

# CURRICULUM VITAE

**Giulio Sandini**

## Personal Details

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**Date and Place of Birth:** September 7, 1950, Correggio, Italy

**Nationality / Status:** Italian / married

**Professional Address:** LIRA-Lab, University of Genova  
Viale Causa, 13  
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## Education

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1976 *LAUREA DEGREE IN ELECTRONIC ENGINEERING AND BIOENGINEERING (SUMMA CUM LAUDE) AT THE UNIVERSITY OF GENOVA - ITALY*

## Academic Appointments

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SINCE 2000 *FULL PROFESSOR OF BIOENGINEERING (WITH TENURE)*

1995 – 1996 *VISITING SCIENTIST AT THE ARTIFICIAL INTELLIGENCE LAB AT MIT*

1987 - 2000 *ASSOCIATE PROFESSOR OF BIOENGINEERING (WITH TENURE) AT THE DIPARTIMENTO DI INFORMATICA SISTEMISTICA E TELEMATICA OF THE UNIVERSITY OF GENOVA*

1984 - 1987 *ASSISTANT PROFESSOR AT THE DIPARTIMENTO DI INFORMATICA SISTEMISTICA E TELEMATICA OF THE UNIVERSITY OF GENOVA*

1983 *RESEARCH ASSOCIATE IN NEUROLOGY AT HARVARD UNIVERSITY IN BOSTON - USA*

1980 – 1984 *ASSISTANT PROFESSOR (RICERCATORE UNIVERSITARIO) IN BIOENGINEERING AT THE SCUOLA NORMALE SUPERIORE IN PISA*

1978 – 1979 *VISITING RESEARCH ASSISTANT AT THE DIVISION OF NEUROPHYSIOLOGY AND SEIZURE UNIT THE CHILDREN'S HOSPITAL IN BOSTON – USA*

1976 – 1980 *RESEARCH FELLOW AT THE "LABORATORIO DI NEUROFISIOLOGIA" OF THE CNR IN PISA WITH A FELLOWSHIP FROM THE SCUOLA NORMALE SUPERIORE IN PISA*

## Professional Appointments

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SINCE 2003	<i>JOURNAL "INTERACTION STUDIES" – JOHN BENJAMINS PUBLISHING COMPANY</i>	<i>ASSOCIATE EDITOR</i>
SINCE 2002	<i>INTERNATIONAL JOURNAL OF HUMANOID RESEARCH – WORLD SCIENTIFIC</i>	<i>EDITORIAL BOARD</i>
SINCE 2002	<i>JOURNAL OF APPLIED BIONICS AND BIOMECHANICS</i>	<i>HONORARY EDITORIAL BOARD</i>
SINCE 2002	<i>SCIENCE AND TECHNOLOGY PARK OF THE LIGURIA REGION</i>	<i>SCIENTIFIC BOARD</i>
SINCE 2002	<i>NEURO-IT-NET (NETWORK OF EXCELLENCE SUPPORTED BY CEC)</i>	<i>STEERING COMMITTEE</i>
SINCE 2002	<i>CENTER FOR APPLIED AUTONOMOUS SENSORS SYSTEMS – OREBRO SWEDEN</i>	<i>INTERNATIONAL SCIENTIFIC BOARD</i>
2000 – 2001	<i>ITALIAN SPACE AGENCY</i>	<i>ADVISORY COMMITTEE ON ROBOTICS</i>
SINCE 1998	<i>ISITITUTO DI STUDI SUI SISTEMI INTELLIGENTI PER L'AUTOMAZIONE DEL CNR</i>	<i>SCIENTIFIC BOARD</i>
1998	<i>MINISTRY OF TRADE AND INDUSTRY OF JAPAN</i>	<i>FOREIGN SCIENTIFIC EXPERT</i>
1998	<i>DUTCH SCIENTIFIC RESEARCH COUNCIL</i>	<i>EVALUATOR OF NATIONAL PROJECT ON "PHYSICAL BIOLOGY"</i>
1997 – 2004	<i>COMMISSION OF THE EUROPEAN COMMUNITIES-FUTURE AND EMERGING TECHNOLOGIES</i>	<i>EXPERT FOR 5<sup>TH</sup> AND 6<sup>TH</sup> FRAMEWORK PROGRAM PLANNING</i>
SINCE 1995	<i>COMMISSION OF EUROPEAN COMMUNITIES – LONG TERM RESEARCH AND IST</i>	<i>PROJECT'S EVALUATOR</i>
1992 – 1998	<i>INTERUNIVERSITY CENTER OF AGRICULTURAL AND ENVIRONMENTAL ROBOTICS</i>	<i>DIRECTOR</i>
SINCE 1992	<i>IMAGE AND VISION COMPUTING JOURNAL – ELSEVIER SCIENCE B. V.</i>	<i>ADVISORY EDITORIAL BOARD</i>
SINCE 1990	<i>LABORATORY FOR INTEGRATED ADVANCED ROBOTICS (LIRA-LAB)</i>	<i>FOUNDING DIRECTOR</i>

