

Selected publications – Ruben Pauwels

1.	Pauwels R, Beinsberger J, Collaert B, Theodorakou C, Rogers J, Walker A, Cockmartin L, Bosmans H, Jacobs R, Bogaerts R, Honer K. (2012). Effective dose range for dental cone beam computed tomography scanners. <i>EUROPEAN JOURNAL OF RADIOLOGY</i> , 81 (2), 267-271. doi: 10.1016/j.ejrad.2010.11.028 .
2.	Pauwels R, Theodorakou C, Walker A, Bosmans H, Jacobs R, Horner K, Bogaerts R, SEDENTEXCT Consortium (2012). Dose distribution for dental cone beam CT and its implication for defining a dose index. <i>DENTOMAXILLOFACIAL RADIOLOGY</i> , 41 (7), 583-593. doi: 10.1259/dmfr/20920453 .
3.	Pauwels R, Nackaerts O, Bellaiche N, Stamatakis H, Tsiklakis K, Walker A, Bosmans H, Bogaerts R, Jacobs R, Horner K, The SEDENTEXCT Project Consortium (2013). Variability of dental cone beam CT grey values for density estimations. <i>THE BRITISH JOURNAL OF RADIOLOGY</i> , 86 (1021), Art.No. 20120135. doi: 10.1259/bjr.20120135
4.	Pauwels R, Silkosessak O, Jacobs R, Bogaerts R, Bosmans H, Panmekiate S. (2014). A pragmatic approach to determine the optimal kVp in cone beam CT: balancing contrast-to-noise ratio and radiation dose. <i>DENTOMAXILLOFACIAL RADIOLOGY</i> , 43 (5), Art.No. 20140059. doi: 10.1259/dmfr.20140059
5.	Pauwels R, Stamatakis H, Bosmans H, Bogaerts R, Jacobs R, Horner K, Tsiklakis K. (2013). Quantification of metal artifacts on cone beam computed tomography images. <i>CLINICAL ORAL IMPLANTS RESEARCH</i> , 24, 94-99. doi: 10.1111/j.1600-0501.2011.02382.x
6.	Pauwels R, Jacobs R, Singer SR, Mupparapu M. (2015). CBCT-based bone quality assessment: are Hounsfield units applicable?. <i>DENTOMAXILLOFACIAL RADIOLOGY</i> , 44 (1), Art.No. 20140238, doi: 10.1259/dmfr.20140238
7.	Pauwels R, Araki K, Siewerdsen JH, Thongvigitmanee SS. (2015). Technical aspects of dental CBCT: state of the art. <i>Dentomaxillofac Radiol</i> , 44 (1), doi: 10.1259/dmfr.20140224
8.	Pauwels R, Zhang G, Theodorakou C, Walker A, Bosmans H, Jacobs R, Bogaerts R, Horner K. (2014). Effective radiation dose and eye lens dose in dental cone beam CT: effect of field of view and angle of rotation. <i>BRITISH JOURNAL OF RADIOLOGY</i> , 87 (1042), Art.No. 20130654, doi: 10.1259/bjr.20130654
9.	Pauwels R, Cockmartin L, Ivanauskaitė D, Urbonienė A, Gavala S, Donta C, Tsiklakis K, Jacobs R, Bosmans H, Bogaerts R, Horner K, SEDENTEXCT Project Consortium (2014). Estimating cancer risk from dental cone-beam CT exposures based on skin dosimetry. <i>PHYSICS IN MEDICINE AND BIOLOGY</i> , 59 (14), 3877-91. doi: 10.1088/0031-9155/59/14/3877
10.	Pauwels R. (2015). Cone Beam CT for Dental and Maxillofacial Imaging: Dose Matters. <i>RADIATION PROTECTION DOSIMETRY</i> 165 (1-4), 156-61. doi: 10.1093/rpd/ncv057
11.	Panmekiate S, Ngonphloy N, Charoenkarn T, Faruangsang T, Pauwels R. (2015). Comparison of mandibular bone microarchitecture between micro-CT and CBCT images. <i>Dentomaxillofacial Radiology</i> , 44 (5), Art.No. 20140322. doi: 10.1259/dmfr.20140322 (citations: 10) (Impact factor: 1.59).
