CURRICULUM VITAE ET STUDIORUM DI GIUSEPPE CASTALDI

- Giuseppe Castaldi è nato a Benevento il 12/07/1968.

- Nel luglio 1993, ha conseguito la Laurea in Ingegneria Elettronica presso l'Università degli Studi di Napoli Federico II con lode discutendo una tesi in Campi Elettromagnetici dal titolo “Identificazione di sistemi con misure quadratiche: applicazione alla caratterizzazione di antenne" (relatore il prof. Ovidio M. Bucci).

- Nel novembre, 1995 ha vinto il concorso di ammissione al corso di Dottorato di Ricerca in Ingegneria dell'Informazione, Elettromagnetismo Applicato e Telecomunicazioni, XI Ciclo, con Sede Amministrativa presso l'Università degli Studi di Salerno, ed ha conseguito il titolo di Dottore di Ricerca nel febbraio 1999 discutendo una tesi in Elettromagnetismo Applicato sul tema “Diagnostica di grandi schiere di antenne tramite rete neurale di Vidyasagar", (relatore il prof. Innocenzo M. Pinto).

- Nel settembre 1999, ha vinto il concorso per un assegno di ricerca annuale presso l’Università degli Studi del Sannio in Benevento nell'ambito dell'attività del "Gruppo Nazionale per la Difesa dai rischi Chimico-Industriali ed ecologici" del CNR per ricerche relative alla “Sintesi di radiatori per l’ottenimento di specifiche distribuzioni di intensità in mezzi dissipativi con geometria assegnata, per le applicazioni industriali delle microonde" (referente: prof. Innocenzo M. Pinto).

- Nel gennaio 2001, ha ottenuto un contratto di ricerca annuale a livello post-doc presso la Netherlands Organization for Applied Scientific Research (TNO) – Physics Electronic Laboratory, The Hague, Olanda, sul tema “Millimetre-Wave and Microwave Components Design Framework for Ground and Space Multimedia Network” (referente dr. Giampiero Gerini).

- Nel giugno 2003, ha ottenuto un contratto (sei mesi) di prestazione d’opera per attività nell’ambito della CRdC “Nuove tecnologie per le attività produttive”, presso il Dipartimento di Ingegneria dell’Università degli Studi del Sannio (referente il prof. Innocenzo M. Pinto).

- Dal gennaio del 2004 è Ricercatore Universitario nel settore disciplinare ING-INF/02 “Campi elettromagnetici” presso la Facoltà di Ingegneria dell'Università degli Studi del Sannio.

- Dal gennaio 2007 è Ricercatore Confermato.

Alta formazione

Giuseppe Castaldi ha frequentato le seguenti scuole di alta formazione:

- "Wavelet Methods in Analysis and Simulation" presso il Laboratorio A.S.C.I.-C.N.R.S., Universite' Paris Sud, Orsay Cedex, Francia, 29/6-10/7 1998.

- "Summer School on Microwave Superconductivity" presso ASI (Advanced Study Institute) Millau, France (1999).

CURRICULUM DELL'ATTIVITA' DIDATTICA di GIUSEPPE CASTALDI

Ha svolto con continuità attività di supporto didattico a tutti corsi del settore scientifico disciplinare ING-INF/02 per il CdL e CdLS, in Ingegneria delle Telecomunicazioni, e per CdL e CdLM, in Ingegneria Elettronica per l'Automazione e le Telecomunicazioni, presso la Facoltà (ora Dipartimento) di Ingegneria dell'Università del Sannio. E' stato relatore o correlatore di 28 tesi di Laurea, ed ha contribuito alla formazione scientifica di 3 dottorandi dell'Università del Sannio.

