

**MARIA PILAR MIRITELLO****LIST OF PUBLICATIONS**

**101 scientific publications (whose 81 on ISI international journals), that have received 1289 citations with an h-index of 19 (Source: ISI Web of knowledge 01/09/2016).**

- 1) Invited Paper : "*Electroluminescence of silicon nanocrystals in MOS structures*"  
G. Franzò, A. Irrera, E. C. Moreira, **M. Miritello**, F. Iacona, D. Sanfilippo, G. Di Stefano, P. G. Fallica, and F. Priolo;  
Appl. Phys. A: Mater. Sci. Process. **74**, 1 (2002);  
DOI: 10.1007/s003390101019
- 2) "*Excitation and De-Excitation Properties of Silicon Quantum Dots under Electrical Pumping*"  
A. Irrera, D. Pacifici, **M. Miritello**, G. Franzò, F. Priolo, F. Iacona, D. Sanfilippo, G. Di Stefano, and P.G. Fallica;  
Appl. Phys. Lett. **81**, 1866 (2002);  
DOI: 10.1063/1.1505117  
**Selected by Virtual Journal of Nanoscale Science & Technology.**
- 3) "*Electroluminescence at 1.54  $\mu\text{m}$  in Er-doped Si nanocluster-based devices*"  
F. Iacona, D. Pacifici, A. Irrera, **M. Miritello**, G. Franzò, F. Priolo, D. Sanfilippo, G. Di Stefano, and P.G. Fallica;  
Appl. Phys. Lett. **81**, 3242 (2002);  
DOI: 10.1063/1.1516235  
**Selected by Virtual Journal of Nanoscale Science & Technology.**
- 4) "*Erbium-doped Si nanocrystals: optical properties and electroluminescent devices*"  
D. Pacifici, A. Irrera, G. Franzò, **M. Miritello**, F. Iacona, and F. Priolo;  
Physica E **16**, 331 (2003);  
DOI: 10.1016/S1386-9477(02)00615-X
- 5) "*Electroluminescence properties of light emitting devices based on silicon nanocrystals*"  
A. Irrera, D. Pacifici, **M. Miritello**, G. Franzò, F. Priolo, F. Iacona, D. Sanfilippo, G. Di Stefano, and P.G. Fallica;  
Physica E **16**, 395 (2003);  
DOI: 10.1016/S1386-9477(02)00609-4
- 6) "*Light emitting devices based on silicon nanocrystals*"  
A. Irrera, D. Pacifici, **M. Miritello**, G. Franzò, F. Priolo, F. Iacona, D. Sanfilippo, G. Di Stefano, and P.G. Fallica;  
NATO Science Series II: Mathematics, Physics and Chemistry, vol. **93** "Towards the first silicon laser", Eds. L. Pavesi, S. Gaponenko and L. Dal Negro, Kluwer Academic Publishers, Dordrecht, 29 (2003);  
Publisher: Kluwer Academic (NETHERLANDS); 2003.
- 7) "*Electroluminescent devices based on Er-doped Si nanoclusters*"  
F. Priolo, F. Iacona, D. Pacifici, A. Irrera, **M. Miritello**, G. Franzò, D. Sanfilippo, G. Di Stefano, and P.G. Fallica;  
Mat. Res. Soc. Symp. Proc., vol. **737**, "Quantum Confined Semiconductor Nanostructures", Eds. J.M. Buriak, D.D.M. Wayner, F. Priolo, B. White, V. Klimov and L. Tsybeskov, F9.3.1 (2003);
- 8) "*Tuning of the electroluminescence from Si nanocrystals through the control of their structural properties*"  
A. Irrera, F. Iacona, D. Pacifici, **M. Miritello**, G. Franzò, D. Sanfilippo, G. Di Stefano, P.G. Fallica, and F. Priolo;  
Mat. Res. Soc. Symp. Proc., vol. **737**, "Quantum Confined Semiconductor Nanostructures", Eds. J.M. Buriak, D.D.M. Wayner, F. Priolo, B. White, V. Klimov and L. Tsybeskov, F11.9.1 (2003);  
Publisher: MRS, Warrendale, PA (USA); 2003.
