

# Curriculum Vitae – Francisco J. García-Vidal (December 2016)

## Address

Departamento de Física Teórica de la Materia Condensada,  
Facultad de Ciencias, Universidad Autónoma de Madrid,  
Madrid 28049 (Spain)  
E-mail: [fj.garcia@uam.es](mailto:fj.garcia@uam.es); Tel: 0034-914978515

## Education

- Universidad Autónoma de Madrid, PhD in Physics, 1992.
- Universidad Autónoma de Madrid, Undergraduate, 1983-88.

## Professional Experience

- Universidad Autónoma de Madrid (Spain)
  - Full professor, Dec. 2007-present
  - Associate professor, Nov. 1996-Dec. 2007
  - Assistant professor, Oct. 1992-Nov. 1994
- Condensed Matter Physics Center (IFIMAC), UAM (Spain)
  - Scientific Director, March 2013-present
- Imperial College of London (UK)
  - Postdoctoral Research Associate, Nov. 1994-Nov. 1996
  - Visiting professor, Jun. 2010-Aug. 2010
- Université Louis Pasteur, Strasbourg (France)
  - Visiting professor, May 2000-Jun. 2000
  - Visiting professor, Jul. 2013-Aug. 2013
- University of California at Berkeley (USA)
  - Visiting professor, Jul. 2011-Aug. 2011
- CIC Nanogune, San Sebastian (Spain)
  - Visiting researcher, Jul. 2012-Aug. 2012
  - Visiting researcher, Jul. 2014-Aug. 2014
- Donostia International Physics Center, San Sebastian (Spain)
  - Visiting professor, Jul. 2015-Aug. 2015
  - Visiting professor, Jul. 2016-Aug. 2016

## Professional Activities

- **Conference Co-Chair and Co-Organizer**
  - 1st International Conference on Surface Plasmon Photonics (SPP1), Granada (Spain), September 2003.

- MRS-Fall Symposium W Engineered Porosity for Microphotonics and Plasmonics, Boston (USA), December 2003.
  - Summer School on Nanophotonics and Optics, Madrid (Spain), September 2007.
  - 9th International Conference on Photonic and Electromagnetic Crystal Structures (PECS-IX), Granada (Spain), September 2010.
  - Workshop on Quantum Plasmonics, Benasque (Spain), March 2015.
  - 1<sup>st</sup> Workshop on Strong Coupling with Organic Molecules (SCOM16), San Sebastián (Spain), October 2016.
- **Journal Reviewer**
    - Reviewer for leading journals in the areas of Physics, Optics and Photonics. A partial list includes Nature, Science, Nature Materials, Nature Physics, Nature Photonics, Physical Review Letters, Physical Review A, Physical Review B, Physical Review E, Nano Letters, Applied Physics Letters, Optics Letters, Optics Express.
- **Editorial Activities**
    - Member of the Editorial Board of New Journal of Physics, Jan. 2009-Dec. 2013.
- **Plenary, Keynote and Invited Talks**
    - More than 80 plenary, keynote and invited talks in the most important conferences devoted to Nanophotonics, Plasmonics and Metamaterials.

## Research Group

(As of December 2016)

- 6 PhD students, 1 postdocs and 1 research associate.
- Funded by the Spanish Ministry of Science, European Union (EU) and European Research Council (ERC).

## Publications

- 235 refereed journal articles.
- Total citations (ISI Web of Knowledge): **17.110**. The h-index: **58**
- Total citations (Google Scholar): **23.201**. The h-index: **64**

### List of publications:

1. F.J. Garcia-Vidal, A. Martin-Rodero and F. Flores, "An ab-initio molecular orbital theory for chemisorption: H on metals", Surf. Sci. **251/252**, 861 (1991).
2. F.J. Garcia-Vidal, A. Martin-Rodero, F. Flores, J. Ortega and R. Perez, "Molecular orbital theory for chemisorption: the case of H on normal metals", Phys. Rev. B **44**, 11412 (1991).
3. J. Ortega, R. Perez, F.J. Garcia-Vidal and F. Flores, "Low coverage deposition of alkali metals on GaAs(110)", Appl. Surf. Sci. **56-58**, 264 (1992).
4. R. Perez, J. Ortega, F.J. Garcia-Vidal and F. Flores, "GaP-Si band-offset modification due to intralayer deposition", Appl. Surf. Sci. **56-58**, 756 (1992).

