

DAFTAR PUSTAKA

- Agilent. (2021). *The Basics of UV-Vis Spectrophotometry*. United State of America: Agilent Community.
- Ahmadinejad, F., Møller, S. G., Chaleshtori, M. H., Bidkhor, G., & Jami, M. S. (2017). Molecular Mechanisms behind Free Radical Scavengers Function against Oxidative Stress. *Antioxidant*, 1-15.
- Albarakaty, F. M., Alzaban, M. I., Alharbi, N. K., Bagrwan, F. S., El-Aziz, A. R., & Mahmoud, M. A. (2023). Zinc oxide Nanoparticles, Biosynthesis, characterization and their potent photocatalytic degradation, and antioxidant activities. *Journal of King Saud University – Science*.
- Al-Bataineh, Q. M., Telfah, M., Ahmad, A. A., Alsaad, A. M., Qattan, I. A., Baaziz, H., . . . Telfah, A. (2020). Synthesis, Crystallography, Microstructure, Crystal Defects, Optical and Optoelectronic Properties of ZnO:CeO₂ Mixed Oxide Thin Films. *Photonics*, 7, 112.
- Alfarisa, S., Rifai, D. A., & Toruan, P. L. (2018). Studi Difraksi Sinar-X Struktur Nano Seng Oksida (ZnO). *Risalah Fisika*, 53-57.
- Anggraheni, D., Isnaeni, & Sugihartono, I. (2020). PENGARUH VARIASI PH TERHADAP SIFAT OPTIK ZNO NANOPARTIKEL DARI HASIL BIOSINTESIS. *Prosiding Seminar Nasional Fisika (E-Journal) SNF2020*, 9(12): 1-4.
- Banerjee, S., Saikia, J. P., Kumar, A., & Konwar, B. K. (2010). Antioxidant activity and haemolysis prevention efficiency of polyaniline nanofibers. *Nanotechnology*, 5-6.
- Batterjee, M. G., Nabi, A., Kamli, M. R., Alzahrani, K. A., Danish, E. Y., & Malik, M. A. (2022). Green Hydrothermal Synthesis of Zinc Oxide Nanoparticles for UV-Light-Induced Photocatalytic Degradation of Ciprofloxacin Antibiotic in an Aqueous Environment. *Catalysts*, 1-17.
- Bayan, P. D., Purwanti, L., & Syafnir, L. (2019). Perbandingan Aktivitas Antioksidan dari Ekstrak Etanol Ampas Teh Hitam dan Teh Hijau (*Camellia Sinensis (L.) Kuntze*) dengan Metode DPPH Serta Penentuan Kadar Polifenol. *Prosiding Farmasi*, Volume 5, No.2, e-ISSN: 2460-6472, 321-327.
- Bhalla, N., Ingle, N., Jayaprakash, A., Patel, H., Patri, S. V., & Haranath, D. (2023). Green approach to synthesize nano zinc oxide via *Moringa oleifera* leaves for enhanced anti-oxidant, anti-acne and anti-bacterial properties for health

- & wellness applications. *Arabian Journal of Chemistry*, Volume 16, 104506, 1-13.
- Budiawan, W., Syabba, A., Abdullah, M., & Khairurrijal. (2006). LUMINESCENCE NANOPARTIKEL EMISI CAHAYA TAMPAK SEBAGAI TINTA PENGAMAN. *Jurnal Sains Materi Indonesia*, 180-182.
- Bunaciu, A. A., Udristioui, E. G., & Aboul-Enein, H. Y. (2015). X-Ray Diffraction: Instrumentation and Applications. *Taylor and Francis Group*, 289-298.
- Chan, Y. Y., Pang, Y. L., Lim, S., & Chong, W. C. (2021). Facile green synthesis of ZnO nanoparticles using natural-based materials: Properties, mechanism, surface modification and application. *Journal of Environmental Chemical Engineering*, 1-22.
- Chauhan, J., Mehto, V. R., & Malviya, N. (2018). Synthesis of ZnO Nanoparticles Using Different pH Values. *Nano Trends: A Journal of Nanotechnology and Its Applications Volume 2, Issue 1, ISSN: 0973-418X*.
- Choudhary, O. P., & Priyanka. (2017). Scanning Electron Microscope: Advantages and Disadvantages in Imaging Components. *Int.J.Curr.Microbiol.App.Sci*, 6(5): 1877 - 1882.
