

## REFERENCE LIST OF MECHANOMYOGRAPHY

### - Papers and Reviews\*\*\* -

Revised by Mita, K. (2003/06/10)

1665

---

Grimaldi FM:  
Physico-mathesis de Lumine, Coloribus et Iride.  
(1665)

1810

---

Wollaston WH:  
On the duration of muscular action.  
Philos Trans R Soc London: 1-5 (1810) (W-91)

1885

---

Herroun EF, Yeo GF:  
Note on the sound accompanying the single contraction of skeletal muscle.  
J Physiol 6: 287-292 (1885) (H-106)

1886

---

Schafer EA, Canney HEL, Tunstall JO:  
On the rhythm of muscular response to volitional impulses in man.  
J Physiol 7: 111-117 (1886) (S-230)

1948

---

Gordon G, Holbourn AHS:  
The sounds from single motor units in a contracting muscle.  
J Physiol 107: 456-464 (1948) (G-70)

1973

---

Cerquiglini S, Figura F, Marchetti M, Salleo A:  
Evaluation of athletic fitness in weight-lifters through biomechanical, bioelectrical and bioacoustical data.  
Biomechanics III: pp189-195 (1973) (C-74)

1974

---

Marchetti M, Salleo A, Figura F, Del Gaudio V:  
Electromyographical and phonomyographical patterns in muscle atrophy in man.  
Biomechanics IV: vol 1, pp388-393 (1974) (M-197)

1976

---

Lammert O, Jorgensen F, Einer-Jensen N:  
Accelerometermyography (AMG) I. method for measuring mechanical vibrations from isometrically contracted muscles.  
Biomechanics V-A: pp152-158 (1976) (L-72)

Jorgensen F, Lammert O:  
Accelerometermyography (AMG) II. contribution of motor unit.  
Biomechanics V-A: pp159-164 (1976) (J-31)

1980

---

Oster G, Jaffe JS:  
Low frequency sounds from sustained contraction of human skeletal muscle.  
Biophys J 30: 119-128 (1980)\*\*\* (O-61)\*\*\*

1983

---

Brozovich FV, Pollack GH:  
Muscle contraction generates discrete sound bursts.  
Biophys J 41: 35-40 (1983) (B-107)

## 1984

---

Oster G:

Muscle sounds.

*Sci Am* 250: 80-88 (1984)\*\*\*

(O-68)\*\*\*

## 1985

---

Barry DT, Geiringer SR, Ball RD:

Acoustic myography : a noninvasive monitor of motor unit fatigue.

*Muscle Nerve* 8: 189-194 (1985)

(B-105)

Hufschmidt A:

Acoustic phenomena in the latent period of skeletal muscle : a simple method for in-vivo measurement of the electro-mechanic latency (EML).

*Pflugers Arch* 404: 162-164 (1985)

(H-120)

## 1986

---

Barry DT, Leonard JA Jr, Gitter AJ, Ball RD:

Acoustic myography as a control signal for an externally powered prosthesis.

*Arch Phys Med Rehabil* 67: 267-269 (1986)

(B-100)

Rhatigan BA, Mylrea KC, Lonsdale E, Stern LZ:

Investigation of sounds produced by healthy and diseased human muscular contraction.

*IEEE Trans Biomed Eng* 33: 967-971 (1986)

(R-42)

## 1987

---

Barry DT:

Acoustic signals from frog skeletal muscle.

*Biophys J* 51: 769-773 (1987)

(B-120)

Frangioni JV, Kwan-Gett TS, Dobrunz LE, McMahon TA:

The mechanism of low frequency sound production in muscle.

*Biophys J* 51: 775-783 (1987)

(F-57)

Hufschmidt A, Schubnell P, Schwaller I:

Assessment of denervation by recording of muscle sound following direct stimulation.

*Electromyogr clin Neurophysiol* 27: 301-304 (1987)

(H-107)

## 1988

---

Barry DT, Cole NM:

Fluid mechanics of muscle vibrations.

*Biophys J* 53: 899-905 (1988)

(B-122)

Diemont B, Figini MM, Orizio C, Perini R, Veicsteinas A:

Spectral analysis of muscular sound at low and high contraction level.