5. J. Ortega, R. Rincon, R. Perez, F.J. Garcia-Vidal and F. Flores, "Schottky barrier formation: Al deposition on GaAs(110)", *Appl. Surf. Sci.* **60/61**, 736 (1992).
6. J. Ortega, F.J. Garcia-Vidal, R. Perez, R. Rincon, F. Flores, C. Coluzza, F. Gozzo, G. Margaritondo, Y. Hwu, L. Lozzi and S. La Rosa, "Early stages of Schottky barrier formation for Al deposited on GaAs (110)", *Phys. Rev. B* **46**, 10277 (1992).
7. J. Ortega, F.J. Garcia-Vidal, R. Perez, R. Rincon and F. Flores, "Chemisorption of metals or electronegative atoms on GaAs", *Phys. Scr.* **45**, 277 (1992).
8. J. Ortega, R. Rincon, F.J. Garcia-Vidal and F. Flores, "Schottky barrier formation for In deposited on GaAs(110): the low coverage limit", *Appl. Surf. Sci.* **65/66**, 766 (1993).
9. F. Flores, R. Rincon, J. Ortega, F.J. Garcia-Vidal and R. Perez, "Schottky barrier formation in the low metal coverage limit", *Prog. Surf. Sci.* **42**, 281 (1993).
10. F. Flores, R. Saiz-Pardo, R. Rincon, J. Ortega, R. Perez and F.J. Garcia-Vidal, "The interaction of atoms with semiconductor surfaces: the case of Sb on GaAs (110)", *J. Phys. Cond. Matt.* **5**, A41 (1993).
11. A. Martin-Rodero, F.J. Garcia-Vidal and A. Levy-Yeyati, "Microscopic Theory of Josephson Mesoscopic Constrictions", *Phys. Rev. Lett.* **72**, 554 (1994).
12. F. Flores, F.J. Garcia-Vidal, J. Ortega and R. Perez, "Chemisorption at metal and semiconductor surfaces", *Philosophical Magazine* **69**, 931 (1994).
13. A. Martin-Rodero, F.J. Garcia-Vidal and A. Levy-Yeyati, "Self-consistent theory for the d.c. Josephson effect in a superconducting STM junction", *Surf. Sci.* **307/309**, 973 (1994).
14. R. Perez, F.J. Garcia-Vidal, P. L. de Andres and F. Flores, "Adsorption of Xenon on metals: a theoretical analysis", *Surf. Sci.* **307/309**, 704 (1994).
15. F.J. Garcia-Vidal, J. Merino, R. Perez, R. Rincon, J. Ortega and F. Flores, "Density Functional approach to LCAO methods", *Phys. Rev. B* **50**, 10537 (1994).
16. A. Levy Yeyati, A. Martin-Rodero and F.J. Garcia-Vidal, "Self-consistent theory of superconducting mesoscopic weak links", *Phys. Rev. B* **51**, 3743 (1995).
17. F. Flores, P. L. de Andres, F.J. Garcia-Vidal, L. Jurczyszyn, N. Mingo and R. Perez, "Adsorption of noble gases on metal surfaces and the Scanning Tunneling Microscope", *Prog. Surf. Sci.* **48**, 27 (1995).
18. R. Rincon, F.J. Garcia-Vidal and F. Flores, "Chemisorption of Cl on GaAs: a density functional approach", *Surf. Sci.* **320**, 297 (1995).
19. F.J. Garcia-Vidal and J.B. Pendry, "Electromagnetic interactions with rough metal surfaces.", *Prog. Surf. Sci.* **50**, 55 (1995).
20. F.J. Garcia-Vidal, P.L. de Andres and F. Flores, "Elastic scattering effects and the lateral resolution of BEEM: focusing effects on the Au/Si interface", *Phys. Rev. Lett.* **76**, 807 (1996).
21. A. Martin-Rodero, A. Levy Yeyati and F.J. Garcia-Vidal, "Thermal noise in superconducting point-contacts", *Phys. Rev. B (RC)* **53**, 8891 (1996).
22. R. Rincon, F.J. Garcia-Vidal and F. Flores, "A theoretical analysis of the molecular and dissociative adsorption of water on GaAs(110)", *Appl. Surf. Sci.* **92**, 216 (1996).
23. N. Mingo, L. Jurczyszyn, F.J. Garcia-Vidal, R. Saiz-Pardo, P.L. de Andres, F. Flores, S. Y. Wu and W. More, "Theory of the Scanning Tunneling Microscope: Xe on Ni and Al", *Phys. Rev. B* **54**, 2225 (1996).
24. F.J. Garcia-Vidal and J.B. Pendry, "Collective theory for Surface Enhanced Raman Scattering", *Phys. Rev. Lett.* **77**, 1163 (1996).
25. P.L. de Andres, F.J. Garcia-Vidal, D. Sestovic and F. Flores, "On the theory of lateral resolution of BEEM", *Phys. Scr.* **T66**, 277 (1996).
26. F. Wijnands, J.B. Pendry, P.J. Roberts, F.J. Garcia-Vidal, L. Martin-Moreno and P.M. Bell, "Green's functions for Maxwell's equations: Application to spontaneous emission", *Optical and Quantum Electronics* **29**, 199 (1997).