- Dangana, R. S., George, R. C., & Aboola, F. K. (2023). The biosynthesis of zinc oxide nanoparticles using aqueous leaf extracts of *Cnidoscolus aconitifolius* and their biological activities. *GREEN CHEMISTRY LETTERS AND REVIEWS*, VOL. 16, NO. 1, 2169591.
- Doyan, A., & Humaini. (2017). Sifat Optik Lapisan Tipis ZnO. *Jurnal Pendidikan Fisika dan Teknologi*, 34.
- Elumalai, K., Velmurugan, S., Ravi, S., Kathivaran, V., & Ashokkumar, S. (2015). Green synthesis of zinc oxide nanoparticles using *Moringa oleifera* leaf extract and evaluation of its antimicrobial activity. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 158-164.
- Fagier, M. A. (2021). Plant-Mediated Biosynthesis and Photocatalysis Activities of Zinc Oxide Nanoparticles: A Prospect towards Dyes Mineralization. *Journal of Nanotechnology*, 1-15.
- Fajar, Wrasiati, L. P., & Suhendra, L. (2018). KANDUNGAN SENYAWA FLAVONOID DAN AKTIVITAS ANTIOKSIDAN EKSTRAK TEH HIJAU PADA PERLAKUAN SUHU AWAL DAN LAMA PENYEDUHAN. *Jurnal Rekayasa dan Manajemen Agroindustri*, 196-202.

- Fan, Z., & Lu, J. G. (2005). Zinc Oxide Nanostructures: Synthesis and Properties. *Journal of Nanoscience and Nanotechnology*, 1-13.
- Fernandez, J. V., Moreno, D. D., Puican, A. N., & Oropeza, M. V. (2022). Green Method, Optical and Structural Characterization of ZnO Nanoparticles Synthesized Using Leaves Extract of *M. oleifera*. *Journal of Renewable Materials*, 834-844.
- Fitriana, W. D., Ersam, T., Shimizu, K., & Fatmawati, S. (2016). Antioxidant Activity of *Moringa oleifera* Extracts. *Indones. J. Chem.*, 16(3): 297-301.
- Gherbi, B., Laouini, S. E., Meneceur, S., Bouafia, A., Hemmami, H., Tedjani, M. L., . . . Meena, F. (2022). Effect of pH Value on the Bandgap Energy and Particles Size for Biosynthesis of ZnO Nanoparticles: Efficiency for Photocatalytic Adsorption of Methyl Orange. *Sustainability*, 1-14.
- Guerrero-Pérez, M. O., & Patience, G. S. (2019). Experimental methods in chemical engineering: Fourier transform infrared spectroscopy—FTIR. *The Canadian Journal of Chemical Engineering*, 25-32.
- Handoko, E., Soegijono, B., & Tama, F. R. (2008). *Teknik Difraksi Sinar-X dalam Analisis Struktur Kristal*. Jakarta: Universitas Negeri Jakarta.
- Hayat, J., Akodad, M., Moumen, A., Baghour, M., Skalli, A., Ezrari, S., & Belmalha, S. (2020). Phytochemical screening, polyphenols, flavonoids and tannin content, antioxidant activities and FTIR characterization of *Marrubium vulgare* L. from 2 different localities of Northeast of Morocco. *Heliyon*, Vol. 6, e05609.
- Hazim, K., Khudair, Z. F., Kadhim, I. K., Mohamed, L., Hameed, G. F., & Alyasiri, F. J. (2022). Biosynthesis, Antibacterial Activity, The Photocatalytic Performance of ZNO NPS by use of Leaf Extract of the Plant *Primo Fiore*. *Pakistan Journal Of Medical & Health Sciences*, 456-459.
- Huang, W., Wang, Y., Tian, W., Cui, X., Tu, P., Li, J., . . . Liu, X. (2022). Biosynthesis Investigations of Terpenoid, Alkaloid, and Flavonoid Antimicrobial Agents Derived from Medicinal Plants. *Antibiotics*, 11(1380): 1-32.
- Iqbal, J., Jan, T., Ul-Hassan, S., Ahmed, I., Mansoor, Q., Ali, M. U., . . . Ismail, M. (2015). Facile synthesis of Zn doped CuO hierarchical nanostructures: Structural, optical and antibacterial properties. *AIP Advances*, Vol. 5, 127112.

- Imade, E. E., Ajiboye, T. O., Fadiji, A. E., Onwudiwe, D. C., & Babalola, O. O. (2022). Green synthesis of zinc oxide nanoparticles using plantain peel extracts and the evaluation of their antibacterial activity. *Scientific African*, 1-9.
