

Maria Antonietta Vincenti, Ph.D.

Ricercatrice

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Cittadinanza: Italiana, USA

Data di nascita: 2 Settembre 1982

Titoli di Studio

Politecnico di Bari - Bari

Dottorato in Ingegneria Elettronica, Maggio 2006 - Giugno 2009

Tesi: "Optical Nanosensors: from periodic structures to plasmonic devices"

Relatori: Prof. A. D'Orazio (Politecnico di Bari), Dr. Michael Scalora (US Army)

Politecnico di Bari - Bari

Laurea in Ingegneria Elettronica, Settembre 2001 – Dicembre 2005

Voto: 110/110 e lode

Tesi: "Re-multiplexer for MPEG2/ASI numeric data for DVB applications"

Relatori: Prof. A. D'Orazio (Politecnico di Bari), Marco Fiore (Elettronika S.R.L.)

Esperienze Professionali

Ricercatore, Marzo 2017 – in corso

Dipartimento di Ingegneria dell'Informazione - Università di Brescia

Via Branze 38, 25123 Brescia

Research Scientist, Agosto 2016 – Marzo 2017

AEgis Technologies Inc. – Huntsville, AL - USA

Research Associate, Novembre 2012 – Febbraio 2017

The National Academies – National Research Council at US ARMY – AMRDEC

Research Scientist, Ottobre 2009 – Ottobre 2012

AEgis Technologies Inc. – Huntsville, AL - USA

Assistente di Ricerca, Luglio 2009 – Settembre 2009
Politecnico di Bari, Via Orabona 4, 70125 – Bari

Research Fellow, March 2007 – September 2009
US ARMY - Charles M. Bowden Laboratory – Redstone Arsenal, AL - USA

Ingegnere Elettronico, Luglio 2005 – Luglio 2006
Elektronika S.R.L., s.s. 96 Km 113 Z.I. – 70027 Palo del Colle (BA)

Parametri Bibliometrici e Pubblicazioni

- **Citazioni** 1268; **h-index** 23 (Google Scholar aggiornato al 30 Maggio 2017)
 - **153 Articoli** in riviste e conferenze internazionali peer-reviewed
 - **3 Capitoli di Libro**
 - **1 Brevetto USA**
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Premi e Fellowships

- Vincitrice del Programma per Giovani Ricercatori "Rita Levi Montalcini" (bando anno 2014) con il progetto: *"Linear and Nonlinear Dynamics of plasma resonant materials"*
- Vincitrice della fellowship del National Research Council of the National Academy of Sciences (2012 – 2017) con il progetto: *"Linear and nonlinear electrodynamics in epsilon-near-zero metamaterials"*
- Vincitrice di due premi AEGIS Technologies IR&D:
All-optical wideband plasmonic beam steering (2011, Internal R&D award)
Hydrogen sensor (2011, Internal R&D award)
- Vincitrice di cinque contratti finanziati dall' US Department of Defense (DoD) con AEGIS Technologies:
Defense Advanced Research Projects Agency (DARPA) (2009, Contract no. W31P4Q-11-C-0237 phase I, II and second phase II): *Photonic Band Gap Structures for Solar Energy Generation*
US Air Force (2010, Contract no. FA8650-11-M-5150): *Plasmonic beamsteering*
US Army (2016, A2-6238 Topic: A090A-T002 Awarded, Second phase II, awaiting contract): *Nonlinear plasmonics*

US Army (2016, A2-6252 Topic: SB092-002 Awarded, Second phase II, *awaiting contract*): *Photonic Band Gap Structures for Solar Energy Generation*

- Vincitrice di quattro contratti per ricerca di base finanziati dall' US ARMY - ITCA

US Army ITCA Grant for Research Activity (2008, Contract no. W911NF-09-1-0077): *Harmonic Generation from Metallic Substrates with Sub-wavelength Apertures: Symmetric Propagator and Calculation of Energy Conversion Efficiencies by Means of 2D-FDTD*

US Army ITCA Grant for Research Activity (2008, Contract no. W911NF-08-1-0085): *Loss Compensation in metallo-dielectric structures in negative refraction and super-resolving regimes*