12.	ICRP, Rehani MM, Gupta R, Bartling S, Sharp GC, Pauwels R, Berris T, Boone JM. (2015). Radiological Protection in Cone Beam Computed Tomography (CBCT). ICRP Publication 129. <i>Ann ICRP</i> , 44 (1), 9-127. doi: 10.1177/0146645315575485 .
13.	Pauwels R, Jacobs R, Bogaerts R, Bosmans H, Panmekiate S. (2016). Reduction of scatter-induced image noise in cone beam computed tomography: effect of field of view size and position. <i>ORAL SURGERY ORAL MEDICINE ORAL PATHOLOGY ORAL RADIOLOGY</i> , 121 (2), 188-195. doi: 10.1016/j.oooo.2015.10.017
14.	Pauwels R, Jacobs R, Bogaerts R, Bosmans H, Panmekiate S. (2017). Determination of size-specific exposure settings in dental cone-beam CT. <i>EUROPEAN RADIOLOGY</i> , 27 (1), 279-285. doi: 10.1007/s00330-016-4353-z
15.	Widmann G, Bischel A, Stratis A, Bosmans H, Jacobs R, Gassner E-M, Puelacher W, Pauwels R. (2017). Spatial and contrast resolution of ultralow dose dentomaxillofacial CT imaging using iterative reconstruction technology. <i>DENTOMAXILLOFACIAL RADIOLOGY</i> , 46 (4), Art.No. 20160452, doi: 10.1259/dmfr.20160452
16.	Pauwels R, Sessirisombat S, Panmekiate S. (2017). Mandibular Bone Structure Analysis Using Cone Beam Computed Tomography vs Primary Implant Stability: An Ex Vivo Study. <i>INTERNATIONAL JOURNAL OF ORAL & MAXILLOFACIAL IMPLANTS</i> , 32 (6), 1257-1265. doi: 10.11607/jomi.6210
17.	Godoy DJ D., Chokboribal J, Pauwels R., Banlunara W., Sangvanich P., Jaroenporn S., Thunyakitpisal P. (2018). Acemannan increased bone surface, bone volume, and bone density in a calvarial defect model in skeletally-mature rats. <i>JOURNAL OF DENTAL SCIENCES</i> . doi: 10.1016/j.jds.2018.06.004
18.	Panmekiate S, Rungwittayathon P, Suptaweepoonboon W, Tangtraitham N, Pauwels R. (2018). Optimization of exposure parameters in dental cone-beam computed tomography using a 3-step approach. <i>ORAL SURGERY ORAL MEDICINE ORAL PATHOLOGY ORAL RADIOLOGY</i> . doi: 10.1016/j.oooo.2018.08.004
19.	Pauwels R, Horner K, Vassileva J, Rehani M. (2019). Thyroid shielding in cone-beam computed tomography: recommendations towards appropriate use. <i>DENTOMAXILLOFACIAL RADIOLOGY</i> . 48:20190014. doi: 10.1259/dmfr.20190014

Book Chapters

1.	Pauwels R. (2018). CBCT quality assurance. <i>Maxillofacial Cone Beam Computed Tomography: Principles, Techniques and Clinical Applications</i> (pp.213-226). ISBN: 9783319620619. doi: 10.1007/978-3-319-62061-9_7 .
2.	Pauwels R. (2018). Radiation dose, risks, and protection in CBCT. <i>Maxillofacial Cone Beam Computed Tomography: Principles, Techniques and Clinical Applications</i> (pp.227-246). ISBN: 9783319620619. doi: 10.1007/978-3-319-62061-9_8 .
3.	Pauwels R. (2018). What is CBCT and how does it work?. In: <i>Maxillofacial Cone Beam Computed Tomography: Principles, Techniques and Clinical Applications</i> (pp.13-42). ISBN: 9783319620619. doi: 10.1007/978-3-319-62061-9_2 .
4.	Pauwels R. (2018). Radiation Protection. In: <i>Imaging of the Temporomandibular Joint</i> (pp. 59-77). ISBN 978-3-319-99467-3. doi: 10.1007/978-3-319-99468-0 .