

Curriculum Vitae

INFORMAZIONI PERSONALI

Nome MAURO
Cognome MOSCA
Recapiti Dipartimento di Ingegneria, viale delle Scienze, Edificio 9
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FORMAZIONE TITOLI

EDUCATION

10 April 1996 University Degree in Electronic Engineering at University of Palermo; mark 110/110 cum laude.

July 1996 Qualification for Profession of Engineer.

22 February 2000 Ph.D. in Electronic Engineering at University of Palermo. Ph.D. dissertation on "*ITO Thin Films Optoelectronics Devices*", tutor *Prof Claudio Cali*

RESEARCH ACTIVITY

1995-1996 Development of degree dissertation on "*Nd:YAG laser deposition of ITO thin films*", supervisor *Prof Claudio Cali* (at the *Thin Film and Laser Technologies Laboratory* of the Department of Electrical Engineering of the University of Palermo).

1995-2002 Research activities at the *Thin Film and Laser Technologies Laboratory* of the Department of Electrical Engineering (University of Palermo).

Fields of interest: ***Pulsed Laser Deposition of thin films, Optical characterization of thin films, Material Science, Organic LED (OLED), Semiconductor transparent oxide.***

January-October 1999 Stage at "*Laboratoires Central de Recherche*" (LCR) of THOMSON-CSF (Orsay - France) on the subject: "*Pulsed Laser Deposition of ITO Thin Films for the Fabrication of Organic Electroluminescent Devices*", supervisor *Dr Guy Garry*

June 2000 – February 2002 Temporary Position (fellowship) at University of Palermo. Research on the subject: "*Thin Film Deposition Laser Technologies and Surface Treatments*"

2002-2004 Marie Curie fellow (n. G5TR-CT-2001-00064) from February 2002 to February 2004 at THALES Research and Technology, Orsay - France (5th Framework Programme 1999-2002 - European Commission). Contract n.G5TR-CT-2001-00064. Subject: "*Solar-Blind Detectors by Epitaxial Growth of AlGaIn*"

on sapphire". Supervisors: Dr Julien Nagle and Dr Jean-Yves Duboz.

2002-2004	Research activities at THALES, Research & Technology, France, on Heterostructure Technology, III-Nitride Materials , AlGaIn Solar-Blind Detectors .
2004-2006	Researcher (temporary position) at the Ecole Polytechnique Fédérale de Lausanne (EPFL) in Lausanne (Switzerland) (LASPE – Prof. N. Grandjean). Research activities on Nitride intersubband devices at telecommunications wavelengths .
2005	Permanent position at the University of Palermo (Italy) as researcher in Electronics (ING-INF/01)

Languages

	English	French	Russian	Italian
Reading ability	B2	C2	A1	mother tongue
Writing skills	C1	C1	A1	mother tongue
Oral expression ability	B2	C1	A1	mother tongue

ATTIVITA' DIDATTICA

- Esercitazioni teoriche e sperimentali (in francese) su "Trattamento dei segnali elettronici" presso l'*Ecole Polytechnique Fédérale de Lausanne* (EPFL), Svizzera (Prof. Sanjines, Faculté des Sciences de bases, A.A. 2004-2005) per un totale di 72 ore.
- Esercitazioni del corso di "Dispositivi Elettronici", per gli allievi del CdS in Ingegneria Elettronica dell'Università di Palermo (A.A. 2005-06, sino a 2011-12) per un totale di 72 ore per corso.
- Affidamento del corso di "Fondamenti di Elettronica", per gli allievi del CdS in Ingegneria Elettrica dell'Università di Palermo (A.A. 2006-07) per un totale di 56 ore (6 CFU).
- Affidamento del corso di "Elettronica", per gli allievi del CdS in Ingegneria Elettrica dell'Università di Palermo, Sede distaccata di Caltanissetta, (A.A. 2008-09, A.A. 2009-10) per un totale di 6 CFU.
- Affidamento del corso di "Elettronica", per gli allievi del CdS in Ingegneria Informatica dell'Università di Palermo, Sede distaccata di Agrigento, (A.A. 2010-11, A.A. 2011-12, A.A. 2012-13) per un totale di 9 CFU.
- Docente del Master in Nanotecnologie per i beni culturali (Università di Palermo, A.A. 2007-08) per un totale di 15 ore.