- 9) "*Silicon Nanocrystal Nucleation as a Function of the Annealing Temperature in SiO<sub>x</sub> Films*"  
N. Daldosso, G. Das, G. Dalba, S. Larcheri, R. Grisenti, G. Mariotto, L. Pavesi, F. Rocca, F. Priolo, G. Franzò, A. Irrera, **M. Miritello**, D. Pacifici, F. Iacona;

Mat. Res. Soc. Symp. Proc., vol. **770**, "Optoelectronics of Group-IV-Based Materials", Eds. <sup>T</sup> Gregorkiewicz, R.G. Elliman, P.M. Fauchet and J.A. Hutchby, II.3.1 (2003);

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- 10) "*Er-doped Si nanocrystals as a candidate for optical amplification*"  
F. Iacona, G. Franzò, D. Pacifici, A. Irrera, **M. Miritello**, D. Sanfilippo, G. Di Stefano, P.G. Fallica, and F. Priolo;  
Proceedings of the ECOC-IOCC 2003 Conference, Rimini (Italy), Vol. **4**, 1068 (2003).
  - 11) "*Er doped Si nanostructures*"  
D. Pacifici, G. Franzò, F. Iacona, S. Boninelli, A. Irrera, **M. Miritello**, and F. Priolo;  
Mater. Sci. Eng. B-Solid State Mater. Adv. Technol. **105**, 197 (2003);  
Publisher: Elsevier Science Sa, Lausanne (SWITZERLAND); December 2003.  
DOI: 10.1016/j.mseb.2003.08.045 S0921-5107(03)00398-2
  - 12) "*Electroluminescence properties of SiO<sub>x</sub> layers implanted with rare earth ions*"  
A. Irrera, **M. Miritello**, D. Pacifici, G. Franzò, F. Priolo, F. Iacona, D. Sanfilippo, G. Di Stefano, and P.G. Fallica;  
Nucl. Instrum. Methods Phys. Res. Sect. B-Beam Interact. Mater. Atoms **216**, 222 (2004);  
Publisher: Elsevier Science Bv, Amsterdam (NETHERLANDS); February 2004.
  - 13) "*Rare earth doped Si nanostructures for Microphotonics*"  
D. Pacifici, G. Franzò, F. Iacona, A. Irrera, S. Boninelli, **M. Miritello**, and F. Priolo;  
Mat. Res. Soc. Symp. Proc., Vol. **817** Symposium L "New Materials for Microphotonics", Eds. J. H. Shin, M. Brongersma, F. Priolo and C. Buchal, L.1.2.1. (2004);
  - 14) "*Correlation between electroluminescence and structural properties of Si nanoclusters*"  
A. Irrera, F. Iacona, G. Franzò, S. Boninelli, D. Pacifici, **M. Miritello**, C. Spinella, D. Sanfilippo, G. Di Stefano, P.G. Fallica, and F. Priolo;  
Opt. Mater. **27**, 1031 (2005);  
DOI: 10.1016/j.optmat.2004.08.058
  - 15) Invited paper: "*Silicon-based light-emitting devices: properties and applications of crystalline, amorphous and Er-doped nanoclusters*"  
F. Iacona, A. Irrera, G. Franzò, D. Pacifici, I. Crupi, **M. Miritello**, C.D. Presti, and F. Priolo;  
IEEE J. Sel. Top. Quantum Electron. **12**, 1596 (2006);  
DOI: 10.1109/JSTQE.2006.880605
  - 16) "*Strong enhancement of Er<sup>3+</sup> emission at room temperature in silicon-on-insulator photonic crystal waveguides*"  
M. Galli, A. Politi, M. Belotti, D. Gerace, M. Liscidini, M. Patrini, L.C. Andreani, **M. Miritello**, A. Irrera, F. Priolo, and Y. Chen;  
Appl. Phys. Lett. **88**, 251114 (2006);  
