

DAFTAR PUSTAKA

- Alloni, D. dan Prata, M., 2017, Characterisation of the secondary neutron field generated by a compact PET cyclotron with MCNP6 and experimental measurements, *Applied Radiation and Isotopes*, 128, 204-209.
- Auditore, L., Amato, E. dan Baldari, S., 2017, Theoretical estimation of ^{64}Cu production with neutrons emitted during ^{18}F production with a 30 MeV medical cyclotron, *Applied Radiation and Isotopes*, 122, 229-234.
- Aytekin, H. dan Baldik, R., 2014, Pre-equilibrium and equilibrium calculations of (n, p) reactions on ^{32}S , ^{64}Zn , ^{67}Zn , ^{89}Y , ^{90}Zr and ^{153}Eu targets used for production of ^{32}P , ^{64}Cu , ^{67}Cu , ^{89}Sr , ^{90}Y and ^{153}Sm therapeutic radionuclides, *Annals of Nuclear Energy*, 53, 439-446.
- Baird, D. dan Faust, T., 1990, Scientific instruments, scientific progress and the cyclotron, *The British Journal for the Philosophy of Science*, 41, 147-175.
- Boschi A., Martini P., Janevik-Ivanovska E. dan Duatti A., 2018, The emerging role of copper-64 radiopharmaceuticals as cancer theranostics, *Drug Discovery Today*, 23, 8, 1489-1501.
- Capasso, E., Valentini, M. C., Mirzael, S., Knoll, P., Meleddu, C., Radionuclide treatment with $^{64}\text{Cu-Cl}_2$ in patients with progressive malignant gliomas, 2015, *European Journal of Nuclear Medicine and Molecular Imaging*, 42, 512-513.
- Chakravarty R. dan Chakraborty S., 2021, Production of a broad palette of positron emitting radioisotopes using a low energy cyclotron : Towards a new success story in cancer imaging?, *Applied Radiation and Isotopes*, 176, 109860.
- Correa-González, L., Consuelo Arteaga de Murphy, Pichardo-Romero, P., Pedraza-López, M., Moreno-García, C., Correa-Hernández, L., 2014, ^{153}Sm -EDTMP for Pain Relief of Bone Metastases from Prostate and Breast Cancer and Other Malignancies, *Archives of Medical Research*, 45, 301-308.
- Engle J. W., Kelsey C. T., Bach, H., Ballard, B. D., Fassbender, M. E., John, K. D., Birnbaum E. R. dan Nortier, F. M., 2012, Preliminary investigation of parasitic radioisotope production using the LANL IPF secondary neutron flux, *Proceedings of the 14th international workshop on targery and target chemistry, AIP conference proceedings*, 1509, 171-175.
- Gottschalks, B., 2018, Radiotherapy proton interactions in matter, *Proton Therapy Physics 2nd Edition*, 1, 27-68.
- Jafari, A., Aboudzadeh, M. R., Sharifan, M., Sadeghi, M., Rahiminezhad, A., Alirezapour, B. dan Rajabihar, S., 2020, Cyclotron-based production of the theranostic radionuclide scandium-47 from titanium target, *Nuclear Instruments and Methods in Physics Research Section A : Accelerators, Spectrometers, Detectors and Associated Equipment*, 961, 163643.
- Johansen, A. M., 2010, Monte Carlo Methods, *International Encyclopedia of Education*, 296-303.
- Kamal, A., 2014, *Nuclear Physics*. Springer-Verlag, Berlin Heidelberg.
- Kaur, A., Sharma, S. dan Mittal, B., 2012, Radiation surveillance in and around