- Jamaluddin, K. (2010, Desember 10). *X-RD (X-Ray Diffractions)*. Kendari: FAKULTAS KEGURUAN DEN ILMU PENDIDIKAN UNIVERSITAS HALUOLEO. Diambil kembali dari E-Campus FKIP: http://e-campus.fkip.unja.ac.id/eskripsi/data/swf/skripsi_mhs/cover0200006175.pdf
- Julianto, T. S. (2019). *Fitokimia: Tinjauan Metabolit Sekunder dan Skrining Fitokimia*. Yogyakarta: Universitas Islam Indonesia.
- Karam, S. T., & Abdulrahman, A. F. (2022). Green Synthesis and Characterization of ZnO Nanoparticles by Using Thyme Plant Leaf Extract. *Photonics*, 1-20.
- Koutu, V., Shastri, L., & Malik, M. (2016). Effect of NaOH concentration on optical properties of zinc oxide nanoparticles. *Material Science-Poland*, 34(4): 819-827.
- Kulkarni, S. S. (2015). Optical and Structural Properties of Zinc Oxide Nanoparticles. *International Journal of Advanced Research in Physical Science (IJARPS)*, 14-18.
- Kumar, B., Smita, K., Cambal, L., & Debut, A. (2016). Green Approach for Fabrication and Applications of Zinc Oxide Nanoparticles. *Hindawi*, 1-6.
- Lalhminghlui, K., & Jagetia, G. C. (2018). Evaluation of the free-radical scavenging and antioxidant activities of Chilauni, Schima wallichii Korth in vitro. *Future Science*, 4(2): 1-12.
- Lestari, V. P., Abrar, & Fathona, I. W. (2019). SINTESIS NANOSTRUKTUR ZnO DENGAN METODE HIDROTERMAL UNTUK APLIKASI SENSOR GAS BUTANA. *e-Proceeding of Engineering*, 6(2): 5375 - 5379.
- Liang, N., & Kitts, D. D. (2014). Antioxidant Property of Coffee Components: Assessment of Methods that Define Mechanisms of Action . *Molecules*, 19180 - 19201.
- Maduu, A., Basuki, C. A., Irmansyah, & Pramudito, S. (2006). STRUKTUR DAN SIFAT OPTIK FILM ZnO HASIL DEPOSISI DENGAN TEKNIK SPIN-COATING MELALUI PROSES SOL-GEL. *Jurnal Sains Materi Indonesia*, 85-90.
- Mahendiran, D., Subash, G., Selvan, D. A., Rehana, D., Kumar, R. S., & Rahiman, A. K. (2017). Biosynthesis of Zinc Oxide Nanoparticles Using Plant

- Extracts of *Aloe vera* and *Hibiscus sabdariffa*: Phytochemical, Antibacterial, Antioxidant and Anti-proliferative Studies. *BioNanoSci*, 10.
- Mahmood, N. B., Saeed, F. R., Gbashi, K. R., & Mahmood, U. S. (2022). Synthesis and characterization of zinc oxide nanoparticles via oxalate co-precipitation method. *Materials Letters: X*, 10(13): 2-3.
- Matinisea, N., Fukua, X., Kaviyarasua, K., Mayadewa, N., & Maaza, M. (2017). ZnO nanoparticles via *Moringa oleifera* green synthesis: Physical properties & mechanism of formation. *Elsevier: Applied Surface Science*, 339-347.
- Meigaria, K. M., Mudianta, I. W., & Martiningsih, N. W. (2016). SKRINING FITOKIMIA DAN UJI AKTIVITAS ANTIOKSIDAN EKSTRAK ASETON DAUN KELOR (*MORINGA OLEIFERA*). *Jurnal Wahana Matematika dan Sains*, 10(2): 2-10.
- Mohamed, M. A., Jaafar, J., Ismail, A. F., Othman, M. H., & Rahman, M. A. (2017). Fourier Transform Infrared (FTIR) Spectroscopy. *Membrane Characterization*.
- Morkoc, H., & Özgür, Ü. (2009). *Zinc Oxide: Fundamentals, Materials and Device Technology*. Weinheim: WILEY-VCH Verlag GmbH & Co. KgaA.
- Mubarok, F. (2021). Spektrofotometer Prinsip dan Cara Kerjanya. *Repository Unimus*, 1-2.
