

EXOSENS Streak Tube Reference List:

The P552 soft X-ray streak tube used in the laser plasma experiment on the PHEBUS laser facility at CEL-V.
P552X-ray streak tube with removable photocathode, improved spatial resolution and temporal fiducial. By J. De Mascureau, J.L. Bourgade, A. Mens, R. Sauneuf, J.C. Rebuffie, J.P. Roux. Published in High-Speed Photography, Videography and Photonics VI - San Diego California 15-17 August 1988 -volume 981.

P850X streak tube which is a high spatio-temporal resolution X-ray converter tube designed for laser interaction X-rays diagnostics.

C850X-ray streak camera with optimized spatio-temporal resolution. By J. De Mascureau, A. Mens, J.M. Mexmain, R. Sauneuf, J. Noël, J.C. Rebuffie, J.P. Roux. Published in High-Speed Photography, Videography and Photonics VI San Diego California 15-17 August 1988-(volume 981)

The P700 is a new picosecond streak tube implementing lamellar electron optics.

P700: A new high speed streak tube with lamellar electron optics. By A. Girard, C. Loty, J.P. Roux, J. Noël, J.C. Rebuffie, J.L. Allamargot. Published in 16ème congrès international de photographie rapide Strasbourg France 1984. SPIE volume 491 page 58-62

Processing S1 photocathode by transfer technology.

New streak tubes of the P500 series: Features and experimental results. By J.C. Rebuffie, A. Mens. Published in 19th International Congress on High-Speed Photography and Photonics 16 - 22 September 1990 - CAMBRIDGE - England. This new camera has been built around the P850X bilamellar streak tube where the focusing of electron beam along the temporal and spatial axes are separated.

C 850X Picosecond High Resolution Streak Camera

By A. Mens, J.M. Dalmasso, R. Sauneuf, R. Verrecchia, J.M. Roth, F. Tomasini, J. Miehe, J.C. Rebuffie. Published in 19th International Congress on High-Speed Photography and Photonics 16 - 22 September 1990 - CAMBRIDGE - England.

Compact design which allows to use it in the picosecond range (P920PMK).

First results on a developmental deflection tube and its associated electronics for streak camera applications. By C. Froehly, A. Laucournet, J. Miehe, J.C. Rebuffie, J.M. Roth, F. Tomasini. Published in 19th International Congress on High-Speed Photography and Photonics 16 - 22 September 1990 - CAMBRIDGE - England

X-ray streak camera PX1 based on the Exosens P860X for subpicosecond time resolved spectroscopy in X rays and X-UV range.

Development of a Subpicosecond Large-Dynamic-Range X-ray Streak Camera. By C.Y. Côté, J.C. Kieffer, P. Gallant, J.C. Rebuffie, C. Goulmy, A. Maksimchuk, G. Mourou, D. Kaplan, M. Bouvier. Published in SPIE Proceedings; 22nd International Congress on High-Speed Photography and Photonics; Vol. 2869, p. 956-961, 1997

Streak camera based on Exosens P860X tube developed for use in ultrashort laser-produced plasma research.

Characterization of a sub picosecond X-ray streak camera for ultrashort laser-produced plasmas experiments. By P. Gallant, P. Forget, F. Dorchies, Z. Jiang, J.C. Kieffer, P.A. Jaanimagi, J.C. Rebuffie, C. Goulmy, J.F. Pelletier, M. Sutton. Published in Review of Scientific Instruments; Volume 71, Number 10; October 2000

Ultra-fast X-ray streak camera based on a new bilamellar X-ray tube P863X.

Characterization of the new FX1 X-ray streak camera. By V. Pitre, S. Magnan, J.C. Kieffer, F. Dorchies, F. Salin, J.C. Rebuffie, C. Goulmy. Ultra-fast X-ray streak camera based on a new bilamellar X-ray tube P863X. Published in SPIE Proceedings; " Fourth-Generation X-Ray Sources and Ultrafast X-Ray Detector "; Vol. 5194, p. 115-122, 2003.

Evaluation of the performance for different amplification stages at the output of the streak tubes.

Image Intensification at the output of streak tubes. By G. Eschard, J.C. Rebuffie. Published in 16ème congrès international de photographie rapide, Strasbourg, France, 1984

A new design streak tube allows to optimize the throughput.

Photoelectron throughput in streak tubes. P. Jaanimagi, A. Mens, J.C. Rebuffie. Published in SPIE Volume 2549-page 62-71 September 1995

A 2-D PIC electron optics code has been used to simulate the propagation of the beam inside a bilamellar streak tube.

Study of photoelectron current saturation in streak tubes used for high dynamic range measurements on Inertial Confinement Fusion lasers. By A. Mens, A. Adolf, D. Gontier, C. Quine, J. Segré, R. Verrecchia, J.C. Rebuffie, C. Goulmy, P. Jaanimagi. Published in 22nd International Congress on High-Speed Photography and Photonics October 1997 - SANTA FE – USA

The novelty of this technique permits to obtain excellent dynamic range measurements in a shot-to-shot accumulation of ultra-fast events at up to 1Khz without degrading the time resolution (streak tube Exosens P860X).

500 fs Streak Camera for UV-hard Xrays in 1Khz accumulating mode with optical-jitter free-synchronization. By K. Scheidt, G. Naylor. Published in 22nd International Congress on High-Speed Photography and Photonics October 1997 - SANTA FE - USA