**Selected by Virtual Journal of Nanoscale Science & Technology.**
  - 17) "*Optical and structural properties of Er<sub>2</sub>O<sub>3</sub> films grown by magnetron sputtering*"  
**M. Miritello**, R. Lo Savio, A.M. Piro, G. Franzò, F. Priolo, F. Iacona, and C. Bongiorno;  
J. Appl. Phys. **100**, 013502 (2006);
  - 18) "*The influence of substrate on the properties of Er<sub>2</sub>O<sub>3</sub> films grown by magnetron sputtering*"  
**M. Miritello**, R. Lo Savio, F. Iacona, G. Franzò, C. Bongiorno, A. Irrera, and F. Priolo;  
J. Lumines. **121**, 233 (2006);
  - 19) "*Direct evidence of light confinement and emission enhancement in active silicon-on-insulator slot waveguides*"  
M. Galli, D. Gerace, A. Politi, M. Liscidini, M. Patrini, L.C. Andreani, A. Canino, **M. Miritello**, R. Lo Savio, A. Irrera, and F. Priolo;  
Appl. Phys. Lett. **89**, 241114 (2006);  
DOI: 10.1063/1.2404936  
**Selected by Virtual Journal of Nanoscale Science & Technology.**
  - 20) "*Efficient luminescence and energy transfer in erbium silicate thin films*"  
**M. Miritello**, R. Lo Savio, F. Iacona, G. Franzò, A. Irrera, A.M. Piro, C. Bongiorno, and F. Priolo;  
Adv. Mater. **19**, 1582 (2007);  
DOI: 10.1002/adma.200601692

- 21) Tesi di dottorato in Scienza dei Materiali (XVIII Ciclo):  
*"Erbium compounds for silicon microphotronics"* MAM  
**M. Miritello**  
 University of Catania (2006);  
 Consegnata all'Ufficio Dottorato dell'Università degli Studi di Catania per essere depositata presso la Biblioteca Centrale Nazionale di Firenze e Roma.
- 22) *"Light Emission from Si Nanostructures"*  
 F. Priolo, G. Franzò, A. Irrera, F. Iacona, S. Boninelli, **M. Miritello**, A. Canino, C. Bongiorno, C. Spinella, D. Sanfilippo, G. Di Stefano, A. Piana, P.G. Fallica;  
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 Book Series: SPRINGER PROCEEDINGS IN PHYSICS of the 15th Conference on Microscopy of Semiconducting Materials, APR 02-05, 2007 Univ Cambridge, Cambridge, ENGLAND.
- 23) *"Enhanced light emission in active silicon-on-insulator photonic crystal slabs and slot waveguides"*,  
 D. Gerace, L. C. Andreani, M. Belotti, M. Galli, M. Patrini, A. Politi, M. Liscidini, A. Canino, A. Irrera, R. Lo Savio, **M. Miritello**, and F. Priolo;  
 Transparent Optical Networks, **2** 8-11 (2007);  
 ICTON 2007: Proceedings of the 9th International Conference on 9th International Conference on Transparent
- 24) *"Enhancement of light emission in silicon photonic crystal slabs"*,  
 L. C. Andreani, M. Belotti, M. Galli, D. Gerace, M. Liscidini, M. Patrini, A. Politi, A. Irrera, **M. Miritello**, F. Priolo, Y. Chen;  
 Conference on Lasers and Electro-Optics/Quantum Electronics and Laser Science Conference and Photonic Applications Systems Technologies, paper QWD1 (2007).  
