

Publications

- [S] Submitted articles, page 1
- [A] Peer-reviewed international journal articles, page 1
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Submitted articles

- [S6] **Sarrut D.** and Ljungberg M. *Chapter: Monte Carlo simulation of Nuclear Medicine Imaging Systems*, chapter in book. Taylor & Francis (CRC) Publishing Company. Handbook of Nuclear Medicine and Molecular Imaging for Physicists. **2020**.
- [S5] **Sarrut D.**, Krah N. and Verhaegen F. *Chapter: Artificial Intelligence and Monte Carlo simulation*, chapter in book. Taylor & Francis (CRC) Publishing Company. Monte Carlo techniques in radiation therapy. **2020**.

Peer-reviewed international journal articles

- [A76] **Sarrut, D.**, Etxebeste A., Krah N. and Létang J.M. “Modeling Complex Particles Phase Space with GAN for Monte Carlo SPECT Simulations: A Proof of Concept”. *Physics in Medicine & Biology*, to appear. **2021**.
- [A75] Winterhalter C., Taylor M., Boersma D., Elia A., Guatelli S., Mackay R., Kirkby K., Maigne L., Ivanchenko V., Resch A.F., **Sarrut, D.**, Sitch P., Vidal M., Grevillot L. and Aitkenhead A. “Evaluation of GATE-RTion (GATE/Geant4) Monte Carlo Simulation Settings for Proton Pencil Beam Scanning Quality Assurance”. *Medical Physics*, 47(11):5817–5828. **2020**.

- [A74] Grevillot L., Boersma D., Fuchs H., Aitkenhead A., Elia A., Bolsa M., Winterhalter C., Vidal M., Jan S., Pietrzyk U., Maigne L. and **Sarrut, D.** “GATE-RTion: a GATE/Geant4 release for clinical applications in Scanned Ion Beam Therapy”. *Medical Physics*, 47(8):3675–3681. **2020.**
- [A73] Salvadori J., Labour J., Odille F., Marie P.Y., Badel J.N., Imbert L. and **Sarrut, D.** “Monte Carlo Simulation of Digital Photon Counting PET”english. *EJNMMI physics*, 7(1):23. ISSN 2197-7364. **2020.**
- [A72] Ayadi M., Baudier T., Bouilhol G., Dupuis P., Boissard P., Pinho R., Krason A., Rit S., Claude L. and **Sarrut, D.** “Mid-position treatment strategy for locally advanced lung cancer: a dosimetric study”. *The British Journal of Radiology*, 93(1110):20190692. **2020.**
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- [A69] Etxebeste A., Dauvergne D., Fontana M., Létang J.M., Llosá G., Muñoz E., Oliver J., Ros A., Testa E. and **Sarrut, D.** “A GATE module for Compton Camera imaging simulation”. *Physics in Medicine and Biology*, 65(5). **2020.**
- [A68] Feng Y., Etxebeste A., Létang J.M. and **Sarrut, D.** Maxim V. “Comparison of ideal parallel-hole gamma camera and Compton camera for prompt- γ imaging”. *IEEE Transactions on Radiation and Plasma Medical Sciences*, 4(4):479–488. **2019.**
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- [A66] **Sarrut, D.**, Krah N. and Letang J.M. “Generative Adversarial Networks (GAN) for Compact Beam Source Modelling in Monte Carlo Simulations”. *Physics in Medicine and Biology*, 64(21). **2019.**
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- [A45] Fassi A., Seregini M., Riboldi M., Cerveri P., **Sarrut D.**, Ivaldi G., Tabarelli P., Liotta M. and Baroni G. “Surrogate-driven deformable motion model for organ motion tracking in particle radiation therapy”. *Physics in Medicine and Biology*, 60(4):8067–8086. **2015**.

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- [C62] **Sarrut, D.**, Krah N. and Létang J.M. “GaGa: GAN for GATE”. In *MCMA: International Conference on Monte Carlo Techniques for Medical Applications*. Montreal, Canada. **2019**.
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