- Membro del Collegio dei Docenti del Dottorato di Ricerca in Ingegneria Elettronica e delle Telecomunicazioni (dal 2007).
- Membro aggregato della Commissione Giudicatrice degli Esami di Stato di Abilitazione alla professione di Ingegnere (2008).
- Docente del Master in Esperto in Impianti e Sistemi per la DOMOTICA e la BUILDING AUTOMATION (Università di Palermo, A.A. 2010-11 e 2011-12) per un totale di 50 ore.
- Attività di tutoraggio per i tirocini e stages del Master in Esperto in Impianti e Sistemi per la DOMOTICA e la BUILDING AUTOMATION (Università di Palermo, A.A. 2010-11 e 2011-12) per un totale di 60 ore.
- Affidamento del corso di "Dispositivi Optoelettronici", per gli allievi del Corso di Laurea Magistrale in Ingegneria Elettronica dell'Università di Palermo (A.A. 2013-14) per un totale di 6 CFU.
- Docente dell'insegnamento "Evoluzione dei Dispositivi Elettronici" e "Laboratorio di Dispositivi Elettronici" presso la SISIS (Scuola Interuniversitaria Siciliana di Specializzazione per l'Insegnamento Secondario) (A.A. 2007-08, A.A. 2008-09).

RICERCHE FINANZIATE

1) Partecipazione ai seguenti Progetti di Ateneo (ex60%) finanziati:

- Fotodeposizione di ossidi drogati con terre rare per applicazioni fotoniche (responsabile scientifico: Prof. Claudio Cali);
- Fabbricazione e caratterizzazione di LED organici (OLED) per display elettroluminescenti (responsabile scientifico: Dr. Pasquale Cusumano);
- Semiconduttori organici drogati tramite co-evaporazione e loro impiego in dispositivi optoelettronici (responsabile scientifico: Dr. Pasquale Cusumano);
- Caratterizzazione di rivelatori ultravioletti di fiamma (responsabile scientifico: Prof. Claudio Cali);
- Crescita mediante laser e caratterizzazione di ossidi drogati per applicazioni fotoniche ed optoelettroniche (responsabile scientifico: Prof. Claudio Cali);
- Fabbricazione e caratterizzazione di LED organici (OLED) con emissione nel blu per applicazioni ai biosensori di fluorescenza (responsabile scientifico: Dr. Pasquale Cusumano);
- Utilizzo di un fascio polarizzato nel controllo dello spessore di strati dielettrici durante la crescita (responsabile scientifico: Prof. Claudio Cali).

2) Responsabile scientifico del seguente Progetto di Ateneo (ex60%) finanziato:

- LED BLU E ULTRAVIOLETTI REALIZZATI IN ZnO

3) Partecipazione al progetto "Nitride Intersubband Devices at Telecommunication Wavelengths (NitWave)" (6th Framework Program) (con l'EPFL)

4) Partecipazione al progetto "Fotoablazione laser finalizzata alla deposizione di materiali ottici non lineari" (PRIN - MIUR)

PUBBLICAZIONE

LIST OF PUBLICATIONS OF MAURO MOSCA

Citations: 1133

h-index: 15

(Source: Google Scholar, <https://scholar.google.com/citations?user=w0v7ceUAAAAJ&hl=en>)

Peer-reviewed journals

1. R. Macaluso, G. Lullo, I. Crupi, F. Caruso, E. Feltrin, **M. Mosca**.

“Current spreading length and injection efficiency in ZnO/GaN-based light-emitting diodes”

to be published in IEEE Transactions on Electron Devices (2019)

2. C. Haller, J.-F. Carlin, **M. Mosca**, M. Rossell, R. Erni, N. Grandjean.

“InAlN underlayer for near ultraviolet InGaN based light emitting diodes”

Applied Physics Express, 12 (2019), 034002

3. P. Sohi, **M. Mosca**, Y. Chen, J.-F. Carlin, N. Grandjean.

“Low-temperature growth of n⁺⁺-GaN by metalorganic chemical vapor deposition to achieve low-resistivity tunnel junctions on blue light emitting diodes”

Semiconductor Science and Technology 34 (2019) 015002

4. V. Aglieri, A. Zaffora, G. Lullo, M. Santamaria, F. Di Franco, U. Lo Cicero, **M. Mosca**, R. Macaluso.

“Resistive switching in microscale anodic titanium dioxide-based memristors”

Superlattices and Microstructures 113 (2018) 135-142.