27. F.J. Garcia-Vidal, J.M. Pitarke and J.B. Pendry, "Effective medium theory of the optical properties of aligned carbon nanotubes", *Phys. Rev. Lett.* **78**, 4289 (1997).
28. P.L. de Andres, K. Reuter, F.J. Garcia-Vidal, D. Sestovic and F. Flores, "A theoretical analysis of BEEM: k-space distributions and spectroscopy", *Appl. Surf. Sci.* **123/124**, 199 (1998).
29. R. Whittle, R. Saiz-Pardo, F.J. Garcia-Vidal and F. Flores, "LCAO calculations of sulphur interlayers on Ge(001) and Si(001)-K interfaces", *Appl. Surf. Sci.* **123/124**, 560 (1998).
30. P.L. de Andres, K. Reuter, F.J. Garcia-Vidal, F. Flores, U. Hohenester and P. Kocevar, "A theoretical analysis of BEEM: band structure effects and attenuation lengths", *Acta Pol. Phys.* **93**, 281 (1998).
31. J.M. Pitarke, F.J. Garcia-Vidal and J.B. Pendry, "Effective electronic response of metallic cylinders", *Phys. Rev. B* **57**, 15261 (1998).
32. T. Lopez-Rios, D. Mendoza, F.J. Garcia-Vidal, J. Sanchez-Dehesa and B. Pannetier, "Surface shape resonances in lamellar metallic gratings", *Phys. Rev. Lett.* **81**, 665 (1998).
33. F.J. Garcia-Vidal, J.M. Pitarke and J.B. Pendry, "Silver filled carbon nanotubes as spectroscopic enhancers", *Phys. Rev. B* **58**, 6783 (1998).
34. K. Reuter, P.L. de Andres, F.J. Garcia-Vidal, F. Flores, D. Sestovic and K. Heinz, "Quantum mechanical analysis of the elastic propagation of electrons in the Au/Si system: application to Ballistic Electron Emission Microscopy", *Phys. Rev. B* **58**, 14036 (1998).
35. K. Reuter, F.J. Garcia-Vidal, P.L. de Andres, F. Flores and K. Heinz, "Ballistic Electron Emission Microscopy on CoSi<sub>2</sub>/Si(111) interfaces: band structure induced atomic-scale and role of localized surface states", *Phys. Rev. Lett.* **81**, 4963 (1998).
36. K. Reuter, P.L. de Andres, F.J. Garcia-Vidal, F. Flores, U. Hohenester and P. Kocevar, "Hot electron transport in Ballistic Electron emission Spectroscopy: band structure effects and  $\mathbf{k}$ -space currents", *Europhys. Lett.* **45**, 181 (1999).
37. R. Saiz-Pardo, R. Perez, F.J. Garcia-Vidal, R. Whittle and F. Flores, "Systematic studies of the Schottky barrier control by passivating monolayers", *Surf. Sci.* **247**, 26 (1999).
38. L. Martin-Moreno, F.J. Garcia-Vidal and A.M. Somoza, "Self-Assembled Triply Periodic Minimal Surface as moulds for Photonic Band Gap Materials", *Phys. Rev. Lett.* **83**, 73 (1999).
39. J.M. Pitarke, F.J. Garcia-Vidal and J.B. Pendry, "Interface modes of two-dimensional composite structures", *Surf. Sci.* **433/435**, 605 (1999).
40. J.A. Porto, F.J. Garcia-Vidal and J.B. Pendry, "Transmission resonances on metallic gratings with very narrow slits", *Phys. Rev. Lett.* **83**, 2845 (1999).
41. A. Reynolds, F. Lopez-Tejeira, D. Cassagne, F.J. Garcia-Vidal, C. Jouanin and J. Sanchez-Dehesa, "Spectral properties of opal-based photonic crystals with SiO<sub>2</sub> matrix", *Phys. Rev. B* **60**, 11422 (1999).
42. H. Miguez, A. Blanco, C. Lopez, F. Meseguer, H.M. Yates, M.E. Pemble, F. Lopez-Tejeira, F.J. Garcia-Vidal and J. Sanchez-Dehesa, "Face centered cubic photonic band gap materials based on opal-semiconductor composites", *J. Light. Tech.* **17**, 1975 (1999).
43. F.J. Garcia-Vidal, J. Sanchez-Dehesa, A. Dechelette, E. Bustarret, T. Lopez-Rios, Th. Fournier and B. Pannetier, "Localized surface plasmons in lamellar metallic gratings", *J. Light. Tech.* **17**, 2191 (1999).
44. K. Reuter, U. Hohenester, P.L. de Andres, F.J. Garcia-Vidal, F. Flores, K. Heinz and P. Kocevar, "Electron energy relaxation times from Ballistic Electron emission Spectroscopy", *Phys. Rev. B* **61**, 4522 (2000).