## Teaching

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SINCE 2002	<i>ANTHROPOMORPHIC ROBOTICS</i> COURSE FOR BIOMEDICAL ENGINEERING DEGREE	ENGINEERING SCHOOL UNIVERSITY OF GENOA
SINCE 2002	<i>HUMAN PHYSIOLOGY</i> COURSE FOR BIOMEDICAL ENGINEERING DEGREE	ENGINEERING SCHOOL UNIVERSITY OF GENOA
SINCE 1991	<i>NATURAL AND ARTIFICIAL INTELLIGENT SYSTEMS</i> COURSE FOR EE AND EO DEGREE	ENGINEERING SCHOOL UNIVERSITY OF GENOA
1987 – 1991	<i>BIOMEDICAL DATA PROCESSING</i> COURSE FOR EE AND EO DEGREE	ENGINEERING SCHOOL UNIVERSITY OF GENOA
1981 – 1998	<i>PRINCIPLES OF PHYSICS AND ELECTRONICS</i> COURSE FOR SECONDARY DEGREE ON NEUROPHYSIOPATHOLOGY	MEDICAL SCHOOL UNIVERSITY OF GENOA

## Selected Invited Talks

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2004	<i>COGNITIVE DEVELOPMENT IN A ROBOT-CUB</i>	TALKS ON “COMPLEX SYSTEMS AND HUMANITIES” UNIVERSITY OF LILLE
2004	<i>MOVIMENTO-AZIONE-COMUNICAZIONE: DALL’UOMO ALLA MACCHINA</i>	COLLEGIO DI MILANO
2003	<i>HUMAN BABIES AND ROBOT CUBS</i>	AIBS 2003 - COGNITION IN MACHINES AND ANIMALS – ABERYSTWYTH, UK
2003	<i>HUMANOIDS AS RESEARCH TOOLS</i>	RESEARCH ON HUMANOID, SERVICE AND RESCUE ROBOTS IN ITALY AND JAPAN – TOKYO
2003	<i>EXPLOITING EYE-HEAD-ARM COORDINATION FOR THE COGNITIVE DEVELOPMENT OF A BABY HUMANOIDS</i>	ROSE 2003: SENSING AND PERCEPTION IN 21 <sup>ST</sup> CENTURY ROBOTICS – OREBRO – SWEDEN
2002	<i>COGNITIVE DEVELOPMENT: FROM HUMANS TO ARTIFICIAL BEINGS. WORKSHOP “BEYOND ROBOTICS”</i>	CEC – FUTURE AND EMERGING TECHNOLOGIES -COPENHAGEN
2002	<i>FOVEAL IMAGING AND IMAGE ANALYSIS</i>	AUSTRIAN PHOTOGRAMM. SOCIETY – GRAZ
2001	<i>FROM HUMANS TO HUMANOIDS – WORKSHOP “HUMANOIDS: A TECHNO-ONTOLOGICAL APPROACH”</i>	WASEDA UNIVERSITY - TOKYO
2001	<i>SENSORIMOTOR TECHNOLOGIES: FROM BIOLOGY TO ARTIFICIAL SYSTEMS (AND VICEVERSA). WORKSHOP “NEW DIRECTIONS IN MATERIALS FOR BIOMIMETIC AND BIOINTERACTIVE PROCESSES”</i>	DARPA-ONRIFO IL CIOCCO - ITALY

