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Publications

PUBLICATIONS

- **Shielding Analysis of a Preclinical Bremsstrahlung X-ray FLASH Radiotherapy System within a Clinical Radiation Therapy Vault.** *Health physics*
Rosenstrom, A., Santana-Leitner, M., Rokni, S., Shumail, M., Tantawi, S., Kwofie, J., Dewji, S., Loo, B. W.
2023
- **Frontiers in the Application of RF Vacuum Electronics.** *IEEE transactions on electron devices*
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- **Frontiers in the Application of RF Vacuum Electronics** *IEEE TRANSACTIONS ON ELECTRON DEVICES*
Armstrong, C. M., Snively, E. C., Shumail, M., Nantista, C., Li, Z., Tantawi, S., Loo, B. W., Temkin, R. J., Griffin, R. G., Feng, J., Dionisio, R., Mentgen, F., Ayllon, et al
2023
- **Monte Carlo simulation of shielding designs for a cabinet form factor preclinical MV-energy photon FLASH radiotherapy system.** *Medical physics*
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- **Bayesian optimisation to design a novel X-ray shaping device.** *Medical physics*
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- **Initial Steps Towards a Clinical FLASH Radiotherapy System: Pediatric Whole Brain Irradiation with 40 MeV Electrons at FLASH Dose Rates.** *Radiation research*
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- **Theory of electromagnetic insertion devices and the corresponding synchrotron radiation** *PHYSICAL REVIEW ACCELERATORS AND BEAMS*
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- **Experimental Demonstration of a Tunable Microwave Undulator** *PHYSICAL REVIEW LETTERS*
Tantawi, S., Shumail, M., Neilson, J., Bowden, G., Chang, C., Hemsing, E., Dunning, M.
2014; 112 (16)
- **Electron dynamics and transverse-kick elimination in a high-field short-period helical microwave undulator** *APPLIED PHYSICS LETTERS*
Chang, C., Shumail, M., Tantawi, S., Neilson, J., Pellegrini, C.
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