

Publications related to Samba Sensors AB

REFEREED PAPERS

1. Z. Xiao, S. Norrman and O. Engström, "A fiber optical voltage sensor prepared by micromachining and wafer bonding," *Sensors and Actuators A*, Vol, 41-42. pp. 334-337, 1994.
2. Z Xiao, O Engström, N Vidovic, "Diaphragm deflection of silicon interferometer structures used as pressure sensors", *Sensors and Actuators A* 58, pp. 99 - 107, 1997.
3. Z. Xiao, O. Engström, and N. Vidovic', "The influence of pressure on the optical properties of artificial microcavities in silicon", *Semicon. Sci. Technol.*, 12, pp. 166-172, 1997.
4. S. Söndergaard, S. Karason, A. Hanson, K. Nilsson, S. Höjer, S. Lundin, and O. Stenqvist, "Direct measurements of intratracheal pressure in paediatric respiratory monitoring", *Pediatric Research*, Vol. 51, No. 3, pp. 339-345, 2002.
5. S. Söndergaard, S. Karason, A. Hanson, K. Nilsson, J. Wiklund, S. Lundin, and O. Stenqvist, "The dynostatic algorithm accurately calculates alveolar pressure on-line during ventilator treatment in children", *Pediatric Anaesthesia*, Vol. 13, pp. 294-303, 2003.
6. P. R. Woldbaek, T. A. Strømme, J. B. Sande, G. Christensen, T. Tønnessen, and A. Ilebekk, "Evaluation of a new fiber-optic pressure recording system for cardiovascular measurements in mice", *Am J Physiol Heart Circ Physiol*, Vol. 285, pp. H2233-H2239, 2003.
7. M. Harada, Y. Qin, H. Takano, T Minamino, Y. Zou, H Toko, M. Ohtsuka, K. Matsuura, M. Sano, J Nishi, K Iwanaga, H Akazawa, T Kunieda, W Zhu, H. Hasegawa, K. Kunisada, T. Nagai, H. Nakaya, K. Yamauchi-Takihara, I. Komuro, " G-CSF prevents cardiac remodeling after myocardial infarction by activating the Jak-Stat pathway in cardiomyocytes", *Nat Med*. Vol.11, No. 3, pp. 305-311, 2005.
8. U. Krave, S. Höjer, HA. Hansson, "Transient, powerful pressures are generated in the brain by a rotational acceleration impulse to the head", *Eur J Neurosci*. Vol. 21, No. 10, pp. 2876-82, 2005.
9. F. Clausen and L. Hillered, "Intracranial pressure changes during fluid percussion, controlled cortical impact and weight drop injury in rats", *Acta Neurochir* Vol. 147, No. 7, pp. 775-780, 2005.
10. F. Unglaub, T. Guehring, H. Lorenz, C. Carstens and M. W. Kroeber, "Effects of unisegmental disc compression on adjacent segments: an in vivo animal model.", Vol. 14, No. 10, pp. 949-955, December, 2005.