2000	<i>RETINA-LIKE SENSORS AND APPLICATIONS</i>	ELECTRO TECHNICAL LAB TSUKUBA
1998	<i>20/20 VISION</i>	OPTICAL ENGINEERING SOCIETY OF IRELAND MAYNOOTH
1998	<i>ARTIFICIAL SYSTEMS AND NEUROSCIENCE: WORKSHOP ON "NEUROINFORMATICS"</i>	CEC - POTSDAM, GERMANY
1997	<i>SENSORIMOTOR COORDINATION IN ARTIFICIAL SYSTEMS: WORKSHOP ON: "PROCESSING VISUAL MOTION IN THE REAL WORLD"</i>	AUSTRALIAN NATIONAL UNIVERSITY - CANBERRA
1997	<i>ARTIFICIAL SYSTEMS AND NEUROSCIENCE: WORKSHOP ON ACTIVE VISION</i>	INSTITUTE OF ADVANCED STUDY, BERLIN
1995	<i>COMPUTER VISION AND ROBOTICS – A BIOMORPHIC APPROACH. WORKSHOP ON: "TRENDS IN COMPUTER SCIENCE"</i>	MAX-PLANK INSTITUTE FOR COMPUTER SCIENCE – SAARBRÜCKEN
1993	<i>TUTORIAL ON NATURAL VISION SYSTEMS IN ROBOTICS RESEARCH: IEEE/RSJ INTERNATIONAL CONFERENCE ON INTELLIGENT ROBOTS AND SYSTEMS (IROS '93)</i>	YOKOHAMA, JAPAN
1993	<i>PANELIST: ACTION, REPRESENTATION, AND PURPOSE: RE-EVALUATING THE FOUNDATIONS OF COMPUTATIONAL VISION". JOINT CONFERENCE ON ARTIFICIAL INTELLIGENCE (IJCAI'93)</i>	CHAMBERY, FRANCE
1990	<i>PANELIST OF THE "BIROBOTICS" TRACK OF: IEEE ENGINEERING IN MEDICINE AND BIOLOGY SOCIETY</i>	PHILADELPHIA, U.S.A.

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## International Research Grants