5. M. Santamaria, A. Zaffora, F. Di Franco, F. Di Quarto, R. Macaluso, **M. Mosca**, H. Habazaki.

“The effect of Nb incorporation on the electronic properties of anodic HfO₂”

ECS Journal of Solid State Science and Technology, 6 (2017) N25-N31.

6. M. Barbouche, R. Benabderrahmane Zaghouni, N.E. Benammar, V. Aglieri, **M. Mosca**, R. Macaluso, K. Khirouni,

H. Ezzaouia.

“New process of silicon carbide purification intended for silicon passivation”

Superlattices and Microstructures, 101 (2017) 512-521.

7 F. Caruso, **M. Mosca**, S. Rinella, R. Macaluso, C. Calì, F. Saiano, E. Feltin.

“Frequency-Downconversion Stability of PMMA Coatings in Hybrid White Light-Emitting Diodes”

Journal of Electronics Materials, 45 (2016) 682-687.

8. A. Sacco, M. S. Di Bella, M. Gerosa, A. Chiodoni, S. Bianco, **M. Mosca**, R. Macaluso, C. Calì, C. F. Pirri.

“Enhancement of photoconversion efficiency in dye-sensitized solar cells exploiting pulsed laser deposited niobium pentoxide blocking layers”

Thin Solid Films, 574 (2015) 38-42.

9. R. Macaluso, **M. Mosca**, V. Costanza, A. D’Angelo, G. Lullo, F. Caruso, C. Calì, F. Di Franco, M. Santamaria, F. Di Quarto.

“Resistive switching behaviour in ZnO and VO₂ memristors grown by pulsed laser deposition”

Electronics Letters, 50 (2014) 262-263.

10. **M. Mosca**, R. Macaluso, G. Randazzo, M. Di Bella, F. Caruso, C. Calì, F. Di Franco, M. Santamaria, F. Di Quarto.

“Anodized Ti-Si alloy as gate oxide of electrochemically-fabricated organic field-effect transistors”

ECS Solid State Letters, 3 (2014) P7-P9.

11. F. Di Franco, M. Santamaria, F. Di Quarto, R. Macaluso, **M. Mosca**, C. Calì.

“Electrochemical Fabrication and Physico-Chemical Characterization of Metal/High K Insulating Oxide/Polymer Electrolyte Junctions”

Journal of Physical Chemistry C, 118 (2014) 29973–29980.

12. **M. Mosca**, R. Macaluso, C. Calì, R. Butté, S. Nicolay, E. Feltin, D. Martin, N. Grandjean.

“Optical, structural, and morphological characterisation of epitaxial ZnO films grown by pulsed-laser deposition”

Thin Solid Films, 539 (2013) 55-59.

13. R. Macaluso, **M. Mosca**, C. Cali, F. Di Franco, M. Santamaria, F. Di Quarto, J.-L. Reverchon.

“Erroneous p-type assignment by Hall effect measurements in annealed ZnO films grown on InP substrate”

Journal of Applied Physics, 113 (2013) 164508.

14. **M. Mosca**, F. Caruso, L. Zambito, R. Macaluso, C. Cali, E. Feltin.

“Hybrid LEDs pave way to new lighting applications”

Photonics Spectra, 47 (2013) 60-64.

15. F. Caruso, **M. Mosca**, R. Macaluso, E. Feltin, C. Cali.

“Generation of white LED light by frequency down-conversion using a perylene-based dye”

Electronics Letters, 48 (2012) 1417-1419.

16. F. Di Franco, P. Bocchetta, C. Cali, **M. Mosca**, M. Santamaria, F. Di Quarto.

“Electrochemical fabrication of metal/oxide/conducting polymer junction”

Journal of Electrochemical Society, 158 (2011) H50-H54.