- Dall'a.a. 2004/2005 è membro delle Commissioni per l'esame dei piani di studio del CdL e del CdLS in Ingegneria delle Telecomunicazioni.
- Nell' a.a. 2002-2003 è stato professore a contratto di "Microonde II" presso la Facoltà di Ingegneria dell'Università degli Studi del Sannio ed ha presieduto le relative commissioni esaminatrici.
- Nell'a.a. 2003/2004 ha tenuto parte del corso di "Onde Elettromagnetiche" nell'ambito del Master in "Tecnologie di archiviazione e gestione di dati satellitari massivi per l'osservazione della Terra" (PON 2000-2006) organizzato dall'Università del Sannio in collaborazione con il PSTSA.
- Nell'a.a. 2003/2004, ha partecipato al progetto sull'incentivazione didattica per il CdL in Ingegneria delle Telecomunicazioni.
- Nell'a.a. 2003-2004 ha tenuto i corsi di "Antenne" (C.d.L. in Ingegneria delle Telecomunicazioni) e "Microonde II" (CDLS in Ingegneria delle Telecomunicazioni) ed ha presieduto le relative commissioni esaminatrici.
- Nell'a.a. 2004-2005 ha tenuto i corsi di "Antenne" (C.d.L. in Ingegneria delle Telecomunicazioni), "Microonde II" e "Antenne II" (CDLS in Ingegneria delle Telecomunicazioni) ed ha presieduto le relative commissioni esaminatrici.
- Nell'a.a. 2005-2006 ha tenuto i corsi di "Antenne" (C.d.L. in Ingegneria delle Telecomunicazioni), "Microonde II" e "Antenne II" (CDLS in Ingegneria delle Telecomunicazioni) ed ha presieduto le relative commissioni esaminatrici.
- Nell'a.a. 2006-2007 ha tenuto i corsi di "Antenne" (C.d.L. in Ingegneria delle Telecomunicazioni), e "Microonde II" (CDLS in Ingegneria delle Telecomunicazioni) ed ha presieduto le relative commissioni esaminatrici.
- Nell'a.a. 2007-2008 ha tenuto i corsi di "Antenne" del C.d.L. in Ingegneria delle Telecomunicazioni, e "Microonde II" del CDLS in Ingegneria delle Telecomunicazioni ed ha presieduto le relative commissioni esaminatrici.
- Nell'a.a. 2008-2009 ha tenuto i corsi di "Antenne" del C.d.L. in Ingegneria delle Telecomunicazioni, e "Microonde II" del CDLS in Ingegneria delle Telecomunicazioni ed ha presieduto le relative commissioni esaminatrici.
- Nell'a.a. 2009-2010 ha tenuto il corso di "Microonde II" del CDLS in Ingegneria delle Telecomunicazioni ed ha presieduto le relative commissioni esaminatrici.
- Nell'a.a. 2011-2012 ha tenuto il corso di "Complementi di Microonde e Antenne" del CDLM in Ingegneria Elettronica ed ha presieduto le relative commissioni esaminatrici.
- Nell'a.a. 2013-2014 ha tenuto il corso di "Complementi di Microonde e Antenne" del CDLM in Ingegneria Elettronica per l'Automazione e le Telecomunicazioni ed ha presieduto le relative commissioni esaminatrici.
- Nell'a.a. 2014-2015 ha tenuto il corso di "Complementi di Microonde e Antenne" del CDLM in Ingegneria Elettronica per l'Automazione e le Telecomunicazioni ed ha presieduto le relative commissioni esaminatrici.
- Nell'a.a. 2014-2015 ha tenuto il precorso di "Matematica " dei CDL in Ingegneria ed ha presieduto le relative commissioni esaminatrici.

SINOSSI DELL'ATTIVITA' SCIENTIFICA di GIUSEPPE CASTALDI

L'attività scientifica del dott. Giuseppe Castaldi a partire dal dottorato si è svolta nell'ambito del WavesGroup dell'Università del Sannio coordinato dal prof. Innocenzo M. Pinto, ed ha riguardato i seguenti temi principali: caratterizzazione, nel regime d'onda, di problemi di scattering che esibiscono caos nel limite ottico, analisi delle proprietà radiative di schiere di antenne con geometrie regolari, ma non-periodiche (quasi-cristalline), sintesi equi-ripple di trasformatori stepped multibanda in linea di trasmissione, ottimizzazione degli specchi dielettrici per il Laser Interferometer Gravitational wave Observatory (LIGO), e sintesi di intricanti metamateriali, usando l'ottica di trasformazione.

Parte consistente di tali ricerche è stata svolta nell'ambito di collaborazioni con Università e Centri di ricerca italiani e stranieri, tra cui Università di Harvard (Cambridge, Massachusetts, USA), l'Università di Boston (USA), l'Università di Pennsylvania (USA), il TNO (Den Hag, NL), la LIGO Science Collaboration (MIT-Caltech) e l'Università di Salerno.

