

Associate Professor Marco Mugnaini




Birth date 11.10.1974
 Birth Place Florence, Italy
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 Marital Status Married
 Nationality Italian

EDUCATION	<p><u>Ph.D. in Reliability Availability and Logistics, University of Florence, Italy, 2003</u></p> <p><u>Laurea Degree (110/110 cum Laude) in Electronics Engineering with major in Non Linear Automatic Controls, University of Florence, Italy, 1999</u></p> <p><u>High School diploma from Liceo Scientifico Antonio Gramsci Firenze, Italy, 1993</u></p>
EXPERIENCE & RECOGNITIONS	<p><u>Since 2019 he is ASSOCIATE Professor at the DIISM Department of the University of Siena</u></p> <p><u>Since 2018 he has obtained the scientific qualification for FULL PROFESSORSHIP of Electronic Measurements E9/04 (W3) from the Italian Ministry of Education.</u></p> <p><u>Since 2017 he has obtained the scientific qualification for PROFESSORSHIP from the AQU agency Catalan system Spain.</u></p> <p><u>Since 2014 he has obtained the scientific qualification for ASSOCIATE PROFESSORSHIP of Electronic Measurements E9/04 (W2) from the Italian Ministry of Education.</u></p> <p><u>Assistant Professor at the University of Siena (Manager of the electronics training lab.), University of Siena, Italy, 2013-Present</u></p> <p><u>Faculty and Professor at the Electrical and Electronics Technology Dept. at the Higher Colleges of Technology Abu Dhabi, UAE, 2012 - 2013</u></p> <p><u>Assistant Professor at the University of Siena (Manager of the electronics training</u></p>

	<p>lab.), University of Siena, Italy, 2005-2012</p> <p><u>Co-founder</u> of the SENSIA SrL Company, Italy, 2008 www.sensia.it</p> <p><u>Co-founder</u> of the DESMOWEB SrL Company, Italy, 2009 www.desmoweb.com</p> <p><u>Product Safety Engineer</u> at General Electric (GE) Power System Oil and Gas Division with the responsibility of leading the design for safety of five production sites (AC Compressor, Gemini, Rotoflow, Thermodyn, PII), Florence, Italy, 2003-2005.</p> <p><u>Consultant</u> for Borri Industrial Power Solutions S.p.A. 2002-2011</p> <p><u>Consultant</u> for Astrid Energy Enterprises S.p.A. 1999-2000</p> <p><u>Teacher and Consultant</u> for CETACE, Magnetek S.p.A. 1999-2000</p> <p><u>Teacher</u> IFOA relating to areas of reliability for electronics and mechanics. 1999</p>
CERTIFICATIONS	<p>Certified as Labview Associate Developer</p>  <p>Green Belt Certified</p> <p>CAP (Change Acceleration Process) Certified</p>
MEMBERSHIPS	<p>IEEE Senior Member</p>
HONORS & AWARDS	<p>IEEE Instrumentation and Measurement Distinguished Lecturer</p> <p>In 2003 Marco Mugnaini received the award for the best National Ph.D. thesis in the maintenance context from CNIM (National Italian Center for Maintenance)</p>

**SERVICE
ACTIVITIES**

Visiting Professor at the “Halmstad University” Halmstad, Sweden, 2019.
Visiting Professor at the “Applied Sciences faculty” Coburg University, Germany 2018.
Keynote Speaker at IEEE Nanofim 2018 Conference, Mexico City, Mexico
Keynote Speaker at IEEE IMCCC 2018 Conference, Harbin, China
Special Session Organizer and Chair Of the IEEE ISSE 2017 Conference
Visiting Professor at the “Universitat Politecnica de la Catalunya” (UPC) and teacher at Ph.D. program at UPC
Lecturer at Politecnico di Milano 2016 for Ph.D. students on Reliability and Design for Safety subjects
Research Collaborator with Meyer Children Hospital (reference Prof Elio Novembre) Florence
Editor in Chief of the International Journal of Instrumentation Technology (IJIT)
Associate Editor of the International Journal of Power Electronics and Drives
Editorial Board of the “Safety” Journal MDPI since 2015
Organizing committee member of IEEE student competition UAE, 2013
Stirring Committee of IEEE student competition UAE, 2013
Judges Coordinator of IEEE student competition UAE, 2013
Director of the educational Electronics and Electronic Measurement Laboratory.
2006 RAV member (Faculty auto evaluation board)
Member of the Board of Electronic and Telecommunication Branch since 2010
Associate Technical Program Chair for the following Conferences:
IEEE Sensor application Symposium (IEEE SAS)
IEEE Multi-Conference on Systems, Signals & Devices SSD
IEEE Instrumentation and Measurement I2MTC
Rector delegate for the Safety Manager Intra Faculty Regional Organization since 2010-2011
Reviewer for IEEE Transaction on Instrumentation and Measurement, for IEEE Transaction on Neural Networks Journals, Reliability Engineering and System Safety, JCST and IEEE IMSC coordinator.
Member of the Ph.D. School Board in Bionformatics University of Siena since 2008 and up to 2011

**TEACHING
EXPERIENCE**

Since 2013

He is with the Department of Information Engineering and Mathematics of the University of Siena where he holds the course of:

- Reliability and Design for Safety (a.y.s 2013-2019)
- Electronics (a.y. 2017/2019)

Since 2012

He is with the department of Electrical and Electronics Engineering of the Higher Colleges of Technology as faculty and is instructor of the following courses:

- Instrumentation and Control
- Electrical Maintenance and Testing
- Health and Safety
- Power system Analysis
- Power Generation and Distribution

Since 2005 He is with the Department of Information Engineering of the University of Study of Siena as Assistant Professor. During his career he had the ownership of the following classes in the Electronic and Telecommunication branch.

In charge of (Siena):

(a.y. 2004/2005) Electric and Electronic Measurements
(a.y. 2005/2006) Electric and Electronic Measurements
(a.y. 2006/2007) Electric and Electronic Measurements
(a.y. 2007/2008) Electronic Measurements Laboratory
(a.y. 2007/2008) Electric and Electronic Measurements
(a.y. 2008/2009) Electronic Measurements Laboratory
(a.y. 2008/2009) Electric and Electronic Measurements
(a.y. 2009/2010) Electric and Electronic Measurements
(a.y. 2010/2011) Reliability and Design for Safety

Support for (Siena):

(a.y. 2005/2006) Measurements for Automation
(a.y. 2006/2007) Measurements for Automation
(a.y. 2005/2006) Electronic Systems
(a.y. 2006/2007) Electronic Systems

Support for (Florence):

(a.y. 2000/2001) Reliability and Quality Control
(a.y. 2001/2002) Measurement for Diagnosis
(a.y. 2002/2003) Reliability and Quality Control

**INDUSTRIAL
PROJECTS &
PATENTS**

2017 2017 Funded (Scientific responsible Proff. Vignoli and Fort) by National Railway Company RFI to develop two projects. One concerning the design of a drone-box for unmanned infrastructure monitoring and the other one to develop an advanced access door for a total amount of 200k€.

2016 Funded from BURT 2012 POR CREO for the STech project 400k€ overall project 6M€ for the development of new reliable sensing strategies in Gas Turbines.

2015 Funded by Isertech SpA with 50k€ (CNIT Contract Responsible Prof. Toccafondi) for the development and research of safe solution for the surveillance of railway crossing level passages through radar technologies.

2014 Scientific reference for the University of Siena of the founded project ATENE for 380k€ (overall project about 9M€) Regione Toscana Burt

2012 Funding for a four year project PerovSkite based Sensors Artificial Olfactory System (PSAOS responsible Prof. Fort) from US Army RDECOM ACQ CTR - W911NF (250000€)

2011 he started a project on smart grid jointly with Borri SpA received funding for 45000€.

2009-2010 founding for about 120000€ from General Electric for the development of torsion measurement systems and for the development of new displacement and chemical sensing systems.

Patents:

As indicated in the selected Publication list in 2008, in 2010 and 2015 respectively he developed together with other colleagues three patents (two nationals and one International) on a new kind of three electrode amperometric sensor for NOx detection and on a detector for allergies.

SELECTED PUBLICATIONS

BOOKS AND BOOKS CHAPTERS:

[B1] 2012 - Book Chapter

A. Fort, M. Mugnaini, S. Rocchi, V. Vignoli (2012). Surface State Models For Conductance Response Of Metal Oxide Gas Sensors During Thermal Transients. In: -. Chemical Sensors: Simulation and Modeling Volume 2: Conductometric-Type Sensors. vol. 2, p. 127-175, New York: Momentum Press, ISBN: 9781606503126, doi: 10.5643/9781606503140

JOURNALS & CONFERENCES (#142 Source Scopus)

Mugnaini, M., Addabbo, T., Fort, A., Elmi, A., Landi, E., Vignoli, V. Magnetic brakes material characterization under accelerated testing conditions (2020) Reliability Engineering and System Safety, 193, art. no. 106614, . <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85071294431&doi=10.1016%2fj.ress.2019.106614&partnerID=40&md5=591fc0bd63c4e4f584edb2af215e2ebf>

DOI: 10.1016/j.ress.2019.106614

Addabbo, T., Fort, A., Moretti, R., Mugnaini, M., Vignoli, V. Analysis of a Circuit Primitive for the Reliable Design of Digital Nonlinear Oscillators (2019) PRIME 2019 - 15th Conference on Ph.D. Research in Microelectronics and Electronics, Proceedings, art. no. 8787773, pp. 189-192. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85071339106&doi=10.1109%2fPRIME.2019.8787773&partnerID=40&md5=ad2a9b46504a0fd826e3196c162d248e>

DOI: 10.1109/PRIME.2019.8787773

Fort, A., Panzardi, E., Vignoli, V., Landi, E., Mugnaini, M., Trigona, C. Performance Analysis of an AlN Humidity Sensor based on TiO₂ nanoparticles (2019) 2019 IEEE International Symposium on Measurements and Networking, M and N 2019 - Proceedings, art. no. 8805004, . <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85072113118&doi=10.1109%2fIWMN.2019.8805004&partnerID=40&md5=bb78604d1787d73be2ca2b6180085ace>

DOI: 10.1109/IWMN.2019.8805004

Addabbo, T., Di Marco, M., Fort, A., Landi, E., Mugnaini, M., Vignoli, V., Ferretti, G. Instantaneous Rotation Speed Measurement System Based on Variable Reluctance Sensors for Torsional Vibration Monitoring (2019) IEEE Transactions on Instrumentation and Measurement, 68 (7), art. no. 8534416, pp. 2363-2373.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85056598753&doi=10.1109%2fTIM.2018.2877808&partnerID=40&md5=d2cbf3c0cecl1f3c13b536528db185fd3>

DOI: 10.1109/TIM.2018.2877808

Addabbo, T., Cataldo, G., Cevenini, G., Fort, A., Franchi, F., Moretti, R., Mugnaini, M., Scolletta, S., Vignoli, V.