*Int J Biomed Comput* 23: 161-175 (1988)

(D-45)

Stokes IAF, Moffroid MS, Rush S, Haugh LD:

Comparison of acoustic and electrical signals from erector spinae muscles.

*Muscle Nerve* 11: 331-336 (1988)

(S-204)

1989

---

- Accornero N, Berardelli A, Manfredi M:  
A composite probe for acoustic and electromyography recording of muscular activity.  
*Electroenceph clin Neurophysiol* 72: 548-549 (1989) (A-80)
- Bolton CF, Parkes A, Thompson TR, Clark MR, Sterne CJ:  
Recording sound from human skeletal muscle : technical and physiological aspects.  
*Muscle Nerve* 12: 126-134 (1989) (B-103)
- Keidel M, Keidel WD:  
The computer-vibrography as a biometric process in studying muscle function.  
*Biomed Technik* 34: 107-116 (1989) (K-158)
- Orizio C, Perini R, Veicsteinas A:  
Muscular sound and force relationship during isometric contraction in man.  
*Eur J Appl Physiol* 58: 528-533 (1989a) (O-56)
- Orizio C, Perini R, Veicsteinas A:  
Changes of muscular sound during sustained isometric contraction up to exhaustion.  
*J Appl Physiol* 66: 1593-1598 (1989b) (O-59)
- Wee AS, Ashley RA:  
Vibrations and sounds produced by sustained voluntary muscle contraction.  
*Electromyogr clin Neurophysiol* 29: 333-337 (1989) (W-80)

1990

---

- Barry DT, Gordon KE, Hinton GG:  
Acoustic and surface EMG diagnosis of pediatric muscle disease.  
*Muscle Nerve* 13: 286-290 (1990a) (B-97)
- Barry DT, Cole NM:  
Muscle sounds are emitted at the resonant frequencies of skeletal muscle.  
*IEEE Trans Biomed Eng* 37: 525-531 (1990b) (B-114)
- Barry DT:  
Acoustic signals from skeletal muscle.  
*NIPS* 5: 17-21 (1990c)\*\*\* (B-129)\*\*\*
- Dobrunz LE, Pelletier DG, McMahon TA:  
Muscle stiffness measured under conditions simulating natural sound production.  
*Biophys J* 58: 557-565 (1990) (D-51)
- Maton B, Petitjean M, Cnockaert JC:  
Phonomyogram and electromyogram relationships with isometric force reinvestigated in man.  
*Eur J Appl Physiol* 60: 194-201 (1990) (M-191)
- Orizio C, Perini R, Diemont B, Figini MM, Veicsteinas A:  
Spectral analysis of muscular sound during isometric contraction of biceps brachii.  
*J Appl Physiol* 68: 508-512 (1990) (O-55)
- Wee AS, Ashley RA:  
Transmission of acoustic or vibratory signals from a contracting muscle to relatively distant tissues.  
*Electromyogr clin Neurophysiol* 30: 303-306 (1990) (W-85)

1991

---

Barry DT:

Muscle sounds from evoked twitches in the hand.

*Arch Phys Med Rehabil* 72: 573-575 (1991) (B-98)

Dalton PA, Stokes MJ:

Acoustic myography reflects force changes during dynamic concentric and eccentric contractions of the human biceps brachii muscle.

*Eur J Appl Physiol* 63: 412-416 (1991) (D-52)

Goldenberg MS, John Yack J, Cerny FJ, Burton HW:

Acoustic myography as an indicator of force during sustained contractions of small hand muscle.

*J Appl Physiol* 70: 87-91 (1991) (G-65)

Stokes MJ, Dalton PA:

Acoustic myography for investigating human skeletal muscle fatigue.

*J Appl Physiol* 71: 1422-1426 (1991a) (S-205)

Stokes MJ, Dalton PA:

Acoustic myographic activity increases linearly up to maximal voluntary isometric force in the human quadriceps muscle.

*J Neurol Sci* 101: 163-167 (1991b) (S-203)

Zwarts MJ, Keidel M:

Relationship between electrical and vibratory output of muscle during voluntary contraction and fatigue.

*Muscle Nerve* 14: 756-761 (1991) (Z-3)

1992

---

Barry DT:

Vibrations and sounds from evoked muscle twitches.