Le ricerche svolte rientrano in programmi finanziati dall'Ateneo (FAR), dal MIUR (PRIN-2006 "Studio e realizzazione di metamateriali per applicazioni all'elettronica ed alle telecomunicazioni"), dall'INFN (progetto COAT, 2005 -2006, progetto MIDI-BRUT "MIscele DIelettrice a Basso RUmore Termico") , dal PON (progetto pegaso, 2012-2014, "Aree scientifico-tecnologiche generatrici di processi di trasformazione del sistema produttivo e creatrici di nuovi settori – Azione II: Interventi di sostegno alla ricerca industriale"; progetto TELEMACO, 2014-2015, "Tecnologie abilitanti e sistemi innovativi a scansione elettronica del fascio in banda millimetrica e centimetrica per applicazioni radar a bordo di velivoli), dal POR CAMPANIA (WISH 2013-2014, Contratto di programma regionale per lo sviluppo innovativo delle filiere manifatturiere strategiche in Campania"), dei quali Giuseppe Castaldi è stato co-proponente.

Giuseppe Castaldi ha svolto attività di revisore per la IEEE (Transactions on Antennas & Propagation, Antennas & Propagation Magazine, Transactions on Vehicular Technology).

Giuseppe Castaldi è membro della Società Italiana di Elettromagnetismo (SIEm), è associato all'Istituto Nazionale di Fisica Nucleare (INFN), e (dall'Agosto 2005) fa parte del Coating Workgroup della LIGO Science Collaboration (LSC) e del progetto giapponese Kamioka Gravitational Wave Detector (KAGRA)

Giuseppe Castaldi ha fatto parte del comitato di organizzazione del Workshop on

"Metamaterials and special materials for electromagnetic applications and TLC", April 16, Firenze, 2003,

"ELECTROMAGNETICS IN A COMPLEX WORLD Challenges and Perspectives",University of Sannio, Benevento, Febbraio 20-21, 2003,

"4 National Workshop on metamaterials and special materials for electromagnetic applications and tlc", Naples, Italy December 18- 19, 2008.

"XVIII Riunione Nazionale di Elettromagnetismo", Benevento, Italy, September 6-10, 2010

CURRICULUM VITAE ET STUDIORUM GIUSEPPE CASTALDI

• Giuseppe Castaldi was born in Benevento on 12/07/1968.

• In July 1993, he graduated in Electronic Engineering from the University of Naples Federico II summa cum laude with a thesis in Electromagnetic Fields titled "Identificazione di sistemi con misure quadratiche: applicazione alla caratterizzazione di antenne " (supervisor Prof. . Ovid M. Bucci).

• In November, 1995 he won the competition for admission to the PhD in Engineering, Applied Electromagnetics and Telecommunications, XI cycle, with Administrative Office at the University of Salerno, and holds a Ph.D. Research in February 1999 with a thesis in Applied Electromagnetics on " Diagnostica di grandi schiere di antenne tramite rete neurale di Vidyasagar" (supervisor prof. Innocent M. Pinto).

• In September 1999, he won the competition for an annual research fellow from the University of Sannio in Benevento as part of the "Gruppo Nazionale per la Difesa dai rischi Chimico-Industriali ed ecologici" del CNR for the research in " Sintesi di radiatori per l'ottenimento di specifiche distribuzioni di intensità in mezzi dissipativi con geometria assegnata, per le applicazioni industriali delle microonde " (reference: prof. Innocent M. Pinto).

• In January 2001, he has won a annual research fellow post-doc at the Netherlands Organization for Applied Scientific Research (TNO) - Electronic Physics Laboratory, The Hague, Netherlands, on "Millimetre-Wave and Microwave Components Design Framework for Ground and Space Multimedia Network "(contact person dr. Giampiero Gerini).

• From January 2004, he is Assistant Professor in the sector ING-INF / 02 "Electromagnetic fields" from the Faculty of Engineering of the University of Sannio.

• From October 2015 he is Associate Professor in the sector ING-INF / 02 "Electromagnetic fields" in the Department of Engineering of the University of Sannio.

