

DAFTAR PUSTAKA

- Bayda, S. *et al.* (2020) 'The history of nanoscience and nanotechnology: From chemical-physical applications to nanomedicine', *Molecules*, 25(1). Available at: <https://doi.org/10.3390/molecules25010112>.
- Boakye-Yiadom, K.O. *et al.* (2019) 'Carbon dots: Applications in bioimaging and theranostics', *International Journal of Pharmaceutics*, 564, pp. 308–317. Available at: <https://doi.org/10.1016/J.IJPHARM.2019.04.055>.
- Cardoso, J. *et al.* (2015) 'Contrasting strategies to cope with drought conditions by two tropical forage c4grasses', *Aob Plants*, 7, p. plv107. Available at: <https://doi.org/10.1093/aobpla/plv107>.
- Carloni, P. *et al.* (1993) 'On the use of 1,3-diphenylisobenzofuran (DPBF). Reactions with carbon and oxygen centered radicals in model and natural systems', *Research on Chemical Intermediates*, 19(5), pp. 395–405. Available at: <https://doi.org/10.1163/156856793X00181>.
- Casas, A. *et al.* (2011) 'Mechanisms of Resistance to Photodynamic Therapy', *Current Medicinal Chemistry*, 18(16), pp. 2486–2515. Available at: <https://doi.org/10.2174/092986711795843272>.
- Chan, K.K., Yap, S.H.K. and Yong, K.-T. (2018) 'Biogreen Synthesis of Carbon Dots for Biotechnology and Nanomedicine Applications', *Nano-Micro Letters*, 10(4), p. 72. Available at: <https://doi.org/10.1007/s40820-018-0223-3>.
- Dadang, S. (2021) 'KARAKTERISTIK, PRODUKTIVITAS DAN PEMANFAATAN RUMPUT GAJAH HIBRIDA(*Pennisetum Purpureum* cvThailand) SEBAGAI HIJAUAN PAKAN TERNAK', *Maduranch Jurnal Ilmu Peternakan*, 6(1), p. 37. Available at: <https://doi.org/10.53712/maduranch.v6i1.1071>.
- Danquah, J., Roberts, C. and Appiah, M. (2018) 'Elephant grass (*pennisetum purpureum*): a potential source of biomass for power generation in ghana', *Current Journal of Applied Science and Technology*, 30(6), pp. 1–12. Available at: <https://doi.org/10.9734/cjast/2018/45224>.
- Dougherty, T.J. *et al.* (1998) 'Photodynamic Therapy', *Jnci Journal of the National Cancer Institute*, 90(12), pp. 889–905. Available at: <https://doi.org/10.1093/jnci/90.12.889>.
- El-Shafey, A.M. (2021) 'Carbon dots: Discovery, structure, fluorescent properties, and applications', *Green Processing and Synthesis*, 10(1), pp. 134–156. Available at: <https://doi.org/10.1515/gps-2021-0006>.
- Esemoto, N.N. *et al.* (2016) 'Bacteriochlorin Dyads as Solvent Polarity Dependent Near-Infrared Fluorophores and Reactive Oxygen Species Photosensitizers', *Organic Letters*, 18(18), pp. 4590–4593. Available at: <https://doi.org/10.1021/acs.orglett.6b02237>.
- Etefa, H.F., Tessema, A.A. and Dejene, F.B. (2024) 'Carbon dots for future prospects: Synthesis, characterizations and recent applications: A review (2019–2023)', *Preprints*. Available at: <https://doi.org/10.20944/preprints202404.0245.v1>.

- Fernando, K.A.S. *et al.* (2015) 'Carbon Quantum Dots and Applications in Photocatalytic Energy Conversion', *Acs Applied Materials & Interfaces*, 7(16), pp. 8363–8376. Available at: <https://doi.org/10.1021/acsami.5b00448>.
- Gao, N. *et al.* (2019) 'Application of Carbon Dots in Dye-sensitized Solar Cells: A Review', *Journal of Applied Polymer Science*, 137(10). Available at: <https://doi.org/10.1002/app.48443>.
- Heraini, D.H. *et al.* (2022) 'PERTUMBUHAN DAN PRODUKTIVITAS RUMPUT GAJAH ODOT (*Pennisetum Purpureum* Cv. Mott) YANG DIBERI PUPUK KOTORAN PUYUH', *Agrinimal Jurnal Ilmu Ternak Dan Tanaman*, 10(2), pp. 59–64. Available at: <https://doi.org/10.30598/ajitt.2022.10.2.59-64>.
