

Universitäts- und Landesbibliothek Tirol

Komponenten der Schnellkraftleistungen im Dehnungs-Verkürzungs-Zyklus

Gollhofer, Albert

Erlensee, 1987

Literaturverzeichnis

[urn:nbn:at:at-ubi:2-5079](https://nbn-resolving.org/urn:nbn:at:at-ubi:2-5079)

- ALEXANDER, R. MCN.: Mechanics of skeleton and tendon. In: BROOKS, V.B. (ed.): Handbook of Physiology: The Nervous System II., Chap. 2, 17-42, Bethesda, USA, 1981.
- ALEXANDER, R. MCN.; VERNON, A.: The mechanics of hopping by kangaroos (Macropodidae). In: J. of Zool., 177, 265 - 303, 1975.
- ALEXANDER, R. MCN.; BENNET-CLARK, H.C.: Storage of elastic strain energy in muscle and other tissues. In: Nature, 265, 114-117, 1977.
- ALLUM, J.H.J.: Responses to load disturbance in human shoulder muscles: the hypothesis that one component is a pulse test information signal. In: Exp. Brain Res., 22, 307 - 326, 1975.
- AMEMIYA, Y.; SUGI, H.; HASHIZUME, H.: X-ray diffraction studies on the dynamic properties of cross-bridges in skeletal muscle. In: SUGI, H.; POLLACK, G.H. (eds.): Cross-bridge mechanism in muscle contraction. Proceedings of the International Symposium on the current problems of sliding filament model and muscle mechanics. Tokio, 13th-15th September, 1978, University Park Press, Baltimore, U.S.A., 425-441.
- ANTONI, M.; SCHMIDTBLEICHER, D.; DIETZ, V.: Möglichkeiten der schnellen Innervationskorrektur beim Laufen durch den spinalen Dehnungsreflex. In: Leistungssport, 9, 6, 428-432, 1979.
- APPELL, H.J.: Proliferation of motor end-plates induced by increased muscular activity. In: Int. J. of Sports Med. 5, 125 - 129, 1985.
- ASMUSSEN, E.; BONDE-PETERSEN, F.: Apparent efficiency and storage of elastic energy in human muscles during exercise. In: Acta Physiol. Scand., 92, 537 - 545, 1974a.
- ASMUSSEN, E.; BONDE-PETERSEN, F.: Storage of elastic energy in skeletal muscles in man. In: Acta Physiol. Scand., 91, 385-392, 1974b.
- BALLREICH, R.; KUHLOW, A.: Beiträge zur Biomechanik des Sports: In Schriftenreihe des Bundesinstituts für Sportwissenschaft, Bd. 32, Hofmann, Schorndorf, 1980.
- BELL, D.G.; JACOBS, I.: Electro-mechanical response times and rate of force development in males and females. Medicine and Science in Sports and Exercise, 18, 1, 31 - 36, 1986.
- BELLEMARE, F.; WOODS, J.J.; JOHANSSON, R.; BIGLAND-RITCHIE, B.: Motor-unit discharge rate in maximal voluntary contraction of three human muscles. In: J. of Neurophysiol., 50, 6, 1380 - 1392, 1983.
- BENEDICT, J.V.; WALKER, L.B.; HARRIS, E.H.: Stress-strain characteristics and tensile strength unembalmed human tendon. In: J. of Biomechanics, 1, 53 - 63, 1968.
- BLANGE, T.; STIENEN, G.J.M.: Transmission phenomena and early tension

- recovery in skinned muscle fibres of the frog. In: Pflügers Arch., 405, 12 - 18, 1985.
- BLANTON, P.L.; BIGGS, N.L.: Ultimate tensile strength of fetal and adult human tendons. In: J. of Biomechanics, 3, 181 - 189, 1970.
- BOSCO, C.: Stretch-shortening cycle in skeletal muscle function. In: Studies in Sport, Physical Education and Health 15, University of Jyväskylä 1982.
- BOSCO, C.; KOMI, P.V.: Potentiation of the mechanical behavior of the human skeletal muscle through prestretching. In: Acta Physiol. Scand. 106, 467-472, 1979.
- BOSCO, C.; KOMI, P.V.; LOCATELLI, E.: Physiologische Betrachtungen zum Tiefsprungtraining, In: Leistungssport, 9, 6, 434-439, 1979.
- BOSCO, C.; KOMI P.V.: Influence of aging on the mechanical behavior of the leg extensor muscles. In: Eur. J. of Appl. Physiol., 45, 209-219, 1980.
- BOSCO, C.; KOMI, P.V.; ITO, A.: Prestretch potentiation of human skeletal muscle during ballistic movement. In: Acta Physiol. Scand. 111, 135-140, 1981.
- BOSCO, C.; PITTERA, C.: Zur Trainingswirkung neuentwickelter Sprungübungen auf die Explosivkraft. In: Leistungssport, 12, 1, 36-39, 1982.
- BOSCO, C.; VIITASALO, J.T.; KOMI, P.V.; LUHTANEN, P.: Combined effect of elastic energy and myoelectrical potentiation during stretch-shortening cycle exercise. In: Acta Physiol. Scand., 114, 557-565, 1982a.
- BOSCO, C.; ITO, A.; KOMI, P.V.; LUHTANEN, P.; RAHKILA, P.; RUSKO, H.; VIITASALO, J.T.: Neuromuscular function and mechanical efficiency of human leg extensor muscles during jumping exercises. In: Acta Physiol. Scand. 114, 543-550, 1982b.
- BOSCO, C.; LUHTANEN, P.; KOMI, P.V.: A simple method for measurement of mechanical power in jumping. In: Europ. J. of Appl. Physiol., 82, 273-282, 1982c.
- BÜHRLE, M.: Dimensionen des Kraftverhaltens und ihre spezifischen Trainingsmethoden. In: Grundlagen des Maximal- und Schnellkrafttrainings, Schriftenreihe des Bundesinstituts für Sportwissenschaft, Bd. 56, 82-112, 1985.
- BÜHRLE, M.; SCHMIDTBLEICHER, D.: Komponenten der Maximal- und Schnellkraft. In: Sportwissenschaft, 11, 11-26, 1981.
- BÜHRLE, M.; SCHMIDTBLEICHER, D.; RESSEL, H.: Die spezielle Diagnose der einzelnen Kraftkomponenten im Hochleistungssport. In: Leistungssport 13, 11 - 16, 1983.