 ISBN: 1557528349  
 DOI: 10.1109/QELS.2007.4431802
- 25) *"Synthesis and luminescence properties of erbium silicate thin films"*  
**M. Miritello**, R. Lo Savio, F. Iacona, G. Franzò, C. Bongiorno, and F. Priolo;  
 Mat. Sci. Eng. B **146**, 29 (2008);  
 DOI: 10.1016/j.mseb.2007.07.041
- 26) *"Erbium doped materials for a Si-based microphotronics"*  
 F. Priolo, G. Franzò, F. Iacona, A. Irrera, R. Lo Savio, **M. Miritello**, E. Pecora;  
 Solid State Phenomena **131-133**, 563 (2008);  
 DOI: 10.4028/www.scientific.net/SSP.131-133.563
- 27) *"Silicon nanocrystals: structural and optical properties and device applications"*  
 F. Iacona, G. Franzò, A. Irrera, S. Boninelli, **M. Miritello**, and F. Priolo;  
 Silicon Nanophotonics: basic principles, present status and perspectives, Chapter X, edited by L. Khriachtchev (August 2008);  
 Publisher: World Scientific Publishing Co., Singapore.
- 28) *"Efficient Light Emission from Erbium Doped Si Nanoclusters and Erbium Silicates"*  
**M. Miritello**, R. Lo Savio, A. Irrera, F. Iacona, G. Franzò, M. Galli, M. Belotti, L.C. Andreani, and F. Priolo;  
 214th ECS Meeting Abstracts, pag. 2156 (2008)
- 29) *"The influence of stoichiometry on the structural stability and on the optical emission of erbium silicate thin films"*  
 R. Lo Savio, **M. Miritello**, A. M. Piro, F. Priolo, and F. Iacona;  
 Appl. Phys. Lett. **93**, 021919 (2008);  
 DOI: 10.1063/1.2957034
- 30) *"Thermal evolution of Er silicate thin films grown by rf magnetron sputtering"*  
 R. Lo Savio, **M. Miritello**, F. Iacona, A. M. Piro, M. G. Grimaldi, and F. Priolo;  
 J. Phys.-Condens. Matter **20**, 454218 (2008);  
 DOI: 10.1088/0953-8984/20/45/454218

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- 31) *“Microstructural evolution of SiO<sub>x</sub> films prepared by different methods and its effect on the luminescence of Si nanoclusters”*  
 G. Franzò, **M. Miritello**, S. Boninelli, R. Lo Savio, M. G. Grimaldi, F. Priolo, F. Iacona, G. Nicotra, C. Spinella, and S. Coffa;  
 J. Appl. Phys. **104**, 094306 (2008);  
 Publisher: Amer. Inst. Physics, Melville, NY (USA); 6 November 2008.  
 DOI: 10.1063/1.3006735
- 32) *“Structural and optical properties of Si nanocrystals: implications for light emitting devices fabrication”*  
 A. Irrera, G. Franzò, **M. Miritello**, R. Lo Savio, S. Boninelli, F. Priolo, F. Iacona, G. Nicotra, C. Bongiorno, C. Spinella, and S. Coffa;  
 Proceeding of Group IV Photonics, 5th IEEE International Conference, pag. 38-40 (2008).  
 DOI: 10.1109/GROUP4.2008.4638089
- 33) *“Influence of stoichiometry on the structural and optical properties of erbium silicate”*  
 R. Lo Savio, **M. Miritello**, F. Iacona, G. Franzò, A. M. Piro, and F. Priolo;  
 Proceeding of Group IV Photonics, 5th IEEE International Conference, pag. 21-23 (2008).  
 DOI: 10.1109/GROUP4.2008.4638083
- 34) *“Er<sup>3+</sup> excitation and up-conversion processes in Y<sub>2-x</sub>Er<sub>x</sub>Si<sub>2</sub>O<sub>7</sub> films for planar optical amplifiers”*  
**M. Miritello**, R. Lo Savio, P. Cardile and F. Priolo;  
 6th IEEE International Conference on Group IV Photonics, pag. 61 (2009).  