US Army ITCA Grant for Research Activity (2007, Contract no. W911NF-07-1-0567): *Analysis and Design of a Palladium based Hydrogen Leak Detection Sensor*

US Army ITCA Grant for Research Activity (2007, Contract no. N62558-07-P-0065): *Experimental and theoretical investigations on linear and nonlinear interactions in transparent metals, for applications to super-resolution and super-guiding*

- Vincitrice del "Bando borse di ricerca all'estero finanziate dalla Regione Puglia" (2008): *Metal-Dielectric Structure and Super-resolution regime, a path to loss compensation*
 - Vincitrice della borsa di studio per il dottorato di ricerca in Ingegneria Elettronica - XXI ciclo (2006)
-

Qualifiche, Affiliazioni e Attività Professionali

- Correlatrice per undici studenti di laurea quinquennale (vecchio ordinamento) e laurea magistrale in Ingegneria Elettronica presso il Politecnico di Bari.
- Correlatrice per due studenti di laurea triennale in Ingegneria Elettronica presso il Politecnico di Bari.
- Esercitatrice per i corsi di Campi Elettromagnetici e Microonde presso il Politecnico di Bari
- Membro della Optical Society of America, Sigma Xi, SPIE e IEEE
- Revisore per le seguenti riviste internazionali: Optics Letters, Optics Express, Journal of Optical Society of America B, Applied Optics, Journal of European Optical Society, Progress in electromagnetic research, Optics

Communications, Journal of Optics, ACS Applied Materials and Interfaces, Journal of Applied Physics, ACS Photonics, Scientific Reports

- Membro del comitato organizzatore per il workshop: "Linear and Nonlinear Optical Interactions in Metamaterials and Plasmonic Nanostructures", Huntsville – AL, June 21-22 (2012)
 - Membro del comitato tecnico per la conferenza CLEO/QELS 2014, sessione "Fundamental Science 03 Metamaterials and Complex Media", San Jose, CA – June 8-13 (2014)
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Altri Titoli di Studio

Sustainable Energy Conversion and Storage Certificate

Luglio 2011- Dicembre 2011

Stanford University – Stanford Center for Professional Development

Photovoltaics; Energy Storage; Hydrogen Economy; Fuel Cells – Hydrogen utilization