High formation

Giuseppe Castaldi has attended the following schools of higher education:

• "Wavelet Methods in Analysis and Simulation" at the Laboratory ASCI-CNRS, Universite 'Paris Sud, Orsay Cedex, France, 29 / 6-10 / 7 1998.

• "Summer School on Microwave Superconductivity" at ASI (Advanced Study Institute) Millau, France (1999).

CURRICULUM OF 'EDUCATION GIUSEPPE CASTALDI

• In 'a.a. 2002-03 Giuseppe Castaldi was professor of "Microwave II" at the Faculty of Engineering, University of Sannio and chaired its exam boards.

• In the academic year. 2003-2004 held courses "Antenna" (CdL in Telecommunications Engineering) and "Microwave II" (CDLS in Telecommunications Engineering) and has chaired its exam boards.

• In the academic year. 2004-2005 held courses "Antenna" (degree in Telecommunications Engineering), "Microwave II" and "Antenna II" (CDLS in Telecommunications Engineering) and has chaired its exam boards.

• In the academic year. 2005-2006 held courses "Antenna" (degree in Telecommunications Engineering), "Microwave II" and "Antenna II" (CDLS in Telecommunications Engineering) and has chaired its exam boards.

• In the academic year. 2006-2007 he held courses "Antenna" (degree in Telecommunications Engineering) and "Microwave II" (CDLS in Telecommunications Engineering) and has chaired its exam boards.

• In the academic year. 2007-2008 held courses "Antenna" of the CDL in Telecommunications Engineering, and "Microwave II" of CDLS in Telecommunications Engineering and has chaired its exam boards.

• In the academic year. 2008-2009 held courses "Antenna" of the CDL in Telecommunications Engineering, and "Microwave II" of CDLS in Telecommunications Engineering and has chaired its exam boards.

• In the academic year. 2009-2010 he held the course "Microwave II" of CDLS in Telecommunications Engineering and has chaired its exam boards.

• In the academic year. 2011-2012 he held the course "Complements of Microwave and Antenna" of CDLS in Electronic Engineering and has chaired its exam boards.

• In the academic year. 2013-2014 he held the course "Complements of Microwave and Antenna" of CDLM in Electronic Engineering for Automation and Telecommunications and has chaired its exam boards.

• In the academic year. 2014-2015 he held the course "Complements of Microwave and Antenna" of CDLM in Electronic Engineering for Automation and Telecommunications and has chaired its exam boards.

• In the academic year. 2014-2015 held ahead of "Mathematics" of CDL Engineering and chaired the relevant examination boards.

Organizing activities and educational support

• Giuseppe Castaldi has played continuously support activities in all courses in the scientific sector ING-INF/ 02 for the CdL and CdLS in Telecommunications Engineering, and was co-rapporteur or 26 Thesis.

• In the academic year. 2003/2004 has held the course "Electromagnetic Waves" in the Master in "Technologies of storage and management of massive satellite data for earth observation" (PON 2000-2006) organized by the University of Sannio in collaboration with PSTSA.

• From the year. 2004/2005 is a member of the Committees for the examination of the curriculum of the CdL and the CdLS in Telecommunications Engineering.

• In the academic year. 2003/2004, he planned on encouraging education for the degree in Telecommunications Engineering.

SYNOPSIS OF 'SCIENTIFIC GIUSEPPE CASTALDI

The scientific work of Dr. Giuseppe Castaldi has covered the following main topics: characterization of the regime of wave of scattering problems that exhibit chaos in the optical limit, analysis of the radiative properties of antenna arrays with regular geometries, but non-periodic (almost -periodic), synthesis equi-ripple of transformers stepped multiband transmission line, optimization of dielectric mirrors for the Laser Interferometer Gravitational wave Observatory (LIGO) and synthesis of exotic metamaterials, using the transformation optics.

The research conducted covered by programs funded by the university (FAR), the Ministry of Education (PRIN-2006 "Study and realization of metamaterials for applications to electronics and telecommunications"), and INFN (project COAT, 2005 -2006) Giuseppe Castaldi of which was co-proponent.

Substantial part of this research was conducted as part of collaborations with universities and research centers Italian and foreign, including the University of Boston (USA), the University of Pennsylvania (USA), TNO (Den Hag, NL), the LIGO Science Collaboration (MIT-Caltech) and the University of Salerno.

