A BIBLIOGRAPHY ON MYOELECTRIC CONTROL OF PROSTHESSES

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3. A Bibliography on Myoelectric Control of Prostheses

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Preface

Reference literature on the Control of Myoelectric Prostheses is scattered in different biomedical, clinical, engineering, and other related scientific publications in many languages. The diligence, foresight, and commitment on the part of each of the co-authors of this monograph is reflected in the compilation of this bibliography with its wealth of reference material.

This monograph, entitled "A Bibliography on Myoelectric Control of Prostheses", is the third in our series and I believe the only reference listed alphabetically and extracted from the English, Russian, Swedish, German, Italian, and Japanese literature.

In my view, this extensive bibliography is a must for those involved in research on myoelectric prostheses. Additionally, it should prove invaluable as a major source of reference to libraries, related clinics, and healthcare institutions.

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Introduction

The authors have directed research programs in myoelectric control of prostheses over nearly three decades. A very time consuming element of this work has been locating relevant information in the scientific and clinical literature. This task is especially difficult in myoelectric prosthetics because the topic involves many disciplines, each with its own literature.

Further, the authors share an interest in the historical development of myoelectric prosthetics. Thus, they have been particularly attentive to some of the more informal publications which are less readily accessible and less likely to be referenced in the standard indices.

As a consequence of these circumstances, the authors have accumulated an extensive library of specialized literature on myoelectric control of prostheses. The purpose of this publication is to share this information with others in the field. The bibliography contains material up to and including 1985, more recent data being quite readily accessed via electronic data bases.

All relevant papers are listed, alphabetically by first author. For certain papers which are unlikely to be readily available in other libraries, identification numbers (Elastic) are given by which photocopies may be ordered through the inter-library loan services of the Harriet Irving Library, University of New Brunswick.

The authors hope that this bibliography will prove helpful to those researchers who will carry on research in myoelectric control of prosthetics over the coming years.

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The success of this research is due in large part to the contributions of my colleagues in the Institute, to students who have served as volunteer subjects, and especially to the many patients who have evaluated our experimental prostheses.

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A Bibliography on
Myoelectric Control of Prostheses


Almström, C., and Herberts, P., "Clinical applications of a multifunctional hand prosthesis", Proceedings of the 5th International Symposium on External Control of Human Extremities, Dubrovnik; 1975

Almström, C., "An electronic control system for a prosthetic hand with six degrees of freedom", Chalmers University of Technology, Department of Applied Electronics, Göteborg, Sweden, Research Report 1:77; 1977


Almström, C., Herberts, P., Cain, K., "Clinical application study of multifunctional prosthetic hands", Chalmers University of Technology, Research Laboratory of Medical Electronics, Göteborg Sweden, Research Report 2:77; 1977


Anani, A., Körner, L., "Discrimination of phan-
tom hand sensations elicited by afferent electrical nerve stimulation in below-elbow amputees", Medical Progress Through Technology, 6; 1979.

Anani, A., Körner, L., Almstrom, C., Herberts, P., "The interference of electrical nerve stimulation with myoelectric prosthesis control systems: A theoretical and applied study relevant to prosthesis sensory feedback", Chalmers University of Technology, Research Laboratory of Medical Electronics, Technical Report 2:79; 1979. Enlist# 87856


Basmajian, J. V., Baer, M., Fabrigar, C., "Con-
cious control and training of individual spinal motor neurons in normal human subjects", Journal of New Drugs, V 5, No 2, pp 78-85; March-April, 1965. Enlist# 85208

Basmajian, J. V., "Training of individual motor units as signal generators", Amperand Semian-
ual Report, Highland View Hospital, Cleveland, Ohio, Vol. 1, No 2, pp 15-16; June, 1966. Enlist# 85223

Bouton, R. L., Montgomery, L., Beisel, L., Mc-
Croskey, D., Clark, S., "Electronically controlled inspirator", Science, 196, pp 819-821; October, 1957. Enlist# 85644


Becker, W., Engelhardt, A., Sorel, F., Schlitten-
hardt, P., Wehrer, E., "Transcutaneous inductive transmission of EMG (electromyogram) sig-
als", Elektromedizin, V 15, No 3, pp 118-123; 1970. Translated by Dr. Fracpe, Ottawa; 1972. Enlist# 86112


Bigland, B. O., Lippold, O. C., "The relation be-
tween force, velocity, and integrated electrical activity in human muscles", Journal of Physiolog-
ology, No 123, pp 214-224; 1951.