- BURKE, R.E.; EDGERTON, V.R.: Motor unit properties and selective involvement in movement. In: Exercise Sport Sci. Review, 3, 31-81, 1975.
- BURKE, R.E.; HAGBARTH, K.E.; LOFSTEDT, L.: Muscle spindle activity in man during shortening and lengthening contractions. In: J. of Physiol., 277, 132-142, 1978.
- BURKE, R.E.: Motor units: anatomy, physiology and functional organization. In: Handbook of Physiology. The Nervous System. Am. Physiol. Soc., 1981, sect.1, vol. II, part 1, chapt. 10, 345 - 422, 1981.
- CAVAGNA, G.A.: Elastic bounce of the body. In: J. of Appl. Physiol., 19, 3, 279-282, 1970.
- CAVAGNA, G.A.; SABIENE, F.P.; MARGARIA, R.: Mechanical work in running. In: Journal of Appl. Physiol. 19, 249-256, 1964.
- CAVAGNA, G.A.; SABIENE, F.P.; MARGARIA, R.: Effect of negative work on the amount of positive work performed by an isolated muscle. In: J. of Appl. Physiol., 20, 157 - 158, 1965
- CAVAGNA, G.A.; DUSMAN, B.; MARGARIA, R.: Positive work done by a previously stretched muscle. In: J. of Appl. Physiol., 24, 1, 21-32, 1968.
- CAVAGNA, G.A.; KOMAREK, L.; CITTERIO, G.; MARGARIA, R.: Power output of the previously stretched muscle. In: Medicine and Sport, Vol.6: Biomechanics II, 159-167, Karger Basel, 1971.
- CAVANAGH, P.R.; KOMI, P.V.: Electromechanical delay in human skeletal muscle under concentric and eccentric contractions. In: Europ. J. of Appl. Physiol., 42, 159-163, 1979.
- CAVANAGH, P.R.; KRAM, R.: Mechanical and muscular factors affecting the efficiency of human movement. Medicine and Science in Sports and Exercise, 17, 3, 326-331, 1985.
- CLAUS, G.; EBNER, H.: Grundlagen der Statistik. Frankfurt/M.-Zürich, 2. Aufl. 1977
- CRAGO, P.E.; HOUK J.C.; HASAN Z.: Regulatory actions of human stretch reflex. In: J. of Neurophysiol., 39, 925 - 935, 1976.
- DAWSON, T.J.; TAYLOR, C.R.: Energetic cost of locomotion in kangaroos. In: Nature, 246, 313-314, 1973.
- DEEKE, L.; SCHEID, P.; KORNUBER, H.: Distribution of readiness potential, pre-motion positivity, and motor potential of the human cerebral cortex preceding voluntary finger movements. In: Experimental Brain Res., 7, 158, 1969.
- DESMEDT, J. E.: The size principle of motoneuron recruitment in ballistic or ramp voluntary contractions in man. In: Progress in

- Clinical Neurophysiol. (Desmedt J.E. ed.) Karger, 9, 145-148, 1981.
- DIETZ, V.; NOTH, J.: Spinal stretch reflexes of triceps surae in active and passive movements. In: J. of Physiology, 284, 180-181, 1978a.
- DIETZ, V.; NOTH, J.: Pre-innervation and stretch responses of triceps brachii in man falling with and without visual control. In: Brain Research, 142, 576-579, 1978b.
- DIETZ, V.: Contribution of spinal stretch reflexes to the activity of leg muscles in running. In: Muscle receptors and Movement, Proceedings of a Symposium held at the Sherrington School of Physiol., London, (ed.: TAYLOR, A., PROCHAZKA, A.), 339 - 346, 1980.
- DIETZ, V.; SCHMIDTBLEICHER, D.; NOTH J.: Neuronal mechanisms of human locomotion. In: J. of Neurophysiol., 42, 1212-1222, 1979.
- DIETZ, V.; NOTH, J.; SCHMIDTBLEICHER, D.: Interaction between pre-activity and stretch reflex in human triceps brachii during landing from forward falls. In: J. of Physiol., 311, 113-125, 1981.
- DIETZ, V.: Elektrophysiologie komplexer Bewegungsabläufe: Gang-, Lauf-, Balance- und Fallbewegungen. Aus: Berger, W. et al. (Hrsg.): Haltung und Bewegung beim Menschen, Springer-Verlag Berlin, Heidelberg, 87 - 118, 1984.
- DONSKOI, D.D.: Grundlagen der Biomechanik, Berlin 1975
- DOSS, W.; KARPOVICH, P.: A comparison of concentric, excentric and isometric strength of elbow flexors. In: J. of Appl. Physiol., 20, 351 - 353, 1965.
- EDMAN, K.A.P.: The velocity of shortening at zero load: Its relation to sarkomere length and degree of activation of vertebrate muscle fibers. In: SUGI, H.; POLLACK, G.H. (eds.): Cross-bridge mechanism in muscle contraction. Proceedings of the International Symposium on the current problems of sliding filament model and muscle mechanics. Tokio, 13th-15th September, 1978, University Park Press, Baltimore, U.S.A., 347-356.
- EDMAN, K.A.P.; ELZINGA, G.; NOBLE M.I.M.: The effect of stretch on contracting skeletal muscle fibers. In: SUGI, H.; POLLACK, G.H. (eds.): Cross-bridge mechanism in muscle contraction. Proceedings of the International Symposium on the dcrrrent problems of sliding filament model and muscle mechanics. Tokio, 13th-15th September, 1978a, University Park Press, Baltimore, U.S.A., 297-303.
- EDMAN, K.A.P.; ELZINGA, G.; NOBLE, M.I.M.: Enhancement of mechanical performance by stretch during tetanic contractions of vertebrate skeletal muscle fibres. In: J. of Physiol., 281, 139-155, 1978b.