 ISSN : 1949-2081 - E-ISBN : 978-1-4244-4403-8 - Print ISBN: 978-1-4244-4402-1  
 INSPEC Accession Number: 10978660  
 DOI: 10.1109/GROUP4.2009.5338288
- 35) *“Modification of erbium radiative lifetime in silicon-on-insulator slot waveguides”*  
 C. Creatore, L. C. Andreani, **M. Miritello**, R. Lo Savio, and F. Priolo;  
 Appl. Phys. Lett. **94**, 103112 (2009);  
 DOI: 10.1063/1.3098072
- 36) *“Er-based materials for Si microphotronics”*  
 F. Iacona, G. Franzò, **M. Miritello**, R. Lo Savio, E. Pecora, A. Irrera, and F. Priolo;  
 Opt. Mater. **31**, 1269 (2009);  
 DOI: 10.1016/j.optmat.2008.10.002
- 37) *“New approaches for enhancing light emission from Er-based materials and devices”*  
 A. Irrera, M. Galli, **M. Miritello**, R. Lo Savio, F. Iacona, G. Franzò, A. Canino, A. M. Piro, M. Belotti, D. Gerace, A. Politi, M. Liscidini, M. Patrini, D. Sanfilippo, P.G. Fallica, L. C. Andreani and F. Priolo;  
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 DOI: 10.1016/j.physe.2008.08.050
- 38) *“Theoretical and experimental investigation of radiative decay rates in active slot waveguides”*  
 C. Creatore, L. C. Andreani, M. Galli, **M. Miritello**, R. Lo Savio, and F. Priolo;  
 J. Opt. A: Pure Appl. Opt. **11**, 114011 (2009);  
 DOI: 10.1088/1464-4258/11/11/114011
- 39) *“Concentration dependence of the Er<sup>3+</sup> visible and infrared luminescence in Y<sub>2-x</sub>Er<sub>x</sub>O<sub>3</sub> thin films on Si”*  
 R. Lo Savio, **M. Miritello**, P. Cardile, and F. Priolo;  
 J. Appl. Phys. **106**, 043512 (2009);  
 DOI: 10.1063/1.3195077
- 40) *“Light absorption in silicon at the nanoscale”*  
 S. Mirabella, R. Agosta, G. Franzò, I. Crupi, **M. Miritello**, R. Lo Savio, M. A. Di Stefano, S. Di Marco, F. Simone, and A. Terrasi;  
 J. Appl. Phys. **106**, 103505 (2009).  
 DOI: 10.1063/1.3259430

- 41) "Enhanced down-conversion of photons emitted by photoexcited  $Er_xY_{2-x}Si_2O_7$  films grown on silicon"  
**M. Miritello**, R. Lo Savio, P. Cardile, and F. Priolo;  
 Phys. Rev. B **81**, 041411(R) (2010).  
 DOI: 10.1103/PhysRevB.81.041411
- 42) "Structural properties of annealed  $SiO_x$ "  
 G. Nicotra, C. Bongiorno, **M. Miritello**, F. Priolo, C. Spinella;  
 J. Phys.: Conference Series **209**, 012042 (2010).
- 43) "Influence of the matrix properties on the performances of Er-doped Si nanoclusters light emitting devices"  
 A. Irrera, F. Iacona, G. Franzò, **M. Miritello**, R. Lo Savio, M. E. Castagna, S. Coffa, and F. Priolo;  
 J. Appl. Phys. **107**, 054302 (2010).  
 DOI: 10.1063/1.3319581
- 44) "Si:O alloys for photovoltaics: Optical and electrical properties from quantum dots to thin films"  
 S. Mirabella, G. Di Martino, I. Crupi, S. Gibilisco, **M. Miritello**, R. Lo Savio, F. Simone, A. Terrasi, and F. Priolo;  
 218th ECS Meeting Abstracts, pag.1636 (2010)
- 45) "As doping of Si-based low-dimensional systems"  
 F. Ruffino, M. Tomasello, **M. Miritello**, G. Nicotra, C. Spinella, and M. G. Grimaldi;  
 Appl. Phys. Lett. **96**, 093116 (2010).  
