

CURRICULUM VITAE



PERSONAL INFORMATION

Name
Address
Telephone
Fax
E-mail

Nationality
Date of birth

CARLO NERI

WORK EXPERIENCE

- Dates (from – to)
- Name and address of employer
- Type of business or sector
- Occupation or position held
- Main activities and responsibilities

1983 – to now

ENEA-Italian National Agency for New Technologies, Energy and Environment – Lungotevere
Thaon de Ravel, 76 – 00196 Rome, Italy

Research & Development in New Technologies, Energy & Environment

First Researcher

1984 – 1985: ENEA – FUSION DEPARTMENT

Design and implementation of the control and data acquisition system of the R.F. Plant of the Tokamak FT.

Design and specification of the control system of the FTU vacuum system.

1986 – 1988: ENEA – FUSION DEPARTMENT

Design and supervision of the implementation and commissioning of the distributed Fast Data Acquisition system (FDA) of the Tokamak FTU. Developed the acquisition software.

Design, supervision of the implementation and commissioning of the Fast Sequence Control system (FSC) of FTU, which control the plants during the plasma experiment.

1988 – 1990: ENEA – FUSION DEPARTMENT

Design and supervision of the implementation and commissioning of the Plasma Position and Current control system of the Tokamak FTU.

1991 – 1993: ENEA – FUSION DEPARTMENT

Design and supervision of the implementation and commissioning of the upgraded system for Magnetic Measure used to determinate the plasma position and current of FTU Tokamak.

1994 – 1995: ENEA – FUSION DEPARTMENT

Design and implementation of the system used in FTU to collect data from PLC's, interfacing the SCADA FTU system based on B running on ALPHA UNIX work-station.*

Design of the acquisition system for a laser radar based range finder imaging system.

Experimental activities in parallel image and data processing of amplitude and range images.

1996 – 1997: ENEA – FUSION DEPARTMENT

Design and supervision of the implementation and commissioning of the Data Acquisition System for the DIVERTOR TEST PLATFORM used in the REMOTE HANDLING ITER experiments in ENEA BRASIMONE

1997 – 2001: ENEA – FUSION DEPARTMENT

Was in charge of the ENEA inter departmental project for parallel computing (ELAP).

Design and supervision of the implementation and commissioning of the data processing, data acquisition and control system of the Laser In Vessel Viewing System to be tested in JET

Was the ENEA interface of an international collaboration with association EURATOM/ENEA and EURATOM/IST (Istituto Superior Tecnico)

2001: ENEA – FUSION DEPARTMENT

Was in charge of the Electronic Laboratory FUS-ELE-SEL of ENEA FRASCATI.

From 1999 – 2005 fulfilled key roles in the following task of the EFDA technology work program:

- TW0-DTP1 (Feasibility demonstration of a viewing & ranging probe, based on an hybrid lasertechnique, able to meet the ITER RC requirements)
- TW1-TVA-IVV (design, manufacture and preliminary testing of a proof-of-principle model of a viewing probe with potential to meet both remote viewing and ranging requirements for ITER-FEAT requirements)
- TW3-TVR-IVV (Investigate probe performance under "ITER-like" conditions to assess, for example, requirement for deployment system stability and limits for prism drive system speed variation)
- TW5-TVR-IVV (parametrically test the viewing and ranging capabilities of the ENEA prototype IVVS at a number of probe-target distances and viewing angles)

In detail:

Collaborated to the development of the In Vessel Viewing System IVVS for ITER. Was in charge of the design and supervision for the development of the overall control, data acquisition, data processing, and data visualisation systems.

Developed and patented an innovative radar equipment data processing system used in the IVVS system.

Supervised a further international collaboration with association EURATOM/ENEA and EURATOM/IST (Instituto Superior Tecnico) for the developments of parts of the IVVS control/ data acquisition systems.

Collaborated with the SCK-CEN in Mol, Belgium to characterize the radiation resistance of the IVVS fiber optic optical encoders.

