 60, art. 102739, pp. 1–12, 2021. [Online]. Available: <https://doi.org/10.1016/j.ctim.2021.102739>
- [4] M. E. Reven, E. J. Bowles, K. Ablard, M. Peppers-Citizen, A. May-Fitzgerald, D. Joswiak, and B. Unger, "Essential criteria for reporting of aromatherapy-focused research in humans: An international Delphi consensus study protocol," *PLoS One*, vol. 20, no. 3, e0318379, Mar. 2025. [Online]. Available: <https://doi.org/10.1371/journal.pone.0318379>
- [5] K. H. Park, H. J. Kim, B. Oh, M. Seo, E. Lee, and J. Ha, "Evaluation of human electroencephalogram change for sensory effects of fragrance," *Skin Res. Technol.*, vol. 25, no. 4, pp. 526–531, Jul. 2019. [Online]. Available: <https://doi.org/10.1111/srt.12682>
- [6] Y. Zhang, F. Li, J. Wang, Y. Gao, Y. Liu, and J. Qin, "Applied principles of EEG/iEEG analysis methods in neuroscience: Requirements and challenges," *Military Med. Res.*, vol. 10, no. 1, art. 11, pp. 1–15, Jan. 2023. [Online]. Available: <https://doi.org/10.1186/s40779-023-00502-7>
- [7] H.-L. Wei, Y. Guo, F. He, and Y. Zhao, "EEG signal processing techniques and applications—2nd edition," *Sensors*, vol. 25, no. 3, art. 805, pp. 1–8, Jan. 2025. [Online]. Available: <https://doi.org/10.3390/s25030805>
- [8] A. Chaddad, Y. Wu, R. Kateb, and A. Bouridane, "Electroencephalography signal processing: A comprehensive review and analysis of methods and techniques," *Front. Neurosci.*, vol. 17, art. 1178650, pp. 1–20, 2023. [Online]. Available: <https://www.mdpi.com/1424-8220/23/14/6434>
- [9] N. S. Amer and S. B. Belhaouari, "EEG signal processing for medical diagnosis, healthcare, and monitoring: A comprehensive review," *IEEE Access*, vol. 11, pp. 51123–51142, 2023. [Online]. Available: <https://ieeexplore.ieee.org/document/10353995>

- [10] A. J. Casson, “Wearable EEG and beyond,” *Biomed. Eng. Lett.*, vol. 9, no. 1, pp. 53–71, Jan. 2019. [Online]. Available: <https://doi.org/10.1007/s13534-018-00093-6>
- [11] S. E. Brennan, S. McDonald, M. Murano, and J. E. McKenzie, “Effectiveness of aromatherapy for prevention or treatment of disease, medical or preclinical conditions, and injury: protocol for a systematic review and meta-analysis,” *Syst. Rev.*, vol. 11, no. 148, pp. 1–18, 2022, doi: [10.1186/s13643-022-02015-1](https://doi.org/10.1186/s13643-022-02015-1)
- [12] A. J. Farrar and F. C. Farrar, “Clinical aromatherapy,” *Nurs. Clin. North Am.*, vol. 55, no. 4, pp. 489–504, Dec. 2020. [Online]. Available: <https://pubmed.ncbi.nlm.nih.gov/33131627/>
- [13] Grand View Research, “Aromatherapy Market Size & Share – Industry Report, 2030,” *Grand View Research*, 2024. [Online]. Available: <https://www.grandviewresearch.com/industry-analysis/aromatherapy-market>
- [14] B. Ali et al., “Essential oils used in aromatherapy: A systemic review,” *Asian Pac. J. Trop. Biomed.*, vol. 5, no. 8, pp. 589–598, Jul. 2015. [Online]. Available: <https://www.sciencedirect.com/science/article/pii/S2221169115001033>