A Measurement System to Estimate the Pleural Pressure from the CVP for Respiratory System Monitoring
(2019) IEEE Transactions on Instrumentation and Measurement, 68 (7), art. no. 8693892, pp. 2469-2478.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85067119624&doi=10.1109%2fTIM.2019.2909995&partnerID=40&md5=3c33d6a44220b81475264d631d0695a0>

DOI: 10.1109/TIM.2019.2909995

Addabbo, T., Fort, A., Mugnaini, M., Parri, L., Pinzi, M., Vignoli, V., Mvemba, P.K., Becatti, M., Barygina, V., Taddei, N., Fiorillo, C.

On the Suitability of Low-Cost Compact Instrumentation for Blood Impedance Measurements

(2019) IEEE Transactions on Instrumentation and Measurement, 68 (7), art. no. 8665961, pp. 2412-2424.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85067130011&doi=10.1109%2fTIM.2019.2899475&partnerID=40&md5=1dce22aa72bac0a142e93db6d9a2722c>

DOI: 10.1109/TIM.2019.2899475

Abrardo, A., Fort, A., Landi, E., Mugnaini, M., Panzardi, E., Pozzebon, A.
Black Powder Flow Monitoring in Pipelines by Means of Multi-Hop LoRa Networks
(2019) 2019 IEEE International Workshop on Metrology for Industry 4.0 and IoT, MetroInd 4.0 and IoT 2019 - Proceedings, art. no. 8792890, pp. 312-316.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85071599424&doi=10.1109%2fMETROI4.2019.8792890&partnerID=40&md5=da3eb14d0bd7157505dc35854ade0cd3>

DOI: 10.1109/METROI4.2019.8792890

Fort, A., Panzardi, E., Addabbo, T., Mugnaini, M., Vignoli, V., Trigona, C.
Conditioning Circuit for Simultaneous Sensing and Actuation in Piezoelectric MEMS Resonators

(2019) SAS 2019 - 2019 IEEE Sensors Applications Symposium, Conference Proceedings, art. no. 8705996, .

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85065914440&doi=10.1109%2fSAS.2019.8705996&partnerID=40&md5=2640191ffb6f68107a36cd1493e97600>

DOI: 10.1109/SAS.2019.8705996

Addabbo, T., Fort, A., Mecocci, A., Mugnaini, M., Parrino, S., Pozzebon, A., Vignoli, V.

A LoRa-based IoT Sensor Node for Waste Management Based on a Customized Ultrasonic Transceiver

(2019) SAS 2019 - 2019 IEEE Sensors Applications Symposium, Conference Proceedings, art. no. 8705980, .

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85065905670&doi=10.1109%2fSAS.2019.8705980&partnerID=40&md5=a2f22a6793cdf7b3f946f8bd235c1d52>

DOI: 10.1109/SAS.2019.8705980

Addabbo, T., Fort, A., Mugnini, M., Vignoli, V., Parri, L., Allegorico, M., Ruggiero, M., Cioncolini, S.

Ion sensors: Application to combustion monitoring in gas turbines (2019) SAS 2019 - 2019 IEEE Sensors Applications Symposium, Conference Proceedings, art. no. 8706114, .

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85065916021&doi=10.1109%2fSAS.2019.8706114&partnerID=40&md5=c04ea366085702a884c9f6628110c461>

DOI: 10.1109/SAS.2019.8706114

Addabbo, T., Fort, A., Mugnaini, M., Panzardi, E., Vignoli, V.

Measurement System Based on Electrostatic Sensors to Detect Moving Charged Debris with Planar-Isotropic Accuracy

(2019) IEEE Transactions on Instrumentation and Measurement, 68 (3), art. no. 8419738, pp. 837-844.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85050624064&doi=10.1109%2fTIM.2018.2853938&partnerID=40&md5=c4868d51fef143c0c94fcb9fc9c96ca1>

DOI: 10.1109/TIM.2018.2853938

Addabbo, T., Della Giovampaola, C., Fort, A., Mugnaini, M., Pozzebon, A., Toccafondi, A., Vignoli, V.

Target measurements influence on level crossing detection system safety determination

(2019) Measurement: Journal of the International Measurement Confederation, 135, pp. 547-554.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85058167221&doi=10.1016%2fj.measurement.2018.11.059&partnerID=40&md5=75da92b2ad35f90adef2c5802f09eade>

DOI: 10.1016/j.measurement.2018.11.059

Fort, A., Panzardi, E., Vignoli, V., Hjiri, M., Aida, M.S., Mugnaini, M., Addabbo, T.

Co₃O₄/Al-ZnO nano-composites: Gas sensing properties

(2019) Sensors (Switzerland), 19 (4), art. no. 760, .

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85061857441&doi=10.3390%2fs19040760&partnerID=40&md5=7875c9c2aaa5d2e1b29b18db663084b1>

DOI: 10.3390/s19040760

Addabbo, T., Fort, A., Mugnaini, M., Vignoli, V.

YCoO₃ resistive gas sensors for the detection of NO₂ in 'resistance controlled mode'

(2019) Lecture Notes in Electrical Engineering, 539, pp. 61-68.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-85061106663&doi=10.1007%2f978-3-030-04324-7_9&partnerID=40&md5=348371d4d7fa6e151c071089473a0124

DOI: 10.1007/978-3-030-04324-7_9

Addabbo, T., Fort, A., Mugnaini, M., Vignoli, V.
Low temperature NO₂ sensor based on YCoO₃ and TiO₂ nanoparticle composites
(2019) Lecture Notes in Electrical Engineering, 539, pp. 3-10.
https://www.scopus.com/inward/record.uri?eid=2-s2.0-85061082394&doi=10.1007%2f978-3-030-04324-7_1&partnerID=40&md5=e578a451f6fc634748e7b6379ae1d6fe

DOI: 10.1007/978-3-030-04324-7_1

Addabbo, T., Fort, A., Moretti, R., Mugnaini, M., Vignoli, V.
Lightweight true random bit generators in PLDs: Figures of merit and performance comparison
(2019) Proceedings - IEEE International Symposium on Circuits and Systems, 2019-May, art. no. 8702791, .
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85066795346&doi=10.1109%2fISCAS.2019.8702791&partnerID=40&md5=158f909cd5f4a52f5063188113de87b7>

DOI: 10.1109/ISCAS.2019.8702791

Addabbo, T., Fort, A., Mugnaini, M., Panzardi, E., Pozzebon, A., Vignoli, V.
A low power city-scale wireless sensor network for the monitoring of monumental structures
(2019) IMEKO International Conference on Metrology for Archaeology and Cultural Heritage, MetroArchaeo 2017, pp. 510-515.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85070519854&partnerID=40&md5=3cec1e6e597c240025alea4d33ed8c75>

Addabbo, T., Landi, E., Moretti, R., Mugnaini, M., Parri, L., Tani, M.
A distributed condition monitoring system for the non-invasive temperature measurement of heat fluids circulating in turbomachinery pipes based on self-powered sensing nodes
(2019) Lecture Notes in Electrical Engineering, 550 (9783030119720), pp. 343-348.
https://www.scopus.com/inward/record.uri?eid=2-s2.0-85066913482&doi=10.1007%2f978-3-030-11973-7_40&partnerID=40&md5=3ba22791ec67fafa4821d90b4300d31b

DOI: 10.1007/978-3-030-11973-7_40

Addabbo, T., Di Marco, M., Fort, A., Mugnaini, M., Takaloo, H., Vignoli, V.
A CMOS PUF circuit primitive based on a two-dimensional nonlinear dynamical system
(2019) Proceedings - IEEE International Symposium on Circuits and Systems, 2019-May, art. no. 8702670, .
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85066801038&doi=10.1109%2fISCAS.2019.8702670&partnerID=40&md5=1b6acf55dd54b4d72a8987fd74ad129e>

DOI: 10.1109/ISCAS.2019.8702670

Addabbo, T., Fort, A., Mugnaini, M., Takaloo, H., Vignoli, V., Petra, N.

Piecewise linear chaotic maps in current mode CMOS circuits: Nonlinear distortion analysis
(2019) Proceedings - IEEE International Symposium on Circuits and Systems, 2019-May, art. no. 8701879, .
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85066784270&doi=10.1109%2fISCAS.2019.8701879&partnerID=40&md5=08ba57cde196aa565365f29ee8cd5e05>

DOI: 10.1109/ISCAS.2019.8701879

Addabbo, T., Fort, A., Mugnaini, M., Panzardi, E., Pozzebon, A., Vignoli, V.
A city-scale IoT architecture for monumental structures monitoring
(2019) Measurement: Journal of the International Measurement Confederation, 131, pp. 349-357.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85053057149&doi=10.1016%2fj.measurement.2018.08.058&partnerID=40&md5=bf22c5351f0d7bcb548390e261a49b5d>

DOI: 10.1016/j.measurement.2018.08.058

Addabbo, T., Fort, A., Mugnaini, M., Parri, L., Parrino, S., Pozzebon, A., Vignoli, V.
A low-power IoT architecture for the monitoring of chemical emissions
(2019) Acta IMEKO, 8 (2), pp. 53-61.
https://www.scopus.com/inward/record.uri?eid=2-s2.0-85070447243&doi=10.21014%2facta_imeko.v8i2.642&partnerID=40&md5=e8be5539ecf6b97574acbc26cfb76189

DOI: 10.21014/acta_imeko.v8i2.642

Addabbo, T., Bardi, F., Cioncolini, S., Fort, A., Mugnaini, M., Parri, L., Vignoli, V.
Multi-sensors exhaust gas emission monitoring system for industrial applications
(2019) Lecture Notes in Electrical Engineering, 512, pp. 49-56.
https://www.scopus.com/inward/record.uri?eid=2-s2.0-85050407504&doi=10.1007%2f978-3-319-93082-4_7&partnerID=40&md5=f84e07cdd0f48419b45a7c03fa1799f6

DOI: 10.1007/978-3-319-93082-4_7

Addabbo, T., Bruzzi, M., Fort, A., Mugnaini, M., Vignoli, V.
Gas sensing properties of In₂O₃ nano-films obtained by low temperature pulsed electron deposition technique on alumina substrates
(2018) Sensors (Switzerland), 18 (12), art. no. 4410, .
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85058635302&doi=10.3390%2fs18124410&partnerID=40&md5=4d4062c6404c2b4e7f9c622830db2697>

DOI: 10.3390/s18124410

Addabbo, T., Fort, A., Landi, E., Tani, M., Mugnaini, M., Vignoli, V., Elmi, A.
Modular test bed for magnetic brakes characterization and durability testing
(2018) 4th IEEE International Symposium on Systems Engineering, ISSE 2018 - Proceedings, art. no. 8544432, .