- EDMAN, K.A.P.; ELZINGA, G.; NOBLE, M.I.M.: Critical sarcomere extension required to recruit a decaying component of extra force during stretch in tetanic contractions of frog skeletal muscle fibers. In: J. of Gen. Physiol. 78, 365-382, 1981.
- EDMAN, K.A.P.; ELZINGA, G.; NOBLE, M.I.M.: Residual force enhancement after stretch of contracting frog single muscle fibers. In: J. of Gen. Physiol., 80, 769-784, 1982.
- EKLUND, G.; HAGBARTH, K.E.; HAEGGLUND, J.V.; WALLIN, E.U.: Mechanical oscillations contributing to the segmentation of the reflex electromyogram responses to stretching human muscles. In: J. of Physiol., 326, 65-77, 1982a.
- EKLUND, G.; HAGBARTH, K.E.; HAEGGLUND, J.V.; WALLIN, E.U.: The "late" reflex responses to the muscle stretch: the "resonance hypothesis" versus the "long-loop hypothesis". In: J. of Physiol., 326, 79-90, 1982b.
- EVARTS, E.V.: Motor cortex reflexes associated with learned movements. In: Science 179, 501 - 503, 1973.
- FLITNEY, F.W.; HIRST, D.G.: Cross-bridge detachment and sarcomere "give" during stretch of active frog's muscle. In: J. of Physiol., 276, 449-465, 1978a.
- FLITNEY, F.W.; HIRST, D.G.: Filament sliding and energy absorbed by the cross-bridges in active muscle subjected to cyclical length changes. In: J. of Physiol., 276, 467-479, 1978b.
- FREUND, H.J.: Motor unit and muscle activity in voluntary motor control. In: Physiological Reviews, The American Physiological Society, 63, 2, 387 - 436, 1983.
- FORD, L.E.; HUXLEY, A.F.; SIMMONS, R.M.: Tension responses to sudden length change in stimulated frog muscle fibers near slack length. In: J. of Physiology 269, 441-515, 1978.
- FORD, L.E.; HUXLEY, A.F.; SIMMONS, R.M.: The relation between stiffness and filament overlap in stimulated frog muscle fibers. In: J. of Physiol., 311, 219-249, 1981.
- FROMMEYER, P.: Erfahrungen mit ungewöhnlichen Trainingsformen zur Leistungssteigerung im Hochsprung. In: Lehre der Leichtathletik, 34, 6, 182, 1983.
- FUNG, Y.C.: Biomechanics. Springer-Verlag Berlin, Heidelberg, New York 1981.
- GERTHSEN, C.; KNESER, H.O.; VOGEL, H.: Physik. Springer-Verlag Berlin, Heidelberg, New York 12.Aufl. 1974.
- GILLIES, D.H.: Motor unit discharge patterns during isometric contraction in man. In: J. of Physiol., 223, 36P-37P, 1973.

- GOLLHOFER, A.: Innervationscharacteristics of M. Gastrocnemius during landing on different surface. In: 10th International Congress of Biomechanics, Umea, Abstract Book, 89, 1985a.
- GOLLHOFER, A.: Diagnose und Training der Schnellkraftleistung im Dehnungs-Verkürzungs-Zyklus. In: DVS - Handblätter, im Druck, 1985b.
- GOLLHOFER, A.; SCHMIDTBLEICHER, D.; DIETZ, V.: Regulation of muscle stiffness in human locomotion. In: Int. Journal of Sportsmed. 5, 156 - 159, 1984a.
- GOLLHOFER, A.; SCHMIDTBLEICHER, D.; DIETZ, V.: Die Regulation des Muskeltonus bei Bewegungen. In: Extracta orthopädisca 7, 404-407, 1984b.
- GOTTLIEB, G.L.; AGARWAL, G.C.: Response to sudden torques about ankle in man: Myotatic reflex. In: J. of Neurophysiol., 42, 91-106, 1979.
- GOTTLIEB, G.L.; AGARWAL, G.C.: Response to sudden torques about ankle in man: II. Postmyotatic reactions. In: J. of Neurophysiol., 43, 86-101, 1980a.
- GOTTLIEB, G.L.; AGARWAL, G.C.: Response to sudden torques about ankle in man: III. Suppression of stretch-evoked responses during phasic contraction. In: J. of Neurophysiol., 44, 233-246, 1980b.
- GOTTLIEB, G.L.; AGARWAL, G.C.; JAEGER, R.F.: Response to sudden torques about ankle in man. IV. A functional role of α - γ -linkage. In: J. of Neurophysiol., 46, 179-190, 1981.
- GRAF, K.H.; KRAHL, H.: Überlastungsschäden im Fußbereich beim Leichtathleten. In: Lehre der Leichtathletik 24, 3, 81-87, 1984.
- GRANIT, R.; PHILLIPS, C.G.; SKOGLUND, S.; STEG, G.: Differentiation of tonic from phasic alpha ventral horn cells by stretch, pinna and crossed extensor reflexes. In: J. of Neurophysiol., 20, 470-481, 1957.
- GREENWOOD, R.; HOPKINS, A.: Landing from an unexpected fall and a voluntary step. In: Brain 99, 375-386, 1976a.
- GREENWOOD, R.; HOPKINS, A.: Muscle responses during sudden falls in man. In: J. of Physiol., 254, 507 - 518, 1976b.
- GRIEVE, D.W.; PHEASANT, S.; CAVANAGH, P.R.: Prediction of gastrocnemius length from knee and ankle joint posture. In: ASSMUSSEN, E.; JØRGENSEN, K. (ed.): Biomechanics VI-A, 405-412, Baltimore, University Park Press 1978.
- GRIMBY, L.; HANNERZ, J.: Disturbances in voluntary recruitment order of low and high frequency motor units on blockades of proprioceptive afferent activity. In: Acta Physiol. Scand. 96, 207-216, 1976.