17. **M. Mosca**, A. Castiglia, H.-J. Bühlmann, J. Dorsaz, E. Feltin, J.-F. Carlin, N. Grandjean.

“Suppression of leakage currents in GaN-based LEDs induced by reactive-ion etching damages”

European Physical Journal. Applied Physics, 43 (2008) 51-53.

18. A. Lupu, F. H. Julien, S. Golka, G. Pozzovivo, G. Strasser, E. Baumann, F. Giorgetta, D. Hofstetter, S. Nicolay, **M.**

Mosca, E. Feltin, J.-F. Carlin, N. Grandjean.

“Lattice matched GaN/InAlN waveguides at $\lambda = 1.55 \mu\text{m}$ grown by metalorganic vapor phase epitaxy”

IEEE Photonics Technology Letters, 20 (2008) 102-104.

19. R. Butté, J.-F. Carlin, E. Feltin, M. Gonschorek, S. Nicolay, G. Christmann, D. Simeonov, A. Castiglia, J. Dorsaz, H.

J. Buehlmann, S. Christopoulos, G. Baldassarri Höger von Högersthal, A. J. D. Grundy, **M. Mosca**, C. Pinguier, M.

A. Py, F. Demangeot, J. Frandon, P. G. Lagoudakis, J. J. Baumberg, N. Grandjean.

“Current status of AlInN layers lattice-matched to GaN for photonics and electronics”

Journal of Physics D, 40 (2007) 6328-6344.

20. D. Simeonov, E. Feltin, H. -J. Buhlmann, T. Zhu, A. Castiglia, **M. Mosca**, J.-F. Carlin, R. Butté, N. Grandjean.

“Blue lasing at room temperature in high quality factor GaN/AlInN microdisks with InGaN quantum wells”

Applied Physics Letters, 90 (2007) 061106.

21. **M. Mosca**, S. Nicolay, E. Feltin, J.-F. Carlin, R. Butté, M. Ilegems, N. Grandjean, M. Tchernycheva, L. Nevou, F. H.

Julien.

“Nitride-based heterostructures grown by MOCVD for near- and mid-infrared intersubband transitions”

Physica Status Solidi (a), 204 (2007) 1100-1104.

22. E. Feltin, G. Christmann, R. Butté, J.-F. Carlin, **M. Mosca**, N. Grandjean.

“Room Temperature Polariton Luminescence from a GaN/AlGaIn Quantum Well Microcavity”

Applied Physics Letters, 89 (2006) 071107.

23. J. Dorsaz, J.-F. Carlin, B. Faure, **M. Mosca**, P. Gilet, F. Letertre, S. Bressot, H. Larheche, P. Bove.

“First InGaN/GaN Thin Film LED Using SiCoi Engineered Substrate”

Physica Status Solidi (c), 3 (2006) 2227-2230.

24. S. Nicolay, E. Feltin, J.-F. Carlin, **M. Mosca**, L. Nevou, M. Tchernycheva, F.H. Julien, M. Ilegems, N. Grandjean.

“Indium Surfactant Effect On AlN/GaN Heterostructures Grown By Metal-Organics Vapour Phase Epitaxy:

Applications To Intersubband Transitions”

Applied Physics Letters, 88 (2006) 151902.

25. R. Butté, G. Christmann, E. Feltin, J.-F. Carlin, **M. Mosca**, M. Ilegems, N. Grandjean.

“Room temperature polariton luminescence from a bulk GaN microcavity”

Physical Review B, Condensed Matter and Materials Physics, 73 (2006) 033315.

26. J.-Y. Duboz , N. Grandjean, A. Dussaigne, **M. Mosca**, J.-L. Reverchon, P. G. Verly, R. H. Simpson.

“Solar Blind AlGaIn photodetectors with a very high spectral selectivity”

European Physical Journal. Applied Physics, 33 (2006) 5-7.

27. S. Nicolay, J.-F. Carlin, E. Feltin, R. Butté, **M. Mosca**, N. Grandjean, M. Ilegems, M. Tchernycheva, L. Nevou, F.H.

Julien.

