Features in This Issue

**Time of Flight in Perspective: Instrumental and Computational Aspects of Time Resolution in Positron Emission Tomography**
by Dennis R. Schaart, Georg Schramm, Johan Nuyts, and Suleman Surti

**Study of Čerenkov Light Emission in the Semiconductors TlBr and TlCl for TOF-PET**
by Gerard Ariño-Estrada, Member, IEEE, Emilie Roncali, Aaron R. Selfridge, Junwei Du, Jaroslaw Glodo, Kanai S. Shah, and Simon R. Cherry

**A Crosshair Light Sharing PET Detector With DOI and TOF Capabilities Using Four-to-One Coupling and Single-Ended Readout**
by Eiji Yoshida, Fujino Obata, Kei Kamada, and Taiga Yamaya Yu

**TOF-PET Image Reconstruction With Multiple Timing Kernels Applied on Cherenkov Radiation in BGO**
by Nikos Efthimiou, Nicolaus Kratochwil, Stefan Gundacker, Andrea Polesel, Matteo Salomoni, Etienne Auffray, and Marco Pizzichemi
Improvement of Spatial Resolution With Iterative PET Reconstruction Using Ultrafast TOF

by Maxime Toussaint, Roger Lecomte, and Jean-Pierre Dussault