- Ilyas, M.S. b., Nugroho, T. and Sunyigono, A.K. (2022) 'Manajemen Pakan Ternak Sapi Madura Di Desa Dempo Barat Kecamatan Pasean Kabupaten Pamekasan', *Agriscience*, 3(2), pp. 255–268. Available at: <https://doi.org/10.21107/agriscience.v3i2.15507>.
- Isnaeni, I. *et al.* (2020) 'Role of Surface States on Luminescence Shift of Caramelised Sugar Carbon Dots for Color Conversion Emitting Devices', *Advances in Natural Sciences Nanoscience and Nanotechnology*, 11(1), p. 015003. Available at: <https://doi.org/10.1088/2043-6254/ab628e>.
- Kang, C. *et al.* (2020) 'A review of carbon dots produced from biomass wastes', *Nanomaterials (Basel)*, 10(11), p. 2316. Available at: <https://doi.org/10.3390/nano10112316>.
- Karagianni, A. *et al.* (2023) 'Application of Carbon-Based Quantum Dots in Photodynamic Therapy', *Carbon*, 203, pp. 273–310. Available at: <https://doi.org/10.1016/j.carbon.2022.11.026>.
- Li, H. *et al.* (2023) 'Amide (n, π^*) transitions enabled clusteroluminescence in solid-state carbon dots', *Advanced Functional Materials*, 33(37), p. 2302862.
- Li, Q. *et al.* (2020) 'Sulphur-doped carbon dots as a highly efficient nano-photodynamic agent against oral squamous cell carcinoma', *Cell Proliferation*, 53(4). Available at: <https://doi.org/10.1111/cpr.12786>.
- Li, S. *et al.* (2015) 'Blood compatibility evaluations of fluorescent carbon dots', *ACS Appl. Mater. Interfaces*, 7(34), pp. 19153–19162. Available at: <https://doi.org/10.1021/acsami.5b04866>.
- Li, W. *et al.* (2018) 'Enhanced Biological Photosynthetic Efficiency Using Light-Harvesting Engineering With Dual-Emissive Carbon Dots', *Advanced Functional Materials*, 28(44). Available at: <https://doi.org/10.1002/adfm.201804004>.
- Lin, H. *et al.* (2018) 'Detection of nitrite based on fluorescent carbon dots by the hydrothermal method with folic acid', *R. Soc. Open Sci.*, 5(5), p. 172149. Available at: <https://doi.org/10.1098/rsos.172149>.
- Liu, Z. *et al.* (2023) 'Blue, Yellow, and Red Carbon Dots from Aromatic Precursors for Light-Emitting Diodes', *Molecules*, 28(7), p. 2957. Available at: <https://doi.org/10.3390/molecules28072957>.

- Malavika, J.P. *et al.* (2022) 'Green synthesis of multifunctional carbon quantum dots: An approach in cancer theranostics', *Biomaterials Advances*, 136, pp. 212756–212756. Available at: <https://doi.org/10.1016/J.BIOADV.2022.212756>.
- Mancini, F. *et al.* (2023) 'Fluorescent Carbon Dots from Food Industry By-Products for Cell Imaging', *Journal of Functional Biomaterials*, 14(2), p. 90. Available at: <https://doi.org/10.3390/jfb14020090>.
- Molaei, M.J. (2019) 'Carbon quantum dots and their biomedical and therapeutic applications: A review', *RSC Advances*, 9(12), pp. 6460–6481. Available at: <https://doi.org/10.1039/c8ra08088g>.
- Nainggolan, R. (2022) 'Penerapan Teknologi Tepat Guna Mesin Pencacah Serbaguna Untuk Peternak Kambing Di Dusun II Sei Nagalawan Serdang Bedagai', *Jurnal Pengabdian Masyarakat Indonesia*, 2(2), pp. 175–180. Available at: <https://doi.org/10.52436/1.jpmi.492>.
- National Cancer Institute (2023) 'Types of Cancer Treatment'. Available at: <https://www.cancer.gov/about-cancer/treatment/types>.
- Nocito, G. *et al.* (2021) 'Carbon dots as promising tools for cancer diagnosis and therapy', *Cancers*, 13(9). Available at: <https://doi.org/10.3390/cancers13091991>.
- Otsuki, J. (2018) 'Supramolecular approach towards light-harvesting materials based on porphyrins and chlorophylls', *Journal of Materials Chemistry A*, 6(16), pp. 6710–6753. Available at: <https://doi.org/10.1039/C7TA11274B>.
- Ozyurt, D. *et al.* (2023) 'Properties, synthesis, and applications of carbon dots: A review', *Carbon Trends*, 12, p. 100276. Available at: <https://doi.org/10.1016/j.cartre.2023.100276>.
