

DAFTAR PUSTAKA

- Ahmed, S.N. (2015) *Physics and Engineering of Radiation Detection*. Second. Waltham, USA: Elsevier Inc.
- Alzahrani, J.S., Nazrin, S.N., Eke, C., Kebaili, I., Al-Buriahi, M.S. and Joesry Syaiwan, A.S. (2022) 'Effect of strontium oxide on radiation shielding features and elastic properties on zinc borotellurite glass system', *Radiation Physics and Chemistry*, 199(March), p. 110304. Available at: <https://doi.org/10.1016/j.radphyschem.2022.110304>.
- Assirey, E.A.R. (2019) 'Perovskite synthesis, properties and their related biochemical and industrial application', *Saudi Pharmaceutical Journal*, 27(6), pp. 817–829. Available at: <https://doi.org/10.1016/j.jsps.2019.05.003>.
- Bao, X., Wang, Y., Zhu, Q., Wang, N., Zhu, D., Wang, J., Yang, A. and Yang, R. (2015) 'Efficient planar perovskite solar cells with large fill factor and excellent stability', *Journal of Power Sources*, 297, pp. 53–58. Available at: <https://doi.org/10.1016/j.jpowsour.2015.07.081>.
- Budiawan, M.A., Suryani, S., Abdullah, B. and Tahir, D. (2019) 'Analysis of Absorption Properties of a Composite FlyAsh and Fe₂O₃ for X-ray Radiation Shielding Applications', *IOP Conference Series: Materials Science and Engineering*, 593. Available at: <https://doi.org/10.1088/1757-899X/593/1/012014>.
- BurrueI-Ibarra, S.E., Salas-Juarez, C.J., Gil-Tolano, M.I., Ramos-Velazquez, J.P., Soria-Hernandez, J.I., Garcia-Haro, A.R., Alvarado-Ibarra, J., Brown-Bojorquez, F., Moreno-Corral, R. and Melendrez, R. (2023) 'Thermoluminescence radiation dosimetry in Sonoran zeolite exposed to beta particle irradiation', *Radiation Physics and Chemistry*, 203(PA), p. 110631. Available at: <https://doi.org/10.1016/j.radphyschem.2022.110631>.
- Chen, Y., Zhang, L., Zhang, Y., Gao, H. and Yan, H. (2018) 'Large-area perovskite solar cells – a review of recent progress and issues', *RSC Advances*, 8(19), pp. 10489–10508. Available at: <https://doi.org/10.1039/C8RA00384J>.
- Gürel Özdemir, H., Kaçal, M.R., Akman, F., Polat, H. and Agar, O. (2023) 'Investigation of gamma radiation shielding characteristics of bismuth reinforced ternary composites in wide photon energy region', *Radiation Physics and Chemistry*, 208(March). Available at: <https://doi.org/10.1016/j.radphyschem.2023.110924>.
- Hannachi, E., Sayyed, M.I., Slimani, Y. and Elsafi, M. (2023) 'Structural, optical and radiation shielding peculiarities of strontium titanate ceramics mixed with tungsten nanowires: An experimental study', *Optical Materials*, 135(December 2022), p. 113317. Available at: <https://doi.org/10.1016/j.optmat.2022.113317>.

- Hashimoto, S. and Sato, T. (2019) 'Estimation method of systematic uncertainties in Monte Carlo particle transport simulation based on analysis of variance', *Journal of Nuclear Science and Technology*, 56(4), pp. 345–354. Available at: <https://doi.org/10.1080/00223131.2019.1585989>.
- Ikram, M., Malik, R., Raees, R., Imran, M., Wang, F., Ali, S., Khan, M., Khan, Q. and Maqbool, M. (2022) 'Recent advancements and future insight of lead-free non-toxic perovskite solar cells for sustainable and clean energy production: A review', *Sustainable Energy Technologies and Assessments*, 53(PA), p. 102433. Available at: <https://doi.org/10.1016/j.seta.2022.102433>.
- Kepala Badan Pengawas Tenaga Nuklir Republik Indonesia (2013) *Peraturan Kepala Badan Pengawas Tenaga Nuklir Nomor 4 Tahun 2013 tentang Proteksi dan Keselamatan Radiasi dalam Pemanfaatan Tenaga Nuklir*. Indonesia.
- Krane, K.S. (1988) *Introductory Nuclear Physics*. United States of America: John Wiley & Sons, Inc.
- Li, L., Baig, M.I., de Vos, W.M. and Lindhoud, S. (2023) 'Preparation of Sodium Carboxymethyl Cellulose-Chitosan Complex Membranes through Sustainable Aqueous Phase Separation', *ACS Applied Polymer Materials*, 5(3), pp. 1810–1818. Available at: <https://doi.org/10.1021/acsapm.2c01901>.
- Martin, A., Harbison, S., Beach, K. and Cole, P. (2012) *An Introduction to Radiation Protection*. sixth. Edited by J. Wright. London, UK: Hodder Arnold.
- Martin, B.R. (2009) *Nuclear and Particle Physics: An Introduction*. Second. John Wiley & Sons, Ltd.
- Meyerhof, W.E. (1967) *Elements of Nuclear Physics*. Edited by E.U. Condon. USA: McGraw-Hill Book Company.
- Morsi, M.A., Asnag, G.M., Rajeh, A. and Awwad, N.S. (2021) 'Nd:YAG nanosecond laser induced growth of Au nanoparticles within CMC/PVA matrix: Multifunctional nanocomposites with tunable optical and electrical properties', *Composites Communications*, 24(January), p. 100662. Available at: <https://doi.org/10.1016/j.coco.2021.100662>.
- Musolino, S. V. (2002) 'Radionuclide and Radiation Protection Data Handbook', *Health Physics*. 2nd edn, 83(1), p. 136. Available at: <https://doi.org/10.1097/00004032-200207000-00019>.
- Nag Bhargavi, G. and Khare, A. (2015) 'Luminescence studies of perovskite structured titanates: A review', *Optics and Spectroscopy*, 118(6), pp. 902–917. Available at: <https://doi.org/10.1134/S0030400X15060156>.
- Nurhasmi, Tahir, D., Abdullah, B., Ansar, A., Ilyas, S., Mutmainna, I. and Madda,