Giuseppe Castaldi has worked as a reviewer for the IEEE (Transactions on Antennas & Propagation, Antennas & Propagation Magazine, Transactions on Vehicular Technology). It was also part of the organizing committee of the "3rd Workshop on Metamaterials and Special Materials for Electromagnetic Applications and TLC" (Rome, 30 to 31 March 2006).

Giuseppe Castaldi is a member of the Italian Society of Electromagnetism (SIEm), it is associated with the National Institute of Nuclear Physics (INFN), and (as of August 2005) is part of the Coating Workgroup of LIGO Science Collaboration (LSC).

Giuseppe Castaldi has been part of the organizing committees of the Workshop on "Metamaterials and special materials for electromagnetic applications and TLC", April 16, Florence, 2003, and the Workshop on "ELECTROMAGNETICS IN A COMPLEX WORLD Challenges and Perspectives", University of Sannio, Benevento, 20 to 21 February, 2003

LISTE DELLE PUBBLICAZIONI DI GIUSEPPE CASTALDI - RIVISTE INTERNAZIONALI

J1. Savo, S., Zhou, Y., **Castaldi**, G., Moccia, M., Galdi, V., Ramanathan S., Sato, Y.,"Reconfigurable anisotropy and functional transformations with VO2-based metamaterial electric circuits", (2015) Physical Review B - Condensed Matter and Materials Physics, 91 (13).

J2. Savoia, S., **Castaldi**, G., Galdi, V., Alù, A., Engheta, N.,"PT -symmetry-induced wave confinement and guiding in ε -near-zero metamaterials", (2015) Physical Review B - Condensed Matter and Materials Physics, 91 (11).

J3. Principe, M., **Castaldi**, G., Consales, M., Cusano, A., Galdi, V."Supersymmetry-inspired non-Hermitian optical couplers", (2015) Scientific Reports, .

J4. Savoia, S., **Castaldi**, G., Galdi, V., Alù, A., Engheta, N.,"Tunneling of obliquely incident waves through PT -symmetric epsilon-near-zero bilayers", (2014) Physical Review B - Condensed Matter and Materials Physics, 89 (8).

J5. Moccia, M., **Castaldi**, G., Galdi, V., Alù, A., Engheta, N.,"Enhanced Faraday rotation via resonant tunnelling in tri-layers containing magneto-optical metals", (2014) Journal of Physics D: Applied Physics, 47 (2).

J6. Moccia, M., **Castaldi**, G., Savo, S., Sato, Y., Galdi, V.,"Independent manipulation of heat and electrical current via bifunctional metamaterials", (2014) Physical Review X, 4 (2).

J7. Moccia, M., **Castaldi**, G., Galdi, V., Alù, A., Engheta, N.,"Optical isolation via unidirectional resonant photon tunneling", (2014) Journal of Applied Physics, 115 (4).

J8. Silva, A., Engheta, N., Monticone, F., Alu, A., **Castaldi**, G., Galdi, V.,"Doing math with light", (2014) Optics and Photonics News, 25 (12), p. 52.

J9. Silva, A., Monticone, F., **Castaldi**, G., Galdi, V., Alù, A., Engheta, N.,"Performing mathematical operations with metamaterials", (2014) Science, 343 (6167), pp. 160-163.

J10. **Castaldi**, G., Galdi, V., Alù, A., Engheta, N.,"Electromagnetic funneling through a single-negative slab paired with a double-positive transformation slab", (2013) COMPEL - The International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 32 (6).

J11. Savoia, S., **Castaldi**, G., Galdi, V.,"Optical nonlocality in multilayered hyperbolic metamaterials based on Thue-Morse superlattices", (2013) Physical Review B - Condensed Matter and Materials Physics, 87 (23).

J12. **Castaldi**, G., Savoia, S., Galdi, V., Alù, A., Engheta, N.,"PT metamaterials via complex-coordinate transformation optics", (2013) Physical Review Letters, 110 (17).

J13. **Castaldi**, G., Savoia, S., Galdi, V., Alù, A., Engheta, N.,"Analytical study of subwavelength imaging by uniaxial epsilon-near-zero metamaterial slabs", (2012) Physical Review B - Condensed Matter and Materials Physics, 86 (11).

