Research Publications

Stationary intraoral digital tomosynthesis using a carbon nanotube X-ray source array. Shan J, Tucker AW, Gaalaas LR, Wu G, Platin E, Mol A, Lu J, Zhou O. Dentomaxillofac Radiol. 2015;44(9):20150098. doi: 10.1259/dmfr.20150098. Epub 2015 Jun 19. PMID: 26090933

Stationary intraoral digital tomosynthesis using a carbon nanotube X-ray source array. Shan J, Tucker AW, Gaalaas LR, Wu G, Platin E, Mol A, Lu J, Zhou O. Dentomaxillofac Radiol. 2015;44(9):20150098. doi: 10.1259/dmfr.20150098. Epub 2015 Jun 19. PMID: 26090933

Bitewing radiography dosimetry of a stationary intraoral tomosynthesis imaging system. Johnson KB, LaPrade JC, Platin E, Broome AM, Ludlow JB, Mol A. Oral Surg Oral Med Oral Pathol Oral Radiol. 2020;S2212-4403(20)31058-0. doi:10.1016/j.oooo.2020.06.004

Applying synthetic radiography to intraoral tomosynthesis: a step towards achieving 3D imaging in the dental clinic. Puett C, Inscoe CR, Hilton RL, Regan Anderson MW, Perrone L, Puett S, Gaalaas LR, Platin E, Lu J, Zhou O. Dentomaxillofac Radiol. 2021 Feb 1;50(2):20200159. doi: 10.1259/dmfr.20200159. Epub 2020 Jul 15. PMID: 32666823; PMCID: PMC7860952.

Research Publications

Characterization of a clinical prototype stationary intraoral tomosynthesis system. Inscoe C, Platin E, Mauriello S, Broome A, Mol A, Gaalaas L, Anderson MR, Tucker AW, Boyce S, Shan j, Gonzales B, Lu J, Zhou O. Medical Physics 2018. PMID: 30259988 PMCID: PMC6237281 DOI: 10.1002/mp.13214

Stationary intraoral tomosynthesis for dental imaging. Inscoe CR, Wu G, Soulioti DE, Platin E, Mol A, Gaalaas L, Anderson R, Tucker A, Boyce S, Shan J, Gonzales B, Lu J, Zhou O. Proc. SPIE 10132, Medical Imaging 2017: Physics of Medical Imaging, 1013203 (March 9, 2017); doi:10.1117/12.2254632.

The role of stationary intraoral tomosynthesis in reducing proximal overlap in bitewing radiography. Mauriello SM, Broome AM, Platin E, Mol A, Inscoe C, Lu J, et al. Dentomaxillofac Radiol 2020; 49: 20190504. PMID: 32202939 PMCID: PMC7719863 (available on 2021-12-01) DOI: 10.1259/dmfr.20190504

More research is needed to explore the clinical capabilities of the Portray sIOT system. Ongoing research is being carried out by a number of high ranking schools of dentistry including the UNC Adams School of Dentistry