

KONSTANTINOS VALAGIANNOPOULOS *Curriculum Vitae*

SUMMARY

Name	DR. KONSTANTINOS VALAGIANNOPOULOS
Date of birth	6 TH OF MARCH 1982
Journal Publications	82 papers published in international scientific journals with referees.
Conference Papers	41 works presented in international conferences with referees.
Citations	>650 Citations in international academic journals (SCOPUS). >950 (SCHOLAR).
H-Index	16 (SCOPUS), 19 (SCHOLAR)

EDUCATION AND TRAINING

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| • Dates (from – to) | October 2004 – February 2009 |
| • University providing education | School of Electrical and Computer Engineering, NTUA, Greece. |
| • Title of qualification awarded | PH.D. IN ELECTROMAGNETIC THEORY |
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| • Dates (from – to) | October 1999 – July 2004 |
| • University providing education | School of Electrical and Computer Engineering, NTUA, Greece. |
| • Title of qualification awarded | DIPLOMA IN ELECTRICAL AND COMPUTER ENGINEERING, GRADE 9.14/10 (EXCELLENT) |

PROFESSIONAL EXPERIENCE

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| • Dates (from – to) | 1st August 2015– now |
| • Employer | Department of Physics, Nazarbayev University, Astana, Kazakhstan. |
| • Position held | ASSISTANT PROFESSOR |
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| • Dates (from – to) | 1st June 2014– 31st August 2015 |
| • Employer | Department of Electrical and Computer Engineering, University of Texas at Austin, Austin, USA. |
| • Position held | VISITING RESEARCH ASSOCIATE |
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| • Dates (from – to) | 1st October 2010 – 31st August 2015 |
| • Employer | School of Electrical Engineering, Aalto University, Helsinki, Finland. |
| • Position held | ACADEMY RESEARCH FELLOW |
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| • Dates (from – to) | 1st October 2004– 30th September 2010 |
| • Employer | AKTIS Education Center, Athens, Greece. |
| • Position held | TUTOR AND COURSE INSTRUCTOR |

HONORS AND AWARDS

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| 2017 | • OSA REVIEWER RECOGNITION |
| 2016 | • IEEE SENIOR MEMBER ELEVATION. |
| 2015 | • INAUGURAL 2015 JOURNAL OF OPTICS RESEARCH EXCELLENCE AWARD. |
| 2008 | • INTERNATIONAL CHORAFAS AWARD 2008 FOR THE BEST DOCTORAL THESIS ACROSS NTUA.
• THOMAIDES AWARD 2008 FOR THE BEST DOCTORAL THESIS ACROSS NTUA. |
| 2004 | • MMET*04 INTERNATIONAL CONFERENCE, HONORARY MENTION. |

FUNDING AND GRANTS

- 2017-2020 • CO-PI TO ORAU 4-YEAR GRANT, 400K USD. "STRUCTURED LIGHT FOR NONLINEAR AND TOPOLOGICAL PHOTONICS".
- 2016 • NU SOCIAL POLICY GRANT, 10K USD. "NEW APPLICATIONS OF AHARONOV-BOHM EFFECT AND PHOTONIC BI-LAYERS".
- 2015 • BRITISH COUNCIL (NEWTON-ALFARABI) INSTITUTIONAL LINKS GRANT, 10K USD. "DESIGNING ENERGY-EFFICIENT AND HIGHLY CONTROLLABLE PHOTONIC STRUCTURES".
- 2012-2015 • ACADEMY OF FINLAND POSTDOCTORAL GRANT, 300K USD. "SEMI-ANALYTICAL METHODS AND APPLICATIONS OF ELECTROMAGNETIC MODELING FOR ANISOTROPIC STRUCTURES".
- 2010-2012 • AALTO UNIVERSITY POSTDOCTORAL SCHOLARSHIP, 200K USD. "METAMATERIALS IN PHOTONICS".
- 2004 • EUGENIDES FOUNDATION GRANT FOR POSTGRADUATE STUDIES, 5K USD. "MODERN APPLICATIONS OF GREEN'S FUNCTIONS ON IONOSPHERIC PROPAGATION".