*Electromyogr clin Neurophysiol* 32: 35-40 (1992a) (B-101)

Barry DT, Hill T, Im D:

Muscle fatigue measured with evoked muscle vibrations.

*Muscle Nerve* 15: 303-309 (1992b) (B-102)

Lee DJ, Stokes MJ, Taylor RJ, Cooper RG:

Electro and acoustic myography for noninvasive assessment of lumbar paraspinal muscle function.

*Eur J Appl Physiol* 64: 199-203 (1992a) (L-67)

Lee DJ, Stokes MJ:

Repeatability of electro- and acoustic myographic activity during a fatigue test of normal lumbar paraspinal muscles.

*Clin Rehabil* 6: 265-273 (1992b) (L-69)

Marchetti M, Felici F, Bernardi M, Minasi P, Di Filippo L:

Can evoked phonomyography be used to recognize fast and slow muscle in man ?

*Int J Sports Med* 13: 65-68 (1992) (M-194)

Orizio C, Perini R, Diemont B, Veicsteinas A:

Muscle sound and electromyogram spectrum analysis during exhausting contractions in man.

*Eur J Appl Physiol* 65: 1-7 (1992a) (O-64)

- Orizio C:  
Soundmyogram and EMG cross-spectrum during exhausting isometric contractions in humans.  
*J Electromyograph Kinesiol* 2: 141-149 (1992b) (O-66)
- Orizio C, Veicsteinas A:  
Soundmyogram analysis during sustained maximal voluntary contraction in sprinters and long distance runners.  
*Int J Sports Med* 13: 594-599 (1992c) (O-70)
- Petitjean M, Maton B, Cnockaert JC:  
Evaluation of human dynamic contraction by phonomyography.  
*J Appl Physiol* 73: 2567-2573 (1992) (P-63)
- Stokes MJ, Cooper RG:  
Muscle sounds during voluntary and stimulated contractions of the human adductor pollicis muscle.  
*J Appl Physiol* 72: 1908-1913 (1992) (S-207)
- Wright F, Stokes MJ:  
Symmetry of electro- and acoustic myographic activity of the lumbar paraspinal muscles in normal adults.  
*Scand J Rehab Med* 24: 127-131 (1992) (W-92)
- Zhang YT, Frank CB, Rangayan RM, Bell GD:  
A comparative study of simultaneous vibromyography and electromyography with active human quadriceps.  
*IEEE Trans Biomed Eng* 39: 1045-1052 (1992) (Z-4)
- 1993
- 
- Dalton PA, Stokes MJ:  
Frequency of acoustic myography during isometric contraction of fresh and fatigued muscle and during dynamic contraction.  
*Muscle Nerve* 16: 255-261 (1993) (D-46)
- L'Estrange P, Rowell J, Stokes MJ:  
Acoustic myography in the assessment of human masseter muscle.  
*J Oral Rehab* 20: 353-362 (1993) (L-70)
- Orizio C:  
Muscle sound : bases for the introduction of a mechanomyographic signal in muscle studies.  
*Crit Rev Biomed Eng* 21: 201-243 (1993a)\*\*\* (O-63)\*\*\*
- Orizio C, Solomonow M, Baratta RV, Veicsteinas A:  
Influence of motor units recruitment and firing rate on the soundmyogram and EMG characteristics in cat gastrocnemius.  
*J Electromyograph Kinesiol* 2: 232-241 (1993b) (O-67)
- Rodriquez AA, Agre JC, Knudtson ER, Franke TM, Ng AV:  
Acoustic myography compared to electromyography during isometric fatigue and recovery.  
*Muscle Nerve* 16: 188-192 (1993) (R-45)
- Smith TG, Stokes MJ:  
Technical aspects of acoustic myography (AMG) of human muscle : contact pressure and force/AMG relationship.  
*J Neurosci Methods* 47: 85-92 (1993) (S-221)

Stokes MJ:

Acoustic myography : applications and considerations in measuring muscle performance.

*Isokinetics and Exercise Science* 3: 4-15 (1993)\*\*\*

(S-228)\*\*\*

1994

---

Cole NM, Barry DT:

Muscle sound frequencies of the frog are modulated by skeletal muscle tension.