Bontrager, E. L., "The application of muscle education techniques in the investigation of electromyographic control - Report EDC 4-65-13", Case Institute of Technology & Western Reserve University School of Medicine, Cleveland, Ohio; 1965. Enlist# 86395

Bottomley, A. H., "Working model of a myo-
electric control system", Proceedings, Interna-

Bottomley, A. H., Kinnier Wilson, A. B., Nightingale, A., "Muscle substitutes and myo-
electric control", Journal of the British Institute of Radio Engineers, V 26, No 6, pp 435-448; December, 1963. Enlist# 82127

Bottomley, A. H., Cowell, T. K., "An artificial hand controlled by the nerves", New Scientist, No 382, pp 668-671; March 12, 1964. Enlist# 85076


Bottomley, A. H., "Problems in proportional myo-electric control of powered prostheses", 6th International Conference on Medical Electronics & Biological Engineering, Tokyo, p 302; 1965. Enlist# 85566


Bottomley, A. H., "Signal processing in a practi-
cal electromyographically controlled pros-
thesis", Control of External Power in Upper-Ex-

Bottomley, A. H., "Amplifier design and signal processing for myoelectric control of powered prostheses", Digest of the 6th International Con-
ference on Medical Electronics and Biological Engineering, Tokyo, pp 117-17; 1965. Enlist# 85857

Bottomley, A. H., "Control methods for powered prosthesis", Proceedings of the Royal Society of Medicine, pp 5-8; 1966. Enlist# 85661

Bottomley, A. H., "Developments of myo-
electric control concepts in Britain - Toward a new below elbow arm", Amperand Semian-
ual Report, Highland View Hospital, Cleveland, Ohio; p 13; June, 1966. Enlist# 85223

Bottomley, A. H., "Progress with the British myoelectric hand", Proceedings of the Interna-
tional Symposium on External Control of Human Extremities, Dubrovnik, pp 114-124; Septem-
ber, 1966. Enlist# 86467


Bottomley, A. H., "Design considerations for a prosthesis prehension device", Advances in Ex-
ternal Control of Human Extremeties, Proceed-
ings of the International Symposium on External Control of Human Extremities, Dubrovnik, pp 82-84; September, 1966. Enlist# 86467

Bottomley, A. H., "On individual motor-unit control of electrically powered multifunctional ortheoses", in The Control of Upper-Extremity Prostheses and Orthoses, edited by Peter Her-

Bouso, D., Ishai, G., "Report on the use of myoelectric signals for multiple degree-of-freedom arm prosthesis control", Technion-Israel Institute of Technology, Department of Mechanics, Haifa, Israel; July, 1969. Enlist# 86527


Carlson, L. E., "Below elbow control of an externally powered hand", Bulletin of Prosthetics Research, 10-14, pp 43-61; 1970


Case Institute of Technology, Engineering Design Center, "Research and Development Report", Issue No 1; September, 1961. Enlist# 86321


Childress, D. S., "Closed-Loop control in prosthetic systems: historical perspective", Annals of Biomedical Engineering, V.8, pp 293-303; 1980


Childress, D. S., "Historical aspects of powered limb prostheses", Clinical Prosthetics and Orthotics, V.9, No 1, pp 12-2; 1985


Close, J. R., Maurer, R.C., Poor, P.M., "Single motor unit action potentials", Clinical Orthopedics, No 42, pp 171-190; June, 1965


Docas, D. S., Dunfield, V. A., Scott, R. N., "Improved myo-electric control system", Medical & Biological Engineering & Computing, V 8 No 4, pp 333-341; April, 1970


Finley, F. R., "Pattern recognition in myoelectric control systems", Armpersand Report, Highland View Hospital, Cleveland, p.15; September, 1966. Enlist 85223


Godden, A. K., "The techniques of myoelectric control of prostheses and the prospects of this type of control for thalidomide casualties", University of Oxford Department of Engineering Science Report No 1,048,68; March, 1968. Enlist 86449