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2005 – 2009	CEC – NEW AND EMERGING SCIENCE AND TECHNOLOGY (NEST) – 6 <sup>TH</sup> FP	CONTACT - PROJECT COORDINATOR
2004 – 2009	CEC – COGNITIVE SYSTEMS – 6 <sup>TH</sup> FP	ROBOTCUB, IP PROJECT COORDINATOR
2004 – 2008	CEC – FUTURE AND EMERGING TECHNOLOGIES – 6 <sup>TH</sup> FP	NEUROBOTICS STEERING COMMITTEE
2002 – 2005	CEC – FUTURE AND EMERGING TECHNOLOGIES NETWORK OF EXCELLENCE	NEURO-IT THEMATIC NETWORK (NEURO-IT-NET IST-2001-35498) STEERING COMMITTEE
2002 – 2005	CEC – FUTURE AND EMERGING TECHNOLOGIES	ARTIFICIAL DEVELOPMENT APPROACH TO PRESENCE TECHNOLOGY (ADAPT IST-2001-27173) COORDINATOR
2001 – 2004	CEC – IST	COGNITIVE VISION SYSTEM (COGVIS IST-2000-29375)
2000 – 2003	CEC – FET NEURO-IT	MIRROR NEURON BASED ROBOT RECOGNITION (MIRROR IST-2000-28159) COORDINATOR
1999 – 2002	CEC – IST	ADVANCED MOBILE VIDEO COMMUNICATION TECHNOLOGIES (AMOVITE IST-1999-11156)
1998 – 2000	CEC – IST	ROBUST VISION FOR SENSING IN INDUSTRIAL OPERATIONS AND NEEDS (ROBVISION)
1996 – 2000	CEC IST-FET	SPACE-VARIANT VISUAL SENSOR WITH COLOR ACQUISITION (SVAVISCA)
1996 – 2000	CEC – MOBILITY OF RESEARCHERS	VISION-BASED ROBOT NAVIGATION RESEARCH NETWORK (VIRGO)
1996 – 2001	CEC - IST	NAVIGATION OF AUTONOMOUS ROBOTS VIA ACTIVE ENVIRONMENTAL PERCEPTION (NARVAL)
1997 – 2000	CEC – MOBILITY OF RESEARCHERS	SEMI-AUTONOMOUS MONITORING AND ROBOTICS TECHNOLOGY (SMART-2)
1997	CEC INNOVATION	VIDEOPHONE ACCESSORY FOR SPEECHLESS COMMUNICATION (FEASIBILITY STUDY)
1994 – 1997	CEC NETWORK OF EXCELLENCE	EUROPEAN COMPUTER VISION NETWORK OF EXCELLENCE (ECVNET)
1994 – 1996	CEC - TIDE	IMAGE BASED INTERACTIVE DEVICE FOR EFFECTIVE COMMUNICATION (IBIDEM)
1994 – 1997	CEC - ESPRIT	MOBILITY AND ACTIVITY ASSISTANCE SYSTEMS FOR THE DISABLED (MOVAID)

SINCE 1994	ERASMUS	EXCHANGE PROGRAM IN THE FIELD OF ARTIFICIAL VISION
1993 – 1995	CEC – MOBILITY RESEARCHERS	OF FOUNDATION OF A VISUAL EUROPEAN ARCHITECTURE (FOVEA) – EUROPEAN COORDINATOR
1993 – 1996	CEC – MOBILITY RESEARCHERS	OF SEMI-AUTONOMOUS MONITORING AND ROBOTICS TECHNOLOGY (SMART)
1992-1995	CEC - ESPRIT	VISION AS PROCESS (VAP)
1992-1993	CEC - ESPRIT	SENSORY CONTROLLED DEXTEROUS ROBOTS (SECOND)
1989-1992	CEC - ESPRIT	VISION RESEARCH PILOT PROJECT (VOILA)
1989-1991	CEC - ESPRIT	FUNDAMENTALS OF INTELLIGENT RELIABLE ROBOT SYSTEMS (FIRST)
1988-1989	NATO	HARDWARE IMPLEMENTATION OF AN ANTHROPOMOPHIC SPACE-VARIANT VISUAL SENSOR
1985-1990	CEC - ESPRIT	IMAGE AND MOVEMENT UNDERSTANDING – P419