*Biophys J* 66: 1104-1114 (1994)

(C-68)

Herzog W, Zhang Y-T, Vaz M, Guimaraes ACS, Janssen C:

Assessment of muscular fatigue using vibromyography.

*Muscle Nerve* 17: 1156-1161 (1994)

(H-122)

Orizio C, Esposito F, Veicsteinas A:

Effect of acclimatization to high altitude (5,050m) on motor unit activation pattern and muscle performance.

*J Appl Physiol* 77: 2840-2844 (1994)

(O-69)

Petitjean M, Bellemare F:

Phonomyogram of the diaphragm during unilateral and bilateral phrenic nerve stimulation and changes with fatigue.

*Muscle Nerve* 17: 1201-1209 (1994)

(P-66)

1995

---

Petitjean M, Maton B:

Phonomyogram from single motor units during voluntary isometric contraction.

*Eur J Appl Physiol* 71: 215-222 (1995)

(P-67)

1996

---

Akataki K, Mita K, Itoh K, Suzuki N, Watakabe M:

Acoustic and electrical activities during voluntary isometric contraction of biceps brachii muscles in patients with spastic cerebral palsy.

*Muscle Nerve* 19: 1252-1257 (1996)

(A-85)

Esposito F, Malgrati D, Veicsteinas A, Orizio C:

Time and frequency domain analysis of electromyogram and sound myogram in the elderly.

*Eur J Appl Physiol* 73: 503-510 (1996)

(E-38)

Mealing D, Long G, McCarthy PW:

Vibromyographic recording from human muscles with known fibre composition difference.

*Br J Sports Med* 30: 27-31 (1996)

(M-210)

Orizio C, Liberati D, Locatelli C, De Grandis D, Veicsteinas A:

Surface mechanomyogram reflects muscle fibres twitches summation.

*J Biomechanics* 29: 475-481 (1996)

(O-65)

Rodriquez AA, Agre JC, Franke TM, Swiggum ER, Curt JT:

Acoustic myography during isometric fatigue in postpolio and control subjects.

*Muscle Nerve* 19: 384-387 (1996)

(R-50)

Vaz MA, Herzog W, Zhang Y-T, Leonard TR, Nguyen H:

Mechanism of electrically elicited muscle vibrations in the in situ cat soleus muscle.

*Muscle Nerve* 19: 774-776 (1996a)

(V-18)

- Vaz MA, Zhang Y-T, Herzog W, Guimaraes ACS, MacIntosh BR:  
The behavior of rectus femoris and vastus lateralis during fatigue and recovery: an electromyographic and vibromyographic study.  
*Electromyogr clin Neurophysiol* 36: 221-230 (1996b) (V-19)
- Wood JC, Barry DT:  
Time-frequency analysis of skeletal muscle and cardiac vibrations.  
*Proc IEEE* 84: 1281-1294 (1996)\*\*\* (W-93)\*\*\*
- Zhang Y-T, Frank CB, Rangayyan RM, Bell GD:  
Relationship of the vibromyogram to the surface electromyogram of the human rectus femoris muscle during voluntary isometric contraction.  
*J Rehabil Res & Develop* 4: 395-403 (1996) (Z-5)
- 1997
- 
- Brown P:  
Muscle sounds in Parkinson's disease.  
*Lancet* 349: 533-535 (1997) (B-125)
- Chen D, Durand L-G, Lee HC, Petitjean M, Bellemare F:  
Time-frequency analysis of the muscle sound of the human diaphragm.  
*Med Biol Eng Comput* 35: 649-652 (1997a) (C-73)
- Chen D, Durand L.-G., Bellemare F:  
Time and frequency domain analysis of acoustic signals from a human muscle.  
*Muscle Nerve* 20: 991-1001 (1997b) (C-75)
- Evetovich TK, Housh TJ, Stout JR, Johnson GO, Smith DB, Ebersole KT:  
Mechano-myographic responses to concentric isokinetic muscle contractions.  
*Eur J Appl Physiol* 75: 166-169 (1997) (E-39)
- Matheson GO, Maffey-Ward L, Mooney M, Ladly K, Fung T, Zhang Y-T:  
Vibromyography as a quantitative measure of muscle force production.  
*Scand J Rehab Med* 29: 29-35 (1997) (M-204)
- Orizio C, Esposito F, Sansone V, Parrinello G, Meola G, Veicsteinas A:  
Muscle surface mechanical and electrical activities in myotonic dystrophy.  
*Electromyogr clin Neurophysiol* 37: 231-239 (1997) (O-71)
- Petitjean M, Ripart J, Couture J, Bellemare F:  
Diaphragmatic fatigue investigated by phonomyography.  
*Am J Respir Crit Care Med* 155: 1162-1166 (1997) (P-68)
- Shinohara M, Kouzaki M, Yoshihisa T, Fukunaga T:  
Mechanomyography of the human quadriceps muscle during incremental cycle ergometry.  
*Eur J Appl Physiol* 76: 314-319 (1997) (S-226)
- Smith DB, Housh TJ, Stout JR, Johnson GO, Evetovich TK, Ebersole KT:  
Mechano-myographic responses to maximal eccentric isokinetic muscle actions.  
*J Appl Physiol* 82: 1003-1007 (1997) (S-223)
- Stout JR, Housh TJ, Johnson GO, Evetovich TK, Smith DB:  
Mechanomyography and oxygen consumption during incremental cycle ergometry.  
*Eur J Appl Physiol* 76: 363-367 (1997) (S-231)