Hall, J., "Notes on the scientific program of the 11th International Seminar on Prosthetics and Orthotics", Meunster, West Germany; September 1966. Enlist 85462


Enlist 85226


Enlist 85456

Hirschi, C, "Electrically controlled forearm prostheses for a below-elbow amputee", Proceedings of the 9th International Conference on Medical & Biological Engineering, Melbourne, p 1; 1971


Enlist 86051


Enlist 85616

Hobson, D, A, Winter, D, A, "Shriners hospital for crippled children, Winnipeg unit - Biomedical engineering program, activities report - Jan 72 to Aug 73", Shriners Hospital for Crippled Children; 1973

Enlist 86638

Hogan, N, Mann, R, W, "Limitations of existing proportional EMG processors", Conference on Engineering Devices in Rehabilitation Proceedings, Boston, pp 78-81; May, 1974

Enlist 86174

Hogan, N, "A review of the methods of processing EMG for use as a proportional control signal", Biomedical Engineering, pp 81-86; 1976

Horn, G, W, "Muscle potentials control artificial arms movement", Scienza E Tecnica Ortopedica e Infezione a E All'Estero, N 84, pp 213-227; October, 1963

Enlist 86532


Horn, G, W, "L'Autonomia Della Funzione Orale", Automazione E Automatismi, Inst. per l'Autonomia, Milano; 1963


Hudgins, B, S (Ed), "Progress report No 18 - Biomedical Engineering", UNB Research Report 81 9; 1981

Enlist 86225

Iowa State University, "Final Report - Orthotic Brace Design Using Myoelectric Control", Engineering Research Institute, ISU-ERI-AMES-71046, Ames, Iowa; 1971

Enlist 86120


Enlist 86070


Enlist 86649


Enlist 86175


Enlist 86444


Enlist 86567

Kadeffors, R, "The voluntary EMG in prosthetics: contributions to the theory and application of myo-electric controls", Chalmers University of Technology Research Laboratory of Medical Electronics, Göteborg, Sweden; January, 1970

Enlist 86582


Enlist 86449


Herberts, P, "Myoelectric signals in control of prostheses - studies on amputees and normal individuals", Acta Orthopaedica Scandinavica Supplementum No 124, pp 3-83; 1969

Enlist 86545

Herberts, P, Petersen, I, "Possibilities for control of powered devices by myoelectric signals", Scandinavian Journal of Rehabilitation Medicine, V 2, No 4, pp 164-170; 1970

Enlist 86510


Enlist 86159


Enlist 86454


Enlist 86454

Highland View Hospital, "Ampersand seminar - reports - January 1966 to November 1968", Cleveland, Ohio; 1968

Enlist 85223
Kadeffors, R., "Components for signal acquisition and processing in externally powered prosthetics", Advances in External Control of Human Extremities, Proceedings of the 4th International Symposium on the External Control of Human Extremities, Dubrovnik, pp 671-681; September, 1972


Kadeffors, R., "Control components in rehabilitative engineering - Final report", Chalmers University of Technology, Department of Applied Electronics, Göteborg, Sweden, No 71-102/U69; 1973. Enlist # 86223


Kadeffors, R., Olssen, T., "Electrical Impedance - A new control signal in prosthetics and orthotics", The control of Upper-Extremity Prostheses and Orthoses, pp 118-130; 1974


Kato, I., Morita, H., Onozuka, T., "Development of myoelectric control system for an above-knee prosthesis", Theory and Practice of Robots and Manipulators, Proceedings of the 2nd International CISM-IFToMM Symposium, Warsaw, Poland; September, 1976


Kinnell Wilson, A. B., "Recent advances in the control of externally powered artificial limbs", Proceedings, Institute of Medical Engineers, V. 179, pp 219-222; 1964. Enlist # 85389

Kinnell Wilson, A. B., "Control methods with mechanical and EMG inputs", Conference on the Control of External Power in Upper Extremity Rehabilitation, p.57, Warrington, Virginia; April, 1965. Enlist # 86406


Ko, W. H., "Progress in miniaturized biotelemetry", Bioscience, V. 15, pp 118-120; 1965. Enlist # 85263


Ko, W. H., "Micro-miniature implants and circuits for myo-electric control and telemetry", Ampersand Report, Highland View Hospital, Cleveland, Ohio, p 17; 1966. Enlist # 85223