J14. **Castaldi**, G., Galdi, V., Pinto, I.M.,"Short-pulsed wavepacket propagation in ray-chaotic enclosures", (2012) IEEE Transactions on Antennas and Propagation, 60 (8), pp. 3827-3837.

J15. **Castaldi**, G., Galdi, V., Alù, A., Engheta, N.,"Nonlocal transformation optics", (2012) Physical Review Letters, 108 (6).

J16. **Castaldi**, G., Galdi, V., Alù, A., Engheta, N.,"Electromagnetic tunneling of obliquely incident waves through a single-negative slab paired with a double-positive uniaxial slab", (2011) Journal of the Optical Society of America B: Optical Physics, 28 (10), pp. 2362-2368.

J17. **Castaldi**, G., Gallina, I., Galdi, V., Alù, A., Engheta, N."Analytical study of spherical cloak/anti-cloak interactions", (2011) Wave Motion, 48 (6), pp. 455-467.

J18. Ricciardi, A., Pisco, M., Cutolo, A., Cusano, A., O'Faolain, L., Krauss, T.F., **Castaldi**, G., Galdi, V.,"Evidence of guided resonances in photonic quasicrystal slabs", (2011) Physical Review B - Condensed Matter and Materials Physics, 84 (8).

J19. **Castaldi**, G., Gallina, I., Galdi, V., Alù, A., Engheta, N.,"Electromagnetic tunneling through a single-negative slab paired with a double-positive bilayer", (2011) Physical Review B - Condensed Matter and Materials Physics, 83 (8).

J20. **Castaldi**, G., Gallina, I., Galdi, V., Alù, A., Engheta, N.,"Transformation-optics generalization of tunnelling effects in bi-layers made of paired pseudo-epsilon-negative/mu-negative media", (2011) Journal of Optics, 13 (2).

J21. Di Gennaro, E., Gallina, I., Andreone, A., **Castaldi**, G., Galdi, V.,"Experimental evidence of cut-wire-induced enhanced transmission of transverse-electric fields through sub-wavelength slits in a thin metallic screen", (2010) Optics Express, 18 (26), pp. 26769-26774.

J22. **Castaldi**, G., Gallina, I., Galdi, V., Alú, A., Engheta, N.,"Power scattering and absorption mediated by cloak/anti-cloak interactions: A transformation-optics route toward invisible sensors", (2010) Journal of the Optical Society of America B: Optical Physics, 27 (10), pp. 2132-2140.

J23. Pisco, M., Ricciardi, A., Gallina, I., **Castaldi**, G., Campopiano, S., Cutolo, A., Cusano, A., Galdi, V.,"Tuning efficiency and sensitivity of guided resonances in photonic crystals and quasicrystals: A comparative study", (2010) Optics Express, 18 (16), pp. 17280-17293.

J24. Gallina, I., **Castaldi**, G., Galdi, V., Di Gennaro, E., Andreone, A.,"Paired cut-wire arrays for enhanced transmission of transverse-electric fields through subwavelength slits in a thin metallic screen", (2010) IEEE Antennas and Wireless Propagation Letters, 9, pp. 641-644.

J25. Gallina, I., **Castaldi**, G., Galdi, V., Alù, A., Engheta, N.,"General class of metamaterial transformation slabs", (2010) Physical Review B - Condensed Matter and Materials Physics, 81 (12).

J26. Di Gennaro, E., Zannini, C., Savo, S., Andreone, A., Masullo, M.R., **Castaldi**, G., Gallina, I., Galdi, V.,"Hybrid photonic-bandgap accelerating cavities", (2009) New Journal of Physics, 11.

J27. Gallina, I., **Castaldi**, G., Galdi, V.,"Transformation optics-inspired metamaterial coatings for controlling the scattering response of wedge/corner-type structures", (2009) Microwave and Optical Technology Letters, 51 (11), pp. 2709-2712.

J28. Gallina, I., Ricciardi, A., Pisco, M., Campopiano, S., **Castaldi**, G., Cusano, A., Cutolo, A., Galdi, V.,"Parametric study of guided resonances in octagonal photonic quasicrystals", (2009) Microwave and Optical Technology Letters, 51 (11), pp. 2737-2740.

J29. **Castaldi**, G., Gallina, I., Galdi, V.,"Nearly perfect nonmagnetic invisibility cloaking: Analytic solutions and parametric studies", (2009) Physical Review B - Condensed Matter and Materials Physics, 80 (12).