Vaz MA, Herzog W, Zhang Y-T, Leonard TR, Nguyen H:  
The effect of muscle length on electrically elicited muscle vibrations in the situ cat soleus muscle.  
*J Electromyograph Kinesiol* 7: 113-121 (1997) (V-20)

1998

---

Akataki K, Mita K, Itoh Y:  
Repeatability of mechanomyogram (MMG) from voluntary isometric contraction of biceps brachii muscles.  
*Jpn J Phys Fitness Sports Med* 47: 489-498 (1998) (A-90)

Courteville A, Gharbi T, Cornu J-Y:  
MMG measurement: a high-sensitivity microphone-based sensor for clinical use.  
*IEEE Trans Biomed Eng* 45: 145-150 (1998) (C-71)

Celichowski K, Grottel K, Bichler E:  
Relationship between mechanomyogram signals and changes in force of human forefinger flexor muscles during voluntary contraction.  
*Eur J Appl Physiol* 78: 283-288 (1998) (C-72)

Ebersole KT, Housh TJ, Johnson GO, Evetovich KT, Smith DB, Perry SR:  
The effect of leg flexion on the mechanomyographic responses to isometric muscle action.  
*Eur J Appl Physiol* 78: 264-269 (1998) (E-41)

Esposito F, Orizio C, Veicsteinas A:  
Electromyogram and mechanomyogram changes in fresh and fatigued muscle during sustained contraction in men.  
*Eur J Appl Physiol* 78: 494-501 (1998) (E-40)

Evetovich TK, Housh TJ, Johnson GO, Smith DB, Ebersole KT, Perry SR:  
Gender comparison s of the mechanomyographic responses to maximal concentric and eccentric isokinetic muscle actions.  
*Med Sci Sports Exerc* 30: 1697-1702 (1998) (E-44)

Petitjean M, maton B, Fourment A:  
Summation of elementary phonomyograms during isometric twitches in humans.  
*Eur J Appl Physiol* 77: 527-535 (1998) (P-73)

Shinohra M, Kouzaki M, Yoshihisa T, Fukunaga T:  
Mechanomyogram from the different heads of the quadriceps muscle during incremental knee extension.  
*Eur J Appl Physiol* 78: 289-295 (1998) (S-227)

Smith DB, Housh TJ, Johnson GO, Evetovich TK, Ebersole KT, Perry SR:  
Mechanomyographic and electromyographic responses to eccentric and concentric isokinetic muscle actions of the biceps brachii.  
*Muscel Nerve* 21: 1438-1444 (1998) (S-229)

Watakabe M, Itoh Y, Mita K, Akataki K:  
Technical aspects of mechanomyography recording with piezoelectric contact sensor.  
*Med Biol Eng Comput* 36: 557-561 (1998) (W-95)

1999

---

Akataki K, Mita K, Itoh Y:  
Repeatability study of mechanomyography in submaximal isometric contractions using coefficient of variation and intraclass correlation coefficient.  
*Electromyogr clin Neurophysiol* 39: 161-166 (1999a) (A-91)