Ko, W. H., "Progress in telemetering muscle potentials", Biomedical Sciences Instrumentation, V.2; 1969. Enlist # 88873


Kohrinsky, A. Ye., "Utilization of bio-currents for control purposes", USSR Academy of Science, Department of Technical Sciences, Energetics and Automation, No 3; 1959. Translated by Peter Bara, UNB; 1966 Enlist #85469

Kohrinsky, A. Ye., "Bioelectric control of prostheses", News Bulletin USSR Academy of Sciences, No 7, Translated by Peter Bara, UNB; 1960. Enlist #85461


Leblanc, M. A., "Clinical evaluation of externally powered prosthetic elbows", Artificial Limbs, V 15, No 1, pp 70-77; Spring, 1971


Lindstrom, L. H., "Information flow and choice of time constants in prosthesis control", The Control of Upper Extremity Prostheses and Orthoses, pp 220-231; 1974


Long, C., Ebskov, B., "Research applications of myoelectric control", Presented at the 43rd Annual Session of the American Congress of Physical Medicine & Rehabilitation, Philadelphia; August, 1965 Enlist #85264

Long, C., "Types of external power for orthotic systems: possibilities for myo-electric control", Amherst Semiannual Report, Highlandview Hospital, Cleveland, Ohio, Vol I, No 2, p 17; September, 1966

Lorig, R., Greene, L., Vodovnik, L., "Myoelectric control from radio frequency transmitter implanted in man", Int' on some topics on myo-control of OP systems, Report No, EDC 4-67-17, Edited by L. Vodovnik, Case Western Reserve University, Cybernetics System Group, p 47-79; August, 1967. Enlist #86448


Lyman, J., Freedy, A., Solomonow, M., "Studies toward a practical computer-sided arm prosthetic system", Bulletin of Prosthetics Research, BPR 10-22, pp 213-225; Fall, 1974


Manitoba Rehabilitation Hospital, Prosthetics and Orthotics Research Development Unit, "Progress Report"; 1969 Enlist #86529


Mann, R. W., "Recent progress in the development of an electro-myographically controlled limb", Proceedings of the 8th Annual IEEE Symposium on Human Factors in Electronics, Palo Alto; May, 1967 Enlist #85592
Mann, R. W., "Efferent and afferent control of an electromyographic proportional-rate, force sensing artificial elbow with cutaneous display of joint angle", Symposium on the Basic Problems of Prehension, Movement and Control of Artificial Limbs, Paper 15, Institution of Mechanical Engineers, pp 86-92; October, 1968. Enlist# 86153


McLeod, W., "Myo-electric signal handling possibilities for the future", Amperians Semiannual Report, Highlandview Hospital, Cleveland, Ohio, p 16; 1966. Enlist# 85223

McLeod, W. D., "Isolated motor unit groups for controlling assistive devices", In: Some topics on

myo-electric control of O&P systems, Report No. EDC 4-67-17, Edited by L. Vodovnik, Case Western Reserve University, Cybernetics System Group, p 94-115; 1967. Enlist# 86448

McLeod, W. D., De Luca, C. J., "Information processing of the myoelectric signal from skeletal muscle", Electromyography, 8, Supplement I, pp 61-65; 1968. Enlist# 86416


Morecki, A., Ekel, J., Fidelus, K., "Mechano-electrical and biomechanical principles of control of the human upper limb muscles", Archiwum Budowy Muszy, V 11, No 4, pp 727-754; 1964. Enlist# 85194


Murphy, E. F., "The roles of myoelectric control of externally powered prostheses and orthoses", Proceedings of the 28th ACBE, New Orleans, September, 1975. Enlist# 86172

Nelson, P. J., "Mack TV - myo-telemyography implant system", Digest of the 5th CMIEC, Montreal, pp 13 3a-b; September, 1974. Enlist# 86659


Norlander, C., "Russian forearm prosthesis with bioclectric control", FOA 2 Rapport A 2513-54 Forsvarets Forsknings-Aust; June, 1968. Enlist# 86488

Northwestern University Medical School Prosthetic Research Laboratory, "Progress report, November 1970 to June 1971". Enlist# 86326