- [15] C. Sun and C. Mou, “Survey on the research direction of EEG-based signal processing,” *Frontiers in Neuroscience*, vol. 17, art. 1203059, 2023. [Online]. Available: <https://doi.org/10.3389/fnins.2023.1203059>
- [16] A. Delorme and S. Makeig, “EEGLAB: an open-source toolbox for analysis of single-trial EEG dynamics including independent component analysis,” *J. Neurosci. Methods*, vol. 134, no. 1, pp. 9–21, Mar. 2004. [Online]. Available: <https://doi.org/10.1016/j.jneumeth.2003.10.009>
- [17] BrainVision Analyzer, Version 2.x [Software]. Gilching, Germany: Brain Products GmbH, 2024. Available: <https://brainproducts.com/solutions/analyzer/>
- [18] R. Maskeliūnas, R. Damasevicius, I. Martisius, and M. Vasiljevas, “Consumer-grade EEG devices: are they usable for control tasks?,” *PeerJ*, vol. 4, p. e1746, Mar. 2016. [Online]. Available: <https://doi.org/10.7717/peerj.1746>
- [19] A. Gramfort, M. Luessi, E. Larson, D. A. Engemann, D. Strohmeier, C. Brodbeck, R. Goj, M. Jas, T. Brooks, L. Parkkonen, dan M. S. Hämäläinen, “MEG and EEG data analysis with MNE-Python,” *Frontiers in Neuroscience*, vol. 7, art. 267, pp. 1–13, 2013. [Online]. Available: <https://doi.org/10.3389/fnins.2013.00267>
- [20] Y. Renard, F. Lotte, G. Gibert, M. Congedo, E. Maby, V. Delannoy, O. Bertrand, dan A. Lécuyer, “OpenViBE: An Open-Source Software Platform to Design, Test, and Use Brain-Computer Interfaces in Real and Virtual Environments,” *Presence: Teleoperators & Virtual Environments*, vol. 19, no. 1, pp. 35–53, Feb. 2010.

- [21] S. Herculano-Houzel, “The human brain in numbers: a linearly scaled-up primate brain,” *Front. Hum. Neurosci.*, vol. 3, art. 31, pp. 1–11, Nov. 2009, doi: 10.3389/neuro.09.031.2009
- [22] OpenStax, *Anatomy & Physiology 2e*, “12.4 The Action Potential,” Rice Univ., Jun. 29, 2022. [Online]. Available: <https://openstax.org/books/anatomy-and-physiology-2e/pages/12-4-the-action-potential>
- [23] R. Richer, J. Zenkner, A. Küderle, N. Rohleder, and B. M. Eskofier, “Vagus activation by Cold Face Test reduces acute psychosocial stress responses,” *Sci. Rep.*, vol. 12, no. 19270, pp. 1–12, 2022. [Online]. Available: <https://doi.org/10.1038/s41598-022-23222-9>
- [24] M. Naji, G. P. Krishnan, E. A. McDevitt, M. Bazhenov, and S. C. Mednick, “Coupling of autonomic and central events during sleep benefits declarative memory consolidation,” *Neurobiol. Learn. Mem.*, vol. 157, pp. 139–150, 2019, doi: 10.1016/j.nlm.2018.12.008.
- [25] A. T. Duda, A. R. Clarke, R. J. Barry, dan F. M. De Blasio, “Mindfulness meditation is associated with global EEG spectral changes in theta, alpha and beta amplitudes,” *Int. J. Psychophysiol.*, vol. 206, p. 112465, 2024. [Online]. Available: <https://doi.org/10.1016/j.ijpsycho.2024.112465>
- [26] C. Leaf, R. P. Turner, C. S. Wasserman, R. M. Paulson, N. Kopooshian, G. Z. Lynch, and A. M. G. Leaf, “Psycho-neuro-biological correlates of beta activity,” *NeuroRegulation*, vol. 10, no. 1, pp. 11–20, Mar. 2023, doi: 10.15540/nr.10.1.11.