Akataki K, Mita K, Itoh Y:  
Relationship between mechanomyogram and force during voluntary contractions reinvestigated using spectral decomposition.  
*Eur J Appl Physiol* 80: 173-179 (1999b) (A-92)



Ebersole KT, Housh TJ, Johnson GO, Evetovich TK, Smith DB, Perry SR:  
MMG and EMG responses of the superficial quadriceps femoris muscles.  
*J Electromyograph Kinesiol* 9: 219-227 (1999) (E-45)

Evetovich TK, Housh TJ, Weir JP, Johnson GO, Smith DB, Ebersole KT:  
Mean power frequency and amplitude of the mechanomyographic signal during maximal  
eccentric isokinetic muscle actions.  
*Electromyogr clin Neurophysiol* 39: 123-127 (1999) (E-43)

Kouzaki M, Shinohra M, Fukunaga T:  
Non-uniform mechanical activity of quadriceps muscle during fatigue by repeated maximal  
voluntary contraction in humans.  
*Eur J Appl Physiol* 80: 9-15 (1999) (K-161)

Orizio C, Baratta RV, Zhou BH, Solomonow M, Veicsteinas A:  
Force and surface mechanomyogram relationship in cat gastrocnemius.  
*J Electromyograph Kinesiol* 9: 131-140 (1999a) (O-72)

Orizio C, Diemont B, Esposito F, Alfonsi E, Parrinello G, Moglia A, Veicsteinas A:  
Surface mechanomyogram reflects the changes in the mechanical properties of muscle at fatigue.  
*Eur J Appl Physiol* 80: 276-284 (1999b) (O-73)

Ouamer M, Boiteux M, Petitjean M, Travens L, Sales A:  
Acoustic myography during voluntary isometric contraction reveals non-propagative lateral  
vibration.  
*J Biomechanics* 32: 1279-1285 (1999) (O-74)

Yoshitake Y, Moritani T:  
The muscle sound properties of different muscle fiber types during voluntary and electrically  
induced contractions.  
*J Electromyograph Kinesiol* 9: 209-217 (1999) (Y-91)

2000

---

Bellemare F, Couture J, Donati F, Plaud B:  
Temporal relation between acoustic and force responses at the adductor pollicis during  
nondepolarizing neuromuscular block.  
*Anesthesiology* 93: 646-652 (2000) (B-133)

Bichler E:  
Mechanomyograms recorded during evoked contractions of single motor units in the rat medial  
gastrocnemius muscle.  
*Eur J Appl Physiol* 83: 310-319 (2000) (B-130)

Maton B:  
Muscle sounds : from birth to now.  
*Abstract of 13th ISEK* 64-70 (2000)\*\*\* (M-203)\*\*\*

Nonaka H, Mita K, Akataki K, Watakabe M, Yabe K:  
Mechanomyographic investigation of muscle contractile properties in preadolescent boys.  
*Electromyogr clin Neurophysiol* 40: 287-293 (2000) (N-79)