Winter College on Optics in Environmental Science, Febbraio 2009

Abdus Salam International Centre for Theoretical Physics – Trieste, Italy

Distributed European Doctoral School on Metamaterials, Ottobre 2007

Universita' di Roma Tre – Rome, Italy

V SIEM PhD School on Ultra Wide Band Systems, Settembre 2006

Universita' degli Studi di Genova, Italy

RF Power Amplifiers: linear and nonlinear design techniques, Giugno 2006

ST Microelectronics e Politecnico di Bari – Bari, Italy

Telecom services based on wireless networks, Giugno 2006

MAC&NIL S.r.l e Politecnico di Bari – Bari, Italy

Remote Sensing: technologies for earth observation, Giugno 2006

Planetek Italia S.r.l e Politecnico di Bari – Bari, Italy

Lista delle pubblicazioni

Articoli in riviste internazionali peer-reviewed

- [J64] H. Chen, V. Corbolioiu, A. S. Solntsev, D.-Y. Choi, M. A Vincenti, D. de Ceglia, C. de Angelis, Y. Lu and D. N. Neshev, "Enhanced second-harmonic generation from two-dimensional MoSe₂ on a silicon waveguide," *Light: Science and Applications* 6, e17060 (2017).
- [J63] M. A. Vincenti, D. de Ceglia, C. De Angelis, and M. Scalora, "Surface-plasmon excitation of second-harmonic light: emission and absorption," *J. Opt. Soc. Am. B* 34, 633-641 (2017).
- [J62] D. de Ceglia, M. A. Vincenti, N. Akozbek, M. J. Bloemer, and M. Scalora, "Nested plasmonic resonances: extraordinary enhancement of linear and nonlinear interactions", *Optics Express* 25, 3980-3990 (2017).
- [J61] D. de Ceglia, M. A. Vincenti and M. Scalora, "On the origin of third harmonic light from hybrid metal-dielectric nanoantennas", *Journal of Optics* 18, 115002 (2016).
- [J60] M. Grande, G. V. Bianco, M. A. Vincenti, D. de Ceglia, P. Capezzuto, V. Petruzzelli, M. Scalora, G. Bruno, and A. D'Orazio, "Optically transparent microwave screens based on engineered graphene layers", *Optics Express* 24, 22788-22795 (2016).
- [J59] M. A. Vincenti, D. de Ceglia, M. Scalora, "Anomalous nonlinear absorption in epsilon-near-zero materials: Optical limiting and all-optical control", *Optics Letters* 41, 3611-3614 (2016).
- [J58] D. de Ceglia, M. A. Vincenti, M. Grande, G. V. Bianco, G. Bruno, A. D'Orazio, M. Scalora, "Tuning infrared guided-mode resonances with graphene", *J. Opt. Soc. Am. B* 33, 426-433 (2016).
- [J57] M. Grande, G. V. Bianco, M. A. Vincenti, D. de Ceglia, P. Capezzuto, M. Scalora, A. D'Orazio, G. Bruno, "Optically transparent microwave polarizer based on quasi-metallic graphene", *Scientific Reports* 5, 17083 (2015).
- [J56] M. Scalora, M. A. Vincenti, D. de Ceglia, C. M. Cojocar, M. Grande, and J. W. Haus, "Nonlinear Duffing oscillator model for third harmonic generation", *J. Opt. Soc. Am. B* 32, 2129-2138 (2015) .
- [J55] M. Grande, M.A. Vincenti, T. Stomeo, G. V. Bianco, D. de Ceglia, N. Aközbe, V. Petruzzelli, G. Bruno, M. De Vittorio, M. Scalora, A. D'Orazio, "Graphene-based perfect optical absorbers harnessing guided mode resonances", *Optics Express* 23, 1032-21042 (2015).
- [J54] T. S. Luk, D. de Ceglia, S. Liu, G. A. Keeler, R. P. Prasankumar, M. A. Vincenti, M. Scalora, M. B. Sinclair and S. Campione, "Enhanced third harmonic generation from the epsilon-near-zero modes of ultrathin films," *Applied Physics Letters* 106, 151103 (2015).
- [J53] D. de Ceglia, M. A. Vincenti, C. De Angelis, A. Locatelli, J.W. Haus, M. Scalora, "Role of antenna modes and field enhancement in second harmonic generation from dipole nanoantennas," *Opt. Express* 23, 1715-1729 (2015).
- [J52] M. Grande, M.A. Vincenti, T. Stomeo, G. V. Bianco, D. de Ceglia, N. Aközbe, V. Petruzzelli, G. Bruno, M. De Vittorio, M. Scalora, A. D'Orazio, "Graphene-based absorber exploiting guided mode resonances in one-dimensional gratings", *Optics Express* 22, 31511 (2014).