- GRIMBY, L.; HANNERZ, J.; HEDMAN, B.: The fatigue and voluntary discharge properties of single motor units in man. *J. of Physiol.*, 316, 545-554, 1981.
- HAASE, J.; HENATSCH, H. D.; JUNG, R.; STRATA, P.; THODEN, U.: Sensomotorik. Aus: *Physiologie des Menschen*, Bd. 14, München-Berlin-Wien 1976.
- HABERKORN-BUTENDEICH, E.; KLAUCK, J.: Dynamometrische und elektromyographische Untersuchungen am M. triceps brachii. In: DECKER, W.; LÄMMER, M. (Hrsg.): *Kölner Beiträge zur Sportwissenschaft* 2. Jahrbuch der Deutschen Sporthochschule Köln, 87 - 108, 1974.
- HÄKKINEN, K.; KOMI, P.V.: Changes in neuromuscular performance in voluntary and reflex contraction during strength training in man. In: *International Journal of Sports Medicine* 4, 4, 282 - 288, 1983a.
- HÄKKINEN, K.; KOMI, P.V.: Electromyographic and mechanical characteristics of human skeletal muscle during fatigue under voluntary and reflex conditions. In: *Electroencephalography and clinical Neurophysiology*, 55, 436 - 444, 1983b.
- HÄKKINEN, K.; KOMI, P.V.: Electromyographic changes during strength training and detraining. In: *Med. Sci. Sports and Exercise*, 15, 6, 455 - 460, 1983c.
- HÄKKINEN, K.; PAKARINEN, A.; ALEN, M.; KOMI, P.V.: Serum hormones during prolonged training of neuromuscular performance. In: *Eur. J. of Appl. Physiol.*, 53, 287 - 293, 1985a.
- HÄKKINEN, K.; KOMI, P.V.: Changes in electrical and mechanical behavior of leg extensor muscles during heavy resistance strength training. In: *Scand. J. Sports Sci.*, in press, 1985.
- HÄKKINEN, K.; KOMI, P.V.; ALEN, M.: Effect of explosive type strength training on isometric force- and relaxation-time, electromyographic and muscle fibre characteristics of leg extensor muscles. In: *Acta Physiol. Scand.*, in press, 1985b.
- HÄKKINEN, K.; ALEN, M.; KOMI, P.V.: Changes in isometric force- and relaxation-time, electromyographic and muscle fibre characteristics of human skeletal muscle during strength training and detraining. In: *Acta Physiol. Scand.*, in press, 1985c.
- HAMMOND, P.H.: An experimental study of servo action in human muscular control. In: *Proc. Int. Congr. Med. Electronics*, London: IEE Conf. Publ. 190-199, 1960.
- HAUGEN, P.: Latency relaxation and short-range elasticity in single muscle fibres of the frog. In: *Acta Physiol. Scand.*, Supplementum 519, 1983.
- HENATSCH, H.-D.: Cerebrale Regulation der Sensomotorik. In: GAUER, O.H.; KRAMER, K.; JUNG, R. (Hrsg.): *Physiologie des Menschen*

- HENATSCH, H.-D.; LANGER, H.H.: Neurophysiologische Aspekte der Sportmotorik. In: RIEDER, H.; BÖS, K.; MECHLING, H.; REISCHLE, K. (Hrsg.): Motorik und Bewegungsforschung, 27-55, Hofmann Schorn-dorf 1983.
- HENNEMAN, E.; SOMJEN, G.; CARPENTER, D.O.: Functional significance of cell size in spinal motoneurons. In: J. of Neurophysiol., 28, 560-580, 1965a.
- HENNEMAN, E.; SOMJEN, G.; CARPENTER, D.O.: Excitability and inhibi-tibility of motoneurons of different sizes. In: J. of Neuro-physiol., 28, 599-620, 1965b.
- HENNEMAN, E.; CLAMANN, H.P.; GILLIES, J.D.; SKINNER, R.D.: Rank order of motoneurons within a pool: law of combination. In: J. of Neurophysiol., 37, 1338-1349, 1974.
- HILL, A.V.: The heat of shortening and the dynamic constants of muscle. Proc. Roy. Soc. B. 126, 136-195, 1938.
- HILL, A.V.: The effect of load on the heat of shortening of muscle. In: Proc. of Roy. Soc. of London, Sec. B., 159, 297 - 318, 1964.
- HILL, T.L.; EISENBERG, E.: Simplified theory of the HUXLEY-SIMMONS TO, T1 AND T2 in muscle models with two attached states. In: Cross-bridge mechanism in muscle contraction. Proceedings of the Inter-national Symposium on the current problems of sliding filament model and muscle mechanics. Tokio, 13th-15th September, 1978, University Park Press, Baltimore, U.S.A., 541-560.
- HOCHMUTH, G.: Biomechanik sportlicher Bewegungen. Berlin 1974.
- HOLLMANN, W.; HETTINGER, T.: Sportmedizin. Arbeits- und Trainings-grundlagen. Schattauer, Stuttgart-New York 1980.
- HOSTER, M.: Zum Problem der Überlastungssyndrome am Bewegungsapparat von Springern und Springerinnen in der Leichtathletik. In: Lehre der Leichtathletik 31, 39,1307-1310, 1982.
- HOUK, J.C.; HENNEMAN, E.: Responses to golgi tendon organs to active contractions of the soleus muscle of the cat. In: J. of Neuro-physiol., 30, 466-481, 1967.
- HOUK, J.C.: Participation of reflex mechanisms and reaction-time pro-cesses in the compensatory adjustments to mechanical disturban-ces. In: DESMEDT, J.E. (ed.): Cerebral Motor Control in Man: Long Loop Mechanisms, (Prog. Clin. Neurophysiol., Vol. 4), 193-215, Basel Karger, 1978.
- HOUK, J.C.; CRAGO, P.E.; RYMER, W.Z.: Function of the spindle dynamic response in stiffness regulation - predictive mechanism provided by non-linear feedback. In: Muscle receptors and Movement, Proceedings of a Symposium held at the Sherrington School of