“Midinfrared intersubband absorption in lattice-matched AlInN/GaN multiple-quantum wells”

Applied Physics Letters 87, (2005) 111106.

28. J.-Y. Duboz , N. Grandjean, F. Omnès, J.-L. Reverchon, **M. Mosca**.

“Solar Blind Detectors Based on AlGaIn Grown on Sapphire”

Physica Status Solidi (c), 2 (2005) 964-971.

INVITED PAPER

29. J.-Y. Duboz, N. Grandjean, F. Omnès, **M. Mosca**, J.-L. Reverchon.

“Internal Photoemission in Solar Blind AlGaIn Schottky Barrier Photodiodes”

Applied Physics Letters 86, 063511 (2005).

30. **M. Mosca**, J.-L. Reverchon, N. Grandjean, J.-Y. Duboz.

“Multilayer (Al,Ga)N Structures for Solar-Blind Detection”

IEEE Journal of Selected Topics in Quantum Electronics, 10 (2004) 752.

31. **M. Mosca**, J.-L. Reverchon, F. Omnès, J.-Y. Duboz.

"Effects of the Buffer Layers on the Performances of (Al,Ga)N Ultraviolet Photodetectors"

Journal of Applied Physics, 95 (2004) 4367.

32. J.-Y. Duboz, N. Briere de l'Isle, L. Dua, P. Legagneux, **M. Mosca**, J.-L. Reverchon, B. Damilano, N. Grandjean, F.

Semond, J. Massies, R. Dudek, D. Poitras, T. Cassidy.

"Microcavity Light Emitting Diodes Based on GaN membranes Grown by Molecular Beam Epitaxy on Silicon"

Japanese Journal of Applied Physics, Part 1, 42 (2003) 118.

33. C. Cali, **M. Mosca**, G. Targia.

"A Simple Apparatus for the Determination of the Optical Constants and the Thickness of Absorbing Thin Films"

Optics Communications, 191 (2001) 295.

34. C. Cali, R. Macaluso, **M. Mosca**.

"*In-Situ* Monitoring of Pulsed Laser Indium-Tin-Oxide Film Deposition by Optical Emission Spectroscopy"

Spectrochimica Acta B, 56 (2001) 743.

35. C. Cali, R. Macaluso, **M. Mosca**.

"Effects of the Process Conditions on the Plume of a Laser-Irradiated Indium-Tin-Oxide Target"

Optics Communications, 197 (2001) 341.

36. J. Olivier, B. Servet, M. Vergnolle, **M. Mosca**, G. Garry.

"Stability/Instability of Conductivity and Work Function Changes of ITO Thin Films, UV-Irradiated in Air or Vacuum.

Measurements by the Four-Probe Method and by Kelvin Force Microscopy"

Synthetic Metals, 122 (2001) 87.

37. C. Cali, **M. Mosca**, G. Targia.

"Deposition of Indium Tin Oxide films by laser ablation: processing and characterization"

Solid-State Electronics, 42 (1998) 877.

Chapters in collective volumes

1. **M. Mosca**, R. Macaluso, F. Caruso, V. Lo Muzzo, C. Cali.

“The p-type Doping of ZnO: Mirage or Reality?”

Advances in Semiconductor Research: Physics of Nanosystems, Spintronics and Technological Applications

Chapter 12, pp. 245-282 (Nova Science Publishers, New York, US, 2015).

2. **M. Mosca**, F. Caruso, L. Zambito, B. Seminara, R. Macaluso, C. Cali, E. Feltin.

“Warm white LED light by frequency down-conversion of mixed yellow and red Lumogen®”

Integrated Photonics: Materials, Devices, and Applications II

Vol. 8767, 87670L1-10 (SPIE, Washington, US, 2013).

