



## **Patents:**

Confocal microscopy: US 7,209,287 ; US 7,391,565 ; US 7,088,487 ; EP1330671 ; EP1481277 ; EP1604240 ; EP1417526; JP 4160511, JP4629658 ....  
Tomographic microscopy: EP1071974, US 6,525,875 ...  
Digital Audio Broadcasting: EP0616453, US5452322, JPH06303272

## **Awards:**

SPIE Best Technology award, European Photonics Innovations village, 2008.  
Concours ANVAR de création d'entreprises de technologie innovantes, 1999

## **Publications (biological effects of radio-frequency fields):**

"A model of the interaction of T lymphocytes with electromagnetic waves" V. Lauer. HAL : hal-00975963, Hyper Articles en Ligne. 2014. <http://hal.archives-ouvertes.fr/hal-00975963>.  
" A Quantum Theory of the Biological Effects of Radio-frequencies and its application to Cancer" HAL : hal-00877298. Hyper Articles en Ligne. 2013. <http://hal.archives-ouvertes.fr/hal-00877298>.

## **Publications (tomographic microscopy):**

"Holographic microscopy and diffractive microtomography of transparent samples" M. Debailleul B. Simon, V. Georges., O. Haeberlé, V. Lauer, Measurement Sciences and Technology 19 (2008) 074009 <http://hal.archives-ouvertes.fr/hal-00869405>  
"Tomographic diffractive microscopy of transparent samples" B. Simon<sup>1</sup>, M. Debailleul<sup>1</sup>, V. Georges<sup>1</sup>, V. Lauer<sup>2</sup> and O. Haeberlé<sup>1</sup> Eur. Phys. J. Appl. Phys. (2008) <http://hal.archives-ouvertes.fr/hal-00869566>  
"Biological samples observed with diffractive tomographic microscopy", B. Simon, M. Debailleul, V. Georges, O. Haeberlé and V. Lauer Photonics Europe 2008, EPE105 Strasbourg, April 7-11 (2008) Proceeding SPIE 6991-36 (2008)  
"Recent advances in 3-D fluorescence microscopy: tomography as a source of information", A. Dieterlen ; M. Debailleul ; A. De Meyer ; B. Simon ; V. Georges, et al. Proc. SPIE 7008, Eighth International Conference on Correlation Optics, 70080S (April 22, 2008);  
"New applications of Optical Diffraction Tomography", V. Lauer, H. Giovannini, O. Haeberlé, A. Sentenac, P.C. Chaumet, B. Simon, M. Debailleul, V. Georges, F. Drsek, F. Maffezini, D. Konan, Proceedings of the International Workshop on Digital Holographic Reconstruction and Optical Tomography for Engineering Applications p. 69, 23-25 april 2007, Loughborough University, ISBN 978 0 947974 56 5  
"Far-field reflection microscope using optical diffraction tomography: Application to profilometry", H. Giovannini & D. Konan & A. Sentenac & F. Drsek & P.C. Chaumet & V. Lauer & F. Maffezini , Focus on Microscopy 2007.  
"Tomographic microscopy of transparent samples", B. Simon, M. debailleul, V. Georges, O. Haeberlé and V. Lauer Focus on Microscopy 2007, Valencia (Spain), April 10-13 (2007) Technical Digest of Focus on Microscopy 2007, p. 67 (2007)  
"Three-dimensional reconstruction of transparent specimens using coherent optical diffraction microtomography", B. Simon, M. Debailleul, V. Georges, O. Haeberlé and V. Lauer Physics in Signal and Image Processing 2007, PSIP'07 Mulhouse, France, 31. Jan-2. Feb. 2007 Proceedings of PSIP'07 - CD-ROM ISBN 2-912328-40-3  
"Three-Dimensional Coherent Optical Diffraction Tomography of Transparent Living Samples", B. Simon, M. Debailleul, V. Georges, O. Haeberlé and V. Lauer 6th IFAC Symposium on Modelling and Control in Biomedical Systems , Reims (France), September 20-22, 2006 Proceedings of the 6th MCBS IFAC symposium, p. 47 (2006).  
"New approach to optical diffraction tomography yielding a vector equation of diffraction tomography and a novel tomographic microscope", V. Lauer, Journal of Microscopy vol. 205, february 2002, pp. 165-176  
"Observation of biological objects using an optical diffraction tomographic microscope", V. Lauer, SPIE proceedings vol. 4164 p.122-133 (2000)

## **Publications (communication theory):**

Using Channel Capacity as a Criterion in the Design of a Communication System, Vincent Lauer, European Transactions on Telecommunications vol. 6 no 4 pages 447-554, july-august 1995.

## **Diplomas:**

Ecole Centrale de Paris (french "Grande Ecole").  
European Qualifying Examination for professional representatives in the European Patent Office.  
Centre d'Etudes Internationales de la Propriété Industrielle (CEIPI) "patents"