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- [J51] S. Campione, D. de Ceglia, C. Guclu, M.A. Vincenti, M. Scalora, and F. Capolino, "Fano collective resonance as complex mode in a two-dimensional planar metasurface of plasmonic nanoparticles," *Appl. Phys. Lett.*, 105, 191107 (2014).
- [J50] M. Scalora, M. A. Vincenti, D. de Ceglia, J. W. Haus, "Nonlocal and quantum-tunneling contributions to harmonic generation in nanostructures: Electron-cloud-screening effects," *Phys. Rev. A* 90, 013831 (2014).
- [J49] M. A. Vincenti, D. de Ceglia, M. Grande, A. D'Orazio, and M. Scalora, "Third-harmonic generation in one-dimensional photonic crystal with graphene-based defect," *Phys. Rev. B* 89, 165139 (2014).
- [J48] Y. Wu, N. Dong, S. Fu, J. D. Fowlkes, L. Kondic, M. A. Vincenti, D. de Ceglia, and P. D. Rack, "Directed Liquid Phase Assembly of Highly Ordered Metallic Nanoparticle Arrays", *ACS Appl. Mater. Interfaces* 6 (8), 5835-5843 (2014).
- [J47] J. W. Haus, D. de Ceglia, M. A. Vincenti, M. Scalora, "Nonlinear quantum tunneling effects in nanoplasmonic environments: two-photon absorption and harmonic generation", *Journal of Optical Society of America B* 31, A13-A19 (2014).
- [J46] D. de Ceglia, M. A. Vincenti, S. Campione, F. Capolino, J. W. Haus, M. Scalora, "Second-harmonic double-resonance cones in dispersive hyperbolic metamaterials", *Physical Review B* 89, 075123 (2014).
- [J45] J. W. Haus, D. de Ceglia, M. A. Vincenti, M. Scalora, "Quantum conductivity for metal-insulator-metal nanostructures", *Journal of Optical Society of America B* 31, 259-269 (2014).
- [J44] M. A. Vincenti, D. de Ceglia, M. Scalora, "Nonlinear Dynamics in Low Permittivity Media: The Impact of Losses", *Optics Express* 21, 29949-29954 (2013).
- [J43] M. A. Vincenti, D. de Ceglia, J. W. Haus, M. Scalora, "Harmonic generation in multiresonant plasma films", *Physical Review A* 88, 043812 (2013).
- [J42] M. Scalora, M. A. Vincenti, D. de Ceglia, M. Grande, J. W. Haus, "Spontaneous and stimulated Raman scattering near metal nanostructures in the ultrafast, high-intensity regime", *Journal of Optical Society of America B* 30, 2634-2639 (2013).
- [J41] M. A. Vincenti, D. de Ceglia, M. Grande, A. D'Orazio, and M. Scalora, "Nonlinear control of absorption in one-dimensional photonic crystal with graphene-based defect," *Optics Letters* 38, 3550-3553 (2013).
- [J40] M. Grande, T. Stomeo, G. V. Bianco, M. Vincenti, D. de Ceglia, V. Petruzzelli, G. Bruno, M. De Vittorio, M. Scalora, A. D'Orazio, "Fabrication of doubly resonant plasmonic nanopatch arrays on graphene", *Applied Physics Letters* 102, 231111 (2013).
- [J39] M. Vincenti, D. de Ceglia, M. Grande, A. D'Orazio, M. Scalora, "Tailoring absorption in metal gratings with ultra-thin bridges", *Plasmonics* 8, 1445-1456 (2013).
- [J38] M. Grande, G. V. Bianco, M. A. Vincenti, D. de Ceglia, V. Petruzzelli, M. Scalora, G. Bruno, A. D'Orazio, M. De Vittorio, T. Stomeo, "2D Plasmonic gold nanopatches for linear and nonlinear applications," *Microelectronic Engineering* 111, 234-237 (2013).
- [J37] D. de Ceglia, S. Campione, M. A. Vincenti, F. Capolino, M. Scalora, "Low-damping epsilon-near-zero slabs: Nonlinear and nonlocal optical properties," *Physical Review B* 87, 155140 (2013).
- [J36] S. Campione, D. de Ceglia, M. A. Vincenti, M. Scalora, F. Capolino, "Electric field enhancement in ϵ -near-zero slabs under TM-polarized oblique incidence," *Physical Review B* 87, 035120 (2013).

