

Representative Publications

[2008]

- Ng MFW, **Tong RKY**, Li LSW (2008) A Pilot Study of Randomized Clinical Controlled Trial of Gait Training in Sub-Acute Stroke Patients with Partial Body Weight Support Electromechanical Gait Trainer and Functional Electrical Stimulation: Six-Month Follow-Up, *Stroke*, 2008;39:154-160
- Song R, **Tong KY**, Hu XL (2008) Evaluation of Velocity-dependent Performance of the Spastic Elbow during Voluntary Movements, *Archives of Physical Medicine and Rehabilitation*, 89: 1140-45
- Song R, **Tong KY**, Hu XL Li L(2008) Assistive Control System Using Continuous Myoelectric Signal in Robot-Aided Arm Training for Patients After Stroke, *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, 16(4), pp371-37
- Lau AHY and **Tong KY**, (2008) The reliability of using accelerometer and gyroscope for gait event identification on persons with dropped foot. *Gait & posture*, 27: 248–257
- Lau AHY, **Tong KY**, HL Zhu (2008) Support Vector Machine for Classification of Walking Conditions Using Miniature Kinematic Sensors *Medical & Biological Engineering & Computing*, 46(6):563-73
- Meng F, **Tong KY**, Chan ST, Wong WW, Lui KH, Tang KW, Gao XR, Gao SK,(2008) Study on connectivity between coherent central rhythm and electromyographic activities, *Journal of Neural Engineering*, 5: 324–332
- Cao J, Lu B, Li L, Wang W, **Tong KY**, (2008) Implanted FNS system in Closed-circle may become a way for the restoration of eye blinking and closing function for facial paralysis patient, *Medical Hypotheses*, 2008; 70: 1068-1069
- **Tong KY**, Rong W, Li L and Cao J, (2008) Effects of Consecutive Slips in Nerve Signals Recorded by Implanted Cuff Electrode , *Medical Engineering & Physics* 30 (2008) 460–465
- **Tong RKY**, Hu X (2008) Chapter: Robot-Assisted Training for Stroke Rehabilitation IN: *Service Robotics*, Edited by Takahashi Y, I-Tech ISBN 978-953-7619-00-8
- **Tong RKY**(2008), Intention-driven rehabilitation robotic system, *The Journal of the Hong Kong Institution of Engineers*, May 2008, 20
- Hu XL, **Tong KY**, Song R, Zheng XJ, Lui KH, Leung WWF, Ng S, Au-Yeung SSY, (in press) Quantitative Evaluation of Motor Functional Recovery Process in Chronic Stroke Patients during Robot-Assisted Wrist Training, *Journal of Electromyography and Kinesiology* (Available online 19 May 2008)

[2007]

- Hu XL, **Tong KY**, Song R, Tsang VS, Leung PO and Li L, (2007) Variation of Muscle Coactivation Patterns in Chronic Stroke During Robot-Assisted Elbow Training *Archives of Physical Medicine and Rehabilitation*. 88: 1022-29
- Li L, **Tong KY**, Song R and Koo TKK, (2007) Is Maximum Isometric Muscle Stress the Same among Prime Elbow Flexors? *Clinical Biomechanics*, 22(8): 874-83
- Hu XL, **Tong KY** and Li L, (2007) The Mechanomyography of Persons after Stroke during Isometric Voluntary Contractions, *The Journal of Electromyography and Kinesiology*, 17(4):473-83
- Li L, **Tong KY** and Hu XL, (2007) The Effect of Poststroke Impairments on Brachialis Muscle Architecture as Measured by Ultrasound, *Archives of Physical Medicine and Rehabilitation*. 88: 243-250
- Cao J, Shao SY, Li H, Li L, **Tong KY**,(2007) Fabrication of Cuff Electrode and the Extraction of a

Dog's Facial Nerve Electroneurogram, ACTA Biophysica Sinica , 23(3):223-226 (in Chinese): ISSN 1000-6737