TEACHING EXPERIENCE

- Nazarbayev University (2015-now)
 - Instructor of record for the Courses Classical Electrodynamics I & II (PHYS361 & PHYS3162) for Physics Major students. Re-designing the course including Lecture Notes, Problem Sets and Mid/Final Exams. Enriching the content with state-of-the-art research topics (Metamaterials, Graphene, 2D Media).
 - Instructor of record for the Courses Physics I & II for Scientists and Engineers (PHYS161 & PHYS162) of the Undergraduate Program.
 - Recitation service for the Courses PHYS161 & PHYS162.
- Aalto University (2010-2015)
 - Instructor of record for the Course Analytical Techniques In Treating Electromagnetic Scattering (ANTITEMS, S-26.4000) of the Doctoral Program in Radio Science.
 - Teaching assistance for classes of electromagnetic fields and guided waves (S-26.2900) of the International Masters Program. Organizing the courses. Development of interactive fora and YouTube channels.
- NTUA (2004-2009)
 - Microwave laboratory class supervising.
- AKTIS Tuition Center (2004-2010)
 - Series of lectures on a great variety of subjects (Physics, Mathematics etc).

ADVISING AND MENTORING

- 2015-2017
 - External advisor to Mr. **Athanasios Papadimopoulos** from Aristotle University of Thessaloniki (AUTH) for his doctoral thesis on "*Graphene, Microstrips and Absorbers*". During October 2016, a research visit to NU has been performed and a manuscript entitled: "*Wide-angle absorption of visible light from simple bilayers*" has been published at Applied Optics.
 - Member of the committee examined the MSc Thesis of postgraduate student Mr. **Aidyn Shaikhov** of Physics Department (SST, NU) entitled: "*Deploying Nonlinear Circuits on Wireless Power Transmitters and Receivers*".
 - Advising of undergraduate student Mr. **Zhenisbek Tagay** of Physics Department (SST, NU) on a topic related to "*Metasurfaces from cylinders of Binary Metamaterials in Photonic Devices*". Aiming at submitting a manuscript to a high-impact journal during the academic year 2017-2018.
 - Mentoring of undergraduate student Mr. **Aivar Abrashuly** of Physics Department (SST, NU) on a topic related to "*Optimal Operation of Core-Shell Nano-Wires with Ordinary Media*". Aiming at submitting a manuscript to a high-impact journal during the academic year 2017-2018.
 - Mentoring of undergraduate student Mr. **Arsen Sheverdin** of Physics Department (SST, NU) on a topic related to "*Absorption and Scattering from Core-Shell Nano-Spherical Particles*". Aiming at submitting a manuscript to a high-impact journal within calendar year 2018.
 - Mentoring of undergraduate student Mr. **Adilkhan Sarsen** of Physics Department (SST, NU) on a topic related to "*Optical-Axis-Rotation-Driven Control of Reflection and Transmission*". Aiming at submitting a manuscript to a high-impact journal within calendar year 2018.
- 2014-2015
 - External advisor to Mr. **Mohammad Mirmoosa** research on "*Hyperbolic Media and Applications*". Article appeared in Journal of Applied Physics with the title: "*Hyperbolic-metamaterial antennas for broadband enhancement of dipole emission to free space*".

SERVICE

2018	TPC Member of 2018 Meta-Congress. Participation to the Technical Program Committee (TPC) for the 12th International Congress on Artificial Materials for Novel Wave Phenomena (Metamaterials 2018). It will be held in Espoo, Finland between 27 and 30 August 2018.
2016	TPC Member of 2016 Meta-Congress. Participation to the Technical Program Committee (TPC) for the 10th International Congress on Advanced Electromagnetic Materials in Microwaves and Optics (Metamaterials 2016). It was held in Chania, Greece between 17 and 22 September 2016.
2010-now	Reviewer to the following editions: Nature Publishing Group (Scientific Reports). Optical Society of America (JOSA B, Optics Express). Institute of Electrical and Electronics Engineers (IEEE T AP, IEEE AWPL). Institute of Physics (JOpt), Wiley Publications (Radio Science). Taylor & Francis (Journal of Modern Optics).
2015-now	Member to NU Library Committee.