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85059974876&doi=10.1109%2fSysEng.2018.8544432&partnerID=40&md5=8e58d04a4c865c12dff74ec0f8786cdc>

DOI: 10.1109/SysEng.2018.8544432

Fort, A., Mugnaini, M., Rocchi, S., Vignoli, V., Leone, G., Magnani, A., Nelli, N., Radano, G., Zarovni, N.
QCM Biosensors for the Detection of Tumor Released Exosomes
(2018) 2016 Nanotechnology for Instrumentation and Measurement, NANOFIM 2016, art. no. 8521429, .
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85057754467&doi=10.1109%2fNANOFIM.2016.8521429&partnerID=40&md5=f5a4e302fe803022e01927ad140ee4e9>

DOI: 10.1109/NANOFIM.2016.8521429

Addabbo, T., Fort, A., Moretti, R., Mugnaini, M., Vignoli, V., Cataldo, G., Cevenini, G., Franchi, F.
A Novel Measurement System to Estimate the Trans-Pulmonary Pressure Exploiting the Central Venous Pressure and ECG Signals
(2018) MeMeA 2018 - 2018 IEEE International Symposium on Medical Measurements and Applications, Proceedings, art. no. 8438659, .
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85053140533&doi=10.1109%2fMeMeA.2018.8438659&partnerID=40&md5=d4f4f959c25663e71b4ebadf14efcceb>

DOI: 10.1109/MeMeA.2018.8438659

Addabbo, T., Fort, A., Kapita, P., Mugnaini, M., Vignoli, V., Barygina, V., Becatti, M., Fiorillo, C., Taddei, N.
A Compact System for Blood Impedance Measurements for ROS Evaluation
(2018) MeMeA 2018 - 2018 IEEE International Symposium on Medical Measurements and Applications, Proceedings, art. no. 8438784, .
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85053164007&doi=10.1109%2fMeMeA.2018.8438784&partnerID=40&md5=ef6f8ec9d043248319002ca671962b9f>

DOI: 10.1109/MeMeA.2018.8438784

Addabbo, T., Fort, A., Mugnaini, M., Parri, L., Parrino, S., Pozzebon, A., Vignoli, V.
An IoT Framework for the Pervasive Monitoring of Chemical Emissions in Industrial Plants
(2018) 2018 Workshop on Metrology for Industry 4.0 and IoT, MetroInd 4.0 and IoT 2018 - Proceedings, art. no. 8428325, pp. 269-273.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85052491172&doi=10.1109%2fMETROI4.2018.8428325&partnerID=40&md5=30866f65c92f181bdf55720d13d59f03>

DOI: 10.1109/METROI4.2018.8428325

Addabbo, T., Bertocci, F., Fort, A., Mugnaini, M., Vignoli, V.
WO3 Nanograined chemosensor: A model of the sensing behavior
(2018) 2015 1st Workshop on Nanotechnology in Instrumentation and Measurement, NANOFIM 2015, art. no. 8425356, pp. 220-224.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85052214209&doi=10.1109%2fNANOFIM.2015.8425356&partnerID=40&md5=54cb1a8506dea99eeb68b94041427a0a>

DOI: 10.1109/NANOFIM.2015.8425356

Addabbo, T., Bertocci, F., Fort, A., Mugnaini, M., Panzardi, E., Vignoli, V., Cinelli, C.

A clearance measurement system based on on-component multilayer tri-axial capacitive probe

(2018) Measurement: Journal of the International Measurement Confederation, 124, pp. 575-581.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85040986057&doi=10.1016%2fj.measurement.2018.01.015&partnerID=40&md5=1e7e634fd64b21bde01b34a69a35141b>

DOI: 10.1016/j.measurement.2018.01.015

Addabbo, T., Fort, A., Mugnaini, M., Vignoli, V., Garcia-Bosque, M.
Digital Nonlinear Oscillators in PLDs: Pitfalls and Open Perspectives for a Novel Class of True Random Number Generators

(2018) Proceedings - IEEE International Symposium on Circuits and Systems, 2018-May, art. no. 8351622, .

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85057122903&doi=10.1109%2fISCAS.2018.8351622&partnerID=40&md5=bf35874f21e8ed7b6a4018a29893a536>

DOI: 10.1109/ISCAS.2018.8351622

Addabbo, T., Di Marco, M., Fort, A., Landi, E., Mugnaini, M., Vignoli, V., Ferretti, G.

Turbomachinery Clearance Monitoring Based on Passive Variable Reluctance Magnetic Sensors

(2018) Proceedings - IEEE International Symposium on Circuits and Systems, 2018-May, art. no. 8351859, .

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85057104300&doi=10.1109%2fISCAS.2018.8351859&partnerID=40&md5=e360385c109d8f4e255d5652efe091a8>

DOI: 10.1109/ISCAS.2018.8351859

Addabbo, T., Di Marco, M., Fort, A., Landi, E., Mugnaini, M., Vignoli, V., Ferretti, G.

Instantaneous rotation speed measurement system based on variable reluctance sensors: Model and analysis of performance

(2018) 2018 IEEE Sensors Applications Symposium, SAS 2018 - Proceedings, 2018-January, pp. 1-6.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85050133255&doi=10.1109%2fSAS.2018.8336709&partnerID=40&md5=f6a2254f3483b86aa54731873efc055c>

DOI: 10.1109/SAS.2018.8336709

Addabbo, T., Fort, A., Mugnaini, M., Vignoli, V., Baldi, A., Bruzzi, M.
Quartz-Crystal Microbalance Gas Sensors Based on TiO₂ Nanoparticles

(2018) IEEE Transactions on Instrumentation and Measurement, 67 (3), art. no. 8252798, pp. 722-730.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85040591569&doi=10.1109%2fTIM.2017.2785118&partnerID=40&md5=fa9a9ee9832f6684c4cd23ae39f30994>

DOI: 10.1109/TIM.2017.2785118

Becatti, M., Fucci, R., Mannucci, A., Barygina, V., Mugnaini, M., Criscuoli, L., Giachini, C., Bertocci, F., Picone, R., Emmi, G., Evangelisti, P., Rizzello, F., Cozzi, C., Taddei, N., Fiorillo, C., Coccia, M.E.

A biochemical approach to detect oxidative stress in infertile women undergoing assisted reproductive technology procedures

(2018) International Journal of Molecular Sciences, 19 (2), art. no. 592, .

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85042209269&doi=10.3390%2fijms19020592&partnerID=40&md5=0bd3ca24c3114ad019fe19cf155fd7d2>

DOI: 10.3390/ijms19020592

Addabbo, T., Fort, A., Mugnaini, M., Panzardi, E., Pozzebon, A., Tani, M., Vignoli, V.

A low cost distributed measurement system based on Hall effect sensors for structural crack monitoring in monumental architecture

(2018) Measurement: Journal of the International Measurement Confederation, 116, pp. 652-657.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85037039022&doi=10.1016%2fj.measurement.2017.11.050&partnerID=40&md5=59ba0b3e292be7488c2cc9a3dae0e3f5>

DOI: 10.1016/j.measurement.2017.11.050

Addabbo, T., Baldi, A., Bruzzi, M., Fort, A., Mugnaini, M., Vignoli, V.
QCM Sensors Based on In 2 O 3 Nano-films Obtained by a Pulsed Plasma Deposition Technique

(2018) Lecture Notes in Electrical Engineering, 457, pp. 65-69.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-85034220122&doi=10.1007%2f978-3-319-66802-4_10&partnerID=40&md5=9b947714fb183f3d24f0d8a41c3f0312

DOI: 10.1007/978-3-319-66802-4_10

Barni, S., Addabbo, T., Fort, A., Becatti, M., Fiorillo, C., Mugnaini, M., Taddei, N., Vignoli, V., Novembre, E., Mori, F.

Food Allergen-IgE Impedance Measurements Evaluation in Allergic Children

(2018) Lecture Notes in Electrical Engineering, 457, pp. 91-97.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-85034218243&doi=10.1007%2f978-3-319-66802-4_13&partnerID=40&md5=42b66b0d023d390263c565b394e8470a

DOI: 10.1007/978-3-319-66802-4_13

Addabbo, T., Fort, A., Mugnaini, M., Vignoli, V.
Distributed UPS control systems reliability analysis

(2017) Measurement: Journal of the International Measurement Confederation, 110, pp. 275-283.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85022331214&doi=10.1016%2fj.measurement.2017.06.021&partnerID=40&md5=4bd88e6e8d15ac4fe043d96754fde4d5>

DOI: 10.1016/j.measurement.2017.06.021

Addabbo, T., Fort, A., Mugnaini, M., Vignoli, V.
A lightweight digital system for the probabilistic characterization of true random bit generators
(2017) 2017 European Conference on Circuit Theory and Design, ECCTD 2017, art. no. 8093238, .
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85039922038&doi=10.1109%2fECCTD.2017.8093238&partnerID=40&md5=ac1d0776ce468f52ed9c3d319dca0272>

DOI: 10.1109/ECCTD.2017.8093238

Addabbo, T., Fort, A., Moretti, R., Mugnaini, M., Vignoli, V., Cinelli, C., Gerbi, F.
Development of a non-invasive thermometric system for fluids in pipes
(2017) 2017 IEEE International Symposium on Systems Engineering, ISSE 2017 - Proceedings, art. no. 8088260, .
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85040132055&doi=10.1109%2fSysEng.2017.8088260&partnerID=40&md5=8bcd8a82e1c069708bd7b50abd53faf2>