- Cao J, Shao SY, Li H, Li L, **Tong KY**, (2007) Identification of Orbicularis Oculi Muscle Activities Based on the Electroneurogram, Chinese Journal of Medical Physics, 24(5): 342-345 (in Chinese): ISSN 1005-202X
- Cao J, Shao SY, Li H, Li L, **Tong KY**, (2007) Orbicularis oculi muscle activities by analyzing dog's electroneurogram, ACTA Academiae Medicinae Militaris Tertiae, 2007, 29(19): 1855-04 (in Chinese): ISSN 1000-5404
- **Tong KY**, Hu XL, (2007) Chapter 3: Gait Analysis, Orthopaedic rehabilitation, People's Medical Publishing House, pp: 96-117, Sep, 2007 (in Chinese), ISBN 978-7-117-8981-4/R.8982

[2006]

- **Tong RKY**, Ng MFW, Li LSW, and So EFM, (2006) Gait Training of Patients After Stroke Using an Electromechanical Gait Trainer Combined With Simultaneous Functional Electrical Stimulation , Physical Therapy, 86: 1282-1294
- **Tong RKY**, Ng MFW, Li LSW (2006),The Effectiveness of Gait Training of Body Weight-supported Cyclic Walking Exercise and Functional Electrical Stimulation in Patients with Subacute Stroke, Archives of Physical Medicine and Rehabilitation. 87(10):1298-1304
- Hu XL, **Tong KY**, and Hung LK,(2006) Firing Properties of Motor Units during Fatigue in Subjects after Stroke, Journal of Electromyography and Kinesiology: 469-476
- Hu XL, **Tong KY**, Tsang SF, and Song R, (2006) Joint-Angle-Dependent Neuromuscular Dysfunctions at the Wrist in Persons after Stroke Archives of Physical Medicine and Rehabilitation 87(5):671-679
- Leung LY, **Tong KY**, Zhang SM, Zeng XH, Zhang KP, Zheng XX, Hu XL, (2006) Neurochemical effects of exercise and neuromuscular electrical stimulation on brain after stroke: a microdialysis study using rat model, Neuroscience Letters, 397(1-2):135-9
- **Tong KY** (2006) Chapter: Functional Electrical Stimulation (FES): FES on Stroke Rehabilitation Wiley Encyclopedia of Biomedical Engineering edited by Metin Akay, Wiley, pp 1682-1690
- [2005 or before]
- Song R and **Tong KY** (2005) Using recurrent artificial neural network model to estimate voluntary elbow torque in dynamic situation, Medical & Biological Engineering & Computing, Vol 43 No.4, pp473-480
- Hu XL, **Tong KY** and Hung LK, (2004) Oscillations in the Power Spectra of Motor Unit Signals Caused by Refractoriness Variations, Journal of Neural Engineering, vol. 1, pp. 174-185
- **Tong KY**, Mak AFT and Ip WY (2003) Command control for functional electrical stimulation hand grasp systems using miniature accelerometers and gyroscopes Medical & Biological Engineering & Computing, Vol 41 No. 6 pp710-717
- **Tong KY** and Mak AFT (2001) A computer-based environment for simulating the voluntary upper limb movements of persons with disability Medical & Biological Engineering & Computing Vol. 39 No.4 pp414-421
- **Tong KY** and Granat MH (2000) Chapter 14: Artificial neural network control on functional electrical stimulation assisted gait with spinal cord injury persons Artificial neural networks in biomedicine edited by PJG Lisboa, EC Ifeachor and PS Szczepaniak, Springer-Verlag. ISBN 1-85233-005-8
- **Tong KY** and Granat MH* (1999) Reliability of neural network FES gait control systems Medical & Biological Engineering & Computing Vol. 37 No.1 pp633-638

- **Tong KY** and Granat MH* (1999) A practical gait analysis system using gyroscopes Medical Engineering & Physics Vol. 21 No.2 pp87-94
- **Tong KY** and Granat MH* (1999) Gait control system for functional electrical stimulation using neural networks Medical & Biological Engineering & Computing Vol. 37 No.1 pp35-41
- **Tong KY** and Granat MH*. (1998) Virtual artificial sensor technique for functional electrical stimulation. Medical Engineering & Physics Vol 20, No. 6, pp458-68