- Physiol., London, (ed.:TAYLOR, A., PROCHAZKA, A.), 299 - 310, 1980
- HOUK, J.C.; RYMER, W.Z.: Neural control of muscle length and tension. In: BROOKS, V.B. (ed.): Handbook of Physiology: The nervous System II, Chap. 8, 251-323, Bethesda, USA, 1981.
- HOUK, J.C.; RYMER, W.Z.; CRAGO, P.E.: Dependence of dynamic response of spindle receptors on muscle length and velocity. In: J. of Neurophysiol., 46, 1, 143-166, 1981.
- HULTBORN, H.: Transmission in the pathway of reciprocal Ia-inhibition to motoneurons and its control during the tonic stretch reflex. In: HOMMA, L. (ed.): Understanding the stretch reflex. In: Brain Res. 44, 235 - 255, 1976.
- HUXLEY, A.F.; SIMMONS, R.M.: Proposed mechanism of force generation in striated muscle. In: Nature, 233, 533-538, 1971a.
- HUXLEY, A.F.; SIMMONS, R.M.: Mechanical properties of the crossbridges of frog striated muscle. In: J. of Physiol. 218, 59-60, 1971b.
- HUXLEY, A.F.: Muscular contraction. In: J. of Physiol., 243, 1-43, 1974.
- HUXLEY, H.E.: Time resolved X-ray diffraction studies on muscle. In: SUGI, H.; POLLACK, G.H. (eds.): Cross-bridge mechanism in muscle contraction. Proceedings of the International Symposium on the current problems of sliding filament model and muscle mechanics. Tokio, 13th-15th September, 1978, University Park Press, Baltimore, U.S.A., 391-401.
- IKAI, M.; YABE, K.; ISHIJ, K.: Muskelkraft und muskuläre Ermüdung bei willkürlicher Anspannung und elektrischer Reizung des Muskels. In: Sportarzt, Sportmedizin, 197-204, 1967.
- ITO, A.; KOMI, P.V.; SJÖDIN, B.; BOSCO, C.; KARLSSON, J.: Mechanical efficiency of positive work in running at different speeds. In: Med. and Sci. in Sports and Exercise, 15, 4, 299-308, 1983.
- JOYCE, G.C.; RACK, P.M.H.; WESTBURY, D.R.: The mechanical properties of cat soleus muscle during controlled lengthening and shortening movements. In: J. of Physiol., 204, 461-474, 1969.
- JULIAN, F.J.; MORGAN, D.L.: Variation of muscle stiffness with tension during tension transients and constant velocity shortening in the frog. In: J. of Physiol., 319, 193-203, 1981a.
- JULIAN, F.J.; MORGAN, D.L.: Tension, stiffness, unloaded shortening speed and potentiation of frog muscle fibres at sarcomere lengths below optimum. In: J. of Physiol., 319, 205-217, 1981b.
- KODAMA, T.; YAMADA, K.: An explanation of the shortening heat based on the enthalpy profile of the myosin ATPase reaction. In: Cross-bridge mechanism in muscle contraction. Proceedings of the International Symposium on the current problems of sliding filament

model and muscle mechanics. Tokio, 13th-15th September, 1978, University Park Press, Baltimore, U.S.A., 481-488.

- KOMI, P.V.: Relationship between muscle tension, EMG and velocity of contraction and concentric and eccentric work. In: Desmedt, J.E. (Hrsg.): New Development in Electromyography and Clinical Neurophysiology Vol. 1, 596-606, Karger Basel, 1973.
- KOMI, P.V.: Faktoren der Muskelkraft und Prinzipien des Krafttrainings. In: Leistungssport, 5, 13-16, 1975.
- KOMI, P.V.: Neuromuscular performance: factors influencing force and speed production. In: Scand. J. of Sports Sci. 1, 2-15, 1979.
- KOMI, P.V.: Electromyographic, mechanical and metabolic changes during static and dynamic fatigue. In: Knuttgen, Vogel, Poortmans (eds) Biochemistry of exercise, Int. Ser. Sport Sciences, Vol. 13. Human Kinetics Publishers, Champaign, 197-215, 1983a.
- KOMI, P.V.: Elastic potentiation of muscle and its influence on sport performance. In: Baumann, W. (Hrsg.): Biomechanik und Sportliche Leistung, Schriftenreihe des Bundesinstituts für Sportwissenschaft Bd 40, Hofmann Schorndorf 1983b.
- KOMI, P.V.: Physiological and biomechanical correlates of muscle function: Effects of muscle structure and stretch-shortening cycle on force and speed. In: Exercise and Sport Sciences Reviews, 12, 81-121, 1984a.
- KOMI, P.V.: Fatigue and recovery of neuromuscular function. In: Medicine Sport Sci., 17, 187 - 201, (Karger, Basel) 1984b.
- KOMI, P.V.: Dehnungs-Verkürzungs-Zyklus bei Bewegungen mit sportlicher Leistung. In: BÖHRLE, M. (Hrsg.): Grundlagen des Maximal- und Schnellkrafttrainings, 254-270, Hofmann, Schorndorf 1985.
- KOMI, P.V.; BUSKIRK, E.R.: Effect of Eccentric and Concentric Muscle Conditioning on Tension and Electrical Activity of Human Muscle. In: Ergonomics Vol.15, No.4, 417-434, 1972.
- KOMI, P. V.; BOSCO, C.: Utilisation of stored elastic energy in men and women. In: Med. Sci.Sports, 10, 4, 261 - 265, 1978.
- KOMI, P.V.; KARLSSON, J.: Physical performance, skeletal muscle enzyme activities, and fibre types in monozygous and dizygous twins of both sexes. In: Acta Physiol. Scand. Suppl. 462, 1979.
- KOMI, P.V.; ITO, A.; SJÖDIN, B.; WALLENSTEIN, R.; KARLSSON, J.: Muscle metabolism, lactate breaking point and biomechanical features of endurance running. In: Int. J. Sports Med., 2, 148-153, 1981.
- KOMI, P.V.; JÄRVINEN, M.; SALONEN, M.: In-vivo measurements of Achilles tendon forces in man. In: Med. Sci. Sports Exerc., 16, 2, 165, 1984.