From 2006 to 2007 was principal investigator of the EFDA task TW6-TVR-IVV (Upgrading and experimental testing of the IVVS probe prototype).

From 2009 to 2010 was technical responsible for ENEA of the GRANT with Fusion for Energy F4E-2008-GRT-015 (MS-RH) (Activities related to the development of an In-Vessel Viewing System prototype).

from 2012 to 2014 was technical responsible for ENEA of the GRANT with Fusion for Energy F4E-GRT-282 (RH) (In Vessel Viewing System IVVS Probe Design Finalisation, including supplementary laboratory tests).

From 2015 is responsible of the laboratory FSN-FUSTEC-IEE: "Electrical and electronics laboratory of nuclear fusion technological division of the nuclear fusion and nuclear safety technologies department of ENEA"

EDUCATION AND TRAINING

- Dates (from – to) 1972 - 1981
- Name and type of organization providing education and training Università degli studi di FIRENZE
- Principal subjects/occupational skills covered Engineering
- Title of qualification awarded Degree on Electronic Engineering

PERSONAL SKILLS AND EXPERIENCES

MOTHER TONGUE ITALIAN

OTHER LANGUAGES

- ENGLISH**
- Reading skills FLUENT
 - Writing skills WORKING
 - Verbal skills WORKING
- FRENCH**
- Reading skills WORKING
 - Writing skills LIMITED
 - Verbal skills LIMITED

TECHNICAL SKILLS

EXPERIENCE IN COORDINATION OF MULTIDISCIPLINARY ACTIVITIES AND MULTIDISCIPLINARY WORKING GROUPS.
LARGE SPECTRUM OF TECHNOLOGICAL CULTURE REINFORCED ON OVER 30 YEAR OF WORKING EXPERIENCE ON SEVERAL TECHNOLOGICAL FIELDS.
SOUND EXPERIENCE ON SYSTEM LEVEL DESIGN OF COMPLEX ELECTRONICS SYSTEMS, REAL-TIME CONTROL AND ACQUISITION SYSTEMS, OPTOELECTRONICS SYSTEMS AND TECHNOLOGIES.
SOUND EXPERIENCE ON SENSORS AND MECHATRONICS (ALSO COVERED BY THE ACADEMIC EXPERIENCE REPORTED).
SOUND EXPERIENCE ON HIGH PERFORMANCE AND PARALLEL ELABORATION, FOR DIGITAL SIGNAL PROCESSING AND IMAGE PROCESSING SYSTEM.
GOOD EXPERIENCE ON 3D DATA ELABORATION AND ON 3D GEOMETRY WITH RELEVANT EXPERIENCES ON VECTOR GEOMETRY TECHNIQUES.
GOOD EXPERIENCE ON ANALYSIS/ELABORATION OF PHYSICAL DATA AND ON SIGNAL AND IMAGE ANALYSIS TECHNIQUES.
GOOD WORKING EXPERIENCE ON SOFTWARE LANGUAGES AND MATHEMATICAL ELABORATION PACKGES: C LANGUAGE, LABWINDOWS, MATLAB, MATHEMATICA.
EXPERIENCE ON RAD HARD DESIGN AND QUALIFICATION.

RESPONSIBILITIES

- 1) RESPONSIBLE OF THE LABORATORY FSN-FUSTEC-IEE: "ELECTRICAL AND ELECTRONICS LABORATORY OF NUCLEAR FUSION TECHNOLOGICAL DIVISION OF NUCLEAR FUSION AND NUCLEAR SAFETY TECHNOLOGIES DEPARTMENT OF ENEA"

TEACHING

PROFESSOR AT TORVERGATA UNIVERSITY – ROME

- 1) FROM 2005 TO 2008 WAS IN CHARGE AT THE TORVERGATA UNIVERSITY OF THE OFFICIAL COURSE "STRUMENTAZIONE INDUSTRIALE"
- 2) FROM 2009 TO 2011 WAS IN CHARGE AT THE TORVERGATA UNIVERSITY OF THE OFFICIAL COURSE "LABORATORIO DI AUTOMATICA E STRUMENTAZIONE" FOR THE SECTION "STRUMENTAZIONE INDUSTRIALE".