### **National Research Grants**

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2002 – 2004	ITALIAN SPACE AGENCY	SCALABLE ARTIFICIAL VISION SYSTEM FOR SPACE ROBOTICS
2001 – 2002	ENEA	SURFACE ROBOT FOR ANTARCTICA EXPLORATION
1999 – 2001	ITALIAN SPACE AGENCY	METHODS OF SELF-ADAPTATION TO LOSS OF PERFORMANCE DUE TO AGING OF COMPONENTS
1998 – 1999	ITALIAN SPACE AGENCY	EFFECTS OF MICROGRAVITY ON THE NEUROBEHAVIORAL DEVELOPMENT OF RODENTS.
1997 – 1999	MINISTRY OF RESEARCH	MOTOR AND VISUOMOTOR PLASTICITY AND DEVELOPMENT IN BIOLOGICAL AND ARTIFICIAL SYSTEMS.
1996 – 1999	ITALIAN SPACE AGENCY	OPTICAL MICROSYSTEMS OF SPACE ROBOTICS
1992 - 1995	ITALIAN SPACE AGENCY	A SYSTEM FOR THE CONTROL OF A BINOCULAR ROBOT HEAD WITH SELF-STABILIZATION CAPABILITIES
1992 - 1994	CNR – ROBOTICS	URMAD: MOBILE ROBOT FOR DISABLED PERSONS
1992 - 1994	CNR - ROBOTICS	AGROBOT: A ROBOTIC SYSTEM FOR AGRICULTURAL APPLICATIONS.
1989 - 1991	CNR - ROBOTICS	DYNAMIC VISION FOR AUTONOMOUS ROBOTS
1987 - 1991	CNR - ROBOTICS	STUDY AND FABRICATION OF SPACE-VARIANT VISUAL SENSORS
1985 - 1988	CNR - BIOMEDICAL ENGINEERING	SPATIO-TEMPORAL ANALYSIS OF BRAIN ELECTRICAL ACTIVITY BY MEANS OF 2D MAPS.

## International Patents

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- 1992            *1992 US Patent No. 5,166,511: Radiation sensitive sensor having a plurality of radiation sensitive elements arranged substantially circular with radially decreasing density (Submitted in 1990);*
- 1997            *European Patent No. EP 0 397 272 B1: Radiation-sensitive mean or sensor in retina-like configuration (Submitted in 1990).*
- 1999-2001      *Constant Resolution and Space-Variant Sensor Arrays (Submitted EU, USA, CA, JP)*

## Publications

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Published more than 240 papers of which more than 60 in International Journals. The most relevant journal articles and book contribution are the following.

- Article  
2004            G. Metta, A. Gasteratos, G. Sandini: *Learning to track colored objects with log-polar vision*. Mechatronics Vol. 14 (p. 989-1006)
- Article  
2004            M. Lungarella, G. Metta, R. Pfeifer, G. Sandini: *Developmental Robotics: A Survey*. Connection Science. Vol. 15 Issue 4 ( p. 151-190)
- Article  
2003            R. Manzotti, G. Sandini: *What does "isomorphism between conscious representations and the structure of the world" means? A commentary of Pier Perruchet and Annie Vinter, The SOC as an alternative model of the mind*. Behavioral Brain Science 2003
- Article  
2002            A. Gasteratos, C. Beltran, G. Metta, G. Sandini: *PRONTO: a system for mobile robot navigation via CAD-model guidance*. Microprocessors and Microsystems – Vol 26 (p. 17-26)
- Article  
2002            A. Bernardino, J. Santos-Victor, G. Sandini: *Foveated active tracking with redundant 2D motion parameters*. Robotics and Autonomous Systems 2002, Vol 39 (p. 205-221)
- Article  
2002            L. Natale, G. Metta, G. Sandini: *Development of auditory-evoked reflexes: Visuo-acoustic cues integration in a binocular head*. Robotics and Autonomous Systems 2002, Vol 39 (p. 87-106)
- Article  
2002            F. Panerai, G. Metta, G. Sandini: *Learning Visual Stabilization Reflexes in Robots with Moving Eyes*. Neurocomputing, 2002 323-337
- Article  
2002            R. Manzotti, G. Sandini: *Does Functionalism really deal with the phenomenal side of experience?* Behavioral Brain Sciences. 2002
- Article  
2002            G. Metta, G. Sandini: *Embodiment and complex systems*. A commentary on Barbara Webb: Can robots make good models of biological behavior?. Behavioral and Brain Sciences, 2002.
- Article  
2002            R. Manzotti, A. Gasteratos, G. Metta, G. Sandini: *Disparity estimation in log polar images and vergence control*, Computer Vision and Image Understanding, 2002
- Book  
Chapter  
2002            G. Sandini, G. Metta: *Retina-like Sensors: Motivations, Technology, Applications, in Sensors and Sensing in Biology and Engineering*, T.W. Secomb, F. Barth, and P. Humphrey, Editors. 2002, Springer-Verlag.