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- [J35] M. Grande, M. A. Vincenti, T. Stomeo, G. V. Bianco, D. de Ceglia, G. Morea, R. Marani, V. Marrocco, V. Petruzzelli, M. De Vittorio, G. Bruno, M. Scalora, A. D'Orazio, "Novel plasmonic bio-sensing system based on two-dimensional gold patch arrays for linear and nonlinear regimes," *Advances in Science and Technology* 81, 15-19 (2013).
- [J34] M. A. Vincenti, M. Grande, G. V. Bianco, D. de Ceglia, T. Stomeo, M. De Vittorio, V. Petruzzelli, G. Bruno, A. D'Orazio, M. Scalora, "Surface-enhanced Raman scattering at the plasmonic band edge of finite arrays of gold nanopatches", *Journal of Applied Physics* 113, 013103 (2013).
- [J33] M. A. Vincenti, S. Campione, D. de Ceglia, F. Capolino, M. Scalora, "Gain assisted harmonic generation in near-zero permittivity metamaterials made of plasmonic nanoshells", *New Journal of Physics* 14, 103016 (2012).
- [J32] M. Grande, G. V. Bianco, M. A. Vincenti, T. Stomeo, D. de Ceglia, M. De Vittorio, V. Petruzzelli, M. Scalora, G. Bruno, A. D'Orazio, "Experimental Surface-Enhanced Raman Scattering response of two-dimensional finite arrays of gold nanopatches", *Applied Physics Letters* 101, 111606 (2012).
- [J31] V. Roppo, M. A. Vincenti, D. de Ceglia, M. Scalora, "Deep-subwavelength waveguiding via inhomogeneous second-harmonic generation", *Optics Letters* 37, 3093-3095 (2012).
- [J30] M. Scalora, M. A. Vincenti, D. de Ceglia, M. Grande, J. W. Haus, "Raman scattering near metal nanostructures", *Journal of Optical Society of America B* 29, 2035-2045 (2012).
- [J29] N. Akozbek, N. Mattiucci, D. de Ceglia, R. Trimm, A. Alu', G. D'Aguanno, M. A. Vincenti, M. Scalora, and M. J. Bloemer, "Experimental demonstration of plasmonic Brewster angle extraordinary transmission through extreme subwavelength slit arrays in the microwave", *Physical Review B* 85, 205430 (2012).
- [J28] M. Scalora, M. A. Vincenti, D. de Ceglia, N. Akozbek, V. Roppo, M. J. Bloemer, J. H. Haus, "Dynamical Model of harmonic generation in centrosymmetric semiconductors at visible and UV wavelengths", *Physical Review A* 85, 053809 (2012).
- [J27] M. A. Vincenti, M. Grande, D. de Ceglia, T. Stomeo, V. Petruzzelli, M. De Vittorio, M. Scalora, and A. D'Orazio, "Color control through plasmonic metal grating", *Applied Physics Letters* 100, 201107 (2012).
- [J26] D. de Ceglia, M.A. Vincenti and M. Scalora, "Wideband Plasmonic Beam Steering in Metal Gratings", *Optics Letters* 37, 271 (2012).
- [J25] M.A. Vincenti, D. de Ceglia, A. Ciattoni and M. Scalora, "Singularity-driven second and third harmonic generation at epsilon -near-zero crossing points", *Physical Review A* 84, 063826 (2011).
- [J24] M. A. Vincenti, D. de Ceglia and M. Scalora, "Nonlinear response of GaAs gratings in the extraordinary transmission regime", *Optics Letters* 36, 4674 (2011).
- [J23] V. Roppo, N. Akozbek, D. De Ceglia, M. A. Vincenti, and M. Scalora, "Harmonic generation and energy transport in dielectric and semiconductors at visible and UV wavelengths: the case of GaP", *Journal of Optical Society of America B* 28, 2888 (2011).
- [J22] M. Grande, R. Marani, F. Portincasa, G. Morea, V. Petruzzelli, A. D'Orazio, V. Marrocco, D. de Ceglia, M.A. Vincenti, "Asymmetric plasmonic grating for optical sensing of thin layers of organic materials," *Sensors and Actuators B: Chemical* 160, 1056 (2011).