 DOI: 10.1063/1.3353987
- 46) "Local Order and Crystallization of Laser Quenched and Ion Implanted Amorphous  $Ge_{1-x}Te_x$  Thin Films"  
 E. Carria, A. M. Mio, **M. Miritello**, S. Gibilisco, R. De Bastiani, A. R. Pennisi, C. Bongiorno, M. G. Grimaldi, and E. Rimini;  
 Electrochem. Solid State Lett. **13**, H137 (2010).
- 47) "Light absorption and electrical transport in Si:O alloys for photovoltaics"  
 S. Mirabella, G. Di Martino, I. Crupi, S. Gibilisco, **M. Miritello**, R. Lo Savio, M. A. Di Stefano, S. Di Marco, F. Simone, F. Priolo;  
 J. Appl. Phys. **108**, 093507 (2010).  
 DOI: [10.1063/1.3503852](https://doi.org/10.1063/1.3503852)
- 48) "Local order and crystallization of laser quenched and ion implanted amorphous  $Ge_{1-x}Te_x$  thin films"  
 E. Carria, R. De Bastiani, S. Gibilisco, A. M. Mio, **M. Miritello**, A. R. Pennisi, C. Bongiorno, M. G. Grimaldi, E. Rimini;  
 Mat. Res. Soc. Symp. Proc. **1251**, H02-08 (2010).
- 49) "Crystallization of ion amorphized  $Ge_2Sb_2Te_5$  in nano-structured thin films"  
 A. M. Mio, E. Carria, R. De Bastiani, **M. Miritello**, C. Bongiorno, G. D'Arrigo, C. Spinella, M. G. Grimaldi, E. Rimini;  
 Mat. Res. Soc. Symp. Proc. **1251**, H02-03 (2010).
- 50) "Tuning the Crystallization Temperature of Amorphous  $Ge_2Sb_2Te_5$  by O and Si Recoil Implantation"  
 E. Carria, A. M. Mio, S. Gibilisco, **M. Miritello**, M. G. Grimaldi, E. Rimini;  
 Electrochem. Solid State Lett. **14** (3), H124-H127 (2011).  
 DOI: 10.1149/1.3527941.
- 51) "Analyses of the As doping of  $SiO_2/Si/SiO_2$  nanostructures"  
 F. Ruffino, M. V. Tomasello, **M. Miritello**, R. De Bastiani, G. Nicotra, C. Spinella, M. G. Grimaldi;  
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- 52) “Optical properties of silicon rich oxides”  
C. Summonte, E. Centurioni, M. Canino, M. Allegranza, A. De Salvo, A. Terrasi, S. Mirabella, S. Di Marco, **M. Miritello**, R. Lo Savio, F. Simone, R. Agosta;  
Phys. Status Solidi C **8**, 996 (2011).  
DOI: 10.1002/pssc.201000413.
- 53) “The role of the surfaces in the photon absorption in Ge nanoclusters embedded in silica”  
S. Cosentino, S. Mirabella, **M. Miritello**, G. Nicotra, R. Lo Savio, F. Simone, C. Spinella, A. Terrasi;  
Nanoscale Res. Lett. **6**, 135 (2011).  
DOI: 10.1186/1556-276X-6-135.
- 54) “Nucleation and grain growth in as deposited and ion implanted GeTe thin films”  
A. M. Mio, E. Carria, G. D’Arrigo, S. Gibilisco, **M. Miritello**, M. G. Grimaldi, E. Rimini;  
J. Non-Cryst. Solids **357**, 2197–2201 (2011).  
DOI: 10.1016/j.jnoncrysol.2011.02.042.
- 55) “High-efficiency silicon-compatible photodetectors based on Ge quantum dots”  
S. Cosentino, L. Pei, T. L. Son, S. Lee, D. Paine, A. Zaslavsky, D. Pacifici, S. Mirabella, M. Miritello, I. Crupi, and A. Terrasi;  
Appl. Phys. Lett. **98**, 221107 (2011).  
DOI: 10.1063/1.3597360.