45. K. Reuter, P.L. de Andres, F.J. Garcia-Vidal, D. Sestovic, F. Flores and K. Heinz, "Green's function calculation of Ballistic Electron Emission Microscopy currents (BEEM V2.1)", *Comp. Phys. Comm.* **127**, 327 (2000).
46. K. Reuter, P.L. de Andres, F.J. Garcia-Vidal, F. Flores and K. Heinz, "Electronic surface structure of  $\text{CoSi}_2(111)-(2 \times 1)/\text{Si}(111)$ : implications for Ballistic Electron Emission Microscopy currents", *Appl. Surf. Sci.* **166**, 103 (2000).
47. P. Pou, R. Perez, F. Flores, A. Levy Yeyati, A. Martin-Rodero, J.M. Blanco, F.J. Garcia-Vidal and J. Ortega, "A Local Density approach and quasiparticle levels for generalized Hubbard hamiltonians", *Phys. Rev. B* **62**, 4309 (2000).
48. A.L. Vazquez de Parga, F.J. Garcia-Vidal and R. Miranda, "Detecting Electronic States at Stacking Faults in Magnetic Thin Films by Tunneling Spectroscopy", *Phys. Rev. Lett.* **85**, 4365 (2000).
49. P.L. de Andres, F.J. Garcia-Vidal, K. Reuter and F. Flores, "Theory of Ballistic Electron Emission Microscopy", *Prog. Surf. Sci.* **66**, 3 (2001).
50. J.M. Pitarke and F.J. Garcia-Vidal, "Electronic response of aligned multishell carbon nanotubes", *Phys. Rev. B* **63**, 073404 (2001).
51. L. Martin-Moreno, F.J. Garcia-Vidal, H.J. Lezec, K.M. Pellerin, T. Thio, J.B. Pendry and T.W. Ebbesen, "Theory of extraordinary optical transmission through subwavelength hole arrays", *Phys. Rev. Lett.* **86**, 1114 (2001).
52. F.J. Garcia-Vidal and J.M. Pitarke, "Optical absorption and energy-loss spectra of aligned carbon nanotubes", *Eur. Phys. J. B* **22**, 257 (2001).
53. P.F. de Pablos, F.J. Garcia-Vidal, P.L. de Andres and F. Flores, "A comparison between BEEM currents on  $\text{Au}/\text{Si}(111)$  and  $\text{Au}/\text{Si}(100)$ : inelastic and geometrical effects", *Surf. Sci.* **482**, 430 (2001).
54. K. Reuter, P.L. de Andres, F.J. Garcia-Vidal, F. Flores and K. Heinz, "Surface and bulk structure effects on  $\text{CoSi}_2/\text{Si}(111)$  ballistic electron emission experiments", *Phys. Rev. B* **63**, 205325 (2001).
55. A. Krishnan, T. Thio, T.J. Kim, H.J. Lezec, T.W. Ebbesen, P.A. Wolff, J.B. Pendry, L. Martin-Moreno and F.J. Garcia-Vidal, "Evanescently coupled resonance in surface plasmon enhanced transmission", *Opt. Comm.* **200**, 1 (2001).
56. H.J. Lezec, A. Degiron, E. Devaux, R.A. Linke, L. Martin-Moreno, F.J. Garcia-Vidal and T.W. Ebbesen, "Beaming light from a subwavelength aperture", *Science* **297**, 820 (2002).
57. P.F. de Pablos, F.J. Garcia-Vidal, F. Flores and P.L. de Andres, "Electronic transport on  $\text{Au}/\text{Si}$  structures: electron-electron, electron-phonon, and band structure effects", *Phys. Rev. B* **66**, 075411 (2002).
58. F.J. Garcia-Vidal and L. Martin-Moreno, "Transmission and focusing of light in one-dimensional periodically nanostructured metals", *Phys. Rev. B* **66**, 155412 (2002).
59. L. Martin-Moreno, F.J. Garcia-Vidal, H.J. Lezec, A. Degiron and T.W. Ebbesen, "Theory of highly directional emission from a single subwavelength aperture surrounded by surface corrugations", *Phys. Rev. Lett.* **90**, 167401 (2003).
60. F.J. Garcia-Vidal, H.J. Lezec, T.W. Ebbesen and L. Martin-Moreno, "Multiple paths to enhance optical transmission through a single subwavelength slit", *Phys. Rev. Lett.* **90**, 213901 (2003).
61. F. Ladstadter, P.F. de Pablos, U. Hohenester, P. Puschnig, C. Ambrosch-Draxl, P.L. de Andres, F.J. Garcia-Vidal and F. Flores, "Hot-electron lifetimes in metals: a combined ab-initio calculation and ballistic electron emission spectroscopy results", *Phys. Rev. B* **68**, 085107 (2003).
62. J. Bravo-Abad, F.J. Garcia-Vidal and L. Martin-Moreno, "Wavelength De-Multiplexing properties of a single aperture flanked by periodic arrays of indentations", *Photonics and Nanostructures* **1**, 55 (2003).

