

# 赤外線酸素モニタ装置 NIROモニタシリーズ 文献リスト



このコーナーでは、ユーザーの先生方がNIROシリーズを用い、どのような研究を行っているのかを文献リストとして紹介しています。新しく赤外線酸素モニタをお使いくださる先生方の参考になればと考えています。

## 脳神経外科・脳機能

- Leonardo Mottola, Stefano Crisotomi, Marco Ferrari, and Valentina Quaresima: RELATIONSHIP BETWEEN HANDGRIP SUSTAINED SUB-MAXIMAL EXERCISE AND PREFRONTAL CORTEX OXYGENATION Adv. Exp. Med. Biol. 578: 305-310, 2006
- Akira Koike, Haruki Itoh, Reiko Oohara, Masayo Hoshimoto, Akihiko Tajima, Tadanori Aizawa, and Long Tai Fu: Cerebral Oxygenation During Exercise in Cardiac Patients, Chest, Jan 2004; 125: 182 - 190.
- Patrizia Zaramella, et al., "Brain Auditory Activation Measured by Near-Infrared Spectroscopy (NIRS) in Neonates", Ped. Res. 49:213-219 (2001)
- Marco Bartocci, "Activation of Olfactory Cortex in Newborn Infants After Odor Stimulation: A Functional Near-Infrared Spectroscopy Study", Red. Res., 48(1): 18-23 (2000)
- Murata, Y., Y. Katayama, et al., "Changes in cerebral blood oxygenation induced by deep brain stimulation: study by near-infrared spectroscopy (NIRS)", Keio Journal of Medicine 49 Suppl 1: A61-63 (2000)
- Pippa G. Al-Rawi et. al. " Evaluation of a Near-Infrared Spectrometer (NIRO-300) for the Detection of Intracranial Oxygenation Changes in the Adult Head" Stroke. 2001; 32: 2492-2500
- du Plessis A., Volpe J.J. Prognosis for development in the newborn requiring neurosurgical intervention. Neurosurgery Clinics of North America, 9:187-197, 1998.
- Meek J.H., Firbank M., Elwell C.E., Atkinson J., Braddick O., Wyatt J.S. Regional hemodynamic responses to visual stimulation in awake infants. Pediatric Research 43:840-843, 1998.
- Heekeren H.R., Wenzel R., Obrig H., Ruben J., Ndayisaba J-P, Luo Q., Dale A., Nioka S., Kohl M., Dirnagl U., Villringer A., Chance B. Towards noninvasive optical human brain mapping - improvements of spectral, temporal and spatial resolution of near-infrared spectroscopy. SPIE, 2979:847-857, 1997.
- Hirth C., Obrig H., Villringer K., Thiel A., Bernarding J., Muhlneckel W., Flor H., Dirnagl U., Villringer A. Non-invasive functional mapping of the human motor cortex using near-infrared spectroscopy. NeuroReport, 7:1977-1981, 1996.
- Hock C., Muller-Spahn F., Schuh-Hofer S., Hofmann M., Dirnagl U., Villringer A. Age dependency of changes in cerebral hemoglobin oxygenation during brain activation: a near-infrared spectroscopy study. Journal of Cerebral Blood Flow & Metabolism. 15:1103-1108, 1995.
- Hock C., Villringer K., Muller-Spahn F., Hofmann M., Schuh-Hofer S., Heekeren H., Dirnagl U., Villringer A. Near infrared spectroscopy in the diagnosis of Alzheimer disease. Annals New York Academy of Sciences. 17:22-29, 1995.
- Hock C., Villringer K., Muller-Spahn F., Wenzel R., Heekeren H., Schuh-Hofer S., Hofmann M., Minoshima S., Schwaiger M., Dirnagl U., Villringer A. Decrease in parietal cerebral hemoglobin oxygenation during performance of a verbal fluency task in patients with Alzheimer's disease monitored by means of near-infrared spectroscopy (NIRS) - correlation with simultaneous rCBF-PET measurements. Brain Research, 755:293-303, 1997.
- Kleinschmidt A., Obrig H., Requardt M., Merboldt K.D., Dirnagl U., Villringer A., Frahm J. Simultaneous recording of cerebral blood oxygenation changes during human brain activation by magnetic resonance imaging and near-infrared spectroscopy. Journal of Cerebral Blood Flow & Metabolism, 16:817-826, 1996.
- Meek J.H., Elwell C.E., Khan M.J., Romaya J., Wyatt J.S., Delpy D.T., Zeki S. Regional changes in cerebral haemodynamics due to a visual stimulus measured by near infrared spectroscopy. Proceedings Royal Society Biological Sciences B. 261:351-356, 1995.
- Obrig H., Hirth C., Junge-Hulsing J.G., Doge C., Wolf T., Dirnagl U., Villringer A. Cerebral oxygenation changes in response to motor stimulation. Journal of Applied Physiology, 81:1174-1183, 1996.
- Obrig H., Wolf T., Doge C., Hulsing J.J., Dirnagl U., Villringer A. Cerebral oxygenation changes during motor and somatosensory stimulation in human, as measured by near-infrared spectroscopy. Advances in Experimental Medicine and Biology, 388:219-224, 1996.
- Sakatani K., Ohtaki M., Kashiwasake M., Hashi K. Effects of hyperventilation and CO2 inhalation on cerebral oxygen metabolism of moyamoya disease measured by near-infrared spectroscopy. Tubokawa T., Marrumarou A., Robertson C., Teasdale G., eds. Neurochemical monitoring in the intensive care unit. Tokyo, Japan. Springer-Verlag, pp. 226-234, 1995.
- Sakatani K., Xie Y., Lichty W., Li S., Zuo H. Language- activated cerebral blood oxygenation and hemodynamic changes of the left prefrontal cortex in poststroke aphasic patients. A near-infrared spectroscopy study. Stroke, 29:1299-1304, 1998.
- Smielewski P., Czosnyka M., Zabolotny W., Kirkpatrick P., Ricjards H., Pickard J.D. A computing system for the clinical and experimental investigation of cerebrovascular reactivity. International Journal of Clinical Monitoring and Computing, 14:185-198, 1997.
- Villringer A., Chance B. Non-invasive optical spectroscopy and imaging of human brain function. Trends in Neurosciences, 20:435-442, 1997.