DOI: 10.1109/SysEng.2017.8088260

Addabbo, T., Fort, A., Marino, R., Mugnaini, M., Vignoli, V., Michelassi, C., Pedoto, G.
Large plants failures modeling under variable commissioning scheduling
(2017) 2017 IEEE International Symposium on Systems Engineering, ISSE 2017 - Proceedings, art. no. 8088303, .
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85040111076&doi=10.1109%2fSysEng.2017.8088303&partnerID=40&md5=8b97cc2123ffdb8eba3b11a5ce8d6ae1>

DOI: 10.1109/SysEng.2017.8088303

Addabbo, T., Fort, A., Mugnaini, M., Parri, L., Vignoli, V.
An unconventional type of measurement with chemoresistive gas sensors exploiting a versatile measurement system
(2017) Proceedings - 2017 1st New Generation of CAS, NGCAS 2017, art. no. 8052282, pp. 113-116.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85034428824&doi=10.1109%2fNGCAS.2017.34&partnerID=40&md5=9270b817b3056fe856826079f6e3f6e4>

DOI: 10.1109/NGCAS.2017.34

Addabbo, T., Fort, A., Mugnaini, M., Panzardi, E., Rocchi, S., Vignoli, V.
A novel three-sensors electrostatic measurement setup for charged particles detection
(2017) 4th IEEE International Workshop on Metrology for AeroSpace, MetroAeroSpace 2017 - Proceedings, art. no. 7999591, pp. 330-334.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85028523217&doi=10.1109%2fMetroAeroSpace.2017.7999591&partnerID=40&md5=d2014a4b6c17613221196ae0438a8902>

DOI: 10.1109/MetroAeroSpace.2017.7999591

Addabbo, T., Fort, A., Mugnaini, M., Rocchi, S., Takaloo, H., Vignoli, V.,
Petra, N.

A low-complexity programmable current mode circuit to design the sawtooth
chaotic map

(2017) PRIME 2017 - 13th Conference on PhD Research in Microelectronics and
Electronics, Proceedings, art. no. 7974182, pp. 361-364.

[https://www.scopus.com/inward/record.uri?eid=2-s2.0-
85027584307&doi=10.1109%2fPRIME.2017.7974182&partnerID=40&md5=89cd495903897bc
b2382df93f7fa919a](https://www.scopus.com/inward/record.uri?eid=2-s2.0-85027584307&doi=10.1109%2fPRIME.2017.7974182&partnerID=40&md5=89cd495903897bc b2382df93f7fa919a)

DOI: 10.1109/PRIME.2017.7974182

Addabbo, T., Fort, A., Mugnaini, M., Tani, M., Vignoli, V., Bruzzi, M.
Quartz crystal microbalance sensors based on TiO₂ nanoparticles for gas
sensing

(2017) I2MTC 2017 - 2017 IEEE International Instrumentation and Measurement
Technology Conference, Proceedings, art. no. 7969921, .

[https://www.scopus.com/inward/record.uri?eid=2-s2.0-
85026814189&doi=10.1109%2fI2MTC.2017.7969921&partnerID=40&md5=33407de961c8bbcbbe847ea139ea82e0](https://www.scopus.com/inward/record.uri?eid=2-s2.0-85026814189&doi=10.1109%2fI2MTC.2017.7969921&partnerID=40&md5=33407de961c8bbcbbe847ea139ea82e0)

DOI: 10.1109/I2MTC.2017.7969921

Addabbo, T., Della Giovampaola, C., Fort, A., Mugnaini, M., Toccafondi, A.,
Vignoli, V.

Target measurements influence on level crossing detection system safety
assessment

(2017) I2MTC 2017 - 2017 IEEE International Instrumentation and Measurement
Technology Conference, Proceedings, art. no. 7969885, .

[https://www.scopus.com/inward/record.uri?eid=2-s2.0-
85026741397&doi=10.1109%2fI2MTC.2017.7969885&partnerID=40&md5=2e1aef012e8d011
0e10866f18028cdca](https://www.scopus.com/inward/record.uri?eid=2-s2.0-85026741397&doi=10.1109%2fI2MTC.2017.7969885&partnerID=40&md5=2e1aef012e8d0110e10866f18028cdca)

DOI: 10.1109/I2MTC.2017.7969885

Bertocci, F., Fort, A., Vignoli, V., Mugnaini, M., Berni, R.

Optimization of perovskite gas sensor performance: characterization,
measurement and experimental design

(2017) Sensors (Switzerland), 17 (6), art. no. 1352, .

[https://www.scopus.com/inward/record.uri?eid=2-s2.0-
85020772142&doi=10.3390%2fs17061352&partnerID=40&md5=39805390dee5c58fed7a23b7
1faeld39](https://www.scopus.com/inward/record.uri?eid=2-s2.0-85020772142&doi=10.3390%2fs17061352&partnerID=40&md5=39805390dee5c58fed7a23b71faeld39)

DOI: 10.3390/s17061352

Barni, S., Fort, A., Becatti, M., Fiorillo, C., Mugnaini, M., Vignoli, V.,
Addabbo, T., Pucci, N., Novembre, E.

Detection of allergen-ige interaction in allergic children through combined
impedance and ros measurements

(2017) IEEE Transactions on Instrumentation and Measurement, 66 (4), art. no.
7807236, pp. 616-623.

[https://www.scopus.com/inward/record.uri?eid=2-s2.0-
85009961340&doi=10.1109%2fTIM.2016.2640478&partnerID=40&md5=957e72968c6186e19
adff017f7198097](https://www.scopus.com/inward/record.uri?eid=2-s2.0-85009961340&doi=10.1109%2fTIM.2016.2640478&partnerID=40&md5=957e72968c6186e19adff017f7198097)

DOI: 10.1109/TIM.2016.2640478

Lay-Ekuakille, A., Ikezawa, S., Mugnaini, M., Morello, R., De Capua, C.
Detection of specific macro and micropollutants in air monitoring: Review of
methods and techniques
(2017) *Measurement: Journal of the International Measurement Confederation*,
98, pp. 49-59.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84998546875&doi=10.1016%2fj.measurement.2016.10.055&partnerID=40&md5=edab6eecedf7aalffffe68f5db2994b5>

DOI: 10.1016/j.measurement.2016.10.055

Addabbo, T., Fort, A., Marino, R., Michelassi, C., Mugnaini, M., Vignoli, V.
Modelling of Non-Monotonic hazard function for the early production life of
oil and gas plants
(2017) 15th IMEKO TC10 Workshop on Technical Diagnostics 2017 - "Technical
Diagnostics in Cyber-Physical Era", pp. 95-98.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85041232767&partnerID=40&md5=59bd774982dc4daf1cbde29f8ff3b671>

Addabbo, T., Bertocci, F., Fort, A., Mugnaini, M., Vignoli, V., Cinelli, C.
On-component multilayer tri-Axial capacitive probe for clearance measurement
(2017) 15th IMEKO TC10 Workshop on Technical Diagnostics 2017 - "Technical
Diagnostics in Cyber-Physical Era", pp. 149-153.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85041209828&partnerID=40&md5=5458861d03f4d9a24c4fa7be6a6885d5>

Addabbo, T., Bertocci, F., Fort, A., Gregorkiewitz, M., Mugnaini, M.,
Spinicci, R., Vignoli, V.
Gas sensing properties of YMnO₃ based materials for the detection of NO_x and
CO
(2017) *Sensors and Actuators, B: Chemical*, 244, pp. 1054-1070.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85010189178&doi=10.1016%2fj.snb.2017.01.054&partnerID=40&md5=5bb9e54575232a254bc7e5ee131ed126>

DOI: 10.1016/j.snb.2017.01.054

Becatti, M., Marcucci, R., Mannucci, A., Gori, A.M., Giusti, B., Sofi, F.,
Mannini, L., Cellai, A.P., Liotta, A.A., Mugnaini, M., Emmi, G., Prisco, D.,
Taddei, N., Fiorillo, C.
Erythrocyte membrane fluidity alterations in sudden sensorineural hearing
loss patients: The role of oxidative stress
(2017) *Thrombosis and Haemostasis*, 117 (12), pp. 2334-2345.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85042219977&doi=10.1160%2fTH17-05-0356&partnerID=40&md5=fef3fe2c1f14a380549786070d53cd64>

DOI: 10.1160/TH17-05-0356

Addabbo, T., Fort, A., Giovampaola, C.D., Mugnaini, M., Toccafondi, A.,
Vignoli, V.
On the safety design of radar based railway level crossing surveillance
systems
(2016) *Acta IMEKO*, 5 (4), pp. 64-72.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85007574027&partnerID=40&md5=4545bcc86aa36e12b7254766c61f4a80>

Addabbo, T., Bertocci, F., Fort, A., Mugnaini, M., Vignoli, V.
WO3 nanograined chemosensor: A model of the sensing behavior
(2016) IEEE Transactions on Nanotechnology, 15 (6), art. no. 7458171, pp. 1-11.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84994527610&doi=10.1109%2fTNANO.2016.2558099&partnerID=40&md5=fae312403452268924f278c198db45c5>

DOI: 10.1109/TNANO.2016.2558099

Addabbo, T., Fort, A., Mugnaini, M., Panzardi, E., Rocchi, S., Vignoli, V.
Automated testing and characterization of electrostatic measurement systems for the condition monitoring of turbo machinery
(2016) 3rd IEEE International Workshop on Metrology for Aerospace, MetroAeroSpace 2016 - Proceedings, art. no. 7573225, pp. 271-275.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84991755904&doi=10.1109%2fMetroAeroSpace.2016.7573225&partnerID=40&md5=6ae59e99f47b6898d927f4610e2cad68>

DOI: 10.1109/MetroAeroSpace.2016.7573225

Bertocci, F., Fort, A., Mugnaini, M., Vignoli, V., Bertolucci, E., Marracci, M., Galletti, A.M.R., Tellini, B.