Northwestern University Medical School Prosthetic Research Laboratory, "Progress report, January 1 to December 31, 1971". Enlist# 86600

Northwestern University Medical School, Prosthetic Research Laboratory, "Progress report, January 1 to December 31, 1972". Enlist# 86117

Northwestern University Medical School, Prosthetics Research Laboratory, "Progress report, January 1 to December 31, 1973". Enlist# 86179

Northwestern University Medical School, Prosthetics Research Laboratory, "Progress report, January 1, 1974 to June 30, 1975". Enlist# 86326


Nwoabi, O., "Nondominant arm restraint and dominant arm function in a child with athetoid cerebral palsy electromyographic and functional evaluation", Archives of Physical Medicine and Rehabilitation, V 68, No 12, pp 837-839; 1987


Okado, Y., Kato, I., "Intent control of arm prosthesis", 3rd CISM-IFToMM international symposium on theory and practice of robots and manipulators, Udine, Italy; September, 1978. Enlist# 86734

Ontario Crippled Children's Center, Prosthetic Research and Training Unit, "Annual report"; 1965. Enlist# 86400

Northwestern University Medical School Prosthetic Research Laboratory, "Progress report, July 1 to December 31, 1971." Enlist# 86600

Northwestern University Medical School, Prosthetic Research Laboratory, "Progress report, January 1 to December 31, 1972". Enlist# 86117

Northwestern University Medical School, Prosthetics Research Laboratory, "Progress report, January 1 to December 31, 1973". Enlist# 86179

Northwestern University Medical School, Prosthetics Research Laboratory, "Progress report, January 1, 1974 to June 30, 1975". Enlist# 86326


Nwoabi, O., "Nondominant arm restraint and dominant arm function in a child with athetoid cerebral palsy electromyographic and functional evaluation", Archives of Physical Medicine and Rehabilitation, V 68, No 12, pp 837-839; 1987


Okado, Y., Kato, I., "Intent control of arm prosthesis", 3rd CISM-IFToMM international symposium on theory and practice of robots and manipulators, Udine, Italy; September, 1978. Enlist# 86734

Ontario Crippled Children's Center, Prosthetic Research and Training Unit, "Annual report"; 1965. Enlist# 86400
Ontario Crippled Children’s Center, Prosthetic Research and Training Unit, "Annual Report"; 1966. Enlist #86433


Ontario Crippled Children’s Centre, Rehabilitation Engineering Department, "Annual Report"; 1978. Enlist #87850

Ontario Crippled Children’s Centre, Rehabilitation Engineering Department, "Annual Report"; 1980. Enlist #88157


Paciga, J. E., Proceedings of the seminar on myoelectric control system", UNB Bio-Engineering Institute; September, 1978. Enlist #88546


Pennington, A. J., McMahon, E. L., "Electromagnetically controlled orthotic hand", University of Michigan, College of Engineering; April, 1968. Enlist #86505

Philipson, L., Sörbye, R., "Myoelectric elbow and hand prosthesis controlled by signals from two muscles only, in a nine year old girl", Prosthetics & Orthotics International, 5, pp 29-32; 1981

Poljan, E. P., Ezov, M. D., "Electronics of a bioelectric control system", Central Scientific Institute of Development of Prosthetics; Moscow; 1963 Translated by Dr. Ing and Mrs. Lojze Vodovnik, Cleveland, Ohio; August, 1964. Enlist #85800


Rae, James W., Cockrell, J. L., "Clinical applications in myoelectric control", Bulletin of Prostheses Research, BPR 10-16, pp 23-34; Fall, 1971.


Rancho Los Amigos, "Investigation of myoelectric control of functional braces", Rancho Los Amigos Hospital, Downey, California; March, 1965. Enlist #85443

Rancho Los Amigos, "Investigation of myoelectric control of functional braces", Rancho Los Amigos Hospital, Downey, California; January, 1966. Enlist #85214

Rancho Los Amigos, "Investigation of myoelectric control of functional braces", Rancho Los Amigos Hospital, Downey, California; June, 1966. Enlist #85331

Rancho Los Amigos, "Investigation of myoelectric control of functional braces", Rancho Los Amigos Hospital, Downey, California; January, 1967. Enlist #85571
Rancho Los Amigos, "Investigation of myoelectric control of functional braces", Rancho Los Amigos Hospital, Downey, California; June, 1967. Enlist #85611