63. F.J. Garcia-Vidal, L. Martin-Moreno, H.J. Lezec and T.W.Ebbesen, "Focusing light with a single subwavelength aperture flanked by surface corrugations: a new type of lens", *Appl. Phys. Lett.* **83**, 4500 (2003).
64. F.J. Garcia-Vidal, F. Flores and S.G. Davison, "Propagator theory of quantum-wire transmission", *Prog. Surf. Sci.* **74**, 177 (2003).
65. J. Bravo-Abad, L. Martin-Moreno and F.J. Garcia-Vidal, "Transmission properties of a single metallic slit: from the subwavelength regime to the geometrical-optics limit", *Phys. Rev. E* **69**, 026601 (2004).
66. E. Moreno, F.J. Garcia-Vidal and L. Martin-Moreno, "Enhanced transmission and beaming of light via photonic crystal surface modes", *Phys. Rev. B (RC)* **69**, 121402 (2004).
67. E. Moreno, F.J. Garcia-Vidal, D. Erni, J.I. Cirac and L. Martin-Moreno, "Theory of plasmon-assisted transmission of entangled photons", *Phys. Rev. Lett.* **92**, 236801 (2004).
68. J.A. Porto, L. Martin-Moreno and F.J. Garcia-Vidal, "Optical bistability in subwavelength slit apertures containing nonlinear media", *Phys. Rev. B (RC)* **70**, 081402 (2004).
69. L. Martin-Moreno and F.J. Garcia-Vidal, "Optical transmission through periodically nano-structured metal films", *Advances in Solid State Physics* **44**, 69 (2004).
70. F.J. Garcia-Vidal, "Tiny apertures with a big future.", *Physics World (June 2004)*, 20 (2004).
71. J.B. Pendry, L. Martin-Moreno and F.J. Garcia-Vidal, "Mimicking surface plasmons with structured surfaces", *Science* **305**, 847 (2004).
72. L. Martin-Moreno and F.J. Garcia-Vidal, "Optical transmission through circular hole arrays in optically thick metal films", *Opt. Express* **12**, 3619 (2004).
73. E. Moreno, L. Martin-Moreno and F.J. Garcia-Vidal, "Efficient coupling of light into and out of a photonic crystal waveguide via surface modes", *Photonics and Nanostructures* **2**, 97 (2004).
74. M. Beruete, M. Sorolla, I. Campillo, J.S. Dolado, L. Martin-Moreno, J. Bravo-Abad and F.J. Garcia-Vidal, "Enhanced millimeter wave transmission through subwavelength hole arrays", *Opt. Lett.* **29**, 2500 (2004).
75. J. Bravo-Abad, F.J. Garcia-Vidal and L. Martin-Moreno, "Resonant transmission of light through finite chains of subwavelength holes in a metallic film", *Phys. Rev. Lett.* **93**, 227401 (2004).
76. F.J. Garcia-Vidal, L. Martin-Moreno and J.B. Pendry, "Surfaces with holes in them: new plasmonic metamaterials", *J. Opt. A: Pure Appl. Opt.* **7**, S97 (2005).
77. M. Beruete, M. Sorolla, I. Campillo, J.S. Dolado, L. Martin-Moreno, J. Bravo-Abad and F.J. Garcia-Vidal, "Enhanced millimeter wave transmission through quasioptical subwavelength perforated plates", *IEEE Trans. on Antennas and Propagation* **53**, 1897 (2005).
78. C. Gomez-Navarro, P.J. de Pablo, J. Gomez-Herrero, B. Biel, F.J. Garcia-Vidal, A. Rubio and F. Flores, "Tuning the conductance of single-walled carbon nanotubes by ion irradiation in the Anderson localization regime", *Nature Materials* **4**, 534 (2005).
79. F.J. Garcia-Vidal, E. Moreno, J.A. Porto and L. Martin-Moreno, "Transmission of light through a single rectangular hole", *Phys. Rev. Lett.* **95**, 103901 (2005).
80. E. Moreno, A.I. Fernandez-Dominguez, J. Ignacio Cirac, F.J. Garcia-Vidal and L. Martin-Moreno, "Resonant transmission of cold atoms through subwavelength apertures", *Phys. Rev. Lett.* **95**, 170406 (2005).
81. F. Lopez-Tejiera, F.J. Garcia-Vidal and L. Martin-Moreno, "Scattering of surface plasmons by one-dimensional periodic nanoindented surfaces", *Phys. Rev. B (RC)* **72**, 161405 (2005).