INVITED TALKS

June 2017	Southampton, UK. University of Southampton , Department of Physics. <i>Analytical Methods to Optimize Incoherent Radiation Extraction.</i>
March 2017	Cambridge, Massachusetts, USA. Harvard University , Department of Physics. <i>From Metamaterials to Metastructures.</i>
June 2016	Austin, Texas, USA. University of Texas at Austin , Department of Electrical and Computer Engineering. <i>Maximizing Control of Layered Photonic Structures.</i>
November 2015	Brest, France. Telecom Bretagne. <i>Colloquium Talk.</i>
October 2015	Heraklion, Greece. Crete Center for Quantum Complexity and Nanotechnology. <i>Infinite-Power Wireless Devices.</i>
August 2015	Astana, Kazakhstan. Nazarbayev University , Department of Physics. <i>New Limits for Absorption and Radiation.</i>
June 2015	Thessaloniki, Greece. Aristotle University of Thessaloniki , Department of Electrical and Computer Engineering. <i>Using Physics for Optimal Design in Electromagnetics: A Case on Absorption.</i>
April 2015	Jeddah, Saudi Arabia. King Abdullah University of Science and Technology , Computer, Electrical and Mathematical Science and Engineering Division. <i>Colloquium Talk.</i>
March 2015	Tampere, Finland. Tampere University of Technology , Faculty of Engineering Sciences. <i>Colloquium Talk.</i>
March 2014	Shenzhen, China. Southern University of Science and Technology , Department of Materials Science and Engineering. <i>Colloquium Talk: Controlling the Electromagnetic Fields with Simple Structures.</i>
April 2013	Albuquerque, New Mexico, USA. University of New Mexico , Department of Electrical and Computer Engineering. <i>Colloquium Talk: Models and Semi-Analytical Approaches for Structures Controlling EM Fields.</i>

JOURNAL PUBLICATIONS

	2017
[J82]	A. N. Papadimopoulos, N. V. Kantartzis, N. L. Tsitsas, and C. A. Valagiannopoulos, Wide-angle absorption of visible light from simple bilayers, <i>Applied Optics</i> , vol. 56, 2017.
[J81]	C. A. Valagiannopoulos, M. Mattheakis, S. N. Shirodkar and E. Kaxiras, Manipulating polarized light with a planar slab of black phosphorus, <i>Journal of Physics Communications</i> , vol. 1, 2017.
[J80]	C. A. Valagiannopoulos and V. Kovanis, Judicious distribution of laser emitters to shape the desired far-field patterns, <i>Physical Review A</i> , vol. 95, 2017.
[J79]	A. D. Boardman, A. Alberucci, G. Assanto, V. Grimalsky, B. Kibler, J. McNiff, I. Nefedov, Y. Rapoport and C. A. Valagiannopoulos, Waves in hyperbolic and double negative metamaterials including roques and solitons, <i>Nanotechnology</i> , vol. 28, 2017.
[J78]	S. Savoia, C. A. Valagiannopoulos, F. Monticone, G. Castaldi, V. Galdi, and A. Alu, Magnified imaging based on non-Hermitian nonlocal cylindrical metasurfaces, <i>Physical Review B</i> , vol. 95, 2017.
[J77]	N. Tsitsas and C. A. Valagiannopoulos, Anomalous reflection of visible light by all-dielectric gradient metasurfaces, <i>Journal of the Optical Society of America B</i> , vol. 34, 2017.
[J76]	C. A. Valagiannopoulos, C. Simovski and S. Tretyakov, Breaking the Black-Body Limit with Resonant Surfaces, <i>EPJ Applied Metamaterials</i> , 2017.