PATENTS

ITALIAN PATENT N. RM2004 A000527 TITLE:
METODO DI MISURA VETTORIALE DIGITALE AD ALTA DINAMICA DELL'AMPIEZZA E DELLA FASE DI UN
SEGNALE A RADIOFREQUENZA, E RELATIVO DISPOSITIVO

ITALIAN PATENT N.810.1 DOMANDA: N.102015000068983 TITLE:
APPARATO OTTICO DI SCANSIONE COMPATTO PER SENSORI LASER RADAR IN AMBIENTI OSTILI

PUBLICATIONS

1. G. Fermani, C. Neri et al. , *Development Status of FTU Control System*, Proc. of 14th Symposium on Fusion Technology 1986, Avignon
2. F.Crisanti,C.Neri,M.Santinelli, *FTU Plasma Position and Current Feedback Control*, Proc. of 16th Symposium on Fusion Technology, September 3-7,1990 London U.K.
3. G. FERMANI, C. NERI, M. RIVA, G. APRUZZESE, G. BUCETI, F. CRISANTI, D. FRIGIONE, H. KROEGLER, L. LOVISETTO, G. MAZZITELLI, S. PODDA and M. SANTINELLI, EXPERIMENTAL RESULTS AND UPGRADING OF THE PLASMA CURRENT AND POSITION CONTROL IN FTU, In Fusion Technology 1992, North-Holland, Oxford, 1993, Pages 1067-1071, ISBN 9780444899958, <http://dx.doi.org/10.1016/B978-0-444-89995-8.50207-1>.
4. S. Cabrini, G. Fornetti, C. Neri, M. Riva, R. Tomassini, *A Quadrics Q1-based system for on-line image analysis in laser vision environment*, ENEA technical report , September 1995 presented in the meeting on MASSIVELY PARALLEL COMPUTING using Quadrics systems, DESY-IFH Zeuthen Oct 5-6, 1995
5. G. Fornetti, C. Neri, M. Riva, *High Performance Computing and Networking at ENEA*, Oct 1996 - ENEA publication, pp 25-26
6. L. Bartolini, A. Coletti, M. Ferri de Collibus, G. Fornetti, C. Neri, M. Riva, L. Semeraro, C. Talarico, *Amplitude-Modulated Laser In Vessel Viewing System (LIVVS) for ITER/JET*, Fusion Technology 1998 (Proc. of 20th Symposium on Fusion Technology) , B.Beumont Libeyre De Gentile and Tonon eds., pp 685-688, September 7-11, 1998, Marseille, France.
7. Rita C Pereira, Nuno.Cruz, C Neri, M Riva, C Correia, C.A.F Varandas, *The control and data acquisition system of a laser in-vessel viewing system*, Fusion Engineering and Design, Volume 48, Issues 1-2, 1 August 2000, Pages 205-212, ISSN 0920-3796, [http://dx.doi.org/10.1016/S0920-3796\(00\)00128-9](http://dx.doi.org/10.1016/S0920-3796(00)00128-9).
8. V. Vitale, G. Buceti, C. Centioli, S. Ciattaglia, F. Crisanti, G. D'Antona, G. Mazza, C. Neri, M. Riva, *The New FTU feedback control system: an approach oriented to the future plasma equilibrium configuration in FTU*, Proc. of 20th Symposium on Fusion Technology, pp 563-566, September 7-11, 1998, Marseille, France.
9. Coletti A., M. Baldarelli, L. Bartolini, A. Bordone, M. Ferri de Collibus, G. Fornetti, S. Lupini, C. Neri, C. Poggi, M. Riva, L. Semeraro, C. Talarico, L. Zannelli, *Amplitude-Modulated Laser Viewing System in Apparatus for Controlled Thermonuclear Studies*, American Nuclear Society 8th International Topical Meeting, April 25-29, 1999, Pittsburgh PA.