Number of citations: 1

3. J.-L. Reverchon, **M. Mosca**, N. Grandjean, F. Omnés, F. Semond, J.-Y. Duboz, L. Hirsch.

“UV Metal Semiconductor Metal Detectors. A Robust Choice for (Al,Ga)N Based Detectors”

UV Solid-State Light Emitters and Detectors,

ed. by M. S. Shur, A. Zukauskas (NATO Science Series II - Mathematics, Physics, and Chemistry)

vol. 144, pp. 10-20 (Kluwer Academic Publisher, New York, US, 2004)

INVITED PAPER

4. J.-Y. Duboz, J.-L. Reverchon, **M. Mosca**, N. Grandjean, F. Omnés.

"High Performance Solar Blind Detectors Based On AlGaIn Grown By MBE And MOCVD"

GaN And Related Alloys,

ed. by H. Min Ng, M. Wraback, K. Hiramatsu, N. Grandjean

vol. 798, pp. 47-52 (MRS, Warrendale, Pennsylvania, US, 2004)

5. **M. Mosca**, J.-L. Reverchon, N. Grandjean, F. Omnès, J.-Y. Duboz, I. Ribet, M. Tauvy.

"Solar Blind (Al,Ga)N Metal-Semiconductor-Metal Devices for High Performance Flame Detection"

New Applications for Wide-Bandgap Semiconductors,

ed. by J.-I. Chyi, S. J. Pearton, J. Han, A. G. Baca, W. H. Chang

vol. 764, pp. 315-320, (MRS, Warrendale, Pennsylvania, US, 2003).

6. C. Cali, **M. Mosca**,

"ITO Thin Films for Optical Sensors"

Optical Sensors and Microsystems: New Concepts, Materials Technologies,

pp.79-85 (Kluwer Academic/Plenum Publishers, New York, US, 2000).

Peer-reviewed conference papers

1. **M. Mosca**, I. Crupi, D. C. Russotto, G. Lullo, R. Macaluso, C. G. Giaconia, S. Mirabella, E. Feltin.

"Chemical Bath Deposition as a Simple Way to Grow Isolated and Coalesced ZnO Nanorods for Light-Emitting Diodes Fabrication"

Proceedings of 2018 IEEE 4th International Forum on Research and Technology for Society and Industry (RTSI). Palermo (Italy) September 10th-13th, 2018, p. 472-477.

2. V. Aglieri, G. Lullo, **M. Mosca**, R. Macaluso, A. Zaffora, F. Di Franco, M. Santamaria, U. Lo Cicero, L. Razzari.

[“Forming-Free and Self-Rectifying Resistive Switching Effect in Anodic Titanium Dioxide-Based Memristors”](#)

Proceedings of 2018 IEEE 4th International Forum on Research and Technology for Society and Industry (RTSI). Palermo (Italy) September 10th-13th, 2018, p. 540-545.

3. L. Cirrincione, R. Macaluso, **M. Mosca**, G. Scaccianoce, S. Costanzo.

[“Study of Influence of the LED Technologies on Visual and Subjective/Individual Aspects”](#)

Proceedings of 2018 IEEE International Conference on Environment and Electrical Engineering and IEEE Industrial and Commercial Power Systems Europe (EEEIC/I&CPS Europe). Palermo (Italy) June 12th-15th, 2018.

4. M. La Gennusa, R. Macaluso, **M. Mosca**, G. Scaccianoce, F. Massaro, L. Cirrincione.

[“An experimental study on relationship between LED lamp characteristics and non image-forming”](#)

Proceedings of 2017 IEEE International Conference on Environment and Electrical Engineering and IEEE Industrial and Commercial Power Systems Europe (EEEIC/I&CPS Europe). Milan (Italy) June 6th-9th, 2017.

5. R. Macaluso, S. Barcellona, A. Zaffora, U. Lo Cicero, G. Lullo, **M. Mosca**, C. Calì, F. Di Franco, M. Santamaria.

[“Fabrication and characterization of microscale HfO₂-based Memristors”](#)

49th Annual Meeting of the Associazione Società Italiana di Elettronica (SIE2017). Palermo (Italy) June 21st–23rd, 2017, p. 112-113.

6. **M. Mosca**, D. Caltagirone, G. Lullo, R. Macaluso, C. Calì, I. Crupi, F. Caruso, E. Feltin.

[“Influence of electrodes layout on hydrothermally-grown GaN/ZnO LEDs”](#)

49th Annual Meeting of the Associazione Società Italiana di Elettronica (SIE2017). Palermo (Italy) June 21st–23rd, 2017, p. 166-167.