Fast nano-grained Fe₃O₄ gas sensor for the control of CO and NO₂ concentrations

(2016) 3rd IEEE International Workshop on Metrology for Aerospace, MetroAeroSpace 2016 - Proceedings, art. no. 7573228, pp. 286-290.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84991819418&doi=10.1109%2fMetroAeroSpace.2016.7573228&partnerID=40&md5=16f2c448fb3b4ca80aff8ce6e64d164f>

DOI: 10.1109/MetroAeroSpace.2016.7573228

Addabbo, T., Fort, A., Mugnaini, M., Panzardi, E., Vignoli, V.
A Smart Measurement System with Improved Low-Frequency Response to Detect Moving Charged Debris

(2016) IEEE Transactions on Instrumentation and Measurement, 65 (8), art. no. 7473915, pp. 1874-1883.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84978645902&doi=10.1109%2fTIM.2016.2555118&partnerID=40&md5=9daeabcd16bed769fbaba18e5dfa9aec>

DOI: 10.1109/TIM.2016.2555118

Bertocci, F., Fort, A., Mugnaini, M., Vignoli, V.
Stability evaluation of YCoO₃ based perovskites used for NO₂ detection
(2016) SAS 2016 - Sensors Applications Symposium, Proceedings, art. no. 7479891, pp. 462-467.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84977529448&doi=10.1109%2fSAS.2016.7479891&partnerID=40&md5=160b62081d154a0cb5333901003ee44e>

DOI: 10.1109/SAS.2016.7479891

Addabbo, T., Fort, A., Mugnaini, M., Panzardi, E., Rocchi, S., Vignoli, V.
Multisensor electrostatic detection of moving charged particles
(2016) SAS 2016 - Sensors Applications Symposium, Proceedings, art. no.
7479888, pp. 445-450.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84977511011&doi=10.1109%2fSAS.2016.7479888&partnerID=40&md5=f21779fa29bf5844aa5bd579109f31b6>

DOI: 10.1109/SAS.2016.7479888

Fort, A., Mugnaini, M., Tani, M., Vignoli, V., Barni, S., Pucci, N.,
Novembre, E.
Detection of allergen-IgE interaction in allergic children through impedance
measurements
(2016) SAS 2016 - Sensors Applications Symposium, Proceedings, art. no.
7479845, pp. 199-204.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84977577224&doi=10.1109%2fSAS.2016.7479845&partnerID=40&md5=bf8a013980709f718710d1af961b1bf9>

DOI: 10.1109/SAS.2016.7479845

Addabbo, T., Fort, A., Mugnaini, M., Vignoli, V., Simoni, E., Mancini, M.
Availability and reliability modeling of multicore controlled UPS for
datacenter applications
(2016) Reliability Engineering and System Safety, 149, pp. 56-62.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84954093865&doi=10.1016%2fj.res.2015.12.010&partnerID=40&md5=3f89a7b29380d1f2fd99fc41802d5a21>

DOI: 10.1016/j.res.2015.12.010

Bertocci, F., Fort, A., Mugnaini, M., Vignoli, V.
Availability comparison between distributed and concentrated UPS control
systems
(2016) 14th IMEKO TC10 Workshop on Technical Diagnostics 2016: New
Perspectives in Measurements, Tools and Techniques for Systems Reliability,
Maintainability and Safety, pp. 124-128.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84985990085&partnerID=40&md5=1dbe6a49c069b6fc765bd856dce2e5c9>

Bertocci, F., Mugnaini, M., Fort, A., Vignoli, V., Spicciarelli, L.
Reliability and availability of industrial bakery plant: Modeling and
analysis. A case study
(2016) 14th IMEKO TC10 Workshop on Technical Diagnostics 2016: New
Perspectives in Measurements, Tools and Techniques for Systems Reliability,
Maintainability and Safety, pp. 135-140.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84986004248&partnerID=40&md5=c1c841466a777a0e153a7a387270b8c8>

Addabbo, T., Fort, A., Mugnaini, M., Toccafondi, A., Vignoli, V.
Reliability and safety considerations affecting the design of a radar based
railway crossing level passage monitoring system

(2016) 14th IMEKO TC10 Workshop on Technical Diagnostics 2016: New Perspectives in Measurements, Tools and Techniques for Systems Reliability, Maintainability and Safety, pp. 290-293.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84985945506&partnerID=40&md5=9d520b60cbb95c747ab08ab1266ba165>

Pozzebon, A., Addabbo, T., Fort, A., Mugnaini, M., Panzardi, E., Vignoli, V. Pervasive wireless sensor networks for the monitoring of large monumental structures: The case of the ancient city Walls of Siena
(2016) Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 10058 LNCS, pp. 669-678.
https://www.scopus.com/inward/record.uri?eid=2-s2.0-84995394436&doi=10.1007%2f978-3-319-48496-9_53&partnerID=40&md5=6a14dbe7779bd744391ea053b6dbeeee

DOI: 10.1007/978-3-319-48496-9_53

Pozzebon, A., Addabbo, T., Fort, A., Mugnaini, M., Panzardi, E., Vignoli, V. A low cost distributed measurement systems based on hall effect sensors for structural crack monitoring in monumental architecture
(2016) 6th IMEKO TC19 Symposium on Environmental Instrumentation and Measurements 2016, pp. 34-38.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84994570989&partnerID=40&md5=f07456ce3775f4bb163dcb4a8bf98db1>

Addabbo, T., Bertocci, F., Fort, A., Gregorkiewitz, M., Mugnaini, M., Spinicci, R., Vignoli, V. Gas sensing properties and modeling of YCoO₃ based perovskite materials
(2015) Sensors and Actuators, B: Chemical, 221, pp. 1137-1155.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84938832150&doi=10.1016%2fj.snb.2015.07.079&partnerID=40&md5=ea65be98948399c7a48dc7178e454091>

DOI: 10.1016/j.snb.2015.07.079

Fort, A., Mugnaini, M., Vignoli, V., Gaggii, V., Pieralli, M. Fault tolerant design of a field data modular readout architecture for railway applications
(2015) Reliability Engineering and System Safety, 142, pp. 456-462.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84947438755&doi=10.1016%2fj.ress.2015.06.008&partnerID=40&md5=ecb88506a67a01b1b89e1279526b32e5>

DOI: 10.1016/j.ress.2015.06.008

Fort, A., Mugnaini, M., Vignoli, V. Hidden Markov Models approach used for life parameters estimations
(2015) Reliability Engineering and System Safety, 136, pp. 85-91.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84919797822&doi=10.1016%2fj.ress.2014.11.017&partnerID=40&md5=ab4f6105808c15492cd885ab7ce65e99>

DOI: 10.1016/j.ress.2014.11.017

Addabbo, T., Fort, A., Mugnaini, M., Vignoli, V.
Gas turbine sensor loop availability driven fall back strategies design
(2015) Conference Record - IEEE Instrumentation and Measurement Technology
Conference, 2015-July, art. no. 7151343, pp. 641-645.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84938834713&doi=10.1109%2fI2MTC.2015.7151343&partnerID=40&md5=c16690d75741425ebe9d6106a73f6671>

DOI: 10.1109/I2MTC.2015.7151343

Addabbo, T., Fort, A., Mugnaini, M., Rocchi, S., Vignoli, V.
A heuristic reliable model for guarded capacitive sensors to measure
displacements
(2015) Conference Record - IEEE Instrumentation and Measurement Technology
Conference, 2015-July, art. no. 7151497, pp. 1488-1491.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84938839478&doi=10.1109%2fI2MTC.2015.7151497&partnerID=40&md5=0e469f5d292edb8fc523e5a37c902bb4>

DOI: 10.1109/I2MTC.2015.7151497

Addabbo, T., Fort, A., Mugnaini, M., Rocchi, S., Vignoli, V.
Improved model for the capacitance estimation of guarded capacitive sensors
(2015) Proceedings of the 2015 18th AISEM Annual Conference, AISEM 2015, art.
no. 7066772, .
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84937121686&doi=10.1109%2fAISEM.2015.7066772&partnerID=40&md5=693ec276bddf3b980e109c4c1019a9f5>

DOI: 10.1109/AISEM.2015.7066772

Addabbo, T., Fort, A., Mugnaini, M., Vignoli, V., Rocchi, S.
Metal oxide nanograined chemosensor: Influence of film microstructure on gas
sensing
(2015) Proceedings of the 2015 18th AISEM Annual Conference, AISEM 2015, art.
no. 7066834, .
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84937119070&doi=10.1109%2fAISEM.2015.7066834&partnerID=40&md5=8eb1cf23e048c1df276eacd39d5f70f7>

DOI: 10.1109/AISEM.2015.7066834

Bertocci, F., Fort, A., Vignoli, V., Shahin, L., Mugnaini, M., Berni, R.
Assessment and Optimization for Novel Gas Materials Through the Evaluation of
Mixed Response Surface Models
(2015) IEEE Transactions on Instrumentation and Measurement, 64 (4), art. no.
6985661, pp. 1084-1092.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85027932393&doi=10.1109%2fTIM.2014.2364106&partnerID=40&md5=ae8936fe474b6543b1aa25ae72eb9bd7>

DOI: 10.1109/TIM.2014.2364106

Addabbo, T., Fort, A., Mugnaini, M., Rocchi, S., Vignoli, V., Garbin, R.
Theoretical modeling of an electrostatic Gas-Path debris detection system
with experimental validation

(2015) SAS 2015 - 2015 IEEE Sensors Applications Symposium, Proceedings, art. no. 7133599, .
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84939431051&doi=10.1109%2fSAS.2015.7133599&partnerID=40&md5=c95cb114cd4accbcl97315ab5c6cc18b>

DOI: 10.1109/SAS.2015.7133599

Addabbo, T., Fort, A., Mugnaini, M., Vignoli, V., Cioncolini, S., Marrazzo, M.

A system for the dynamic response characterization of turbomachinery tip clearance measurement instruments based on capacitive probes

(2015) SAS 2015 - 2015 IEEE Sensors Applications Symposium, Proceedings, art. no. 7133597, .

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84939424410&doi=10.1109%2fSAS.2015.7133597&partnerID=40&md5=7b02d83e92b50371527e5dd5668ff57f>

DOI: 10.1109/SAS.2015.7133597

Addabbo, T., Bixio, G., Fort, A., Mugnaini, M., Vignoli, V., Vigni, F.