11. T. Guehring, F. Unglaub, H. Lorenz, G. Omlor, H-J Wilke, and M. W. Kroeber. "Intradiscal pressure measurements in normal discs, compressed discs and compressed discs treated with axial posterior disc distraction: an experimental study on the rabbit lumbar spine model", *Eur Spine J*, Vol. 15, No. 6, pp. 597-604, May 2006.
12. L. Ferrara, J. J. Triano, M-J Sohn, E Song, D. D. Lee, "A biomechanical assessment of disc pressures in the lumbosacral spine in response to external unloading forces" *Spine J*, Vol 5, No. 5, pp. 548-553, 2005.
13. P. E. Huber, M. Bischof, J. Jenne, S Heiland, P. Peschke, R. Saffrich, H-J. Gröne, J. Debus, K. E. Lipson, and A. Abdollahi "Trimodal Cancer Treatment: Beneficial Effects of Combined Antiangiogenesis, Radiation, and Chemotherapy", *Cancer Res*, Vol. 65, No 9, pp. 3643-3655, 2005.
14. E. Jennische, T. Bergström, M. Johansson, K. Nyström, A. Tarkowski, H-A Hansson and S. Lange "The peptide AF-16 abolishes sickness and death at experimental encephalitis by reducing increase of intracranial pressure." *Brain Res*, Vol. 1227, pp. 189-97, 2008.
15. M. Palmowski, J. Huppert, G. Ladewig, P. Hauff, M. Reinhardt, M.M. Mueller, E.C. Woenne, J.W. Jenne, M. Maurer, G.W. Kauffmann, W. Semmler and F. Kiessling, "Molecular profiling of angiogenesis with targeted ultrasound imaging: early assessment of antiangiogenic therapy effects.", *Mol Cancer Ther.*, Vol. 7, No. 1, pp. 101-9, Jan 2008.
16. T. Ichikawa, "Periodic abdominal pumping supports leg development during metamorphosis in tenebrionid beetle *Zophobas atratus*.", *Comp Biochem Physiol A Mol Integr Physiol.*, Vol. 150, No 1, pp. 8-13, May 2008.
17. P. Dahm-Kähler, C. Wranning, C. Lundmark, A. Enskog, J. Mölne, J. Marcickiewicz, R.R. El-Akouri, J. McCracken and M. Brännström, "Transplantation of the uterus in sheep: methodology and early reperfusion events.", *J Obstet Gynaecol Res*. Vol. 34, No 5, pp. 784-93, Oct 2008.
18. A. Säljö, F. Arrhén, H. Bolouri, M. Mayorga, A. Hamberger "Neuropathology and pressure in the pig brain resulting from low-impulse noise exposure.", *J Neurotrauma.*, Vol. 25, No. 12, pp.1397-1406, December. 2008.
19. F. Clausen, N. Marklund, A. Lewén, L. Hillered, "The Nitron Free Radical Scavenger NXY-059 Is Neuroprotective when Administered after Traumatic Brain Injury in the Rat.", *Journal of Neurotrauma.*, Vol. 25, No 12, pp. 1449-1457, December 2008
20. T. Niizeki, Y. Takeishi, T. Kitahara, T. Arimoto, M. Ishino, O. Bilim, S. Suzuki, T. Sasaki, O Nakajima, R. A. Walsh, K. Goto and I. Kubota, "Diacylglycerol kinase- ϵ restores cardiac dysfunction under chronic pressure overload: a new specific regulator of Gq signaling cascade". *Am J Physiol Heart Circ Physiol* 295: pp. H245-H255, May 2008.
21. T. Kitahara, Y. Takeishi, M. Harada, T. Niizeki, S. Suzuki, T. Sasaki, M. Ishino, O. Bilim, O. Nakajima and I. Kubota, "High-mobility group box 1 restores cardiac function after myocardial infarction in transgenic mice". *Cardiovascular Research* Vol. 80, No 1, pp. 40-46, 2008.

22. Y. Kayama, T. Minamino, H. Toko, M. Sakamoto, I. Shimizu, H. Takahashi, S. Okada, K. Tateno, J. Moriya, M. Yokoyama, A. Nojima, M. Yoshimura, K. Egashira, H. Aburatani and I. Komuro, "Cardiac 12/15 lipoxygenase-induced inflammation is involved in heart failure." *J Exp Med.* Vol. 206, No. 7, pp. 1565-74, Jul 6 2009.
23. A. Säljö, B. Svensson, M. Mayorga, A. Hamberger and H. Bolouri, "Low levels of blast raises intracranial pressure and impairs cognitive function in rats.", *Journal of Neurotrauma.*, Vol. 26, No 8, pp. 1345-1352, August 2009.
24. M. A. Kwiatek, D. Menne, A. Steingoetter, O. Goetze, Z. Forras-Kaufman, E. Kaufman, H. Fruehauf, P. Boesiger, M. Fried, W. Schwizer, and M. R. Fox, "Effect of meal volume and calorie load on postprandial gastric function and emptying: studies under physiological conditions by combined fiber-optic pressure measurement and MRI.", *Am J Physiol Gastrointest Liver Physiol* 2009 Vol. 297, No 5, pp. G894-901, November 2009.
25. A. Säljö, H. Bolouri, M. Mayorga, B. Svensson, A. Hamberger, "Low levels of blast raises intracranial pressure and impairs cognitive function in rats 2: Prophylaxis with fermented cereal feed.", *Journal of Neurotrauma.*, 2009 Oct 23. [Epub ahead of print]