- Mulyani, S., Ardiningsih, P., & Jayuska, A. (2016). AKTIVITAS ANTIOKSIDAN DAN ANTIBAKTERI EKSTRAK DAUN MENTAWA (*Artocarpus anisophyllus*). *JURNAL KIMIA KHATULISTIWA*, 5(1): 36-43.
- Naseer, M., Aslam, U., Khalid, B., & Chen, B. (2020). Green route to synthesize Zinc Oxide Nanoparticles using leaf extracts of *Cassia fistula* and *Melia azadarach* and their antibacterial potential. *Scientific Reports*, 1-8.
- Neamah, S. A., Albukhaty, S., Falih, I. Q., Dewir, Y. H., & Mahood, H. B. (2023). Biosynthesis of Zinc Oxide Nanoparticles Using *Capparis spinosa L.* Fruit Extract: Characterization, Biocompatibility, and Antioxidant Activity. *Applied Sciences*, Volume 13, Nomor 6604, 1-14.
- Ngom, I., Ndiaye, N. M., Fall, A., Bakayoko, M., Ngom, B. D., & Maaza, M. (2020). On the Use of *Moringa Oleifera* Leaves Extract for the Biosynthesis of NiO and ZnO Nanoparticles . *Material Research Society*, 2-11.
- Ngom, I., Ngom, B. D., Sackey, J., & Khamlich, S. (2020). Biosynthesis of zinc oxide nanoparticles using extracts of *Moringa Oleifera*: Structural & optical properties. *Materials Today: Proceedings*, 2-8.

- Noman, M. T., Petru, M., Militký, J., Azeem, M., & Ashraf, M. A. (2020). One-Pot Sonochemical Synthesis of ZnO Nanoparticles for Photocatalytic Applications, Modelling and Optimization. *Materials*, 13(14): 6.
- Nurbayasari, R., Saridewi, N., & Shofwatunnnisa. (2017). Biosintesis dan Karakterisasi Nanopartikel ZnO dengan Ekstrak Rumput Laut Hijau Caulerpa sp. *Jurnal Perikanan Universitas Gadjah Mada*, 17-28.
- Nurlina, Y., & Syahbanu, I. (2020). Sintesis Nanopartikel Zink Oksida (ZnO) dengan Penambahan Ekstrak Klorofil dari Daun Suji sebagai sumber Capping Agent. *POSITRON*, 123-130.
- Olimpiani, I., & Astuti. (2016). Efek Doping Senyawa Alkali Terhadap Celah Pita Energi Nanopartikel ZnO. *Jurnal Fisika Unand*, 116.
- Omidi, M., Fatehinya, A., Farahani, M., Akbari, Z., Shahmoradi, S., Yazdian, F., . . . Vashee, D. (2017). Characterization of biomaterials. *Biomaterials of Oral and Dental Tissue Engineering*, 97-115.
- Pal, S., Mondal, S., Maity, J., & Mukherjee, R. (2018). Synthesis and Characterization of ZnO Nanoparticles using *Moringa Oleifera* Leaf Extract: Investigation of Photocatalytic and Antibacterial Activity. *Int. J. Nanosci. Nanotechnol*, 111-119.
- Putra, I. W., Dharmayudha, A. A., & Sudimartini, L. M. (2016). Identifikasi Senyawa Kimia Ekstrak Etanol Daun Kelor (*Moringa oleifera* L) di Bali. *Indonesia Medicus Veterinus*, 5(5): 466 - 467.
- Rajeshkumar, S., Kumar, S. V., Ramaiah, A., Agarwal, H., Lakshmi, T., & Roopan, S. M. (2018). Biosynthesis of zinc oxide nanoparticles using *Mangifera indica* leaves and evaluation of their antioxidant and cytotoxic properties in lung cancer (A549) cells. *Enzyme and Microbial Technology*, 91 - 95.
- Ravbar, M., Kuncic, A., Matoh, L., Mozina, S. S., Sala, M., & Suligoj, A. (2022). Controlled growth of ZnO nanoparticles using ethanolic root extract of *Japanese knotweed*: photocatalytic and antimicrobial properties†. *Royal Society of Chemistry*, 31235-312345.
- Rayerfrancis, A., Bhargav, P. B., Ahmed, N., Chandra, B., & Dhara, S. (2015). Effect of pH on the morphology of ZnO nanostructures and its influence on structural and optical properties. *Physica B*, 457, 96-102.