10. V.Vitale, G.Buceti, C.Centioli, S. Ciattaglia, F. Crisanti, G. D'Antona, G.Mazza, C. Neri, M. Riva, *A 10 KHz Feedback Control System for Plasma Shaping on FTU*, 11th IEEE NPSS Real Time Conference. Year: 1999. Pages: 235 - 238, DOI: 10.1109/RTCON.1999.842609
11. L. Bartolini, A. Coletti, M. Ferri de Collibus, G. Fornetti, C. Neri, M. Riva, L. Semeraro, C. Talarico, *Laser Vision Sensor for in Vessel Inspection of Fusion Reactors*, Proceedings EUROPTO Series, International Symposium of Industrial Laser and Inspection, SPIE Vol. 3823, pp 200-211, 14-19 June 1999, Munich, Germany. DOI:10.1117/12.360990
12. C Talarico, M Baldarelli, A Coletti, S Lupini, C Neri, M Riva, L Semeraro, *Laser in vessel viewing system for activated areas: mechanical design, manufacturing and tests*, Fusion Engineering and Design, Volumes 51-52, November 2000, Pages 1001-1006, ISSN 0920-3796, [http://dx.doi.org/10.1016/S0920-3796\(00\)00415-4](http://dx.doi.org/10.1016/S0920-3796(00)00415-4).
13. M. Riva, L. Bartolini, A. Bordone, A. Coletti, M. Ferri De Collibus, G. Fornetti, S. Lupini, C. Neri, C. Poggi, L. Semeraro, C. Talarico. *LASER VIEWING SYSTEM FOR IN-VESSEL INSPECTION AND CONTROL IN LARGE FUSION MACHINES (JET AND ITER)*, ICALEPS 1999 PP 202-204
14. Rita C Pereira, Nuno Cruz, C Neri, M Riva, C Correia, C.A.F Varandas, *The control and data acquisition system of a laser in-vessel viewing system*, Fusion Engineering and Design, Volume 48, Issues 1-2, 1 August 2000, Pages 205-212, ISSN 0920-3796, [http://dx.doi.org/10.1016/S0920-3796\(00\)00128-9](http://dx.doi.org/10.1016/S0920-3796(00)00128-9).
15. L. Bartolini, A. Bordone, A. Coletti, M. Ferri de Collibus, G. Fornetti, S. Lupini, C. Neri, C. Poggi, M. Riva, L. Semeraro, C. Talarico, *Laser in vessel viewing system for nuclear fusion reactors*, Proceedings of SPIE - The International Society for Optical Engineering 09/1999; DOI:10.1117/12.360990
16. C. Neri, L. Bartolini, B. Brichard, A. Coletti, M. Ferri de Collibus, G. Fornetti, F. Pollastrone, M. Riva, L. Semeraro, *Experimental result of the laser in vessel viewing and ranging system (IVVS) for ITER*, Fusion Engineering and Design, Volumes 75-79, November 2005, Pages 613-618, ISSN 0920-3796, <http://dx.doi.org/10.1016/j.fusengdes.2005.06.185>.
17. C. Neri et al, *Advanced digital processing for amplitude and range determination in optical RADAR systems*, IEEE Transactions on Nuclear Science 05/2002; 49(2-49):417 - 422. DOI:10.1109/TNS.2002.1003764
18. B. Brichard, C.Neri, *Gamma irradiation of critical parts of the IVVS ENEA (Optical Radar for ITER)*, SCK-CEN internal report, Mol Belgium 2002
19. Rita Pereira, Nuno Cruz, Carlo Neri, Carlos Correia, Carlos Varandas, *A high-data-transfer-rate VME system for TCP-IP remote real-time control of the ITER in-vessel vision system*, Fusion Engineering and Design, Volume 60, Issue 3, June 2002, Pages 253-259, ISSN 0920-3796, [http://dx.doi.org/10.1016/S0920-3796\(02\)00017-0](http://dx.doi.org/10.1016/S0920-3796(02)00017-0).
20. C. Neri, A. Coletti, L. Bartolini, M. Ferri De Collibus, G. Fornetti, A. Lo Bue, S. Lupini, C. Neri, F. Pollastrone, L. Semeraro, C. Talarico, *AM laser system (IVVS) for the ITER in vessel viewing and ranging*, Fusion Engineering and Design, Volume 69, Issues 1-4, September 2003, Pages 169-175, ISSN 0920-3796, [http://dx.doi.org/10.1016/S0920-3796\(03\)00312-0](http://dx.doi.org/10.1016/S0920-3796(03)00312-0).