[J75] C. A. Valagiannopoulos, N. Tsitsas, and A. Lakhtakia, Giant enhancement of the controllable in-plane anisotropy of biased isotropic noncentrosymmetric materials with epsilon-negative multilayers, *Journal of Applied Physics*, 2017.

2016

[J74] M. Mattheakis, C. A. Valagiannopoulos and E. Kaxiras, Epsilon-Near-Zero behavior from Plasmonic Dirac Point: theory and realization using two-dimensional materials, *Physical Review B*, 2016.

[J73] F. Monticone, C. A. Valagiannopoulos and A. Alu, Parity-time symmetric nonlocal metasurfaces: All-angle negative refraction and volumetric imaging, *Physical Review X*, 2016.

[J72] C. A. Valagiannopoulos and S. A. Tretyakov, Theoretical concepts of unlimited-power reflectors, absorbers, and emitters with conjugately matched layers, *Physical Review B*, vol. 94, 2016.

[J71] C. A. Valagiannopoulos, F. Monticone and A. Alu, PT-symmetric planar devices for field transformation and imaging, *Journal of Optics*, vol. 18, 2016.

[J70] C. A. Valagiannopoulos, N. L. Tsitsas and A. H. Sihvola, "Unlocking" the Ground: increasing the detectability of buried objects by depositing passive superstrates, *IEEE Transactions on Geoscience and Remote Sensing*, vol. 54, 2016.

[J69] C. A. Valagiannopoulos, Optical PT-symmetric counterparts of ordinary metals, *IEEE Journal of Selected Topics in Quantum Electronics*, vol. 22, 2016.

[J68] A. N. Papadimitopoulos, N. L. Tsitsas, C. A. Valagiannopoulos, N. V. Kantartzis, C. S. Antonopoulos, and T. D. Tsiboukis, Consistent integral equation modeling of cloaking planar microstrip antennas, *IEEE Transactions on Magnetics*, vol. 52, 2016.

2015

[J67] C. A. Valagiannopoulos, A. N. Askarpour, A. Alu, Aharonov-Bohm detection of two-dimensional magnetostatic cloaks, *Physical Review B*, vol. 92, 2015.

[J66] C. A. Valagiannopoulos, J. Vehmas, C. R. Simovski, S. A. Tretyakov, S. I. Maslovski, Electromagnetic energy sink, *Physical Review B*, vol. 92, 2015.

[J65] C. A. Valagiannopoulos and A. Alu, The role of reactive energy in the radiation by a dipole antenna, *IEEE Transactions on Antennas & Propagation*, vol. 63, 2015.

[J64] C. A. Valagiannopoulos, Controlling reflection and transmission with a single layer, *IEEE Antennas and Propagation Magazine*, vol. 55, 2015.

[J63] C. A. Valagiannopoulos, A. Tukiainen, T. Aho, T. Niemi, M. Guina, S. A. Tretyakov and C. R. Simovski, Perfect magnetic mirror and simple perfect absorber in the visible spectrum, *Physical Review B*, vol. 91, 2015.

[J62] C. A. Valagiannopoulos, N. L. Tsitsas, A. Lakhtakia, and A. Burger, Pockels cover for switchable control of the reflection from a grounded, isotropic, lossy dielectric slab, *Journal of Applied Physics*, vol. 117, 2015.

2014

[J61] C. A. Valagiannopoulos, M. S. Mirmoosa, I. S. Nefedov, S. A. Tretyakov and C. R. Simovski, Hyperbolic-metamaterial antennas for broadband enhancement of dipole emission to free space, *Journal of Applied Physics*, vol. 116, 2014.

[J60] N. L. Tsitsas, C. A. Valagiannopoulos, and A. I. Nosich, Scattering and absorption of a complex source point beam by a grounded lossy dielectric slab with a superstrate, *Journal of Optics*, vol. 16, 2014.