- Pal, D. (2023) 'Detection of Reactive Oxygen Species during Photodynamic Therapy', *Journal of Student Research*, 12(1). Available at: <https://doi.org/10.47611/jsrhs.v12i1.4153>.
- Papaioannou, N. *et al.* (2018) 'Structure and solvents effects on the optical properties of sugar-derived carbon nanodots', *Sci. Rep.*, 8(1), p. 6559. Available at: <https://doi.org/10.1038/s41598-018-25012-8>.
- Pinto, T. da S. *et al.* (2023) 'Carbon dots prepared by different bottom-up methods: a study on optical properties and the application as nanoprobe for metal ions detection', *Fullerenes, Nanotubes and Carbon Nanostructures*, 31(7), pp. 641–651.
- Putra, B. *et al.* (2022) 'The role of arbuscular mycorrhizal fungi in phytoremediation of heavy metals and their effect on the growth of *pennisetum purpureum* cv. mott on gold mine tailings in muara bungo, jambi, indonesia', *Biodiversitas Journal of Biological Diversity*, 23(1). Available at: <https://doi.org/10.13057/biodiv/d230151>.
- Qisthon, A. (2022) 'Penyuluhan Manajemen Pemeliharaan Kambing Perah Dan Penanaman Rumput Unggul Sebagai Pakan Di Kecamatan Sukoharjo', *JPPF*, 1(2), p. 249. Available at: <https://doi.org/10.23960/jppf.v1i2.6220>.
- Qureshi, W.A. *et al.* (2021) 'Antimicrobial Activity and Characterization of Pomegranate Peel-Based Carbon Dots', *Journal of Nanomaterials*, 2021, pp. 1–6. Available at: <https://doi.org/10.1155/2021/9096838>.

- Rahim, E.A. *et al.* (2021) 'Pemanfaatan Selulosa Dari Rumput Gajah (*Pennisetum Purpureum*) Pada Sintesis Karboksimetil Selulosa (CMC)', *Kovalen Jurnal Riset Kimia*, 7(2), pp. 146–153. Available at: <https://doi.org/10.22487/kovalen.2021.v7.i2.14227>.
- Rahmi, C.N. (2023) 'Karbon Dots (C-Dots) Dari Bahan Hayati Untuk Deteksi Logam Berat', *Alchemy Jurnal Penelitian Kimia*, 19(2), p. 234. Available at: <https://doi.org/10.20961/alchemy.19.2.61881.234-246>.
- Rossi, B.L. *et al.* (2022) 'Carbon quantum dots: An environmentally friendly and valued approach to sludge disposal', *Frontiers in Chemistry*, 10. Available at: <https://doi.org/10.3389/fchem.2022.858323>.
- Roy, K. *et al.* (2020) 'Chlorophyll(a)/Carbon Quantum Dot Bio-Nanocomposite Activated Nano-Structured Silicon as an Efficient Photocathode for Photoelectrochemical Water Splitting', *Acs Applied Materials & Interfaces*, 12(33), pp. 37218–37226. Available at: <https://doi.org/10.1021/acsami.0c10279>.
- Sahu, S. *et al.* (2012) 'Simple one-step synthesis of highly luminescent carbon dots from orange juice: application as excellent bio-imaging agents', *Chem. Commun. (Camb.)*, 48(70), pp. 8835–8837. Available at: <https://doi.org/10.1039/c2cc33796g>.
- Sajjad, F. *et al.* (2021) 'The improvement of biocompatibility by incorporating porphyrins into carbon dots with photodynamic effects and ph sensitivities', *Journal of Biomaterials Applications*, 36(8), pp. 1378–1389. Available at: <https://doi.org/10.1177/08853282211050449>.
- Scholl, A. *et al.* (2015) 'Ethanol production from sugars obtained during enzymatic hydrolysis of elephant grass (*pennisetum purpureum*, schum.) pretreated by steam explosion', *Bioresource Technology*, 192, pp. 228–237. Available at: <https://doi.org/10.1016/j.biortech.2015.05.065>.
- Setiadji, S. *et al.* (2019) 'Pemanfaatan Rumput Gajah Sebagai Sumber Silika Untuk Sintesis Zeolit T', *Al-Kimiya*, 4(2), pp. 51–60. Available at: <https://doi.org/10.15575/ak.v4i2.5085>.
- Sharma, S.K. and Hamblin, M.R. (2021) 'The Use of Fluorescent Probes to Detect ROS in Photodynamic Therapy', in J. Espada (ed.) *Reactive Oxygen Species: Methods and Protocols*. New York, NY: Springer US, pp. 215–229. Available at: https://doi.org/10.1007/978-1-0716-0896-8_17.