- Reddy, S. B., & Mandal, B. K. (2017). Facile green synthesis of zinc oxide nanoparticles by *Eucalyptus globulus* and their photocatalytic and antioxidant activity. *Advanced Powder Technology*, 11-12.

- Redha, A. (2010). Flavonoid: Struktur, Sifat Antioksidatif Dan Peranannya Dalam Sistem Biologis. *Jurusan Teknologi Pertanian Politeknik Negeri Pontianak*, 9(2): 196-202.
- Rhamdiyah, F. K., & Maharani, D. K. (2022). Biosynthesis of ZnO Nanoparticles from Aqueous Extract of *Moringa Oleifera L.*: Its Application as Antibacterial and Photocatalyst. *Indonesian Journal of Chemical Science*, 92-102.
- Rizkayanti, Wahid, A., Diah, M., & Jura, M. R. (2017). UJI AKTIVITAS ANTIOKSIDAN EKSTRAK AIR DAN EKSTRAK ETANOL DAUN KELOR (*Moringa Oleifera LAM*). *Jurnal Akademika Kimia*, 125-131.
- Saputra, A., Arfi, F., & Yulian, M. (2020). LITERATURE REVIEW: ANALISIS FITOKIMIA DAN MANFAAT EKSTRAK DAUN KELOR (*Moringa oleifera*). *AMINA*, 2(3): 114-118.
- Sari, R. N., Chasanah, E., & Nurhayati. (2018). NANOPARTIKEL SENG OKSIDA (ZnO) DARI BIOSINTESIS EKSTRAK RUMPUT LAUT COKLAT *Sargassum sp.* DAN *Padina sp.* *JPB Kelautan dan Perikanan*, Vol. 13, No. 1, 41-60.
- Setyaningsih, D., Pandji, C., & Perwatasari, D. D. (2014). KAJIAN AKTIVITAS ANTIOKSIDAN DAN ANTIMIKROBA FRAKSI DAN EKSTRAK DARI DAUN DAN RANTING JARAK PAGAR (*Jatropha curcas L.*) SERTA PEMANFAATANNYA PADA PRODUK PERSONAL HYGIENE. *AGRITECH*, Vol. 34, No. 2, 126-136.
- Sharmila, G., Thirumarimurugan, M., & Muthukumaran, C. (2019). Green synthesis of ZnO nanoparticles using *Tecoma castanifolia* leaf extract: Characterization and evaluation of its antioxidant, bactericidal and anticancer activities. *Microchemical Journal*, Volume 145, 578-587.
- Sitompul, E. L., & Sutringih. (2017). UJI AKTIVITAS ANTIOKSIDAN EKSTRAK DAUN SIRSAK (*Annona muricata L.*) DENGAN METODE 2,2-difenil-1-pikrilhidrazil (DPPH) DAN UJI STABILITAS FORMULASI SEDIAAN KRIM. *INDONESIA NATURAL RESEARCH PHARMACEUTICAL JOURNAL*, Vol 2, No 2, e-ISSN; 2502-8421, 1-12.
- Situmeang, D., Ilham, Ibrahim, A. M., Amin, F., Mahardika, M., Bialangi, N., & Musa, W. J. (2022). AKTIVITAS ANTIOKSIDAN DAN ANTIBAKTERI DARI EKSTRAK METANOL KULIT BATANG KESAMBI . *JURNAL KIMIA*, 16(1): 53-59.

- Sivasankarapillai, V. S., Krishnamoorthy, N., Eldesoky, G. E., Wabaidur, S. M., Islam, M. A., Dhanusuraman, R., & Ponnusamy, V. K. (2022). One-pot green synthesis of ZnO nanoparticles using *Scoparia Dulcis* plant extract for antimicrobial and antioxidant activities. *Applied Nanoscience*, 1-11.
- Sugihartono, I. (2019). *FISIKA DAN TEKNOLOGI SEMIKONDUKTOR*. Jakarta: Lembaga Penelitian dan Pengabdian kepada Masyarakat Universitas Negeri Jakarta (LPPM UNJ).
- Sugihartono, I., Purwanto, N., Mekarsari, D., Isnaeni, Diantoro, M., Fahdiran, R., . . . Susila, B. A. (2023). Influence of Co incorporation on morphological, structural, and optical properties of ZnO nanorods synthesized by chemical bath deposition. *Advances in Materials Research*, Vol. 12, No. 3.