[J59] C. A. Valagiannopoulos, N. L. Tsitsas and A. H. Sihvola, Hiding a bump on a PEC plane by using an isotropic lossless dielectric layer, *IEEE Transactions on Antennas & Propagation*, vol. 62, 2014.

[J58] C. A. Valagiannopoulos and S. A. Tretyakov, Symmetric absorbers realized as gratings of PEC cylinders covered by ordinary dielectrics, *IEEE Transactions on Antennas & Propagation*, vol. 62, 2014.

[J57] C. A. Valagiannopoulos and A. H. Sihvola, Mimicking the PEMC scattering mechanisms with suitable bi-isotropic media, *Taylor & Francis Electromagnetics*, vol. 34, 2014.

[J56] C. A. Valagiannopoulos, How non-reciprocal is an effective permittivity matrix?, *Microwave and Optical Technology Letters*, vol. 56, 2014.

[J55] C. A. Valagiannopoulos and S. A. Tretyakov, Emulating hyperbolic-media properties with conventional structures, *New Journal of Physics*, vol. 16, 2014.

[J54] M. Katsigiannis and C. A. Valagiannopoulos, Demand curves and operator strategies in the Finnish mobile broadband market. *International Journal of Business Data Communications and Networking*, vol. 10, 2014.

[J53] C. A. Valagiannopoulos, P. Alitalo and S. A. Tretyakov, On the minimal scattering response of PEC cylinders in a dielectric cloak, *IEEE Letters on Antennas and Wireless Propagation*, vol. 13, 2014.

2013

[J52] I. S. Nefedov, C. A. Valagiannopoulos and L. A. Melnikov, Perfect absorption in graphene multilayers, *Journal of Optics*, vol. 3, 2013.

[J51] D. Zarbouti, G. Tsoulos, G. Athanasiadou, and C. A. Valagiannopoulos, The effective radiation pattern concept for realistic performance estimation of LTE wireless systems, *International Journal of Antennas and Propagation*, vol. 2013, 2013.

[J50] I. S. Nefedov, C. A. Valagiannopoulos, S. M. Hashemi and E. I. Nefedov, Total absorption in asymmetric hyperbolic media, *Scientific Reports*, 2013.

[J49] C. A. Valagiannopoulos and I. S. Nefedov, Increasing the electromagnetic attenuation below a quasi-matched surface with use of passive hyperbolic metamaterials, *Photonics and Nanostructures: Fundamentals and Applications*, vol. 11, 2013.

[J48] C. A. Valagiannopoulos and A. H. Sihvola, Low-pass features of optical nano-filters constituted by simple layered structures,

Microwave and Optical Technology Letters, vol. 55, 2013.

[J47] C. A. Valagiannopoulos and A. H. Sihvola, Improving the electrostatic field concentration in a negative-permittivity wedge with a grounded "bowtie" configuration, Radio Science, vol. 48, 2013.

[J46] C. A. Valagiannopoulos, A miniature inhomogeneous cloaking following a power law, International Journal of Applied Electromagnetics and Mechanics, vol. 42, 2013.

[J45] P. Alitalo, C. A. Valagiannopoulos and A. Culhaoglu, Design and free-space measurements of a simple electromagnetic cloak for conducting cylindrical objects, AIP Advances, vol. 3, 2013.

[J44] C. A. Valagiannopoulos, Electromagnetic absorption of Gaussian beams by a grounded layered structure, Radioengineering, vol. 22, 2013.

[J43] C. A. Valagiannopoulos and P. Alitalo, Coupling between transmission-line networks and homogeneous media: a semi-analytical approach, International Journal of RF and Microwave Computer-Aided Engineering, vol. 23, 2013.

[J42] C. A. Valagiannopoulos, Isolating the singular term of the Green's function in the vicinity of the corner formulated by two intersecting waveguides, Microwave and Optical Technology Letters, vol. 55, 2013.