- Article  
2000 F.Panerai, G.Metta, G.Sandini, *Visuo-inertial Stabilization in Space-variant Binocular Systems, Robotics and Autonomous Systems*, Special Issue on Biomimetic Robotics, Vol. 30 No 1-2, Pag 195-214, 2000
- Book  
Chapter  
2000 Sandini, G., F. Panerai, and F.A. Miles, *The Role of Inertial and Visual Mechanisms in the Stabilization of Gaze in Natural and Artificial Systems*, in *Motion Vision, Computational, Neural, and Ecological Constraints*, J.M. Zanker and J. Zeil, Editors. 2000, Springer. p. 189-218.
- Article  
1999 G.Metta, G.Sandini and J.Konczak. *A developmental approach to visually-guided reaching in artificial systems*, *Neural Networks*, Vol 12 No 10 pp 1413-1427, 1999
- Article  
1998 F. Panerai, G. Sandini, *Oculo-Motor Stabilization Reflexes: Integration of Inertial and Visual Information*,” *Neural Networks*, vol. 11, 1998.
- Article  
1997 W. W. Woelders, H. W. Frowein, J. Nielsen, P. Questa, G. Sandini, “*New Developments in Low-bit Rate Videotelephony for People Who are Deaf*,” *Journal of Speech, Language and Hearing Research*, 1997
- Article  
1997 J. Santos-Victor, G. Sandini, “*Visual Behaviors for Docking*,” *Computer Vision and Image Processing*, vol. 67, pp. 223-238, 1997.
- Article  
1997 J. Santos-Victor, G. Sandini, “*Embedded Visual Behaviors for Navigation*,” *Robotics and Autonomous Systems*, vol. 19, pp. 299-313, 1997.
- Article  
1997 C. Capurro, F. Panerai, G. Sandini, “*Dynamic Vergence using Log-polar Images*,” *International Journal of Computer Vision*, vol. 24, pp. 79—94, 1997.
- Article  
1996 J. Santos-Victor, G. Sandini, “*Uncalibrated Obstacle Detection using Normal Flow*,” *Machine Vision and Applications*, vol. 9, pp. 130-137, 1996.
- Article  
1996 G. Sandini, Y. Yamada, D. M. Wilkes, M. Bishay, “*Sensing Group Report on Biorobotics*,” *Robotics and Autonomous Systems*, vol. 18, pp. 207-211, 1996.
- Article  
1996 E. Grosso, G. Metta, A. Oddera, G. Sandini, “*Robust Visual Servoing in 3D Reaching Tasks*,” *IEEE Transactions on Robotics and Automation*, vol. 12, pp. 732—742, 1996.
- Article  
1995 J. Santos-Victor, G. Sandini, F. Curotto, S. Garibaldi, “*Divergent Stereo in Autonomous Navigation: From Bees to Robots*,” *International Journal of Computer Vision*, vol. 14, pp. 159-177, 1995.
- Article  
1995 F. Ferrari, J. Nielsen, P. Questa, G. Sandini, “*Space Variant Imaging*,” *Sensor Review*, vol. 15 No.2, pp. 17-20, 1995
- Article  
1994 G. Sandini, E. Grosso, “*Why Purposive Vision*,” *CVGIP – Image Understanding*, vol. 60, pp. 109-112, 1994
- Edited Book  
1993 P. Dario, G. Sandini, P. Aebischer, “*Robots and Biological Systems: Towards a New Bionics*,” in *NATO ASI Series*, vol. Series F: Computer and Systems Sciences Vol. 102: Springer-Verlag, 1993
- Book  
Chapter  
1993 G. Sandini, F. Gandolfo, E. Grosso, M. Tistarelli, “*Vision During Action*,” in *Active Perception*, Y. Aloimonos, Ed.: Lawrence Erlbaum Associates, 1993, pp. 151-190.