- Siegel, R.L. *et al.* (2022) 'Cancer statistics, 2022', *CA: A Cancer Journal for Clinicians*, 72(1), pp. 7–33. Available at: <https://doi.org/10.3322/CAAC.21708>.
- Singh, V.D. *et al.* (2019) 'Photosensitization Ability of 1,7-Phenanthroline Based Bis-BODIPYs: Perplexing Role of Intramolecular Rotation on Photophysical Properties', *The Journal of Physical Chemistry C*, 123(50), pp. 30623–30632. Available at: <https://doi.org/10.1021/acs.jpcc.9b09721>.
- Sun, Y. *et al.* (2006) 'Quantum-Sized Carbon Dots for Bright and Colorful Photoluminescence', *Journal of the American Chemical Society*, 128(24), pp. 7756–7757. Available at: <https://doi.org/10.1021/ja062677d>.
- Suzuki, K. (2023) 'Enhancing fluorescent nanocomposites: Strategies for interaction and interface modification of carbon dots with metal oxides', *J.*

- Ceram. Soc. Japan*, 131(9), pp. 515–521. Available at: <https://doi.org/10.2109/jcersj2.23088>.
- Wang, X. *et al.* (2019) ‘A Mini Review on Carbon Quantum Dots: Preparation, Properties, and Electrocatalytic Application’, *Frontiers in Chemistry*, 7. Available at: <https://doi.org/10.3389/fchem.2019.00671>.
- Wang, X. *et al.* (2021) ‘Chlorin e6-1,3-diphenylisobenzofuran polymer hybrid nanoparticles for singlet oxygen-detection photodynamic ablation’, *Methods and Applications in Fluorescence*, 9(2), p. 025003. Available at: <https://doi.org/10.1088/2050-6120/abe219>.
- Wang, Zixi, Wang, Zihao and Wu, F. (2022) ‘Carbon Dots as Drug Delivery Vehicles for Antimicrobial Applications: A Minireview’, *Chemmedchem*, 17(13). Available at: <https://doi.org/10.1002/cmdc.202200003>.
- Wen, Y. *et al.* (2019) ‘Pheophytin derived near-infrared-light responsive carbon dot assembly as a new phototheranotic agent for bioimaging and photodynamic therapy’, *Chemistry – An Asian Journal*, 14(12), pp. 2162–2168. Available at: <https://doi.org/10.1002/asia.201900416>.
- Wu, Y. *et al.* (2021) ‘Carbon quantum dots derived from different carbon sources for antibacterial applications’, *Antibiotics (Basel)*, 10(6), p. 623. Available at: <https://doi.org/10.3390/antibiotics10060623>.
- Xu, J. *et al.* (2014) ‘Carbon Dots as a Luminescence Sensor for Ultrasensitive Detection of Phosphate and Their Bioimaging Properties’, *Luminescence*, 30(4), pp. 411–415. Available at: <https://doi.org/10.1002/bio.2752>.
- Xu, J. *et al.* (2015) ‘Carbon dots as a luminescence sensor for ultrasensitive detection of phosphate and their bioimaging properties’, *Luminescence*, 30(4), pp. 411–415. Available at: <https://doi.org/10.1002/bio.2752>.
- Xu, Q. *et al.* (2014) ‘Preparation of highly photoluminescent sulfur-doped carbon dots for Fe(III) detection’, *Journal of Materials Chemistry A*, 3(2), pp. 542–546. Available at: <https://doi.org/10.1039/C4TA05483K>.
- Yang, Y. *et al.* (2022) ‘Carbon dots derived from tea polyphenols as photosensitizers for photodynamic therapy’, *Molecules*, 27(23), p. 8627. Available at: <https://doi.org/10.3390/molecules27238627>.
- Yang, Z. *et al.* (2014) ‘Nitrogen-doped, carbon-rich, highly photoluminescent carbon dots from ammonium citrate’, *Nanoscale*, 6(3), pp. 1890–1895. Available at: <https://doi.org/10.1039/c3nr05380f>.
- Yang, Z.-C. *et al.* (2011) ‘Intrinsically fluorescent carbon dots with tunable emission derived from hydrothermal treatment of glucose in the presence of monopotassium phosphate’, *Chem. Commun. (Camb.)*, 47(42), pp. 11615–11617. Available at: <https://doi.org/10.1039/c1cc14860e>.
- Zhou, X., Shi, T. and Zhou, H. (2012) ‘Hydrothermal preparation of ZnO-reduced graphene oxide hybrid with high performance in photocatalytic degradation’, *Applied Surface Science*, 258(17), pp. 6204–6211. Available at: <https://doi.org/10.1016/j.apsusc.2012.02.131>.