2012

[J41] C. A. Valagiannopoulos and C. R. Simovski, An iterative semi-analytical technique solving the boundary value problem of transmission through an anisotropic wedge, Radio Science, vol. 47, 2012.

[J40] C. A. Valagiannopoulos and N. L. Tsitsas, Field enhancement in a grounded dielectric slab by using a single superstrate layer, International Journal of Antennas and Propagation, vol. 2012, 2012.

[J39] C. A. Valagiannopoulos and A. Sihvola, On modeling perfectly conducting sharp corners with magnetically inert dielectrics of extreme complex permittivities, IEEE Transactions on Antennas & Propagation, vol. 60, 2012.

[J38] C. A. Valagiannopoulos, On jamming unfriendly submarine communication by radiating across an island in the vicinity of the opponent's coastline, Taylor & Francis Electromagnetics, vol. 32, 2012.

[J37] P. Alitalo and C. A. Valagiannopoulos, Demonstration of electromagnetic cloaking of conducting object by dielectric material cover, Electronics Letters, vol. 48, 2012.

[J36] C. A. Valagiannopoulos and N. L. Tsitsas, Integral equation analysis of a low-profile receiving planar microstrip antenna with a cloaking superstrate, Radio Science, vol. 47, 2012.

[J35] C. A. Valagiannopoulos and P. Alitalo, Electromagnetic cloaking of cylindrical objects by multilayer or uniform dielectric claddings, Physical Review B, vol. 85, 2012.

[J34] C. A. Valagiannopoulos, M. Bimpas and N. Uzunoglu, Implementation of the thin-wire approximation for estimating the characteristics of a metallic reinforcement bar embedded into a concrete column with circular cross section, Microwave and Optical Technology Letters, vol. 54, 2012.

[J33] C. A. Valagiannopoulos, N. L. Tsitsas and G. Fikioris, Convergence analysis and oscillations in the method of fictitious sources applied to dielectric scattering problems, Journal of Optical Society of America A, vol. 29, 2012.

2011

[J32] C. A. Valagiannopoulos, Electromagnetic propagation into parallel-plate waveguide in the presence of a skew metallic surface, Taylor & Francis Electromagnetics, vol. 31, 2011.

[J31] C. A. Valagiannopoulos and N. K. Uzunoglu, Simplified model for EM inverse scattering by longitudinal subterranean inhomogeneities exploiting the dawn/dusk ionospheric ridge, IET Microwave Antennas and Propagation, vol. 5, 2011.

[J30] C. A. Valagiannopoulos, High selectivity and controllability of a parallel-plate waveguide component with a filled rectangular ridge, Progress in Electromagnetic Research, vol. 119, 2011.

[J29] N. L. Tsitsas and C. A. Valagiannopoulos, Mathematical modeling of spherical microstrip antennas and applications, InTech Microstrip Antennas Book, 2011.

[J28] C. A. Valagiannopoulos, Electromagnetic scattering of the field of a metamaterial slab antenna by an arbitrarily positioned cluster of metallic cylinders, Progress in Electromagnetic Research, vol. 114, 2011.

[J27] C. A. Valagiannopoulos, The influence of electromagnetic scattering from a permeable sphere on the induced voltage across a rotating eccentric coil, Journal of Electromagnetic Analysis and Applications, vol. 3, 2011.

Before 2011

[J26] C. A. Valagiannopoulos, A new inverse formula based on the Taylor expansion of the scattering integral, Taylor & Francis Electromagnetics, vol. 30, 2010.

[J25] C. A. Valagiannopoulos, Voltage generation by rotating an arbitrary-shaped metal loop around arbitrary axis in the presence of an axial current distribution, Journal of Electromagnetic Analysis and Applications, vol. 2, 2010.

[J24] C. A. Valagiannopoulos, On developing alternating voltage around a rotating circular ring under plane wave excitation in the presence of an eccentrically positioned metallic core, Progress in Electromagnetic Research M, vol. 12, 2010.