- Sujatno, A., Salam, R., Bandriyana, & Dimyati, A. (2015). STUDI SCANNING ELECTRON MICROSCOPY (SEM) UNTUK KARAKTERISASI PROSES OXIDASI PADUAN ZIRKONIUM. *Jurnal Forum Nuklir (JFN)*, 9(2): 44-50.
- Sun, L., Zhang, J., Lu, X., Zhang, L., & Zhang, Y. (2011). Evaluation to the antioxidant activity of total flavonoids extract from persimmon (*Diospyros kaki* L.) leaves. *Food and Chemical Toxicology*, 49: 2693.
- Surono, A. T., & Sutanto, H. (2014). SIFAT OPTIK Zinc Oxide (ZnO) YANG DIDEPOSISI DI ATAS SUBSTRAT KACA MENGGUNAKAN METODE CHEMICAL SOLUTION DEPOSITION (CSD) DAN APLIKASINYA UNTUK DEGRADASI ZAT WARNA METHYLENE BLUE. *Youngster Physics Journal*, 7-14.
- Suresh, D., Nethravathi, P. C., Udayabhanu, Rajanaika, H., Nagabhushana, H., & Sharma, S. C. (2015). Green synthesis of multifunctional zinc oxide (ZnO) nanoparticles using *Cassia fistula* plant extract and their photodegradative, atnioxidant, and antibacterial activities. *Materials Science in Semiconductor Processing*, Volume 31, 446-454.
- Susanty, Ridnugrah, N. A., Chaeruddin, A., & Yudistirani, S. A. (2019). Aktivitas Antioksidan Ekstrak Daun Kelor (*Moringa oleifera*) Sebagai Zat Tambahan Pembuatan Moisturizer. *Seminar Nasional dan Teknologi* , 4-7.
- Sutanto, H., & Wibowo, S. (2015). *Semikonduktor Fotokatalis Seng Oksida dan Titania (Sintesis, Deposisi dan Aplikasi)* . Semarang: Penerbit Telescope.
- Tettey, C. O., & Shin, H. M. (2019). Evaluation of the antioxidant and cytotoxic activities of zinc oxide nanoparticles synthesized using *scutellaria baicalensis* root. *Scientific African*, 1-6.

- Trikasjono, T., Marjanto, D., & Timorti, B. (2009). ANALISIS KESELAMATAN PESAWAT SINAR-X DI INSTALASI RADIOLOGI RUMAH SAKIT UMUM DAERAH SLEMAN YOGYAKARTA . *Prosiding Seminar Nasional Sains dan Teknologi Nuklir*, 279.
- Umar, H., Kavaz, D., & Rizaner, N. (2019). Biosynthesis of zinc oxide nanoparticles using *Albizia lebbeck* stem bark, and evaluation of its antimicrobial, antioxidant, and cytotoxic activities on human breast cancer cell lines. *International Journal of Nanomedicine*, 88-96.
- Vaseem, M., Umar, A., & Han, Y. B. (2010). ZnO Nanoparticles: Growth, Properties, and Applications. *Metal Oxide Nanostructures and Their Applications*, 1-36.
- Verma, R., Pathak, S., Srivastava, A. K., Prawer, S., & Hanic, S. T. (2021). ZnO nanomaterials: Green synthesis, toxicity evaluation and new insights in biomedical applications. *Journal of Alloys and Compounds* , 1-20.
- Vernon-Parry, K. D. (2000). Scanning Electron Microscopy: an introduction. *Centre for Electric Materials*, 40-44.
- Wang, Y., Yang, C., Liu, Y., Fan, Y., Dang, F., Qiu, Y., . . . Liu, Y. (2021). Solvothermal Synthesis of ZnO Nanoparticles for Photocatalytic Degradation of Methyl Orange and p-Nitrophenol. *Water*, 4.
- Widowati, I., Efiyati, S., & Wahyuningtyas, S. (2014). UJI AKTIVITAS ANTIBAKTERI EKSTRAK DAUN KELOR (MORINGA OLEIFERA) TERHADAP BAKTERI PEMBUSUK IKAN SEGAR (PSEUDONAS AERUGINOSA). *PELITA*, 9(1): 146-152.
- Wirunchit, S., Gansa, P., & Koetniyom, W. (2021). Synthesis of ZnO nanoparticles by Ball-milling process for biological applications. *Materials Today: Proceedings*, 47(12): 2-6.
- Wu, Y. L., Tok, A. I., Boey, F. Y., Zeng, X. T., & Zhang, X. H. (2007). Surface modification of ZnO nanocrystals. *Applied Surface Science*, 253: 5437-5479.