- cyclotron facility, *Indian journal of nuclear medicine : IJNM : the official journal of the Society of Nuclear Medicine*, 27, 4, 243–245.
- Krane, K. S., 1988, *Introductory Nuclear Physics*, John Wiley & Sons, Inc, New Jersey.
- Lechner, A., 2018, Particle interactions with matters, *Proceedings of the CAS-CERN Accelerator School on Beam Injection, Extraction and Transfer*, 5, 47-68.
- Liu, B., Han, R., Yuan, C., Sun, H., Chen, Z., Tian, G., Shi, F., Zhang, X., Luo, P. dan Jia, H., 2021, Excitation function of proton induced reactions on titanium and copper, *Applied Radiation and Isotopes*, 173, 109713.
- Mirzadeh, S., Mausner, L. F. dan Garland, M.A., 2011, Reactor-produced medical radionuclides, *Handbook of Nuclear Chemistry 2nd Edition*, 4, 1857-1902.
- Mokhov N. V. dan Cerutti F., 2016, Beam–material interactions, *Proc. 2014 Joint International Accelerator School: Beam Loss and Accelerator Protection*, 2, 83-112.
- Nagai, Y., 2021, Production scheme for diagnostic-therapeutic radioisotopes by accelerator neutrons, *Proceedings of the Japan Academy, Series B Physical and Biological Sciences*, 97, 6, 292-323.
- Newhauser, W. D. dan Zhang, R., 2015, The physics of proton therapy, *Physics in Medicine and Biology*, 60, 155–209.
- Qaim, S. M., 2001, Nuclear data for medical applications, *Special Issue of Radiochim Acta*, 89, 189-355.
- Resche, I., Chatal, J. F., Pecking, A., Ell, P., Duchesne, G., Rubens, R., Fogelman, I., Houston, S., Fauser, A., Fischer, M., Wilkins, D., 1997, A dose-controlled study of ^{153}Sm -ethylenediaminetetramethylenephosphonate (EDTMP) in the treatment of patients with painful bone metastases. *European Journal of Cancer*, 33(10), 1583-1591.
- Sabyasachi, P., Sahoo, G. S., Tripathy, S. P., Sharma, S. C., Joshi, D. S. Dan Kulkarni, M. S., 2020, Neutron measurements from the interaction of a thick Ta target with protons at different energies, *Nuclear Instruments And Methods in Physics Research Section A*, 957, 163432.
- Sato, T., Iwamoto, Y., Hashimoto, S., Ogawa, T., Furuta, T., Abe, S., Kai, T., Tsai, P., Matsuda, N., Iwase, H., Shigyo, N., Sihver, L. dan Niita, K., 2018, Features of Particle and Heavy Ion Transport code System (PHITS) version 3.02, *Journal of Nuclear Science and Technology*, 55, 6, 684-690.
- Schirmacher, R., 2019, From chemotherapy to biological therapy: A review of novel concepts to reduce the side effects of systemic cancer treatment (Review), *International Journal of Oncology*, 54, 407-419.
- Srivastava, R. Jyoti, B. Dixit, J. dan Priyadarshi, P., 2014, Neutron Therapy-A Novel Approach To Radiotherapeutics : A Review, *International Journal of Contemporary Medical Research*, 1, 2, 61-70.
- Szelecsenyi, F., A. Fenyvesi, G. F. Steyn, K. Brezovcsik, Z. Kovacs dan B. Biro., 2018, Production possibility of ^{161}Tb utilizing secondary neutrons generated by protons from a low-energy cyclotron onto an isotope production target, *Journal of Radioanalytical and Nuclear Chemistry*, 318, 491-496.
- Van de Voorde, M., Duchemin, C., Heinke, R., Lambert, L., Chevallay, E.,

- Schneider, T., Stenis, M.V., Cocolios, T.E., Cardinaels, T., Ponsard, B. dan Ooms, M., 2021, Production of ^{153}Sm with very high specific activity for targeted radionuclide therapy, *Frontiers in Medicine*, 8, 1153, 1-9.
- Wang, B., Liu, Y., Qin, X. dan Xiang, W., 2013, A comparative study between pure titanium and titanium deuteride targets used for neutron generator, *Surface and Coatings Technology*, 228, 1, 142-145.
- World Health Organization (WHO), 2018, Latest gloal cancer data : Cancer burden rises to 18.1 million new cases and 9.6 million cancer death in 2018, *International Agency for Research on Cancer*, 263, 1-3.
- Ziegler, J.F., Ziegler, M. D. dan Biersack, J. P., 2010, SRIM – The stopping and range of ions in matter (2010), *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms*, 268, 11–12, 1818-1823.