- [27] T. Kirschstein and R. Köhling, “What is the source of the EEG?,” *Clin. EEG Neurosci.*, vol. 40, no. 3, pp. 146–149, Jul. 2009. [Online]. Available: <https://doi.org/10.1177/155005940904000305>
- [28] T. M. Artinis, “What is the 10-20 system for EEG?,” *Artinis Medical Systems Blog*, Jan. 24, 2025. [Online]. Available: <https://www.tmsi.artinis.com/blog/the-10-20-system-for-eeeg>. [Accessed: Jun. 18, 2025].
- [29] *MedLink Neurology*, “Technical aspects of EEG,” Minimum sampling rates, cited Jun. 2025. [Online]. Available: *MedLink Neurology* article on EEG technical aspects.
- [30] Y. Cao, A. Rexilius, A. T. Aydore, et al., “Knowledge-guided EEG representation learning,” *arXiv*, Mar. 2024. [Online]. Available: <https://arxiv.org/abs/2403.03222>
- [31] R. Katmah, F. Al-Shargie, U. Tariq, F. Babiloni, F. Al-Mughairbi, dan H. Al-Nashash, “A Review on Mental Stress Assessment Methods Using EEG Signals,” *Sensors*, vol. 21, no. 15, art. 5043, Jul. 2021. [Online]. Available: <https://doi.org/10.3390/s21155043>
- [32] H. Bârzan, A.-M. Ichim, V. V. Moca, and R. C. Mureșan, “Time-frequency representations of brain oscillations: Which one is better?,” *Front. Neuroinform.*, vol. 16, art. 871904, pp. 1–14, Apr. 2022, doi: [10.3389/fninf.2022.871904](https://doi.org/10.3389/fninf.2022.871904)

- [33] “Physiology, Olfactory”, *StatPearls*, 2023. [Online]. Available: <https://www.ncbi.nlm.nih.gov/books/NBK542239/>. [Accessed: Jun. 18, 2025].
- [34] E. Aqrabawi and J. Kim, “Structures like the anterior olfactory nucleus and amygdala receive direct OB projections, participating in olfactory memory representations and emotional learning, respectively,” *Neurogenesis Dynamics in the Olfactory Bulb*, Neural Regeneration Research, Jun. 2025. [Online]. Available: https://www.lww.com/nrronline/fulltext/2025/06000/neurogenesis_dynamics_in_the_olfactory_bulb_4.aspx. [Accessed: Jun. 2025].
- [35] Z.-J. Wang and T. Heinbockel, “Essential oils and their constituents targeting the GABAergic system and sodium channels as treatment of neurological diseases,” *Molecules*, vol. 23, no. 5, art. 1061, May 2018. [Online]. Available: <https://doi.org/10.3390/molecules23051061>
- [36] C. A. R. A. Costa et al., “The GABAergic system contributes to the anxiolytic-like effect of essential oil from *Cymbopogon citratus* (lemongrass),” *J. Ethnopharmacol.*, vol. 137, no. 2, pp. 828–836, 2011. [Online]. Available: <https://doi.org/10.1016/j.jep.2011.07.003>
- [37] Y. Zhang, F. Li, J. Wang, Y. Gao, Y. Liu, and J. Qin, “Applied principles of EEG/iEEG analysis methods in neuroscience: requirements and challenges,” *Mil. Med. Res.*, vol. 10, no. 1, art. 11, pp. 1–15, Jan. 2023. [Online]. Available: <https://doi.org/10.1186/s40779-023-00502-7>
- [38] P. D. Welch, “The use of fast Fourier transform for the estimation of power spectra: a method based on time averaging over short, modified periodograms,” *IEEE Trans. Audio Electroacoust.*, vol. AU-15, no. 2, pp. 70–73, Jun. 1967. [Online]. Available: <https://doi.org/10.1109/TAU.1967.1161901>
- [39] A. Pant, A. Kumar, C. Verma, and Z. Illés, “Comparative exploration on EEG signal filtering using window control methods,” *Results Control Optim.*, vol. 17, p. 100485, Oct. 2024. [Online]. Available: <https://doi.org/10.1016/j.rico.2024.100485>
- [40] S. Sowndhararajan, S. Kim, E. Y. Kim, dan S. H. Kim, “Influence of Fragrances on Human Psychophysiological Activity,” *Sci. Pharm.*, vol. 84, no. 4, p. 724, 2024. [Online]. Available: <https://doi.org/10.3390/scipharm840400724>.