7. F. Caruso, **M. Mosca**, R. Macaluso, C. Calì, E. Feltin.

[“Well-Aligned Hydrothermally Synthesized Zinc Oxide Nanorods on p-GaN without a Seed Layer”](#)

Proceedings of IEEE-NANO 2015. Roma (Italy) July 27th-30th, 2015. Art. N. 7388791 (2016) 1012-1014.

8. **M. Mosca**, F. Caruso, B. Seminara, L. Zambito, R. Macaluso, C. Calì, E. Feltin.

[“Warm white LEDs based on Lumogen® Red and Yellow”](#)

Proceedings of GE 2013, Associazione gruppo italiano di elettronica, Udine (Italy), 19-21 giugno 2013, p. 109-110.

9. **M. Mosca**, F. Caruso, R. Macaluso, C. Cali, E. Feltin.

"White LED light obtained by frequency down-conversion of perylene-based dyes"

Proceedings of GE 2012, Associazione gruppo italiano di elettronica, Marina di Carrara (Italy), 20-22 giugno 2012.

10. F. Caruso, **M. Mosca**, R. Macaluso, C. Cali.

"Fabbricazione di LED bianchi tramite downconversion di coloranti basati su perilene"

Proceedings of Fotonica 2012 - 14° Convegno Nazionale delle Tecnologie Fotoniche. Firenze (Italy), May 15 - 17,

2012.

11. R. Macaluso, **M. Mosca**, C. Cali.

"Film di ZnO drogati di tipo p per diffusione termica di atomi di fosforo da substrati di InP"

Proceedings of Fotonica 2012 - 14° Convegno Nazionale delle Tecnologie Fotoniche. Firenze (Italy), May 15 - 17,

2012.

12. F. Di Franco, M. Santamaria, F. Di Quarto, R. Macaluso, **M. Mosca**, C. Cali.

"Photoelectrochemical Polymerization of 3-4 Ethylenedioxythiophene on High k Niobium-Tantalum Mixed Oxides"

Proceedings of the 63st annual meeting of International Society of Electrochemistry, Prague (Czech Republic)

August 19th -24th, 2012.

13. F. Di Franco, M. Santamaria, P. Bocchetta, F. Di Quarto, C. Cali, **M. Mosca**.

"Electrochemical Fabrication of Inorganic/Organic Field Effect Transistor"

Proceedings of the 61st annual meeting of International Society of Electrochemistry. Nice (France) September 26th-

October 1st, 2010.

14. **M. Mosca**, C. Cali, R. Butté, S. Nicolay, D. Martin, N. Grandjean.

"Growth of device-quality ZnO films by pulsed-laser deposition"

Proceedings of 14th International Workshop on Inorganic and Organic Electroluminescence & 2008 International Conference on the Science and Technology of Emissive Displays and Lighting, Bagni di Tivoli (Italy), September 9th-12th, 2008, p. 229-231

15. S. Nicolay, J.-F. Carlin, E. Feltin, **M. Mosca**, R. Butté, N. Grandjean, M. Ilegems.

"AlInN Based Quantum Wells for Intersubband Transitions"

Proceedings of the 11th European Workshop on MOVPE, p.391-393 (Lausanne, Switzerland, June 5th-8th, 2005).

16. **M. Mosca**, J.-L. Reverchon, F. Omnès, J.-Y. Duboz.

"Effects of the Electrode Geometry on (Al,Ga)N Ultraviolet Photodetectors Performances"

Proceedings of 12th European Workshop on Heterostructure Technology (heTech'03), p.TueB4 (San Rafael - Spain, October 12-15, 2003).

17. Calì, P. Cusumano, S. Gambino, **M. Mosca**, G. Baldacchini, S. Gagliardi, R.M. Montereali, A. Pace, R.B. Pode.

"Film sottili di Alq3 realizzati mediante evaporazione termica ed ablazione laser per dispositivi elettroluminescenti"

Proceedings of the conference "Elettroottica 2002" (7° National Conference "Strumentazione e metodi di misura elettroottici"), p.377 (May 29-31, 2002 - Montecatini Terme - Italy).

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AMBITI DI RICERCA

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