CONFERENCES

1. Z. Xiao, S. Norrman and O. Engström, "A novel microstructure sensor for voltages on high potentials or low pressure" *Proc. Transducer'93*, Yokohama, Japan, 1993.
2. S. Höjer, N. Vidovic, Z. Xiao, and O.Engström, "Microstructure based optical combustion pressure sensors for engine control in commercial vehicles", *Proc. International conference Advanced microsystems for automotive applications*, Berlin, 1996.
3. S. Höjer, M. Krantz, L. Ekström, A. Kaigie, and S. Holm, "A microstructure based fiberoptic pressure sensor for measurements in lumbar intervertebral discs." *Proc. SPIE 3570*, Stockholm, 1998.
4. S. Söndergaard, S. Karason, A. Lundin, and O. Stenqvist, "Fibre-optic measurement of tracheal pressure in paediatric endotracheal tubes", *Proc. ESA 9"1 Annual Meeting*, 7-10 April, Gothenburg, Sweden, *Eur. J. Of Anaesthesiology*, Vol 18, Sup. 21 pp. 24-25, 2001.
5. F. Clausen and L. Hillered, "Intracranial pressure changes during fluid percussion, controlled cortical impact and weight drop injury in rats", *Proc. The 20th annual national neurotrauma symposium society symposium and the sixth international neurotrauma symposium*, Tampa, Florida, USA, 2002.
6. H-A. Hansson, S. Höjer, and U. Krave. "Increased neurogenesis and diffuse brain damage after rotational acceleration of the head" *21st Annual National Neurotrauma Society Symposium*, *J of Neurotrauma* 20(10): p 1077. 2003 Biloxi, Mississippi, USA.

7. S. D. Smith, H. Benveniste, G. R. Morris, S. Hojer, I. Izrailtyan, M. Yu, C. Du, Y. Ma and I. Feinstein "Direct Measurement of Intra Ventricular and Atrial Pressures Concurrent with MR Image Acquisition", Proc. Intl. Soc. Mag. Reson. Med . 14, Seattle USA, 2006.
8. I. Izrailtyan, S.D. Smith R. Morris, S. Höjer, I. Feinstein, P.S.A. Glass and, H.D. Benveniste, "Cardiac Magnetic Resonance Enabled Pressure-Volume Relationship Analysis in the Rodent" 53rd Annual Meeting, Association of University Anesthesiologists, Tucson , Arizona, May11-13, 2006.
9. A. R. Silberberg and K. Sandberg, "Direct measurement of airway pressure in ventilated very low birth weight infants.", Proceedings of the 28th IEEE, EMBS Annual International Conference, New York City, USA, Aug 30-Sept 3, 2006.
10. K. L. Sandberg and A. R. Silberberg, "Respiratory system Mechanics using direct airway pressure measurements in ventilated low birth weight infants" Proc. Pediatric Academic Societies Annual Meeting, Toronto, Canada, May 5-8, 2007.
11. A. Wickman, J. Jia, S. Höjer, C. Åhlund and K. Pettersson "Systolic augmentation in mice estimated from high precision invasive blood pressure recordings", J Hypertension Vol. 26 (Suppl 1), pp. 185, 2008.
12. A. Wickman, J. Jia, S. Höjer, C. Åhlund and K. Pettersson "Endothelium mediated dilatation and systolic augmentation in normal and atherosclerotic mice in vivo." J Hypertension Vol. 26 (Suppl 1), pp. 184-185, 2008.
13. M. Fox, A. Steingötter, M. Kwiatek, R. Treier, M. Fried and W. Schwizer, "Beyond the barostat: Minimally invasive assessment of gastric volume and pressure by a combined magnetic resonance imaging and fiber-optic pressure recording system", Gastroenterology, Vol 134:4, Suppl 1, p. A-578, April 2008.
14. MA Kwiatek, MR Fox, D. Menne, A. Steingoetter, O. Goetze, E. Kaufmann, Z. Forras-Kaufmann, H. Fruehaf, P. Boesinger, M. Fried and W. Schwizer, "Effect of meal volume and caloric load on postprandial gastric function and emptying Rate: Studies under physiological conditions by combined magnetic resonance imaging (MRI) and fiber optic pressure sensor" , Gastroenterology, Vol 134:4, Suppl 1, p. A-531, April 2008.
15. K. L. Sandberg and A. R. Silberberg, "What Is the "Best" Positive End Expiratory Pressure (PEEP) in Ventilated Low Birth Weight Infants?", Proc. Pediatric Academic Societies Annual Meeting, Baltimore, USA, May 2-5, 2009.
16. C. Jones, B. Kwon and P. Cripton, " Cerebrospinal fluid pressures measured during cord injury in a novel pig model ", Journal of Neurotrauma., Vol. 26, No. 8, A-1-A-101 August 2009.
17. J. Jia, J. Lindberg, M. Horn, "Pressure trigger is superior to ECG trigger in cardiac cine MRI.", Magnetic Resonance Material in Physics, Biology and Medicine, Vol. 22. Suppl 1, Antalya, Turkey, October 1-3, 2009

PUBLICATIONS, NOT REFEREED

1. Minimalt instrument mäter exakt tryck, Läkemedelsvärlden, Vol. 105, pp. 45-47, 2001 (in Swedish)
2. Samba Sensors: Från bilars motorer till lungsensorer, Ny Teknik, 041006 (in Swedish)