- Orizio C, Baratta RV, He Zhou B, Solomonow M, Veicsteinas A:  
Force and surface mechanomyogram frequency responses in cat gastrocnemius.  
*J Biomechanics* 33: 427-433 (2000) (O-75)
- Weir JP, Ayers KM, Lacefield JF, Walsh KL:  
Mechanomyographic and electromyographic responses during fatigue in humans: influence of muscle length.  
*Eur J Appl Physiol* 81: 352-359 (2000) (W-97)
- 2001
- 
- Akataki K, Mita K, Watakabe M, Itoh K:  
Mechanomyogram and force relationship during voluntary isometric ramp contractions of the biceps brachii muscle.  
*Eur J Appl Physiol* 84: 19-25 (2001) (A-93)
- Bichler E, Celichowski J:  
Mechanomyographic signals generated during unfused tetani of single motor units in the rat medial gastrocnemius muscle.  
*Eur J Appl Physiol* 85: 513-520 (2001a) (B-131)
- Bichler E, Celichowski J:  
Changes in the properties of mechanomyographic signals and in the tension during the fatigue test of rat medial gastrocnemius muscle motor units.  
*J Electromyograph Kinesiol* 11: 387-394 (2001b) (B-132)
- Madeleine P, Bajaj P, Sogaard K, Arendt-Nielsen L:  
Mechanomyography and electromyography force relationships during concentric, isometric and eccentric contractions.  
*J Electromyograph Kinesiol* 11: 113-121 (2001) (M-205)
- Perry SR, Housh TJ, Weir JP, Johnson GO, Bull AJ, Ebersole KT:  
Mean power frequency and amplitude of the mechanomyographic and electromyographic signals during incremental cycle ergometry.  
*J Electromyograph Kinesiol* 11: 299-305 (2001) (P-69)
- Perry SR, Housh TJ, Johnson GO, Ebersole KT, Bull AJ, Evetvich TK, SmithDB:  
Mechanomyography, electromyography, heart rate, and rating of perceived exertion during incremental cycle ergometry.  
*J Sport Med Phys Fitness* 41: 183-188 (2001) (P-70)
- Perry SR, Housh TJ, Johnson GO, Ebersole KT, Bull AJ:  
Mechanomyographic responses to continuous, constant power output cycle ergometry.  
*Electromyogr clin Neurophysiol* 41: 137-144 (2001) (P-71)
- Watakabe M, Mita K, Akataki K, Itoh Y:  
Mechanical behavior of condenser microphone in mechanomyography.  
*Med Biol Eng Comput* 39: 195-201 (2001) (W-99)
- Yoshitake Y, Miyazaki M, Moritani T:  
Assessment of low-back muscle fatigue using electromyography, mechanomyography, and near-infrared spectroscopy.  
*Eur J Appl Physiol* 84: 174-179 (2001) (Y-92)

- Akataki K, Mita K, Watakabe M, Itoh K:  
Age-related change in motor unit activation strategy in force production: a mechanomyographic investigation.  
*Muscle Nerve* 25: 505-512 (2002) (A-94)
- Cramer JT, Housh TJ, Weir JP, Johnson GO, Berning JM, Perry SR, Bull AJ:  
Mechanomyographic and electromyographic amplitude and frequency responses from the superficial quadriceps femoris muscles during maximal, eccentric isokinetic muscle actions.  
*Electromyogr clin Neurophysiol* 42: 337-346 (2002) (C-76)
- Cramer JT, Housh TJ, Weir JP, Johnson GO, Ebersole KT, Perry SR, Bull AJ:  
Power output, mechanomyographic, and electromyographic responses to maximal, concentric, isokinetic muscle actions in men and women.  
*J Strength Cond Res* 16: 399-408 (2002) (C-77)
- Cramer JT, Housh TJ, Evetovich TK, Johnson GO, Ebersole KT, Perry SR, Bull AJ:  
The relationships among peak torque, mean power output, mechanomyography, and electromyography in men and women during maximal, eccentric isokinetic muscle actions.  
*Eur J Appl Physiol* 86: 226-232 (2002) (C-78)
- Ebersole KT, Housh TJ, Johnson GO, Perry SR, Bull AJ, Cramer JT:  
Mechanomyographic and electromyographic responses to unilateral isometric training.  
*J Strength Cond Res* 16: 192-201 (2002) (E-46)
- Evetovich TK, Boyd JC, Drake SM, Eschbach LC, Magal M, Soukup JT, Webster MJ, Whitehead MT, Weir JP:  
Effect of moderate dehydration on torque, electromyography, and mechanomyography  
*Muscle Nerve* 26: 225-231 (2002) (E-47)
- Madeleine P, Jorgensen V, Sogaard K, Arendt-Nielsen L, Sjogaard G:  
Development of muscle fatigue as assessed by electromyography and mechanomyography during continuous and intermittent low-force contractions: effect of the feedback mode.  
*Eur J Appl Physiol* 87: 28-37 (2002) (M-207)
- Madeleine P, Farina D, Merletti R, Arendt-Nielsen L:  
Upper trapezius muscle mechanomyographic and electromyographic activity in humans during low force fatiguing and non-fatiguing contractions.  
*Eur J Appl Physiol* 87: 327-336 (2002) (M-208)
- Mamaghani NK, Shimomura Y, Iwanaga K, Katsuura T:  
Mechanomyogram and electromyogram responses of upper limb during sustained isometric fatigue with varying shoulder and elbow postures.  
*J Physiol Anthropol Appl Human Sci* 21: 29-43 (2002) (M-209)
- Perry-Rana SR, Housh TJ, Johnson GO, Bull AJ, Berning JM, Cramer JT:  
MMG and EMG responses during fatiguing isokinetic muscle contractions at different velocities.  
*Muscle Nerve* 26: 367-373 (2002) (P-72)
- Yoshitake Y, Shinohara M, Ue H, Moritani T:  
Characteristics of surface mechanomyogram are dependent on development of fusion of motor units in humans.  
*J Appl Physiol* 93: 1744-1752 (2002) (Y-93)