J30. Ricciardi, A., Gallina, I., Campopiano, S., **Castaldi**, G., Pisco, M., Galdi, V., Cusano, A.,"Guided resonances In photonic quasicrystals", (2009) Optics Express, 17 (8), pp. 6335-6346.

J31. **Castaldi**, G., Galdi, V., Gerini, G.,"Evaluation of a neural-network-based adaptive beamforming scheme with magnitude-only constraints", (2009) Progress In Electromagnetics Research B, (11), pp. 1-14.

J32. **Castaldi**, G., Gallina, I., Galdi, V., Alù, A., Engheta, N.,"Cloak/anti-cloak interactions", (2009) Optics Express, 17 (5).

J33. Gallina, I., Pisco, M., Ricciardi, A., Campopiano, S., **Castaldi**, G., Cusano, A., Galdi, V.,"Guided resonances in photonic crystals with point-defected aperiodically-ordered supercells", (2009) Optics Express, 17 (22), pp. 19586-19598.

J34. **Castaldi**, G., Fiumara, V., Gallina, L.," An exact synthesis method for dual-band chebyshev impedance transformers", (2008) Progress in Electromagnetics Research, 86, pp. 305-319.

J35. Galdi, V., Pierro, V., **Castaldi**, G., Engheta, N.,"Genetically optimized metasurface Pairs for wideband out-of-phase mutual response", (2008) IEEE Antennas and Wireless Propagation Letters, 7, art. no. 2005739, pp. 788-791.

J36. Gallina, I., **Castaldi**, G., Galdi, V.,"Transformation media for thin planar retrodirective reflectors", (2008) IEEE Antennas and Wireless Propagation Letters, 7, art. no. 2003541, pp. 603-605.

J37. Gallina, I., **Castaldi**, G., Galdi, V.,"A higher-order optical transformation for nonmagnetic cloaking", (2008) Microwave and Optical Technology Letters, 50 (12), pp. 3186-3190.

J38. Di Gennaro, E., Savo, S., Andreone, A., Galdi, V., **Castaldi**, G., Pierro, V., Masullo, M.R.,"Mode confinement in photonic quasicrystal point-defect cavities for particle accelerators", (2008) Applied Physics Letters, 93 (16), art. no. 164102.

J39. **Castaldi**, G., Galdi, V., Pinto, I.M.,"A study of Ray-chaotic cylindrical scatterers", (2008) IEEE Transactions on Antennas and Propagation, 56 (8 II), pp. 2638-2648.

J40. Di Gennaro, E., Miletto, C., Savo, S., Andreone, A., Morello, D., Galdi, V., **Castaldi**, G., Pierro, V.,"Evidence of local effects in anomalous refraction and focusing properties of dodecagonal photonic quasicrystals", (2008) Physical Review B - Condensed Matter and Materials Physics, 77 (19).

J41. Di Gennaro, E., Morello, D., Miletto, C., Savo, S., Andreone, A., **Castaldi**, G., Galdi, V., Pierro, V.,"A parametric study of the lensing properties of dodecagonal photonic quasicrystals", (2008) Photonics and Nanostructures - Fundamentals and Applications, 6 (1), pp. 60-68.

J42. Pierro, V., Galdi, V., **Castaldi**, G., Pinto, I.M., Agresti, J., DeSalvo, R.,"Perspectives on beam-shaping optimization for thermal-noise reduction in advanced gravitational-wave interferometric detectors: Bounds, profiles, and critical parameters", (2007) Physical Review D - Particles, Fields, Gravitation and Cosmology, 76 (12).

J43. **Castaldi**, G., Galdi, V., Pierro, V., Pinto, I.M.,"Radiation from Fibonacci-type quasiperiodic arrays on dielectric substrates", (2007) Journal of Electromagnetic Waves and Applications, 21 (9), pp. 1231-1245.

J44. Galdi, V., **Castaldi**, G., Pierro, V., Pinto, I.M., Felsen, L.B.,"Scattering properties of one-dimensional aperiodically-ordered strip arrays based on two-symbol substitutional sequences", (2007) IEEE Transactions on Antennas and Propagation, 55 (6 I), pp. 1554-1563.

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