- KORNHUBER, H.-H.: Cerebral cortex, cerebellum and basal ganglion: an introduction to their motor functions. In: SCHMITT/WORDEN (eds.): The Neurosciences: Third study program. Cambridge, 267-280, 1974.
- KUHLLOW, A.: Biomechanische Analyse und Ansteuerung konditioneller Komponenten bei Hochleistungsathleten. In: BALLREICH, R.; KUHLLOW, A.: Beiträge zur Biomechanik des Sports, 37-55, Hofmann, 1980a.
- KUHLLOW, A.: Abschätzung der Einflußhöhe konditioneller Komponenten bei Hochleistungsathleten. In: BALLREICH, R.; KUHLLOW, A.: Beiträge zur Biomechanik des Sports, 64-70, Hofmann, 1980b.
- KWAN, H.C.; MURPHY, J.T.; REPECK, M.W.: Control of stiffness by medium latency electromyographic response to limb perturbation. In: Can. J. of Physiol. Pharmacol., 57, 277 - 285, 1980.
- LÄNNERGREN, J.: The effect of low-level activation on the mechanical properties of isolated frog muscles fibres. In: J. Gen. Physiology 58, 145-162, 1971.
- LATASTE, X.: Spastizität. In: Sandorama, 5, 21-26, SANDOZ, Nürnberg 1983.
- LEE, R.G.; TATTON, W.G.: Longloop reflexes in man: Clinical applications. In: DESMEDT, J.E. (ed.): Cerebral Motor Control in Man: Long Loop Mechanisms, (Prog. Clin. Neurophysiol., Vol 4), 320-333, Basel Karger, 1978.
- LEKSELL, L.: The action potential of excitatory effects of the small ventral root fibres to skeletal muscle. In: Acta Physiol. Scand., 10, 31, 1945.
- LETZELTER, H.: Ziele, Methoden und Inhalte des Krafttrainings. Ahrendsburg, 1983.
- LETZELTER, M.: Trainingsgrundlagen. Rowohlt, Reinbek, 1978.
- MARGARIA, R.: Positive and negative work performances and their efficiencies in human locomotion. In: Int. Z. angew. Physiol. einschl. Arbeitsphysiol., 25, 339-351, 1968.
- MARSDEN, C.D.; MERTON, P.A.; MORTON, H.B.: Stretch reflex and servo action in a variety of human muscles. In: J. of Physiol. 259, 531-560, 1976.
- MARSDEN, C.D.; MERTON, P.A.; MORTON, H.B.; ADAM, J.: The effect of lesions of the central nervous system on long-latency stretch reflexes in the human thumb. In: DESMEDT, J.E. (ed.): Cerebral Motor Control in Man: Long Loop Mechanisms, (Prog. Clin. Neurophysiol., Vol. 4), 334-341, Basel Karger, 1978a.
- MARSDEN, C.D.; MERTON, P.A.; MORTON, H.B.; ADAM, J.; HALLETT, M.: Automatic and voluntary responses to muscle stretch in man. In: DESMEDT, J.E. (ed.): Cerebral Motor Control in Man: Long Loop Mechanisms, (Prog. Clin. Neurophysiol., Vol. 4), 167-177, Basel