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- [J21] M. Grande, M. A. Vincenti, T. Stomeo, G. Morea, R. Marani, V. Marrocco, V. Petruzzelli, A. D'Orazio, R. Cingolani, M. De Vittorio, D. de Ceglia, and M. Scalora, "Experimental demonstration of a novel bio sensing platform via plasmonic band gap formation in gold nano patch arrays," *Opt. Express* 19, 21385-21395 (2011). Paper selected also for *Virtual Journal for Biomedical Optics* (2011).
- [J20] D. de Ceglia, M. A. Vincenti, M. Scalora, N. Akozbek, and M. J. Bloemer, "Plasmonic band edge effects on the transmission properties of metal gratings", *AIP Advances* 1, 032151 (2011).
- [J19] V. Roppo, J. Foreman, N. Akozbek, M.A. Vincenti, and M. Scalora, "Third Harmonic Generation at 223nm in the Metallic Regime of GaP", *Applied Physics Letters* 98, 111105 (2011).
- [J18] R. Marani, M. Grande, V. Marrocco, A. D'Orazio, V. Petruzzelli, M. A. Vincenti, and D. de Ceglia, "Plasmonic Band Gap formation in two-dimensional periodic arrangements of gold patches with sub-wavelength gaps", *Optics Letters* 36, 903 (2011).
- [J17] D. de Ceglia, G. D'Aguanno, N. Mattiucci, M. A. Vincenti, and M. Scalora, "Enhanced Second Harmonic generation from resonant GaAs gratings", *Optics Letters* 36, 704 (2011)
- [J16] M. A. Vincenti, D. de Ceglia, V. Roppo, and M. Scalora, "Harmonic generation in metallic, GaAs-filled nanocavities in the enhanced transmission regime at visible and UV wavelengths", *Optics Express* 19, 2064 (2011).
- [J15] G.. D'Aguanno, N. Mattiucci, M. J. Bloemer, M. A. Vincenti, D. de Ceglia, A. Alu', "Transmission Resonances in Plasmonic Metallic Gratings", *Journal of Optical Society of America B* 28, 253 (2011).
- [J14] M. Scalora, M. A. Vincenti, D. de Ceglia, V. Roppo, M. Centini, N. Akozbek, M. J. Bloemer, "Second and Third Harmonic Generation in Metal-Based Nanostructures", *Physical Review A* 82, 043828 (2010).
- [J13] V. Marrocco, M. A. Vincenti, M. Grande, G. Calo', V. Petruzzelli, F. Prudenzano, A. D'Orazio, "Field localization in Bragg waveguide assisted by metal layers", *Journal of Optical Society of America B* 27, no.4 pp. 703-707 (2010).
- [J12] M. A. Vincenti, D. de Ceglia, M. Buncick, N. Akozbek, M. J. Bloemer, and M. Scalora, "Extraordinary transmission in the ultraviolet range from subwavelength slits on semiconductors", *Journal of Applied Physics* 107, 053101 (2010).
- [J11] M. A. Vincenti, D. de Ceglia, V. Rondinone, A. Ladisa, A. D'Orazio, M. J. Bloemer, M. Scalora, "Loss compensation in Metal-Dielectric structures in negative refraction and super-resolving regimes", *Physical Review A* 80, 053807, (2009).
- [J10] M.A. Vincenti, A. D'Orazio, M. G. Cappeddu, N. Akozbek, M.J. Bloemer, M. Scalora, "Semiconductor-based superlens for subwavelength resolution below the diffraction limit at extreme ultraviolet frequencies", *Journal of Applied Physics* 105, no.9 103103 (2009).
- [J9] M.A. Vincenti, A. D'Orazio, M. Buncick, N. Akozbek, M.J. Bloemer, M. Scalora, "Beam Steering from Resonant Subwavelength Slits Filled with a Nonlinear Material", *Journal of Optical Society of America B* 26, no.2 pp. 301-307 (2009).
- [J8] M. A. Vincenti, V. Petruzzelli, A. D'Orazio, F. Prudenzano, M. J. Bloemer, N. Akozbek, and M. Scalora, "Second harmonic generation from nanoslits in metal substrates: applications to palladium-based H₂ sensor", *Journal of Nanophotonics* 2, 021851 (2008) (INVITED PAPER).
- [J7] M. A. Vincenti, A. D'Orazio, M. Scalora, "Correlated enhancement of linear and nonlinear optical response of nanoslits", *SPIE Newsroom – Nanotechnology*