82. B. Biel, F.J. Garcia-Vidal, A. Rubio and F. Flores, "Anderson localization in Carbon Nanotubes: defect density and temperature effects", *Phys. Rev. Lett.* **95**, 266801 (2005).
83. J. Bravo-Abad, A. Degiron, F. Przybilla, C. Genet, F.J. Garcia-Vidal, L. Martin-Moreno and T.W. Ebbesen, "How light emerges from an illuminated array of subwavelength holes", *Nature Physics* **2**, 120 (2006).
84. E. Moreno, L. Martin-Moreno and F.J. Garcia-Vidal, "Extraordinary optical transmission without plasmons: the s-polarization case", *J. Opt. A: Pure Appl. Opt.* **8**, S94 (2006).
85. Francisco J. Garcia-Vidal, "Light at the end of the channel", *Nature* **440**, 431 (2006).
86. A. Hohenau, J.R. Krenn, J. Beerman, S.I. Bozhevolnyi, S.G. Rodrigo, L. Martin-Moreno and F.J. Garcia-Vidal, "Spectroscopy and nonlinear microscopy of Au nanoparticle arrays: Experiment and Theory", *Phys. Rev. B* **73**, 155404 (2006).
87. A.I. Fernandez-Dominguez, E. Moreno, L. Martin-Moreno and F.J. Garcia-Vidal, "Beaming matter waves from a subwavelength aperture", *Phys. Rev. A (RC)* **74**, 021601 (2006).
88. F.J. Garcia-Vidal, L. Martin-Moreno, E. Moreno, L.K.S. Kumar and R. Gordon, "Transmission of light through a single rectangular hole in a real metal", *Phys. Rev. B* **74**, 153411 (2006).
89. S.A. Maier, S.R. Andrews, L. Martin-Moreno and F.J. Garcia-Vidal, "Terahertz surface plasmon-polariton propagation and focusing on periodically corrugated metal wires", *Phys. Rev. Lett.* **97**, 176805 (2006).
90. E. Moreno, F.J. Garcia-Vidal, S.G. Rodrigo, L. Martin-Moreno and S.I. Bozhevolnyi, "Channel plasmon-polaritons: modal shape, dispersion, and losses", *Opt. Lett.* **31**, 3447 (2006).
91. F.J. Garcia-Vidal, S.G. Rodrigo and L. Martin-Moreno, "Foundations of the composite diffracted evanescent wave model", *Nature Physics* **2**, 790 (2006).
92. J. Bravo-Abad, L. Martin-Moreno and F.J. Garcia-Vidal, "Resonant transmission of light through subwavelength holes in thick metal films", *IEEE J. Selected Topics in Quantum Electronics* **12**, 1221 (2006).
93. F.J. Garcia-Vidal, "Orient yourself", *Nature Photonics* **1**, 13 (2007).
94. A. Hohenau, J.R. Krenn, F.J. Garcia-Vidal, S.G. Rodrigo, L. Martin-Moreno, J. Beerman and S.I. Bozhevolnyi, "Spectroscopy and nonlinear microscopy of gold nanoparticle arrays on gold films", *Phys. Rev. B* **75**, 085104 (2007).
95. F. Lopez-Tejiera, S.G. Rodrigo, L. Martin-Moreno, F.J. Garcia-Vidal, E. Devaux, T.W. Ebbesen, J.R. Krenn, I.P. Radko, S.I. Bozhevolnyi, M.U. Gonzalez, J.C. Weeber and A. Dereux, "Efficient unidirectional nanoslit couplers for surface plasmons", *Nature Physics* **3**, 324 (2007).
96. A. Hohenau, J.R. Krenn, F.J. Garcia-Vidal, S.G. Rodrigo, L. Martin-Moreno, J. Beerman and S.I. Bozhevolnyi, "Comparison of finite-difference time-domain simulations and experiments on the optical properties of gold nanoparticle arrays on gold film", *J. Opt. A: Pure Appl. Opt.* **9**, S366 (2007).
97. A. B. Evlyukhin, G. Brucoli, L. Martin-Moreno, S.I. Bozhevolnyi and F.J. Garcia-Vidal, "Surface plasmon polariton scattering by finite-size nanoparticles", *Phys. Rev. B* **76**, 075426 (2007).
98. P. Sundqvist, F.J. Garcia-Vidal, F. Flores, M. Moreno-Moreno, C. Gomez-Navarro, J.S. Bunch and J. Gomez-Herrero, "Voltage and length-dependent phase diagram of the electronic transport in carbon nanotubes", *NanoLetters* **7**, 2568 (2007).
99. A. Mary, S.G. Rodrigo, L. Martin-Moreno and F.J. Garcia-Vidal, "Theory of light transmission through an array of rectangular holes", *Phys. Rev. B* **76**, 195414 (2007).