2003

---

Orizio C, Gobbo M, Veicsteinas a, Baratta RV, Zhou BH, Solomonow M:

Transients of the force and surface mechanomyogram during cat gastrocnemius tetanic stimulation.

*Eur J Appl Physiol* 88: 601-606 (2003)

(O-76)

Watakabe M, Mita K, Akataki K, Ito K:

Reliability of the mechanomyogram detected with an accelerometer during voluntary contractions.

*Med Biol Eng Comput* 41: 198-202 (2003)

( )

- 赤滝久美, 伊藤晋彦, 三田勝己, 鈴木伸治, 渡壁 誠, 加藤厚生 :  
Muscular Soundを用いた脳性麻痺患者の筋機能の分析 .  
医用電子と生体工学 30: 200-207 (1992) (A-86)
- 赤滝久美, 伊藤晋彦, 三田勝己, 鈴木伸治, 渡壁 誠, 高橋由美, 伊東保志 :  
筋電図と筋音を用いた脳性麻痺患者の筋機能の分析 .  
リハ医学 31: 551-554 (1994) (A-87)
- 赤滝久美, 三田勝己 :  
筋音による筋収縮過程の推定 .  
医用電子と生体工学 BME 8: 30-38 (1994)\*\*\* (A-88)\*\*\*
- 伊東保志, 赤滝久美, 伊藤晋彦, 三田勝己 :  
筋音を用いた持続性筋収縮過程の分析 .  
疲労と休養の科学 10: 75-81 (1995) (I-86)
- 伊東保志, 赤滝久美, 三田勝己 :  
疲労に至る持続性筋収縮における筋活動様式の変化 - 筋音図法による解析 - .  
人間工学 33: 175-181 (1997) (I-87)
- 久野弘明, 三田勝己, 渡壁 誠, 赤滝久美, 伊藤正美 :  
筋電図および筋音図のフラクタル解析 .  
電気学会論文誌 119-C: 261-268 (1999) (K-160)
- 伊東保志, 赤滝久美, 三田勝己 :  
筋音図のスペクトル解析 - 筋線維長軸短縮成分の除去 - .  
電子情報通信学会 J82-D-2: 1210-1216 (1999) (I-88)
- 伊東保志, 渡壁 誠, 赤滝久美, 三田勝己 :  
筋音図計測に用いるトランスデューサの物理的特性 .  
電子情報通信学会 J84-D-2: 408-416 (2001) (I-89)
- 三田勝己 :  
筋音図 .  
宮村 (編) 新運動生理学上巻 109-119, 真興交易 (2001)\*\*\* (M-206)\*\*\*
- 三田勝己 :  
筋音図法の基礎と応用 (1) 概要と計測・解析 .  
臨床脳波 44: 532-542 (2002)\*\*\* (M- )\*\*\*
- 三田勝己 :  
筋音図法の基礎と応用 (2) 誘発筋音図と筋の機械的特性 .  
臨床脳波 (2002 印刷中)\*\*\* (M- )\*\*\*
- 三田勝己 :  
筋音図法の基礎と応用 (3) 随意収縮時の筋音図 .  
臨床脳波 (2002 印刷中)\*\*\* (M- )\*\*\*
- 三田勝己 :  
筋音図法の基礎と応用 (4) 筋音図の臨床応用 .  
臨床脳波 (2002 印刷中)\*\*\* (M- )\*\*\*

三田勝己：  
筋音図計測の計測と解析の基礎．  
理学診療医学会誌 (2002 印刷中)\*\*\*

(M- )\*\*\*