21. M. Riva, C. Neri, F. Bonaccorso, F. Massaioli, *The integrated visualisation software for the ITER in vessel viewing system (IVVS)*, Fusion Engineering and Design, Volume 74, Issues 1–4, November 2005, Pages 909-915, ISSN 0920-3796, <http://dx.doi.org/10.1016/j.fusengdes.2005.06.194>.
22. C. Neri, L. Bartolini, B. Brichard, A. Coletti, M. Ferri de Collibus, G. Fornetti, F. Pollastrone, M. Riva, L. Semeraro, Experimental result of the laser in vessel viewing and ranging system (IVVS) for ITER, Fusion Engineering and Design, Volumes 75–79, November 2005, Pages 613-618, ISSN 0920-3796, <http://dx.doi.org/10.1016/j.fusengdes.2005.06.185>.
23. F. Pollastrone, C. Neri, *A semiautomatic method for optical radar probe alignment*, Proceedings of the 5th WSEAS Int. Conf. on Signal Processing, Computational Geometry & Artificial Vision, Malta, September 15-17, 2005 (pp 233-237)
24. C. Neri, G. Baccarelli, S. Bertazzoni, F. Pollastrone, M. Salmeri, *Parallel Hardware Implementation of RADAR Electronics Equipment for a LASER Inspection System*, IEEE Transactions on Nuclear Science 01/2006; 52(6-52):2741 - 2748. DOI:10.1109/TNS.2005.862772
25. C. Neri, A. Coletti, M. Riva, F. Pollastrone, *The laser in vessel viewing system (IVVS) for ITER: present status and new developments of the control processing and data visualization systems*, 10th ICALEPCS Int. Conf. on Accelerator & Large Expt. Physics Control Systems. Geneva, 10 - 14 Oct 2005, P-OI.004-1 (2005)
26. M. Ferri de Collibus, L. Bartolini, A. Coletti, G. Fornetti, C. Neri, M. Riva, L. Semeraro, *Laser radar sensor for hostile environments*, 23rd International Laser Radar Conference, pp. 91-94, July 2006, Nara Japan, ed. Chikao Nagasawa, Nobuo Sugimoto
27. C. Neri, L. Bartolini, A. Coletti, M. Ferri de Collibus, G. Fornetti, F. Pollastrone, M. Riva, L. Semeraro, *The laser in vessel viewing system (IVVS) for ITER: Test results on first wall and divertor samples and new developments*, Fusion Engineering and Design, Volume 82, Issues 15–24, October 2007, Pages 2021-2028, ISSN 0920-3796, <http://dx.doi.org/10.1016/j.fusengdes.2006.12.006>.
28. L. Boncagni, C. Centioli, F. Iannone, C. Neri, M. Panella, L. Pangione, M. Riva, M. Scappaticci, V. Vitale, L. Zaccarian, *Synchronous Databus Network in ITER: Open source real-time network for the next nuclear fusion experiment*, Fusion Engineering and Design, Volume 83, Issues 2–3, April 2008, Pages 504-510, ISSN 0920-3796, <http://dx.doi.org/10.1016/j.fusengdes.2007.10.007>.
29. C. Neri, A. Coletti, M. Ferri de Collibus, G. Fornetti, F. Pollastrone, *The upgraded laser in vessel viewing system (IVVS) for ITER*, Fusion Engineering and Design, Volume 84, Issues 2–6, June 2009, Pages 224-228, ISSN 0920-3796, <http://dx.doi.org/10.1016/j.fusengdes.2009.01.096>.
30. Carlo Neri, Fabio Pollastrone, Onofrio Tudisco, *Fully Digital Implementation of a High Dynamic Fast Vector Voltmeter*, 36th International Conference on Plasma Science and 23rd Symposium on Fusion Engineering; 05/2009 DOI:10.1109/FUSION.2009.5226464
31. Isabel Ribeiro, Carlo Damiani, Alessandro Tesini, Satoshi Kakudate, Mikko Siuko, Carlo Neri, *The remote handling systems for ITER*, Fusion Engineering and Design, Volume 86, Issues 6–8, October 2011, Pages 471-477, ISSN 0920-3796, <http://dx.doi.org/10.1016/j.fusengdes.2011.01.138>.
32. C. Neri, P. Costa, M. Ferri De Collibus, M. Florean, G. Mugnaini, M. Pillon, F. Pollastrone, P. Rossi, *Iter in vessel viewing system design and assessment activities*, Fusion Engineering and Design,