High performance liquid chromatography LCC analysis

(2015) Conference Record - IEEE Instrumentation and Measurement Technology Conference, 2015-July, art. no. 7151397, pp. 945-950.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84938874755&doi=10.1109%2fI2MTC.2015.7151397&partnerID=40&md5=cb83178c9f1d6d42ba02a84e0fe87c97>

DOI: 10.1109/I2MTC.2015.7151397

Addabbo, T., Cordovani, O., Fort, A., Mugnaini, M., Vignoli, V., Rocchi, S.
Gas turbine thermoelements availability analysis

(2015) Lecture Notes in Electrical Engineering, 319, pp. 387-391.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-84921980266&doi=10.1007%2f978-3-319-09617-9_68&partnerID=40&md5=ddd577db56da4643707b1a1d1754d3b2

DOI: 10.1007/978-3-319-09617-9_68

Addabbo, T., Fort, A., Garbin, R., Mugnaini, M., Rocchi, S., Vignoli, V.
Theoretical characterization of a gas path debris detection monitoring system based on electrostatic sensors and charge amplifiers

(2015) Measurement: Journal of the International Measurement Confederation, 64, pp. 138-146.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84921350594&doi=10.1016%2fj.measurement.2014.12.003&partnerID=40&md5=2cf7c77bf1e2c8a1e44bc699c2e119f2>

DOI: 10.1016/j.measurement.2014.12.003

Addabbo, T., Bertocci, F., Fort, A., Mugnaini, M., Shahin, L., Vignoli, V., Rocchi, S., Spinicci, R., Gregorkiewitz, M.

NOx sensors based on YCoO₃ perovskite

(2015) Lecture Notes in Electrical Engineering, 319, pp. 211-215.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-84921975728&doi=10.1007%2f978-3-319-09617-9_38&partnerID=40&md5=0eb0d7de8ce5ccd7294f7e8683b6119d

DOI: 10.1007/978-3-319-09617-9_38

Fort, A., Addabbo, T., Vignoli, V., Bertocci, F., Mugnaini, M., Atrei, A., Gregorkiewitz, M.
Gas-sensing properties and modeling of silver doped potassium hollandite
(2014) *Sensors and Actuators, B: Chemical*, 194, pp. 427-439.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84893100349&doi=10.1016%2fj.snb.2013.12.102&partnerID=40&md5=cccdf0a959149adee6349b63ab55f87b>

DOI: 10.1016/j.snb.2013.12.102

Addabbo, T., Cordovani, O., Fort, A., Mugnaini, M., Vignoli, V.
Exhaust thermoelements redundant strategy to improve temperature reading reliability and serviceability
(2014) *SMARTGREENS 2014 - Proceedings of the 3rd International Conference on Smart Grids and Green IT Systems*, pp. 96-100.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84902340885&partnerID=40&md5=leda8f833f9941075a039819fcc83bf0>

Shahin, L., Bertocci, F., Fort, A., Mugnaini, M., Rocchi, S., Vignoli, V.
A new wireless interface for resistive chemical sensors
(2014) *2014 IEEE 11th International Multi-Conference on Systems, Signals and Devices, SSD 2014*, art. no. 6808844, .
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84901357114&doi=10.1109%2fSSD.2014.6808844&partnerID=40&md5=357b1f2748fe8a4423d3e10a71653d35>

DOI: 10.1109/SSD.2014.6808844

Addabbo, T., Bertocci, F., Fort, A., Mugnaini, M., Shahin, L., Vignoli, V., Rocchia, S.
A DDS-based multi-harmonic frequency meter for QCM sensor applications
(2014) *Procedia Engineering*, 87, pp. 288-291.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84923376253&doi=10.1016%2fj.proeng.2014.11.664&partnerID=40&md5=bc65ba00afc0d0327cbbe6a994728e65>

DOI: 10.1016/j.proeng.2014.11.664

Addabbo, T., Bertocci, F., Fort, A., Mugnaini, M., Vignoli, V., Rocchi, S., Shahin, L.
HMM used for component parameters apportionment
(2014) *2014 IEEE 11th International Multi-Conference on Systems, Signals and Devices, SSD 2014*, art. no. 6808818, .
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84901318680&doi=10.1109%2fSSD.2014.6808818&partnerID=40&md5=a3e4616348461e5ce27105e1848f1e07>

DOI: 10.1109/SSD.2014.6808818

Addabbo, T., Bertocci, F., Fort, A., Mugnaini, M., Shahin, L., Vignoli, V., Spinicci, R., Rocchi, S., Gregorkiewitz, M.
An artificial olfactory system (AOS) for detection of highly toxic gases in air based on YCoO3

(2014) Procedia Engineering, 87, pp. 1095-1098.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84923341944&doi=10.1016%2fj.proeng.2014.11.355&partnerID=40&md5=3c1f35edff5afb9e71621cc73340240>

DOI: 10.1016/j.proeng.2014.11.355

Addabbo, T., Bertocci, F., Fort, A., Mugnaini, M., Rocchi, S., Vignoli, V.
Surface state model for metal oxide p-type conductometric CO sensors
(2013) Conference Record - IEEE Instrumentation and Measurement Technology Conference, art. no. 6555387, pp. 88-92.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84882262044&doi=10.1109%2fI2MTC.2013.6555387&partnerID=40&md5=87134919c4762606b96dce7efbcc66b3>

DOI: 10.1109/I2MTC.2013.6555387

Addabbo, T., Bertocci, F., Fort, A., Mugnaini, M., Vignoli, V., Shahin, L., Rocchi, S.
Versatile measurement system for the characterization of gas sensing materials
(2013) Conference Record - IEEE Instrumentation and Measurement Technology Conference, art. no. 6555561, pp. 976-980.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84882287165&doi=10.1109%2fI2MTC.2013.6555561&partnerID=40&md5=c3a162158ff26984a7f06ee5a40ad4ab>

DOI: 10.1109/I2MTC.2013.6555561

Fort, A., Bertocci, F., Mugnaini, M., Vignoli, V., Gaggii, V., Galasso, A., Pieralli, M.
Availability modeling of a safe communication system for rolling stock applications
(2013) Conference Record - IEEE Instrumentation and Measurement Technology Conference, art. no. 6555453, pp. 427-430.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84882246244&doi=10.1109%2fI2MTC.2013.6555453&partnerID=40&md5=4aa8877737162170f67b70ab1f53572e>

DOI: 10.1109/I2MTC.2013.6555453

Bertocci, F., Fort, A., Mugnaini, M., Rocchi, S., Shahin, L., Vignoli, V.
High accuracy measurements of new conductometric metal oxide gas sensors by efficient control of working conditions
(2013) 12th IMEKO TC10 Workshop on Technical Diagnostics: New Perspective in Measurements, Tools and Techniques for Industrial Applications, Proceedings, pp. 124-128.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84881567271&partnerID=40&md5=cc8fe18226e8ff37a80cacb8744da91c>

Bertocci, F., Fort, A., Mugnaini, M., Rocchi, S., Shahin, L., Vignoli, V.
High accuracy measurements of new conductometric metal oxide gas sensors by efficient control of working conditions
(2013) 12th IMEKO TC10 Workshop on New Perspectives in Measurements, Tools and Techniques for Industrial Applications 2013, pp. 91-95.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84907363960&partnerID=40&md5=da3061970fd49b9ffa2e47abfd0ee38e>

Addabbo, T., Fort, A., Biondi, R., Cioncolini, S., Mugnaini, M., Rocchi, S., Vignoli, V.
Measurement of angular vibrations in rotating shafts: Effects of the measurement setup nonidealities
(2013) IEEE Transactions on Instrumentation and Measurement, 62 (3), art. no. 6328275, pp. 532-543.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84873708262&doi=10.1109%2fTIM.2012.2218691&partnerID=40&md5=46f9b409b9bf4173ee0ad7c17369f99a>

DOI: 10.1109/TIM.2012.2218691

Fort, A., Di Marco, M., Mugnaini, M., Santi, L., Vignoli, V., Simoni, E.
Performance analysis of digital sliding mode controlled inverters
(2012) SMARTGREENS 2012 - Proceedings of the 1st International Conference on Smart Grids and Green IT Systems, pp. 221-225.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84864871353&partnerID=40&md5=50fa1dd9140c37294db5381a2403617e>

Addabbo, T., Fort, A., Mugnaini, M., Rocchi, S., Vignoli, V.
Statistical characterization of a FPGA PUF module based on ring oscillators
(2012) 2012 IEEE I2MTC - International Instrumentation and Measurement Technology Conference, Proceedings, art. no. 6229468, pp. 1770-1773.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84864266951&doi=10.1109%2fI2MTC.2012.6229468&partnerID=40&md5=046c30cc0ddfc67ef2e9b069382774b3>

DOI: 10.1109/I2MTC.2012.6229468

Addabbo, T., Fort, A., Mugnaini, M., Rocchi, S., Vignoli, V., Biondi, R., Cioncolini, S.
A multi-probe setup for the measurement of angular vibrations in a rotating shaft
(2012) 2012 IEEE Sensors Applications Symposium, SAS 2012 - Proceedings, art. no. 6166307, pp. 295-299.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84859064955&doi=10.1109%2fSAS.2012.6166307&partnerID=40&md5=48964a6a82436e3638df988e68b453cb>

DOI: 10.1109/SAS.2012.6166307

Fort, A., Mugnaini, M., Rocchi, S., Vignoli, V., Bertocci, F., Gregorkiewitz, M., Meroni, S.
Preparation and characterization of conductive sensors based on potassium and silver hollandite
(2012) 2012 IEEE Sensors Applications Symposium, SAS 2012 - Proceedings, art. no. 6166306, pp. 130-134.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84859049149&doi=10.1109%2fSAS.2012.6166306&partnerID=40&md5=2721899ae8b2508cb3b3ae60cd34d255>

DOI: 10.1109/SAS.2012.6166306

Chiavaioli, F., Mugnaini, M., Trono, C., Baldini, F., Brenci, M.
Cascaded LPG and FBG integrated in a miniaturized flow cell for compensated refractometric measurement

(2012) Lecture Notes in Electrical Engineering, 109 LNEE, pp. 241-245.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-84855758553&doi=10.1007%2f978-1-4614-0935-9_41&partnerID=40&md5=3d04b75ff9296a36e1e2da7d93618102

DOI: 10.1007/978-1-4614-0935-9_41

Fort, A., Mugnaini, M., Pasquini, I., Rocchi, S., Vignoli, V.
Modeling of the influence of H₂O on metal oxide sensor responses to CO

(2011) Sensors and Actuators, B: Chemical, 159 (1), pp. 82-91.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-80052305093&doi=10.1016%2fj.snb.2011.06.052&partnerID=40&md5=9ad87330ae0a448105dd7def0f85ad44>

DOI: 10.1016/j.snb.2011.06.052

Fort, A., Mugnaini, M., Rocchi, S., Romualdi, L., Spinicci, R., Vignoli, V.
Development and characterization of YCoO₃ based CO gas sensors

(2011) AIP Conference Proceedings, 1362, pp. 55-57.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-80053220444&doi=10.1063%2f1.3626304&partnerID=40&md5=bda13c78e656786b5c259925a678a9e1>

DOI: 10.1063/1.3626304

Fort, A., Mugnaini, M., Pasquini, I., Rocchi, S., Romualdi, L., Vignoli, V., Spinicci, R., Gregorkiewitz, M.