100. J. Christensen, A.I. Fernandez-Dominguez, F. de Leon-Perez, L. Martin-Moreno and F.J. Garcia-Vidal, "Collimation of sound assisted by acoustic surface waves", *Nature Physics* **3**, 851 (2007).
101. J. Bravo-Abad, A.I. Fernandez-Dominguez, F.J. Garcia-Vidal and L. Martin-Moreno, "Theory of extraordinary transmission of light through quasiperiodic arrays of subwavelength holes", *Phys. Rev. Lett.* **99**, 203905 (2007).
102. J. Bravo-Abad, L. Martin-Moreno, F.J. Garcia-Vidal, E. Hendry and J. Gomez Rivas, "Transmission of light through periodic arrays of square holes: from a metallic wire mesh to an array of tiny holes", *Phys. Rev. B (RC)* **76**, 241102 (2007).
103. A.I. Fernandez-Dominguez, F.J. Garcia-Vidal and L. Martin-Moreno, "Resonant transmission of light through finite arrays of slits", *Phys. Rev. B* **76**, 235430 (2007).
104. Esteban Moreno, Sergio G. Rodrigo, Sergey I. Bozhevolnyi, L. Martin-Moreno and F.J. Garcia-Vidal, "Guiding and focusing of electromagnetic fields with wedge plasmon-polaritons", *Phys. Rev. Lett* **100**, 023901 (2008).
105. C.R. Williams, S.R. Andrews, S.A. Maier, A.I. Fernandez-Dominguez, L. Martin-Moreno and F.J. Garcia-Vidal, "Highly confined guiding terahertz surface plasmon-polaritons on structured metal surfaces", *Nature Photonics* **2**, 175 (2008).
106. Sergio R. Rodrigo, F.J. Garcia-Vidal and L. Martin-Moreno, "Influence of material properties on Extraordinary Optical Transmission through hole arrays", *Phys. Rev. B* **77**, 075401 (2008).
107. A.-L. Baudrion, F. de Leon-Perez, O. Mahboub, H. Ditlbacher, F.J. Garcia-Vidal, J. Dintinger, T.W. Ebbesen, L. Martin-Moreno and J.R. Krenn, "Coupling efficiency of light to surface plasmon polariton for single subwavelength holes in a gold film", *Opt. Express* **16**, 3420 (2008).
108. E. Hendry, F.J. Garcia-Vidal, L. Martin-Moreno, J. Gomez Rivas, M. Bonn, A.P. Hibbins and M.J. Lockyear, "Optical control over surface-plasmon-polariton assisted THz transmission through a slit structure", *Phys. Rev. Lett.* **100**, 123901 (2008).
109. Francisco J. Garcia-Vidal, "Towards the dark side", *Nature Photonics* **2**, 215 (2008).
110. F. Lopez-Tejeira, Sergio G. Rodrigo, L. Martin-Moreno, F.J. Garcia-Vidal, E. Devaux, J. Dintinger, T.W. Ebbesen, J.R. Krenn, I.P. Radko, S.I. Bozhevolnyi, M.U. Gonzalez, J.C. Weeber and A. Dereux, "Modulation of surface plasmon coupling in by one-dimensional surface corrugation", *New J. Phys.* **10**, 033035 (2008).
111. A.I. Fernandez-Dominguez, I. Hernandez-Carrasco, L. Martin-Moreno and F.J. Garcia-Vidal, "Transmission resonances through a Fibonacci array of subwavelength slits", *Electromagnetics* **28**, 186 (2008).
112. A. Yu. Nikitin, G. Brucoli, F.J. Garcia-Vidal and L. Martin-Moreno, "Scattering of surface plasmon polaritons by impedance barriers: dependence on angle of incidence", *Phys. Rev. B* **77**, 195441 (2008).
113. F. Przybilla, A. Degiron, C. Genet, T.W. Ebbesen, F. de Leon-Perez, J. Bravo-Abad, F.J. Garcia-Vidal and L. Martin-Moreno, "Efficiency and finite size effects in enhanced transmission through subwavelength apertures", *Opt. Express* **16**, 9571 (2008).
114. J. Christensen, L. Martin-Moreno and F.J. Garcia-Vidal, "Theory of resonant acoustic transmission through subwavelength apertures", *Phys. Rev. Lett.* **101**, 014301 (2008).
115. B. Biel, F.J. Garcia-Vidal, A. Rubio and F. Flores, "Ab-initio study of transport properties in defected carbon nanotubes: an O(N) approach", *J. Phys. Condens. Matter* **20**, 294214 (2008).



116. A. Mary, Sergio G. Rodrigo, L. Martin-Moreno and F.J. Garcia-Vidal, "Plasmonic metamaterials based on holey metallic films", *J. Phys. Condens. Matter* **20**, 304215 (2008).
117. F. Flores, B. Biel, A. Rubio, F.J. Garcia-Vidal, C. Gomez-Navarro, P. de Pablo and J. Gomez-Herrero, "Anderson localization regime in carbon nanotubes: size dependent properties", *J. Phys. Condens. Matter* **20**, 304211 (2008).
118. L. Martin-Moreno and F.J. Garcia-Vidal, "Minimal model for optical transmission through holey metal films", *J. Phys. Condens. Matter* **20**, 304214 (2008).
119. A.I. Fernandez-Dominguez, D. Martin-Cano, E. Moreno, L. Martin-Moreno and F.J. Garcia-Vidal, "Resonant transmission and beaming of cold atoms assisted by surface matter waves", *Phys. Rev. A* **78**, 023614 (2008).
120. J. Christensen, P.A. Huidobro, L. Martin-Moreno and F.J. Garcia-Vidal, "Confining and slowing airborne sound with a corrugated metawire", *Appl. Phys. Lett.* **93**, 083502 (2008).
121. A. Mary, Sergio G. Rodrigo, F.J. Garcia-Vidal and L. Martin-Moreno, "Theory of negative-refractive-index response of double-fishnet structures", *Phys. Rev. Lett.* **101**, 103902 (2008).
122. I.P. Radko, S.I. Bozhevolnyi, G. Brucoli, L. Martin-Moreno, F.J. Garcia-Vidal and A. Boltasseva, "Efficiency of local surface plasmon polariton excitation on ridges", *Phys. Rev. B* **78**, 115115 (2008).
123. A.I. Fernandez-Dominguez, C.R. Williams, F.J. Garcia-Vidal, L. Martin-Moreno, S.R. Andrews and S.A. Maier, "Terahertz surface plasmon polaritons on a helically grooved wire", *Appl. Phys. Lett.* **93**, 141109 (2008).
124. F. de Leon-Perez, G. Brucoli, F.J. Garcia-Vidal and L. Martin-Moreno, "Theory on the scattering of light and surface plasmon polaritons by arrays of holes and dimples in a metal film", *New J. Phys.* **10**, 105017 (2008).
125. A. Yu. Nikitin, D. Zuco, F.J. Garcia-Vidal and L. Martin-Moreno, "Electromagnetic wave transmission through a small hole in a perfect electric conductor of finite thickness", *Phys. Rev. B* **78**, 165429 (2008).
126. P.A. Sundqvist, F.J. Garcia-Vidal and F. Flores, "Electronic transport in carbon nanotubes: diffusive and localized regimes", *Phys. Rev. B* **78**, 205427 (2008).
127. A.I. Fernandez-Dominguez, L. Martin-Moreno, F.J. Garcia-Vidal, S.R. Andrews and S.A. Maier, "Spoof surface plasmon polaritons modes propagating along periodically corrugated wires", *IEEE Journal of Selected Topics in Quantum Electronics* **14**, 1515 (2008).
128. Sergio G. Rodrigo, L. Martin-Moreno, A. Yu. Nikitin, A. V. Kats, I. S. Spevak and F.J. Garcia-Vidal, "Extraordinary optical transmission through hole arrays in optically thin metal films", *Opt. Lett.* **34**, 4 (2009).
129. L. Landstrom, D. Brodoceanu, D. Bauerle, F.J. Garcia-Vidal, Sergio G. Rodrigo and L. Martin-Moreno, "Extraordinary transmission through metal-coated monolayers of microspheres", *Opt. Express* **17**, 761 (2009).
130. Valentyn S. Volkov, Sergey I. Bozhevolnyi, Sergio G. Rodrigo, L. Martin-Moreno, Francisco J. Garcia-Vidal, Eloise Devaux and Thomas W. Ebbesen, "Nanofocusing with channel plasmon polaritons", *NanoLetters* **9**, 1278 (2009).
131. A. Yu. Nikitin, F.J. Garcia-Vidal and L. Martin-Moreno, "Inter-coupling of free-space radiation to s-polarized confined modes in microcavities", *Appl. Phys. Lett.* **94**, 063119 (2009).
132. J. Jung, F.J. Garcia-Vidal, L. Martin-Moreno and J.B. Pendry, "Holey metal films make perfect endoscopes", *Phys. Rev. B* **79**, 153407 (2009).
133. I. P. Radko, S. I. Bozhevolnyi, G. Brucoli, L. Martin-Moreno, F.J. Garcia-Vidal and A. Boltasseva, "Efficient unidirectional ridge excitation of surface plasmons", *Opt. Express* **17**, 7228 (2009).