- Article  
1993 M. Tistarelli, G. Sandini, "On the Advantages of Polar and Log-polar Mapping for Direct Estimation of Time-to-Impact from Optical Flow," IEEE Transactions on Pattern Analysis and Machine Intelligence, vol. 14, pp. 401—410, 1993
- Article  
1992 M. Tistarelli, G. Sandini, "Dynamic Aspects in Active Vision", CVGIP: Image Understanding, vol. 56 No.1, pp. 108-129, 1992.
- Book  
1992 D. Vernon, G. Sandini, "Parallel Computer Vision: The Vis a Vis System," Ellis Horwood, 1992
- Article  
1990 M. Tistarelli, G. Sandini, "Estimation of Depth from Motion Using an Anthropomorphic Visual Sensor," Image and Vision Computing, vol. 8, No. 4, pp. 271—278, 1990.
- Article  
1990 G. Sandini, M. Tistarelli, "Active Tracking Strategy for Monocular Depth Inference over Multiple Frames," IEEE Trans. On Pattern Analysis and Machine Intelligence, vol. PAMI-12, No. 1, pp. 13—27, 1990
- Article  
1989 E. Grosso, G. Sandini, M. Tistarelli, "3D Object Reconstruction Using Stereo and Motion," IEEE Transactions on Systems Man and Cybernetics, vol. 19 N.6, pp. 1465-1476, 1989.
- Book  
Chapter  
1989 Jan V. d. Spiegel, G. Kreider, C. Claeys, I. Debusschere, G. Sandini, P. Dario, F. Fantini, P. Bellutti, G. Soncini, "A Foveated Retina-like Sensor Using CCD Technology," in Analog VLSI and Neural Network Implementations, C. Mead, M. Ismail, Eds. Boston: Kluwer Academic Publisher, 1989, pp. 189-212.
- Article  
1988 D. Vernon, G. Sandini, "VIS: A Virtual Image System for Image-Understanding Research," Software-Practice and Experience, vol. 18 No.5, pp. 395-414, 1988
- Article  
1987 G. Rodriguez, F. Arvigo, S. Marengo, F. Nobili, P. Romano, G. Sandini, G. Rosadini, "Regional Cerebral Blood Flow in Essential Hypertension: Data Evaluation by a Mapping System," Stroke, vol. 18 No.1, pp. 13-20, 1987.
- Book  
Chapter  
1986 G. Sandini, F. H. Duffy, P. Romano, "Spatiotemporal Analysis of Cerebral Evoked Potentials," in Topographic Mapping of Brain Electrical Activity, F. H. Duffy, Ed.: Butterworth, 1986, pp. 295-324.
- Book  
Chapter  
1986 G. Sandini, G. Rodriguez, P. Romano, G. Rosadini, "Topographic Mapping of rCBF Data," in "PET and NMR: new perspectives in neuroimaging and in clinical neurochemistry, L. Battistin, F. Gerstenbrand, Eds. New York: Alan R. Liss, 1986.
- Article  
1985 L. Massone, G. Sandini, V. Tagliasco, "Form-Invariant Topological Mapping Strategy for 2-D Shape Recognition," Computer Vision, Graphics and Image Processing, vol. 30 No.2, pp. 169—188, 1985.
- Article  
1984 S. Gaglio, P. Morasso, G. Sandini, V. Tagliasco, "Anthropomorphic features in artificial vision," J. Theoretical Linguistics, vol. 11, pp. 45-59, 1984.
- Article  
1984 A. Fiorentini, M. Pirchio, G. Sandini, "Development of Retinal Acuity in Infants Evaluated with Pattern Electroretinogram," Human Neurobiol., vol. 3, pp. 93-95, 1984.
- Book  
Chapter  
1984 S. Gaglio, P. Morasso, G. Sandini, V. Tagliasco, "Anthropomorphic Robotics," in Modeling and Analysis in Biomedicine, C. Nicolini, Ed.: World Scientific, 1984, pp. 391-446