33. Fabio Pollastrone, Carlo Neri, Marco Florean, Giovanni Ciccone, *FTU bolometer electronic system upgrade*, Fusion Engineering and Design, Volume 88, Issues 6–8, October 2013, Pages 1441-1444, ISSN 0920-3796, <http://dx.doi.org/10.1016/j.fusengdes.2013.02.068>.
34. Paolo Rossi, M. Ferri de Collibus, M. Florean, C. Monti, G. Mugnaini, C. Neri, M. Pillon, F. Pollastrone, S. Baccaro, A. Piegari, C. Damiani, G. Dubus, *IVVS actuating system compatibility test to ITER gamma radiation conditions*, Fusion Engineering and Design, Volume 88, Issues 9–10, October 2013, Pages 2084-2087, ISSN 0920-3796, <http://dx.doi.org/10.1016/j.fusengdes.2013.03.030>.
35. O. Tudisco, A. Lucca Fabris, C. Falcetta, L. Accatino, R. De Angelis, M. Manente, F. Ferri, M. Florean, C. Neri, C. Mazzotta, D. Pavarin, F. Pollastrone, G. Rocchi, A. Selmo, L. Tassinato, F. Trezzolani, and A. A. Tuccill., *A microwave interferometer for small and tenuous plasma density measurements*, Review of Scientific Instruments 03/2013; 84(3):7. DOI:10.1063/1.4797470
36. Carlo Neri, Ugo Besi, Mario Ferri De Collibus, Giampiero Mugnaini, Chiara Monti, Mario Pillon, Fabio Pollastrone, Paolo Rossi, Gregory Dubus, Carlo Damiani, *Status of the Design Refinement and the Characterisation of the In Vessel Viewing System for ITER*, 2013 IEEE 25th Symposium on Fusion Engineering (SOFE) DOI: 10.1109/SOFE.2013.6635459
37. Chiara Monti, Ugo Besi Vetrella, Giampiero Mugnaini, Carlo Neri, Paolo Rossi, Rosario Viola, Gregory Dubus, Carlo Damiani, *Test of piezo-ceramic motor technology in ITER relevant high magnetic fields*, Fusion Engineering and Design, Volume 89, Issues 9–10, October 2014, Pages 2304-2308, ISSN 0920-3796, <http://dx.doi.org/10.1016/j.fusengdes.2014.04.023>.
38. Fabio Pollastrone, Mario Ferri de Collibus, Marco Florean, Massimo Francucci, Giampiero Mugnaini, Carlo Neri, Paolo Rossi, Gregory Dubus, Carlo Damiani, *Erosion evaluation capability of the IVVS for ITER applications*, Fusion Engineering and Design, Volume 89, Issues 9–10, October 2014, Pages 2325-2330, ISSN 0920-3796, <http://dx.doi.org/10.1016/j.fusengdes.2014.03.058>.
39. Mario Pillon, Chiara Monti, Giampiero Mugnaini, Carlo Neri, Paolo Rossi, Mario Carta, Orlando Fiorani, Alfonso Santagata, *Study of the response of a piezoceramic motor irradiated in a fast reactor up to a neutron fluence of $2.77E+17$ n/cm²*, Fusion Engineering and Design, Volumes 96–97, October 2015, Pages 329-333, ISSN 0920-3796, <http://dx.doi.org/10.1016/j.fusengdes.2015.03.025>.
40. Chiara Monti, Carlo Neri, Fabio Pollastrone, *Instrumentation, control and data acquisition system with multiple configurations for test in nuclear environment*, Fusion Engineering and Design, Volumes 96–97, October 2015, Pages 873-877, ISSN 0920-3796, <http://dx.doi.org/10.1016/j.fusengdes.2015.02.048>.
41. Fabio Pollastrone, Carlo Neri, *Test results for triple-modulation radar electronics with improved range disambiguation*, Fusion Engineering and Design, Volumes 96–97, October 2015, Pages 912-916, ISSN 0920-3796, <http://dx.doi.org/10.1016/j.fusengdes.2015.04.056>.