Rancho Los Amigos, "Annual reports of progress December 1975 to January 1977", Rehabilitation Engineering Center, Rancho Los Amigos Hospital, Downey, California; 1977. Enlist #86691

Rehabilitation Institute of Montreal, Research and Training Unit, "Interim report of activities". 1965. Enlist #86401

Rehabilitation Institute of Montreal, Department of Research, "Report of activities", 1967. Enlist #85665

Rehabilitation Institute of Montreal, Department of Research, "Report of activities", 1968. Enlist #86492

Rehabilitation Institute of Montreal, Department of Research, "Report of activities", 1969. Enlist #86526

Rehabilitation Institute of Montreal, Department of Research, "Report of activities", 1970. Enlist #86566

Rehabilitation Institute of Montreal, Department of Research, "Report of activities", 1971. Enlist #86591

Rehabilitation Institute of Montreal, Department of Research, "Report of activities", 1972. Enlist #86625

Rehabilitation Institute of Montreal, Department of Research, "Report of activities", 1973. Enlist #86172

Rehabilitation Institute of Montreal, Department of Research, "Report of activities", 1974. Enlist #86654

Rehabilitation Institute of Montreal, Department of Research, "Report of activities", 1975. Enlist #86643

Rehabilitation Institute of Montreal, Department of Research, "Report of activities", 1976. Enlist #86701


Rehabilitation Institute of Montreal, Department of Medical Research, "Annual Report", March 1978 to October 1979. Enlist #87971

Reilly, R. E., "EMGQR: an implantable sensor for myoelectric signals", Symposium on the Basic Problems of Prosthesis, Movement and Control of Artificial Limbs, London; November, 1968. Enlist #86016


Reiter, R., "Eine neue elektruskunsthand (a new electohand)", Grenzgebiete der Medizin, Vol. 1, No 4, pp 133-135. Translated by Dr. R. Stackman; September, 1948. Enlist #85006

Reswick, J., "Introduction to myo-electric phenomena, present and possible implications", Amspecand Semininal Report, Highland View Hospital, Cleveland, Ohio, Vol. 1, No 2; September, 1966. Enlist #85223

Reynolds, L. W., "Utilization of bioelectricity as power source for implanted electronic devices". Aerospace Medicine, pp 115-117; February, 1964. Enlist #85756


Scott, R. N., "Design and development of electronic equipment for manufacture", University of New Brunswick, Department of Electrical Engineering Research Lab Report 63.4; May, 1963. Enlist# 88204

Scott, R. N., Thompson, G. B., "Orthotic systems research - Progress report No. 2", University of New Brunswick, Department of Electrical Engineering, Research Lab Report 63.5; August, 1963. Enlist# 88209

Scott, R. N., "Design and development of electronic equipment for manufacture", University of New Brunswick, Department of Electrical Engineering, Research Lab Report 64.1; February, 1964. Enlist# 88205

Scott, R. N., Thompson, G. B., "Orthotic systems research - Progress report No. 3", University of New Brunswick, Department of Electrical Engineering, Research Lab Report 64.2, 1964. Enlist# 88210


Scott, R. N., "Myoelectric control systems, Progress report #5", UNB Bio-Engineering Institute Research Report 65.3; December, 1965. Enlist# 88212


Scott, R. N., "Development of myo-electric control systems in New Brunswick - toward a new above elbow arm", Amersand Seminannual Report, Highland View Hospital, Cleveland, Ohio, pp. 14; June, 1966. Enlist# 85223


Enlist# 8651


Enlist# 88128


Scott, R. N., "A systems view of prosthetics research", Workshop of the 11th International Conference on Medical and Biological Engineering Conference, Ottawa, pp. 2-3; 1976. Enlist# 88132


Scott, R. N., Paciga, J. E., Parker, P. A., "Operator error in multistate myoelectric control systems", Medical and Biological Engineering and Computing, V. 16, No 3, pp. 296-301; May, 1978. Enlist# 87526


Shannon, G. F., "A self-contained myoelectrically controlled prosthetic hand with sensory feedback for a wrist amputee", Digest of the 11th International Conference on Medical and Biological Engineering, pp 18-19; 1976