- [41] M. Shania, T. Raharjo, dan A. N. Fitriani, “Implementation User-Centered Design in Agile Software Development: Systematic Literature Review,” *Indonesian J. Multidisciplinary Sci.*, vol. 2, no. 7, pp. 2812–2824, Apr. 2023. [Online]. Available: <https://ijoms.internationaljournalabs.com/index.php/ijoms/article/view/504>

- [42] R. Katmah, F. Al-Shargie, U. Tariq, F. Babiloni, F. Al-Mughairbi, and H. Al-Nashash, "A review on mental stress assessment methods using EEG signals," *Sensors*, vol. 21, no. 15, art. 5043, pp. 1–18, Jul. 2021. [Online]. Available: <https://doi.org/10.3390/s21155043>
- [43] M. W. P. Dananjaya, G. H. Prathama, dan K. Darmaastawan, "User-Centered Design Approach in Developing UI/UX of Sculptify Mobile Application," *J. Comput. Netw. Archit. High Perform. Comput.*, vol. 6, no. 3, pp. 1089–1097, Jul. 2024. [Online]. Available: <https://doi.org/10.47709/cnapc.v6i3.4206>
- [44] S. Gordon, J. Crager, C. Howry, A. I. Barsdorf, J. Cohen, M. Crescioni, B. Dahya, P. Delong, C. Knaus, D. S. Reasner, S. Vallow, K. Zarzar, dan S. Eremenco, "Best Practice Recommendations: User Acceptance Testing for Systems Designed to Collect Clinical Outcome Assessment Data Electronically," *Therapeutic Innovation & Regulatory Science*, vol. 56, no. 3, hlm. 442–453, Mar. 2022. [Online]. Tersedia: <https://link.springer.com/article/10.1007/s43441-021-00363-z>
- [45] B. Raufi dan L. Longo, "An Evaluation of the EEG Alpha-to-Theta and Theta-to-Alpha Band Ratios as Indexes of Mental Workload," *Frontiers in Neuroinformatics*, vol. 16, p. 861967, 2022. [Online]. Tersedia: <https://www.frontiersin.org/articles/10.3389/fninf.2022.861967/full>
- [46] M. E. Khan dan F. Khan, "A Comparative Study of White Box, Black Box and Grey Box Testing Techniques," *International Journal of Advanced Computer Science and Applications*, vol. 3, no. 6, hlm. 12–15, Jun. 2012. [Online]. Tersedia: <https://thesai.org/Downloads/Volume3No6/Paper%203-A%20Comparative%20Study%20of%20White%20Box%2C%20Black%20Box%20and%20Grey%20Box%20Testing%20Techniques.pdf>
- [47] A. Hyvärinen and E. Oja, "Independent component analysis: Algorithms and applications," *Neural Networks*, vol. 13, no. 4–5, pp. 411–430, 2000. [Online]. Available: [https://doi.org/10.1016/S0893-6080\(00\)00026-5](https://doi.org/10.1016/S0893-6080(00)00026-5)
- [48] H. Zhang, Q. Zhou, H. Chen, X.-Q. Hu, W.-G. Li, Y. Bai, et al., "The applied principles of EEG analysis methods in neuroscience and clinical neurology," *Military Medical Research*, vol. 10, Art. no. 67, Des. 2023. [Online]. Available: <https://doi.org/10.1186/s40779-023-00502-7>
- [49] Z. Muralidharan et al., "Seizure prediction in EEG signals using STFT and domain adaptation with autoencoder," *Frontiers in Neuroscience*, vol. 15, 2021. [Online]. Available: <https://doi.org/10.3389/fnins.2021.825434>