Development and characterization of low power perovskite CO gas sensors

(2011) Conference Record - IEEE Instrumentation and Measurement Technology Conference, art. no. 5944239, pp. 1372-1375.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-80051905185&doi=10.1109%2fIMTC.2011.5944239&partnerID=40&md5=f3c5722dd9ee74895ec93de30956e250>

DOI: 10.1109/IMTC.2011.5944239

Fort, A., Mugnaini, M., Vignoli, V., Rocchi, S., Perini, F., Monari, J., Schiaffino, M., Fiocchi, F.

Design, modeling, and test of a system for atmospheric electric field measurement

(2011) IEEE Transactions on Instrumentation and Measurement, 60 (8), art. no. 5756668, pp. 2778-2785.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-79960407934&doi=10.1109%2fTIM.2011.2130010&partnerID=40&md5=dff4f05a2fca774082198e813b94018a>

DOI: 10.1109/TIM.2011.2130010

Baldini, F., Brenci, M., Chiavaioli, F., Falciai, R., Giannetti, A., Mugnaini, M., Trono, C.

Long period and fiber Bragg gratings written within the same fiber for sensing purposes

(2011) Proceedings of SPIE - The International Society for Optical Engineering, 7941, art. no. 794112, .
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-79953715962&doi=10.1117%2f12.873796&partnerID=40&md5=22335d463a11ee5887762a6eebbfcf523>

DOI: 10.1117/12.873796

Trono, C., Baldini, F., Brenci, M., Chiavaioli, F., Mugnaini, M.
Flow cell for strain- and temperature-compensated refractive index measurements by means of cascaded optical fibre long period and Bragg gratings

(2011) Measurement Science and Technology, 22 (7), art. no. 075204, .
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-79960205014&doi=10.1088%2f0957-0233%2f22%2f7%2f075204&partnerID=40&md5=e17612fef0d497533df6e898537e5eed>

DOI: 10.1088/0957-0233/22/7/075204

Pasquini, I., Foresti, M.L., Innocenti, M., Fort, A., Mugnaini, M., Pigani, L., Vignoli, V., Rocchi, S., Loglio, F.
Preparation of poly(3,4-ethylenedioxythiophene) films on piezoelectric quartz crystal and their gas sensitivities

(2010) ECS Transactions, 25 (33), pp. 125-131.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-79952772661&doi=10.1149%2f1.3334799&partnerID=40&md5=49b20af03af5ae56c01ae238b767ed11>

DOI: 10.1149/1.3334799

Fort, A., Mugnaini, M., Rocchi, S., Vignoli, V., Simoni, E.
Accuracy evaluation of a grid islanding impedance detection system
(2010) 2010 IEEE International Instrumentation and Measurement Technology Conference, I2MTC 2010 - Proceedings, art. no. 5488652, pp. 1295-1298.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-77957834841&doi=10.1109%2fIMTC.2010.5488652&partnerID=40&md5=07e940b76ca0059f2156f4af900d5ed0>

DOI: 10.1109/IMTC.2010.5488652

Fort, A., Mugnaini, M., Vignoli, V., Rocchi, S., Perini, F., Monari, J., Schiaffino, M., Fiocchi, F.
A low power measurement system for the atmospheric electric field
(2010) 2010 IEEE International Instrumentation and Measurement Technology Conference, I2MTC 2010 - Proceedings, art. no. 5488152, pp. 1290-1294.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-77957826316&doi=10.1109%2fIMTC.2010.5488152&partnerID=40&md5=b50edc836a5dalad46db911943b7345e>

DOI: 10.1109/IMTC.2010.5488152

Fort, A., Mugnaini, M., Rocchi, S., Vignoli, V., Comini, E., Faglia, G., Ponzoni, A.
Metal-oxide nanowire sensors for CO detection: Characterization and modeling
(2010) Sensors and Actuators, B: Chemical, 148 (1), pp. 283-291.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-77953916424&doi=10.1016%2fj.snb.2010.04.034&partnerID=40&md5=2937e778602784eacae008740dcf4>

DOI: 10.1016/j.snb.2010.04.034

Fort, A., Mugnaini, M., Rocchi, S., Vignoli, V., Comini, E., Faglia, G., Ponzoni, A.
Metal-oxide nanowire sensors for CO detection: Characterization and modeling (2010) 2010 IEEE Sensors Applications Symposium, SAS 2010 - Proceedings, art. no. 5439397, pp. 25-29.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-77952343422&doi=10.1109%2fSAS.2010.5439397&partnerID=40&md5=4c88cf25ce77b462052174008740dcf4>

DOI: 10.1109/SAS.2010.5439397

Fort, A., Mugnaini, M., Vignoli, V., Rocchi, S., Perini, F., Monari, J., Schiaffino, M., Fiocchi, F.
Design and modeling of an optimized sensor for atmospheric electric field measurement (2010) 2010 IEEE Sensors Applications Symposium, SAS 2010 - Proceedings, art. no. 5439402, pp. 105-109.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-77952416142&doi=10.1109%2fSAS.2010.5439402&partnerID=40&md5=a5f665aa1bd44eca1e604922c396f163>

DOI: 10.1109/SAS.2010.5439402

Forf, A., Mugnaini, M., Pasquini, I., Rocchi, S., Spinicci, R., Vignoli, V.
Characterization of YCoO₃ film used for CO gas detection (2010) Chemical Engineering Transactions, 23, pp. 153-158.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-78650378321&doi=10.3303%2fCET1023026&partnerID=40&md5=de85f184d8739092cad0adf3d1fd2ede>

DOI: 10.3303/CET1023026

Fort, A., Mugnaini, M., Pasquini, I., Rocchi, S., Vignoli, V.
Modeling the influence of H₂O on metal oxide sensor responses to CO (2009) AIP Conference Proceedings, 1137, pp. 365-368.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-70450165316&doi=10.1063%2f1.3156549&partnerID=40&md5=c566b0e432d48d6e56ff1c576e2bee21>

DOI: 10.1063/1.3156549

Fort, A., Chiavaioli, F., Lotti, C., Mugnaini, M., Rocchi, S., Vignoli, V.
Laboratory impedance meter for electrochemical sensors (2009) AIP Conference Proceedings, 1137, pp. 303-305.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-70450149798&doi=10.1063%2f1.3156532&partnerID=40&md5=0389f8775d78fd426d0f3eca4fa42ada>

DOI: 10.1063/1.3156532

Forta, A., Mugnainia, M., Vignolia, V., Rocchia, S., Comini, E., Fagliab, G., Ponzonib, A.

Characterization and modelling of SnO₂ nanowire sensors for CO detection
(2009) 3rd International Workshop on Advances in Sensors and Interfaces,
IWASI 2009, art. no. 5184765, pp. 41-45.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-70449380270&doi=10.1109%2fIWASI.2009.5184765&partnerID=40&md5=9bdc8d2a900f9b5c751235dd6843ab31>

DOI: 10.1109/IWASI.2009.5184765

FortI, A., Innocenti, M., Foreste, M.L., Mugnaini, M., Pasquini, I., Pigani, L., Rocchil, S., Vignoli, V.

N₂ QCM gas sensor based on electrochemical deposition of PEDOT
(2009) 3rd International Workshop on Advances in Sensors and Interfaces,
IWASI 2009, art. no. 5184792, pp. 184-187.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-70449338789&doi=10.1109%2fIWASI.2009.5184792&partnerID=40&md5=9569cf58c4ea45114aed96f2b3d3e09d>

DOI: 10.1109/IWASI.2009.5184792

Fort, A., Lotti, C., Mugnaini, M., Palombari, R., Rocchi, S., Vignoli, V.

A two electrode C-NiO Nafion amperometric sensor for NO₂ detection
(2009) *Microelectronics Journal*, 40 (9), pp. 1308-1312.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-69249206689&doi=10.1016%2fj.mejo.2008.08.011&partnerID=40&md5=9c160756f58abd5df7fae94021f09065>

DOI: 10.1016/j.mejo.2008.08.011

Bicelli, S., Depari, A., Faglia, G., Flammini, A., Fort, A., Mugnaini, M., Ponzoni, A., Vignoli, V., Rocchi, S.

Model and experimental characterization of the dynamic behavior of low-power carbon monoxide MOX sensors operated with pulsed temperature profiles
(2009) *IEEE Transactions on Instrumentation and Measurement*, 58 (5), pp. 1324-1332.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-67349253061&doi=10.1109%2fTIM.2009.2012940&partnerID=40&md5=903be02283e00fca904193e136ec140f>

DOI: 10.1109/TIM.2009.2012940

Addabbo, T., Fort, A., Mugnaini, M., Rocchi, S., Vignoli, V.

Statistical characterization of a chaotic piecewise linear map for uniform-distributed analog noise generation

(2008) 16th IMEKO TC4 Int. Symp.: Exploring New Frontiers of Instrum. and Methods for Electrical and Electronic Measurements; 13th TC21 Int. Workshop on ADC Modelling and Testing - Joint Session, Proc., pp. 688-693.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84883640643&partnerID=40&md5=db6f327e14d4e667755267545052f001>

Fort, A., Lotti, C., Mugnaini, M., Palombari, R., Rocchi, S., Vignoli, V.