42. Fabio Pollastrone · Carlo Neri · Chiara Monti · Cristina Centioli · Maurizio Panella, *Design for the upgrade of the Fast Sequence Control for Frascati Tokamak Upgrade*, 2015 IEEE 15th International Conference on Environment and Electrical Engineering (EEEIC), pp.1951-1955; 06/2015.
DOI: 10.1109/EEEIC.2015.7165471
43. Paolo Rossi, Carlo Neri, Mario Ferri De Collibus, Giampiero Mugnaini, Fabio Pollastrone, Fabio Crescenzi, *IVVS probe mechanical concept design*, Fusion Engineering and Design, Volumes 98–99, October 2015, Pages 1597-1600, ISSN 0920-3796,
<http://dx.doi.org/10.1016/j.fusengdes.2015.05.008>.
44. C. Neri, M. Florean, P. Rossi, G. Mugnaini, *Correction method of vibration effects for images produced by laser radar*, 9th International Symposium on Image and Signal Processing and Analysis (ISPA). Year 2015. Pages: 182 - 187, DOI: 10.1109/ISPA.2015.7306055
45. Carlo Neri, Chiara Monti, Cristina Centioli, Fabio Pollastrone, Maurizio Panella, *Basic concepts and implementation strategy of the plasma discharge command sequencer for FTU Tokamak*, Fusion Engineering and Design, 2017, ISSN 0920-3796, <http://dx.doi.org/10.1016/j.fusengdes.2017.04.032>.
<http://www.sciencedirect.com/science/article/pii/S0920379617304350>
46. Carlo Neri, Chiara Monti, Fabio Pollastrone, *A plasma discharge fast control system for large fusion reactors*, 2017 European Conference on Circuit Theory and Design (ECCTD), ISSN 2474-9672, DOI: [10.1109/ECCTD.2017.8093309](https://doi.org/10.1109/ECCTD.2017.8093309)
47. Carlo Neri et al, *Upgraded concepts and design of an in vessel inspection system for fusion reactors*, April 2019, Fusion Engineering and Design, DOI: 10.1016/j.fusengdes.2019.03.171
48. Mauro Cappelli, Carlo Neri et al, *IFMIF-DONES Central instrumentation and control systems: General overview*, May 2019, Fusion Engineering and Design, DOI: 10.1016/j.fusengdes.2019.04.084

BOOKS

1. Paola Batistoni · R. Andreani · S. Segre · H. Knoepfel · A. Pizzuto · P. Agostini · V. Antoni · A. Caruso · V. Coccoresse · A. della Corte · [...] · G. Mazzitelli · C. Neri · A. Pisent · M.T. Porfiri · F. Romanelli · R. Toschi · S. Tosti · A.A. Tuccillo · E. Visca · F. Zonca, *50 years of fusion research in Italy*, 2010 edited by Paola Batistoni, 01/2010; ENEA., ISBN: ISBN: 978-88-8286-225-1