[J23] C. A. Valagiannopoulos, A novel methodology for estimating the permittivity of a specimen rod at low radio frequencies, Journal of Electromagnetic Waves and Applications, vol. 24, 2010.

[J22] V. A. Karyotis and C. A. Valagiannopoulos, Analytic stochastic propagation model for urban streets, IET Microwave Antennas and Propagation, vol. 4, 2010.

[J21] C. A. Valagiannopoulos, Rigorous solution to plane wave scattering by an arbitrary-shaped particle embedded into a cylindrical cell of similar material, International Journal of Antennas and Propagation, vol. 2009, 2009.

[J20] C. A. Valagiannopoulos and N. L. Tsitsas, Linearization of the T-matrix solution for quasi-homogeneous scatterers, Journal of

Optical Society of America A, vol. 26, 2009.

- [J19] C. A. Valagiannopoulos and N. K. Uzunoglu, Green's function of a parallel plate waveguide with multiple abrupt changes of interwall distances, *Radio Science*, vol. 44, 2009.
- [J18] C. A. Valagiannopoulos and N. K. Uzunoglu, Rigorous computation of Green's function of a parallel-plate waveguide with a tapered wall, *Taylor & Francis Electromagnetics*, vol. 29, 2009.
- [J17] C. A. Valagiannopoulos, On smoothening the singular field developed in the vicinity of metallic edges, *International Journal of Applied Electromagnetics and Mechanics*, vol. 31, 2009.
- [J16] C. A. Valagiannopoulos, On measuring the permittivity tensor of an anisotropic material from the transmission coefficients, *Progress in Electromagnetic Research B*, vol. 9, 2008.
- [J15] C. A. Valagiannopoulos, On examining the influence of a thin dielectric strip posed across the diameter of a penetrable radiating cylinder, *Progress in Electromagnetic Research C*, vol. 3, 2008.
- [J14] C. A. Valagiannopoulos, A signal coverage model for two neighboring islands of different size, *Progress in Electromagnetic Research M*, vol. 2, 2008.
- [J13] C. A. Valagiannopoulos and V. A. Karyotis, Stochastic ray propagation for two parallel urban streets: exact and approximate results, *IEEE Antennas and Wireless Propagation Letters*, vol. 7, 2008.
- [J12] C. A. Valagiannopoulos, Electromagnetic scattering from two eccentric metamaterial cylinders with frequency-dependent permittivities differing slightly each other, *Progress in Electromagnetic Research B*, vol. 3, 2008.
- [J11] C. A. Valagiannopoulos, Closed-form solution to the scattering of a skew strip field by metallic pin in a slab, *Progress in Electromagnetic Research*, vol. 79, 2008.
- [J10] C. A. Valagiannopoulos and N. L. Tsitsas, On the resonance and radiation characteristics of multi-layered spherical microstrip antennas, *Taylor & Francis Electromagnetics*, vol. 28, 2008.
- [J9] C. A. Valagiannopoulos and N. K. Uzunoglu, Scattering of ELF waves by underground formations because of night-day ionospheric ridge, *Radio Science*, vol. 42, 2007.
- [J8] C. A. Valagiannopoulos, Semi-analytic solution to a cylindrical microstrip with inhomogeneous substrate, *Taylor & Francis Electromagnetics*, vol. 27, 2007.
- [J7] C. A. Valagiannopoulos, An overview of the Watson transformation presented through a simple example, *Progress in Electromagnetic Research*, vol. 75, 2007.
- [J6] C. A. Valagiannopoulos and N. K. Uzunoglu, Rigorous analysis of a metallic circular post in a rectangular waveguide with step discontinuity of sidewalls, *IEEE Transactions on Microwave Theory and Techniques*, vol. 55, 2007.
- [J5] C. A. Valagiannopoulos, Study of an electrically anisotropic cylinder excited magnetically by a straight strip line, *Progress in Electromagnetic Research*, vol. 73, 2007.
- [J4] C. A. Valagiannopoulos, Single-series solution to the radiation of loop antenna in the presence of a conducting sphere, *Progress in Electromagnetic Research*, vol. 71, 2007.
- [J3] C. A. Valagiannopoulos, Effect of cylindrical scatterer with arbitrary curvature on the features of a metamaterial slab antenna, *Progress in Electromagnetic Research*, vol. 71, 2007.
- [J2] C. A. Valagiannopoulos, Arbitrary currents on circular cylinder with inhomogeneous cladding and RCS optimization, *Journal of Electromagnetic Waves and Applications*, vol. 21, 2007.
- [J1] G. Fikioris and C. A. Valagiannopoulos, Input admittances arising from explicit solutions to integral equations for infinite-length dipole antennas, *Progress in Electromagnetic Research*, vol. 55, 2005.