Amperometric sensors based on Nafion as Proton Conductor: A comparison between two different structures

(2008) 16th IMEKO TC4 Int. Symp.: Exploring New Frontiers of Instrum. and Methods for Electrical and Electronic Measurements; 13th TC21 Int. Workshop on ADC Modelling and Testing - Joint Session, Proc., pp. 517-521.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84883638327&partnerID=40&md5=628f30570b7a2d3c55b93489e922475e>

Fort, A., Mugnaini, M., Rocchi, S., Vignoli, V., Faglia, G., Depari, A., Flammini, A., Sisinni, E., Ponzoni, A.
Behavior of MOX CO sensors during thermal transients
(2008) Proceedings of IEEE Sensors, art. no. 4716574, pp. 851-854.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-67649962352&doi=10.1109%2fICSENS.2008.4716574&partnerID=40&md5=b5b6b2373ff476735c34ef5c3ed3e0f8>

DOI: 10.1109/ICSENS.2008.4716574

Addabbo, T., Fort, A., Mugnaini, M., Rocchi, S., Vignoli, V.
On the efficient digital implementation of nonlinear congruential generators derived from the Rényi chaotic map
(2008) Conference Record - IEEE Instrumentation and Measurement Technology Conference, art. no. 4547319, pp. 1707-1711.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-51349168267&doi=10.1109%2fIMTC.2008.4547319&partnerID=40&md5=c2ca469929b53f90d6e950b61d67df2c>

DOI: 10.1109/IMTC.2008.4547319

Bicelli, S., Depari, A., Faglia, G., Flammini, A., Fort, A., Mugnain, M., Ponzoni, A., Vignoli, V.
Model and experimental characterization of dynamic behaviour of low power Carbon Monoxide MOX sensors with pulsed temperature profile
(2008) Conference Record - IEEE Instrumentation and Measurement Technology Conference, art. no. 4547264, pp. 1413-1418.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-51349119248&doi=10.1109%2fIMTC.2008.4547264&partnerID=40&md5=d9054018464ed6ff6b7248c25c9ed736>

DOI: 10.1109/IMTC.2008.4547264

Fort, A., Lotti, C., Mugnaini, M., Palmerini, C.A., Palombari, R., Rocchi, S., Tondi, L., Vignoli, V.
A two electrode C - NiO nafion® amperometric sensor for NO2 detection
(2007) Proceedings of the 2nd IEEE International Workshop on Advances in Sensors and Interfaces, IWASI, art. no. 4420007, .
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-48249109935&doi=10.1109%2fIWASI.2007.4420007&partnerID=40&md5=1c945f517127d61e8d7e2c2a9bc9e58e>

DOI: 10.1109/IWASI.2007.4420007

Catelani, M., Ciani, L., Mugnaini, M., Scarano, V., Singuaroli, R.
Definition of safety levels and performances of safety: Applications for an electronic equipment used on rolling stock
(2007) Conference Record - IEEE Instrumentation and Measurement Technology Conference, art. no. 4258348, .

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-34648824672&partnerID=40&md5=01e63d418cd49756245b7b57976453c4>

Addabbo, T., Alioto, M., Fort, A., Mugnaini, M., Rooghi, S., Vignoli, V. Implementation-efficient maximum-period nonlinear congruential generators (2007) Conference Record - IEEE Instrumentation and Measurement Technology Conference, art. no. 4258312, .

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-34648827049&partnerID=40&md5=4fc344c3b6894efac8b66cb790c66ffe>

Fort, A., Mugnaini, M., Rocchi, S., Serrano-Santos, M.B., Vignoli, V., Spinicci, R.

Simplified models for SnO₂ sensors during chemical and thermal transients in mixtures of inert, oxidizing and reducing gases (2007) Sensors and Actuators, B: Chemical, 124 (1), pp. 245-259.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-34248579689&doi=10.1016%2fj.snb.2006.12.030&partnerID=40&md5=bbeabcc7a775e1d895a22efcff5ca05d>

DOI: 10.1016/j.snb.2006.12.030

Fort, A., Lotti, C., Mugnaini, M., Palombari, R., Rocchi, S., Tondi, L., Vignoli, V.

A two electrode electrochemical amperometric sensor for NO₂ detection (2007) Proceedings - 1st IMEKO TC-19 International Symposium on Measurement and Instrumentation for Environmental Monitoring, .

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84896658485&partnerID=40&md5=408c58438fd57f3bdc8bc243f3d91c92>

Catelani, M., Fort, A., Grande, V., Mugnaini, M., Trotta, I.

Automatic fault diagnosis system for a gas turbine using a simulation before test approach

(2006) Conference Record - IEEE Instrumentation and Measurement Technology Conference, art. no. 1700119, pp. 86-89.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-36048968856&doi=10.1109%2fIMTC.2006.235663&partnerID=40&md5=0b1b85aee057bb7472ac1436ccc76d12>

DOI: 10.1109/IMTC.2006.235663

Fort, A., Mugnaini, M., Rocchi, S., Serrano-Santos, M.B., Spinicci, R., Vignoli, V.

Surface state model for conductance responses during thermal-modulation of SnO₂-based thick film sensors: Part II - Experimental verification (2006) IEEE Transactions on Instrumentation and Measurement, 55 (6), pp. 2107-2116.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-33947330290&doi=10.1109%2fTIM.2006.887119&partnerID=40&md5=d608edbb8179337845bfdd6f001bcb39>

DOI: 10.1109/TIM.2006.887119

Fort, A., Vignoli, V., Rocchi, S., Tondi, L., Serrano-Santos, M.B., Mugnaini, M.

Fine tuning design of control board parameters for sensing applications
(2006) Conference Record - IEEE Instrumentation and Measurement Technology
Conference, art. no. 1700596, pp. 2244-2248.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-33947302158&doi=10.1109%2fIMTC.2006.234895&partnerID=40&md5=220fc7f90c40b77b82f93487323102ec>

DOI: 10.1109/IMTC.2006.234895

Fort, A., Rocchi, S., Serrano-Santos, M.B., Mugnaini, M., Vignoli, V., Atrei, A., Spinicci, R.
CO sensing with SnO₂-based thick film sensors: Surface state model for
conductance responses during thermal-modulation
(2006) Sensors and Actuators, B: Chemical, 116 (1-2), pp. 43-48.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-33646783334&doi=10.1016%2fj.snb.2005.11.070&partnerID=40&md5=e4eac6511fe27cf8b7acf9e4f5e1e366>

DOI: 10.1016/j.snb.2005.11.070

Alippi, C., Catelani, M., Fort, A., Mugnaini, M.
Automated selection of test frequencies for fault diagnosis in analog
electronic circuits
(2005) IEEE Transactions on Instrumentation and Measurement, 54 (3), pp.
1033-1044.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-20544445250&doi=10.1109%2fTIM.2005.847115&partnerID=40&md5=52d64ffb82bca25c9d5e72277c668a39>

DOI: 10.1109/TIM.2005.847115

Alippi, C., Catelani, M., Fort, A., Mugnaini, M.
Methods for the automated selection of test frequencies for fault diagnosis
in analog electronic circuits: A comparison
(2003) Conference Record - IEEE Instrumentation and Measurement Technology
Conference, 1, pp. 60-64.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-0038508686&partnerID=40&md5=69cab36fb4b211166b48473d94db0ccf>

Catelani, M., Campani, E., Del Pistoia, M., Singuaroli, R., Mugnaini, M.,
Fort, A.
High reliable DAQ for ADC on line testing
(2003) Proceedings of the 8th International Workshop on ADC Modelling and
Testing, IWADC 2003, .
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85073301976&partnerID=40&md5=7713b0049efeced918c131028855b1b>

Alippi, C., Catelani, M., Fort, A., Mugnaini, M.
SBT soft fault diagnosis in analog electronic circuits: A sensitivity-based
approach by randomized algorithms
(2002) IEEE Transactions on Instrumentation and Measurement, 51 (5), pp.
1116-1125.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-0036825671&doi=10.1109%2fTIM.2002.806004&partnerID=40&md5=6dbce2dbc1806bf887d10f8672696772>

DOI: 10.1109/TIM.2002.806004

Ceschini, G., Mugnain, M., Masi, A.

A reliability study for a submarine compression application
(2002) *Microelectronics Reliability*, 42 (9-11), pp. 1377-1380.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-80054889706&partnerID=40&md5=9b88f186aafe9ef110bed18867ddb9e>

Mugnainis, M., Catelani, M., Ceschini, G., Masf, A., Nocentini, F.
Pseudo time-variant parameters in centrifugal compressor availability studies
by means of Markov models

(2002) *Microelectronics Reliability*, 42 (9-11), pp. 1373-1376.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-80054938503&partnerID=40&md5=972c36a24f3efe4abd0771fd18dce950>

Alippi, C., Catelani, M., Fort, A., Mugnaini, M.

Automatic selection of test frequencies for the diagnosis of soft faults in
analog circuits

(2002) *Conference Record - IEEE Instrumentation and Measurement Technology
Conference*, 2, pp. 1503-1508.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-00360491111&doi=10.1109%2fIMTC.2002.1007181&partnerID=40&md5=624f07b017df188208197fc61d7af57a>

DOI: 10.1109/IMTC.2002.1007181

Mugnaini, M., Quercioli, V., Catelani, M., Singuaroli, R., Fort, A.
Characterization of centrifugal compressors' thermo-elements used in journal
and thrust bearing temperature monitoring

(2002) *Conference Record - IEEE Instrumentation and Measurement Technology
Conference*, 1, pp. 421-424.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-0036044624&doi=10.1109%2fIMTC.2002.1006878&partnerID=40&md5=cf94457ce210c8260b4ea55f3553d565>

DOI: 10.1109/IMTC.2002.1006878

Catelani, M., Mugnaini, M., Singuaroli, R.

Effects of test sequences on the degradation analysis in high speed
connectors

(2000) *Microelectronics Reliability*, 40 (8-10), pp. 1461-1465.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-16344364498&doi=10.1016%2fS0026-2714%2800%2900150-5&partnerID=40&md5=e68d25a83444977bf78bc7fd21863209>

DOI: 10.1016/S0026-2714(00)00150-5

PATENTS

[P1]2008 - Patent

FORT A, MUGNAINI M, PALOMBARI R, ROCCHI S, VIGNOLI V (2008). Sensore
amperometrico elettrochimico a tre elettrodi. RM2008A000401, UNISI e AUTORI

[P2]2010 - Patent

S. ROCCHI, A. FORT, V. VIGNOLI, M. MUGNAINI, R. PALOMBARI (2010). Three electrode electrochemical amperometric sensor. WO2010013276, UNISI e AUTORI

[P3]2012 - Patent

Federico Perini, Jader Monari, Franco Fiocchi, Marco Schiaffino, Ada Fort, Valerio Vignoli, Marco Mugnaini (2012). Misuratore di Campo elettrico.

BO2010A000710, Istituto Nazionale di Astrofisica

[P4]2015 - Patent

Mugnaini M, Vignoli V, Fort A. Pucci N, Novembre E. A method for in vitro diagnosis of allergy and related device N. FI2015A000110 April 15th 2015

[P5]2018- Patent

A method for blood oxidative stress assessment and related device - Ns. Rif.: BI1342F/BI/fpd

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