- W.I. (2019) 'Geopolimer Concrete for Radiation Shielding Application', *Materials Science Forum*, 966(December 2018), pp. 41–47. Available at: <https://doi.org/10.4028/www.scientific.net/MSF.966.41>.
- Orelma, H., Teerinen, T., Johansson, L.-S., Holappa, S. and Laine, J. (2012) 'CMC-Modified Cellulose Biointerface for Antibody Conjugation', *Biomacromolecules*, 13(4), pp. 1051–1058. Available at: <https://doi.org/10.1021/bm201771m>.
- Pettignano, A., Charlot, A. and Fleury, E. (2019) 'Carboxyl-functionalized derivatives of carboxymethyl cellulose: towards advanced biomedical applications', *Polymer Reviews*, 59(3), pp. 510–560. Available at: <https://doi.org/10.1080/15583724.2019.1579226>.
- Presiden Republik Indonesia (1997) *Undang-Undang Republik Indonesia Nomor 10 Tahun 1997 tentang Ketenaganukliran*. Indonesia.
- Presiden Republik Indonesia (2007) *Peraturan Pemerintah Republik Indonesia Nomor 33 Tahun 2007 tentang Keselematan Radiasi Pengion dan Keamanan Sumber Radioaktif*. Indonesia.
- Rahman, M.S., Hasan, M.S., Nitai, A.S., Nam, S., Karmakar, A.K., Ahsan, M.S., Shiddiky, M.J.A. and Ahmed, M.B. (2021) 'Recent Developments of Carboxymethyl Cellulose', *Polymers*, 13(8), p. 1345. Available at: <https://doi.org/10.3390/polym13081345>.
- Rauf, N., Darmawan, Z.T., Ilyas, S., Heryanto, H., Fahri, A.N., Rahmat, R., Abdullah, B. and Tahir, D. (2021) 'Effect of Fe₃O₄ in enhancement optical and gamma ray absorption properties of geopolymer apron cassava starch/black carbon/glycerin', *Optical Materials*, 113(December 2020), p. 110887. Available at: <https://doi.org/10.1016/j.optmat.2021.110887>.
- Sato, T., Niita, K., Iwamoto, Y., Hashimoto, S., Ogawa, T., Furuta, T., Abe, S.I., Kai, Takeshi, Matsuda, N., Okumura, K., Kai, Tetsuya, Iwase, H. and Sihver, L. (2017) 'Recent Improvements of Particle and Heavy Ion Transport code System: PHITS', *EPJ Web of Conferences*, 153, pp. 1–6. Available at: <https://doi.org/10.1051/epjconf/201715306008>.
- Sayyed, M.I., Lakshminarayana, G., Dong, M.G., Ersundu, M.Ç., Ersundu, A.E. and Kityk, I. V. (2018) 'Investigation on gamma and neutron radiation shielding parameters for BaO/SrO–Bi₂O₃–B₂O₃ glasses', *Radiation Physics and Chemistry*, 145(November 2017), pp. 26–33. Available at: <https://doi.org/10.1016/j.radphyschem.2017.12.010>.
- Turner, J.E. (2007) *Atoms, Radiation, and Radiation Protection*. Third. Weinheim, Germany: WILEY-VCH Verlag GmbH & Co. KGaA.
- Yoon, S., Xie, W., Xiao, X., Checchia, S., Coduri, M., Schuetzenduebe, P., Widenmeyer, M., Ebbinghaus, S.G., Balke, B., Weidenkaff, A., Schütz, G. and Son, K. (2023) 'Site-selective substitution and resulting magnetism in

arc-melted perovskite A TiO_{3-δ} (A = Ca, Sr, Ba)', *Journal of the American Ceramic Society*, (June), pp. 1–9. Available at: <https://doi.org/10.1111/jace.19308>.