CONFERENCE PUBLICATIONS

2017

- [C41] S. A. Tretyakov, C. R. Simovski, C. A. Valagiannopoulos, and Y. Radi, On self-oscillating wireless power transfer, *COMCAS2017*, Tel Aviv, Israel, 2017.
- [C40] N. L. Tsitsas and C. A. Valagiannopoulos, Mitigating Snell's-law reflection and transmission with metasurfaces of ordinary dielectrics, *Verona, Italy*, 2017.

2016

- [C39] C. A. Valagiannopoulos, C. R. Simovski, and S. A. Tretyakov, Conjugately-matched uniaxial metamaterials make extremely efficient absorbers, emitters, and reflectors, *METAMATERIALS2016*, Chania, Greece, 2016.
- [C38] C. A. Valagiannopoulos, N. L. Tsitsas, and A. H. Sihvola, Analytical investigations of ground modifications assisting the detection of a buried object, *EMRS2016*, Helsinki, Finland, 2016.
- [C37] A. Papadimopoulos, T. Karamanos, N. Tsitsas, C. A. Valagiannopoulos, N. Kantartzis, and T. Tsioukas, A double-layer metamaterial-based technique for interference mitigation and shielding of planar microwave structures, *META2016*, Malaga, Spain, 2016.
- [C36] C. A. Valagiannopoulos and S. Tretyakov, Radiation-enhancing reflector, *EUCAP2016*, Davos, Switzerland, 2016.
- [C35] C. A. Valagiannopoulos, E. Marengo, A. Dimakis, A. Alu, Guessing the texture of magnetic samples assisted by Aharonov-Bohm effect, *EUCAP2016*, Davos, Switzerland, 2016.

2015

- [C34] F. Monticone, C. A. Valagiannopoulos, S. Savoia, R. Fleury and A. Alu, PT-symmetric metamaterial systems for aberration-

free imaging and wave manipulation, METAMATERIALS2015, Oxford, UK, 2015.

[C33] J. Vehmas, C. A. Valagiannopoulos, S. Tretyakov and S. Maslovski, Blacker than ideally black: Double negative conjugately matched cylinders, METAMATERIALS2015, Oxford, UK, 2015.

[C32] A. Papadimopoulos, T. Karamanos, C. A. Valagiannopoulos, N. Tsitsas, N. Kantartzis, and T. Tsiboukis, Efficient EMC/EMI analysis of metamaterial-cloaked planar microstrips, ISEF2015, Valencia, Spain, 2015.

[C31] F. Monticone, A. Alu, and C. A. Valagiannopoulos, Aberration-free planar focusing based on parity-time symmetric nonlocal metamaterials, APS2015, Vancouver, Canada, 2015.

[C30] C. A. Valagiannopoulos, N. L. Tsitsas, A. H. Sihvola, Amplifying the response of a buried object by depositing a passive layer on the ground, CEM2015, Izmir, Turkey, 2015.

[C29] C. A. Valagiannopoulos, N. L. Tsitsas and A. H. Sihvola, Cloaking a bump inside a single isotropic lossless dielectric, EUCAP2015, Lisbon, Portugal, 2015.

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