Shannon, G. F., "Some experience in fitting a myoelectrically controlled hand which has a sense of touch", Journal of Medical Engineering & Technology, V 2, No 6, pp 312-314; November, 1978 Enlist# 86727


Shannon, G. F., "Sensory feedback for artificial limbs", Medical Progress Through Technology, V 6, pp 73-79; 1979


Simpson, D. C., "The choice of control system for the multi-movement prosthesis: extended physiological proprioception (e p p.)", The Control of Upper-Extremity Prostheses and Orthoses, pp 146-150; 1974


Soerjanto, R., "On the application of the myoelectric hand-prosthesis in the Netherlands", Institute of Medical Physics TNO, Utrecht; December, 1971 Enlist# 66667

Soerjanto, R., "Myoelectric training of congenital below-elbow stump patients", Institute of Medical Physics, TNO, Utrecht, Netherlands, pp 18-22; 1974. Enlist# 86605


Styles, P., "Low noise parametric amplifiers and autogenic backlash generators for EMG control of limb prostheses", Digest of the 6th International Conference on Medical Electronics and Biological Engineering, Tokyo, p 301; 1965. Enlist# 85560

Sueda, O., Tamura, H., "Sensory device for the artificial arm", 8th ICMBE, Chicago, 1969. Enlist# 85987

Sueda, O., "Evaluation of the control system of an artificial arm-powered elbow", Proceedings of the International Conference on Medical and Biological Engineering, Melbourne, pp 6-10; 1971.

Sueda, O., "Evaluation of sensation apparatus for hand prosthesis and controllability of hand prosthesis", Biomechanism, pp 171-184; 1972. Translated by R. Hope, Ottawa; 1973 Enlist# 86133


Swedish Institute for the handicapped, Planning Unit, "Activities in Sweden within Orthotics/Prosthetics the year 1979"; 1979. Enlist 87993


Szeto, A., Lyman, J., "Recommended electrotactile codes for prosthetic/orthosis sensory feedback", 30th ACMBE Conference, Los Angeles, 39 2; 1977. Enlist 88088


University of Lubjiana, "Development of orthotic systems using functional electrical stimulation and myoelectric control - Final report", Electrical Engineering Faculty Project #19-P-58391-F-01, Lubljana, Yugoslavia; December, 1971. Enlist 86599

University of Tennessee, Rehabilitation Engineering Program, "Report of activities #2 - July 1, 1976 to October 31, 1977"; 1977. Enlist 86309


Van Elzenbergen, B., "Institute of Medical Physics TNO progress report No PR3", Utrecht; 1972. Enlist 86624


Waring, W., "Myo-electric control by weak muscles", Amper'sciemi Annual Report, Highland View Hospital, Vol 1, No 2, p 19; September, 1966. Enlist 85233


Waring, W., "Investigations of myoelectric control of functional braces - Final report", Rancho Los Amigos Hospital, Downey, California; 1968 Enlist 86468

Wasserman, W. L., "Human amplifiers", Science and Technology; October, 1964. Enlist 85172


Williams, T. W., "Ways to control multifunction myoelectric prosthesis", Proceedings of the 10th annual RESNA conference, San Jose, California; 1987 Enlist 88859

Wilms, E., "Die technik der vaduzer hand", Orthopadie Technik, 3, 7; 1951.

Wilson, A. B., Murphy, E. F., "Engineering approaches to limb prosthetics and orthotics", CRC Critical Reviews in Bio-Engineering, V. 1, pp 169-215; December, 1971

Wilson, A. B., "Externally powered upper-limb prostheses", Newsletter... Prosthetics and Orthotics Clinic, 2 (1), pp.1-3; 1978 Enlist 88853


Youdin, M., "Myoelectrically controlled upper extremity prostheses", Proceedings of the Seminar on Electronics Controls for the Severely Disabled, pp 89-90; August, 1974 Enlist 86653

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Jenseg Lions
St. Andrew's Lions
Harvey Station Lions
Grand Washademoak Lions
Lancaster Lions
Kennebecasis Lions
Simonds Lions
River Valley Lions
Nashwaaksis Lions
Upper Nashwaaksis Lionesses

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