# 赤外線酸素モニタ装置 NIROモニタシリーズ 文献リスト

## 脳神経外科・脳機能

---

- Villringer A., Planck J., Hock C., Schleinkofer L., Dirnagl U. Near infrared spectroscopy (NIRS): a new tool to study hemodynamic changes during activation of brain function in human adults. *Neuroscience Letter* 154:101-104, 1993.
- Villringer A., Planck J., Stodieck S., Boetzel K., Schleinkofer L., Dirnagl U. Noninvasive assessment of cerebral hemodynamics and tissue oxygenation during activation of brain function in human adults using near infrared spectroscopy. *Advances in Experimental Medicine and Biology*, 345:559-565, 1994.
- Quaresima V., Ferrari M. Assessment of quadriceps oxygenation in patients with myopathies by near infrared spectroscopy. *Neurology*, 51:1238-1239, 1998.
- Villringer K., Minoshima S., Hock C., Obrig H., Ziegler S., Dirnagl U., Schwaiger M., Villringer A.: ASSESSMENT OF LOCAL BRAIN ACTIVATION A Simultaneous PET and Near-Infrared Spectroscopy Study. *Adv Exp Med Biol*, 413:149-153, 1997
- Kleinschmidt A., Obrig H., Requardt M., Merboldt KM., Dirnagl U., Villringer M., Frahm J.: Simultaneous Recording of Cerebral Blood Oxygenation Changes During Human Brain Activation by Magnetic Resonance Imaging and Near-Infrared Spectroscopy. *J Cerebral Blood Flow and Metabolism* 16:817-826,1996