- Article 1983 V. Torre, W. G. Owen, G. Sandini, "The Dynamics of Electrically Interacting Cells," IEEE Trans Systems, Man and Cybernetics, vol. SMC-13, pp. 757-765, 1983.
- Article 1983 D. Spinelli, M. Pirchio, G. Sandini, "Visual Acuity in the Young Infant is Highest in a Small Retinal Area," Vision Res., vol. 23, pp. 1133-1136, 1983
- Article 1983 G. Sandini, P. Romano, A. Scotto, G. Traverso, "Topography of Brain Electrical Activity: a Bioengineering Approach," Medical Progress through Technology, vol. 10, pp. 5-19, 1983.
- Article 1983 A. Fiorentini, L. Maffei, G. Sandini, "The Role of High Spatial Frequencies in Face Perception," Perception, vol. 12, pp. 195-201, 1983
- Article 1982 C. Braccini, G. Gambardella, G. Sandini, V. Tagliasco, "A Model of the Early Stages of the Human Visual System: Functional and Topological Transformation Performed in the Peripheral Visual Field," Biological Cybernetics, vol. 44, pp. 47—58, 1982.
- Article 1981 C. Braccini, G. Gambardella, G. Sandini, V. Tagliasco, "Borrowing from the Eyes to Create Robot Vision Algorithms," Sensor Review, vol. 1 No.2, pp. 68-72, 1981.
- Article 1981 C. Braccini, G. Gambardella, G. Sandini, "A Signal Theory Approach to the Space and Frequency Variant Filtering Performed by the Human Visual System," Signal Processing, vol. 3, pp. 231-240, 1981.
- Article 1980 G. Sandini, V. Tagliasco, "An Anthropomorphic Retina-like Structure for Scene Analysis," Computer Graphics and Image Processing, vol. 14 No.3, pp. 365-372, 1980.
- Article 1980 F. H. Duffy, M. B. Denckla, P. H. Bartels, G. Sandini, L. S. Kiessling, "Dyslexia: Automated Diagnosis by Computerized Classification of Brain Electrical Activity," Annals of Neurology, vol. 7, pp. 421-428, 1980
- Article 1980 F. H. Duffy, M. B. Denckla, P. H. Bartels, G. Sandini, "Dyslexia: Regional Differences in Brain Electrical Activity by Topographic Mapping," Annals of Neurology, vol. 7, pp. 412-420, 1980.
- Article 1979 L. Maffei, C. Morrone, M. Pirchio, G. Sandini, "Responses of Visual Cortical Cells to Periodic and non Periodic Stimuli," J. Physiology, vol. 296, pp. 27-47, 1979.
- Article 1979 L. Maffei, C. Morrone, M. Pirchio, G. Sandini, "A Perceptual Phenomenon and its Neurophysiological Correlates," Perception, vol. 8, pp. 43-46, 1979.
- Article 1978 P. Morasso, G. Sandini, G. Suetta, T. Vernazza, R. Zaccaria, "LOGOS: a Microprocessor based Device as a Writing Aid for the Motor Handicapped," Medical & Biological Engineering and Computing, vol. 16, pp. 309-315, 1978.
- Article 1977 P. Morasso, G. Sandini, V. Tagliasco, R. Zaccaria, "Control Strategies in the Eye-Head Coordination System," IEEE Trans. Systems, Man and Cybernetics, vol. SMC-7 No.9, pp. 639-651, 1977.
- Article 1977 L. Maffei, C. Morrone, M. Pirchio, G. Sandini, "Visual Cortical Cells as Spatial Frequency Analyzers," J. Physiology, vol. 272, pp. 89-90 P, 1977
- Book Chapter 1975 P. Morasso, G. Sandini, V. Tagliasco, R. Zaccaria, "Plasticity in the Eye-Head Coordination System," in Aspects of Neural Plasticity, vol. 43, V. Durand, Jeannerod, Eds., 1975, pp. 83-94.