- 56) “Ion irradiation on Phase Change Materials”  
E. Rimini, E. Carria, A. M. Mio, **M. Miritello**, S. Gibilisco, C. Bongiorno, G. D’Arrigo, C. Spinella, F. D’Acapito, M. G. Grimaldi;  
Mat. Res. Soc. Symp. Proc. **1354**, (2011).
- 57) “Energy transfer and enhanced 1.54  $\mu\text{m}$  emission in Erbium-Ytterbium disilicate thin films”  
**M. Miritello**, P. Cardile, R. Lo Savio, and F. Priolo;  
Opt. Express **19**, 20761 (2011).  
DOI: 10.1364/OE.19.020761.
- 58) “Polymorphism of amorphous  $\text{Ge}_2\text{Sb}_2\text{Te}_5$  probed by EXAFS and Raman Spectroscopy”  
E. Carria, A. M. Mio, S. Gibilisco, **M. Miritello**, F. D’Acapito, M. G. Grimaldi and E. Rimini;  
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DOI: 10.1149/2.019112esl
- 59) “Crystallization of primed amorphous  $\text{Ge}_2\text{Sb}_2\text{Te}_5$  studied by Transmission Electron Microscopy”  
E. Carria, A. M. Mio, G. G. Scapellato, **M. Miritello**, C. Bongiorno, M. G. Grimaldi and E. Rimini;  
E/PCOS Proceeding pag. 370 (2012).
- 60) “A combined ion implantation/ nanosecond laser irradiation approach towards Si nanostructures doping”  
F. Ruffino, L. Romano, E. Carria, **M. Miritello**, M. G. Grimaldi, V. Privitera, F. Marabelli;  
J. Nanotechnology **2012**, 635705 (2012).  
DOI: 10.1155/2012/635705.
- 61) “ $\text{Eu}^{3+}$  reduction and efficient light emission in  $\text{Eu}_2\text{O}_3$  films deposited on Si substrates”  
G. Bellocchi, G. Franzò, F. Iacona, S. Boninelli, **M. Miritello**, T. Cesca, F. Priolo;  
Opt. Express **20**, 5501 (2012).  
DOI: 10.1364/OE.20.005501.
- 62) “Amorphous-Crystal Phase Transitions in  $\text{Ge}_x\text{Te}_{1-x}$  Alloys”  
E. Carria, A. M. Mio, S. Gibilisco, **M. Miritello**, C. Bongiorno, M. G. Grimaldi, E. Rimini;  
J. Electrochem. Soc. **159**, H130-H139 (2012)  
DOI: 10.1149/2.048202jes.
- 63) “Nanoporosity induced by ion implantation in deposited amorphous Ge thin films”  
L. Romano, G. Impellizzeri, L. Bosco, F. Ruffino, **M. Miritello**, and M. G. Grimaldi;  
J. Appl. Phys. **111**, 113515 (2012).  
DOI: 10.1063/1.4725427.

- 64) "Energy transfer mechanisms in Er-Yb-Y disilicate thin films"  
P. Cardile, **M. Miritello**, and F. Priolo;  
Appl. Phys. Lett. **100**, 251913 (2012).  
DOI: 10.1063/1.4730434.
- 65) "Fast, high-efficiency Germanium quantum dot photodetectors"  
P. Liu, T. Son Le, S. Lee, D. Paine, A. Zaslavsky, D. Pacifici, S. Cosentino, S. Mirabella, **M. Miritello**, I. Crupi, A. Terrasi;  
IEEE Lester Eastman Conference on High Performance Devices (LEC), pag. 1 (2012)  
E-ISBN: 978-1-4673-2300-0 - Print ISBN: 978-1-4673-2298-0  
INSPEC Accession Number: 13246571  
DOI: 10.1109/lec.2012.6410978
- 66) "Synthesis and characterization of light emitting  $\text{Eu}_2\text{O}_3$  films on Si substrates"  
G. Bellocchi, G. Franzò, F. Iacona, S. Boninelli, **M. Miritello**, F. Priolo;  
J. Lumines. **132**, 3133 (2012).  
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Firma

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