- Technical Papers, <http://spie.org/x25043.xml?highlight=x2400>, DOI: 10.1117/2.1200805.1145 (2008) (INVITED PAPER).
- [J6] V. Roppo, M. Centini, D. de Ceglia, M.A. Vincenti, J.W. Haus, N. Akozbek, M.J. Bloemer, M. Scalora, "Anomalous Momentum States, Non-Specular Reflections and Negative Refraction of Phase-Locked, Second Harmonic Pulses", *Metamaterials* 2, pp. 135-144 (2008) (INVITED PAPER).
- [J5] D. de Ceglia, M.A. Vincenti, M.G. Cappeddu, M. Centini, N. Akozbek, A. D'Orazio, J.W. Haus, M.J. Bloemer, M. Scalora, "Tailoring Metallodielectric Structures for Super Resolution and Superguiding Applications in the Visible and Near IR Ranges", *Physical Review A* 77, no.3, 033848 (2008).
- [J4] M.A. Vincenti, S. Trevisi, M. De Sario, V. Petruzzelli, A. D'Orazio, F. Prudenzano, N. Cioffi, D. de Ceglia, M. Scalora, "Theoretical Analysis of a Palladium-Based Metallo-Dielectric Photonic Band Gap Structure for Applications to H₂ sensors", *Journal of Applied Physics* 103, no. 6 064507 (2007). Paper selected also for *Virtual Journal of Biological Physics Research* 14, Issue 8 (2007).
- [J3] M.A. Vincenti, A. D'Orazio, M. De Sario, V. Petruzzelli, F. Prudenzano, D. de Ceglia, M. Scalora, "Fabry-Perot Microcavity Sensor for H₂-Breath-Test Analysis", *Journal of Applied Physics* 102, no.7, 074501 (2007).
- [J2] D. Biallo, M. De Sario, A. D'Orazio, V. Marrocco, V. Petruzzelli, M. A. Vincenti, F. Prudenzano, T. Stomeo, M. Grande, G. Visimberga, R. Cingolani, M. De Vittorio, "High sensitivity photonic crystal pressure sensor", *Journal of European Optical Society – RP* 2, 07017 (2007).
- [J1] D. de Ceglia, M. De Sario, A. D'Orazio, V. Petruzzelli, F. Prudenzano, M. Scalora, M.A. Vincenti, "Wide band optical field concentrator for low-index core propagation", *Journal of European Optical Society – RP* 1, 06023 (2006).

Contributi a conferenze internazionali peer-reviewed

- [C89] H. Chen, V. Corboliou, A. S. Solntsev, D. Choi, M. A. Vincenti, D. Ceglia, C. Angelis, Y. Lu, and D. N. Neshev, "Enhanced second-harmonic generation from two-dimensional MoSe₂ by waveguide integration," in *Conference on Lasers and Electro-Optics*, OSA Technical Digest, paper FM2F.4, 2017.
- [C88] M. A. Vincenti, D. de Ceglia, and M. Scalora, "Absorption of harmonic light in plasmonic nanostructures", *Proceedings of SPIE Optics and Photonics - Paper 9921-2B*, San Diego, CA August 28 - September 1 2016.
- [C87] D. de Ceglia, M. A. Vincenti, M. Grande, G. V. Bianco, G. Bruno, A. D'Orazio, and M. Scalora, "Tuning Fano resonances of graphene-based gratings", *Proceedings of SPIE Optics and Photonics - Paper 9921-2Y*, San Diego, CA August 28 - September 1 2016.
- [C86] M. Grande, G. V. Bianco, M. A. Vincenti, T. Stomeo, D. de Ceglia, P. Capezzuto, V. Petruzzelli, M. De Vittorio, M. Scalora, G. Bruno, A. D'Orazio, "Graphene-based absorbers: from microwave to visible frequencies", *EMN Meeting on Photonics 2016*, September 19-23, Barcelona (Spain) 2016. [INVITED]
- [C85] M. Grande, A. Quattieri, M. A. Vincenti, D. de Ceglia, V. Petruzzelli, M. Scalora, A. D'Orazio, M. De Vittorio and T. Stomeo, "Guided mode resonances in nano-imprinted dielectric pillars", *Micro and Nano Engineering 2016*, 19-23 September, Wien (Austria) 2016.

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- [C84] M. Grande, G. V. Bianco, M. A. Vincenti, D. de Ceglia, P. Capezzuto, V. Petruzzelli, M. Scalora, G. Bruno, A. D'Orazio, "Graphene-based devices: a platform for high frequency applications?", ICTON2016, July 10-14, Trento (Italy) 2016. [INVITED]
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