- Karger, 1978b.
- MASSALGIN, N.A.; USHAKOW, J. W.: Anwendbarkeit der Elektromyographie zur Beurteilung des Entwicklungsniveaus zentralnervaler Einflußfaktoren, die die Effektivität der Schnellkraftbewegungen beeinflussen. In: Medizin und Sport. 19, 364, 1979.
- MATHEWS, B. H. C.: Nerve endings in mammalian muscle. In: J. of Physiol., 78, 1 - 53, 1933.
- MATTHEWS, P.B.C.: The dependence of tension upon extension in the stretch reflex of the soleus muscle of the decerebrate cat. In: J. of Physiol., 147, 521-546, 1959.
- MELLEROWICZ, H.; MELLER, W.: Training. Biologische und medizinische Grundlagen und Prinzipien des Trainings. Berlin 1972.
- MELVILL-JONES, G.M.: Is there a vestibulo-spinal reflex contribution to running? In: Adv. Oto-Rhino-Laryng., 19, 128-133, 1973.
- MEL VILL-JONES, G.M; WATT, D.: Muscular control of landing from unexpected falls in man. In: J. of Physiol., 219, 729-737, 1971a.
- MELVILL-JONES, G.M., WATT, D.: Observations on the control of stepping and hopping movements in man. In: J. of Physiol., 219, 709-727, 1971b.
- MORGAN, D.L.: Separation of active and passive components of short-range-stiffness of muscle. In: Am. J. of Physiol., 232, 45 - 49, 1977.
- MORGAN, D.L.; PROSKE, U.; WARREN, D.: Measurements of muscle stiffness and the mechanism of elastic storage of energy in hopping kangaroos. In: J. of Physiol., 282, 253-261, 1978.
- MORITANI, T.; DEVRIES, H.: Neural factors versus hypertrophy in the time course of muscle strength gain. In: Am. J. Phys. Med., 58, 3, 115-130, 1978.
- NICHOLS, T.R.: Soleus muscle stiffness and its reflex control (Ph.D.Thesis). Cambridge, MA, Harvard Univ., 1974.
- NICHOLS, T.R., HOUK, J.C.: Improvement in Linearity and regulation of stiffness that results from actions of stretch reflex. In: J. of Neurophysiol., 39, 119 - 142, 1976.
- NOTH, J.: Neurophysiologische Aspekte der Muskelelastizität. In: BÜHRLE, M. (Hrsg.): Grundlagen des Maximal- und Schnellkrafttrainings, 238-253, Hofmann, Schorndorf 1985.
- ORLOVSKY, G.N.: The effect of different descending system on flexor and extensor activity during locomotion. In: Brain Reserach, 40, 359 - 371, 1971.
- PAVLOVA, G. P.: Response of Deiter's neurons to tilt during locomotion.

- tion. In: Brain Research, 42, 212 - 214, 1972.
- PHILLIPS, C.G.: Motor apparatus of the baboon's hand. In: Proc. R. Soc. London Ser. B, 173, 141-174, 1969.
- PODOLSKY, R.J.: Thermodynamics of muscle. In: BOURNE, G.H. (ed.): Structure and function of muscle, Bd. II, 359-385, 1960.
- POLLACK, G.H.: The Crossbridge-theory. In: Physiological Reviews 63, 3, 1049-1113, 1983.
- PROCHAZKA, A.; WAND, P.: Muscle spindle responses to rapid stretching in normal cats. In: Muscle receptors and Movement, Proceedings of a Symposium held at the Sherrington School of Physiol., London, (ed.:TAYLOR, A., PROCHAZKA, A.), 257 - 261, 1981.
- PROSKE, U.; MORGAN, D.L.: Stiffness of cat soleus muscle and tendon during activation of part of muscle. In: J. of Neurophysiol., 52, 3, 459 - 468, 1984.
- RACK, P.M.H.: Limitations of sensomotory feedback in control of posture and movement. In: Handbook of Physiology: The nervous System, Chap. 7, 1981.
- RACK, P.M.H.; WESTBURY D.R.: The effects of length and stimulus rate on tension in the isometric cat soleus muscle. In: J. of Physiol. 204, 443-460, 1969.
- RACK, P.M.H.; WESTBURY, D.R.: The short range stiffness of active mammalian muscle and its effect on mechanical properties. In: J. of Physiol., 240, 331-350, 1974.
- RACK, P.M.H.; ROSS, H.F.; BROWN, T.I.H.: Reflex responses during sinusoidal movement of human limbs. In: DESMEDT, J.E. (ed.): Cerebral Motor Control in man: Long Loop Mechanisms, (Prog. Clin. Neurophysiol., Vol. 4), 216-228, Basel Karger, 1978.
- RACK, P.M.H.; ROSS, H.F.; THILLMANN, A.F.; WALTERS, D.K.W.: Reflex responses at the human ankle: the importance of tendon compliance. In: J. of Physiol., 344, 503-524, 1983.
- RACK, P.M.H.; WESTBURY, D.R.: Elastic properties of the cat soleus tendon and their functional importance. In: J. of Physiol. 347, 479 - 495, 1984.
- REICHEL, H.: Muskelelastizität. In: Ergebnisse der Physiologie, 47, 469-554, 1952.
- RÜDIGER, W.: Lehrbuch der Physiologie. Bd. I und II. Berlin VEB 1978.
- SCHMIDT; R.F.; THEWS, G.: Physiologie des Menschen. Springer Berlin, Heidelberg, New York, 20. Aufl. 1980.
- SCHMIDTBLEICHER, D.: Maximalkraft und Bewegungsschnelligkeit. Beiträge zur Bewegungsforschung im Sport 3, Limpert Bad Homburg 1980.

- SCHMIDTBLEICHER, D.: Sportliches Krafttraining und motorische Grundlagenforschung. In: JUNG, R. (Hrsg.): Haltung und Bewegung beim Menschen. Springer-Verlag, Berlin-Heidelberg-New York, 155-188, 1984a.
- SCHMIDTBLEICHER, D.: Strukturanalyse der motorischen Eigenschaft Kraft. In: Lehre der Leichtathletik. 50, 1785-1792, 1984b.
- SCHMIDTBLEICHER, D.; DIETZ, V.; NOTH, J., ANTONI, M.: Auftreten und funktionelle Bedeutung des Muskeldehnungsreflexes bei Lauf- und Sprintbewegungen. In: Leistungssport 8, 480-490, 1978.
- SCHMIDTBLEICHER, D.; ANTONI, M.; DIETZ, V.: Innervationsmuster der Beinstreckmuskulatur bei Bergaufläufen. In: Leistungssport, 11, 350 - 357, 1981a.
- SCHMIDTBLEICHER, D.; MÜLLER, K.J.; NOTH, J.: Dämpfungseigenschaften von Sportmatten und ihr Einfluß auf die Ausprägung von Muskeldehnungsreflexen - Ein Beitrag zur Unfallverhütung im Sport. In: Deutsche Zeitschrift für Sportmedizin 4, 95-103, 1981b.
- SCHMIDTBLEICHER, D.; GOLLHOFER, A.: Neuromuskuläre Untersuchungen zur Bestimmung individueller Belastungsgrößen für ein Tiefsprungtraining. In: Leistungssport 12, 4, 298-307, 1982.
- SCHMIDTBLEICHER, D.; GOLLHOFER, A.: Einflußgrößen des reaktiven Bewegungsverhaltens und deren Bedeutung für die Sportpraxis. In: BÖHRLE, M. (Hrsg.): Grundlagen des Maximal- und Schnellkrafttrainings. Hofmann, Schorndorf 1985.
- SCHOMBURG, E.D.: Spinale Eigenleistungen in der Motorik. In: COTTA, H.; KRAHL, H.; STEINBRÜCK, K.: Die Belastungstoleranz des Bewegungsapparates: Grundlagenforschung in der Sportmedizin. 3. Heidelberger Orthopädie-Symposium. Thieme, Stuttgart-New York, 1980.
- SHERRINGTON, C.S.: Flexion reflex of the limb, crossed extension reflex, and reflex stepping and standing. In: J. of Physiol., 40, 28-121, 1910.
- SIMONS, H.: Probleme interdisziplinärer Forschung auf dem Gebiet des Sports aus sozialwissenschaftlicher Sicht. Vortragspublikation, VDS- Berlin, 1982.
- SOETER, J.: Flop-Technik und Flop-Training. In: Fosbury-Flop und Hürdenlauf der Frauen, Beiträge zur sportlichen Leistungsförderung Bd. 6, 47-50, 1972.
- STIENEN, G.J.M.; BLANGE, T.; SCHNERR, M.C.: Tension responses of frog sartorius muscle to quick ramp-shaped shortenings and some effects of metabolic inhibition. In: Pflügers Arch. 376, 97-104, 1978.
- STIENEN, G.J.M.; BLANGE, T.: Tension responses to rapid length changes

- in skinned muscle fibres of the frog. In: Pflügers Arch. 405, 5 - 11. 1985.
- STIENEN, G.J.M.; BLANGE T.; TREIJTEL, B.W.: Tension development and calcium sensitivity in skinned muscle fibres of the frog. In: Pflügers Archiv. 405, 19 - 23, 1985.
- SUGI, H.: The origin of the series elasticity in striated muscle fibres. In: SUGI, H.; POLLACK, G.H. (eds.): Cross-bridge mechanism in muscle contraction. Proceedings of the international Symposium on the current problems of sliding filament model and muscle mechanics. Tokio, 13th-15th September, 1978, University Park Press, Baltimore, U.S.A.
- TANCIC, D.: Das Krafttraining der Hochspringer. In: BÜHRLE, M. (Hrsg.): Grundlagen des Maximal- und Schnellkrafttrainings. Hofmann, Schorndorf 1985.
- TATTON, W.G.; BAWA, P.; BRUCE, I.C.; LEE, R.G.: Long loop reflexes in monkeys: A interpretative base for human reflexes. In: DESMEDT, J.E. (ed.): Cerebral Motor Control in Man: Long Loop Mechanisms, (Prog. Clin. Neurophysiol., Vol. 4), 229-245, Basel Karger, 1978.
- THYS, H.; FARGGIANA, T.; MARGARIA, R.: Utilization of muscle elasticity in exercise. In: J. of Appl. Physiol., 32, 4, 491-494, 1972.
- THYS, H.; CAVAGNA, A.; MARGARIA, R.: The role played by elasticity in an exercise involving movements of small amplitude. In: Pfluegers Arch. 354, 281-286, 1975.
- TROUSIL, T.: Messung der Sprungkraft. In: Leistungssport, 2, 150 - 153, 1980.
- ÜBERLA, K.: Faktorenanalyse. Springer Berlin, Heidelberg, New York 1971.
- VALLBO, A.: Basic patterns of muscle spindle discharge in man. In: Muscle receptors and Movement, Proceedings of a Symposium held at the Sherrington School of Physiol., London, (ed.:TAYLOR, A., PROCHAZKA, A.), 263-277, 1981.
- VIITASALO, J.T.; KOMI, P.V.: Force-Time characteristics and fiber composition in human leg extensor muscle. In: Eur. J. of Appl. Physiol., 40, 7-15, 1978.
- WALMSLEY, B.; HODGSON, J.A.; BURKE, R.E.: Forces produced by medial gastrocnemius and soleus during locomotion in freely moving cats. In: J. of Neurophys. 41, 5, 1203 - 1216, 1978.
- WEINECK, J.: Optimales Training. In: Beiträge zur Sportmedizin, Bd. 10, Perimed, Erlangen, 1980.
- WERCHOSHANSKIJ, J.V.: Grundlagen des sportlichen Krafttrainings im Sport. Moskau, 1970.

- WERCHOSHANSKIJ, J.V.: Grundlagen des speziellen Krafttrainings. In: ADAM, D.; WERCHOSHANSKIJ, J.V.: Modernes Krafttraining im Sport. Trainerbibliothek 4, 37-148, 1972.
- WERCHOSHANSKIJ, J.V.: Zum speziellen Krafttraining der Werfer und Springer. In: Lehre der Leichtathletik, 27, 897-900, 1978.
- WINER, B.J.: Statistical principles in experimental design. McGraw-Hill: Tokio 1971.
- WINTER, D.A.: Biomechanics of human movement with applications to the study of human locomotion. In: CRC Critical Reviews in Biomedical Engineering, 9, 4, 287-314, 1984.
- YAMADA, H.: Strength of biological material. Williams and Wilkins, Baltimore 1970.
- ZANON, S.: Plyometrie für die Sprünge. In: Lehre der Leichtathletik 16, 549-552, 1974.