134. Eui Su Lee, D.H. Kang, A.I. Fernandez-Dominguez, F.J. Garcia-Vidal, L. Martin-Moreno, D.S. Kim and Tae-In Jeon, "Bragg reflection of terahertz waves in plasmonic crystals", *Opt. Express* **17**, 9212 (2009).
135. A.I. Fernandez-Dominguez, Esteban Moreno, L. Martin-Moreno and F.J. Garcia-Vidal, "Guiding terahertz waves along subwavelength channels", *Phys. Rev. B* **79**, 233104 (2009).
136. A.I. Fernandez-Dominguez, Esteban Moreno, L. Martin-Moreno and F.J. Garcia-Vidal, "Terahertz wedge plasmon polaritons", *Opt. Lett.* **34**, 2063 (2009).
137. L.A. Dunbar, M. Guillaume, F. de Leon-Perez, C. Santschi, E. Grenet, R. Eckert, F. Lopez-Tejeira, F.J. Garcia-Vidal, L. Martin-Moreno and R. P. Stanley, "Enhanced transmission from a single subwavelength slit aperture surrounded by grooves on a standard detector", *Appl. Phys. Lett.* **95**, 011113 (2009).
138. A. Yu Nikitin, F.J. Garcia-Vidal and L. Martin-Moreno, "Enhanced optical transmission, beaming and focusing through a subwavelength slit under excitation of dielectric waveguide modes", *J. Opt. A: Pure Appl. Opt.* **11**, 125702 (2009).
139. Francisco J. Garcia-Vidal and Esteban Moreno, "Lasers go nano", *Nature* **461**, 604 (2009).
140. A. Mary, Sergio G. Rodrigo, L. Martin-Moreno and F. J. Garcia-Vidal, "Holey metal films: From extraordinary transmission to negative-index behavior", *Phys. Rev. B* **80**, 165431 (2009).
141. V. S. Volkov, J. Goscinia, S. I. Bozhevolnyi, S. G. Rodrigo, L. Martín-Moreno, F.J. Garcia-Vidal, E. Devaux and T. W. Ebbesen, "Plasmonic candle: towards efficient nanofocusing with channel plasmon polaritons", *New J. Phys.* **11**, 113043 (2009).
142. J. Jung, L. Martin-Moreno and F. J. Garcia-Vidal, "Light transmission properties of holey metal films in the metamaterial limit: effective medium theory and subwavelength imaging", *New J. Phys.* **11**, 123013 (2009).
143. A. Yu Nikitin, David Artigas, Lluís Torner, F. J. Garcia-Vidal and L. Martin-Moreno, "Polarization conversion spectroscopy of hybrid modes", *Opt. Lett.* **34**, 3911 (2009).
144. A. Yu. Nikitin, Sergio G. Rodrigo, F. J. Garcia-Vidal and L. Martin-Moreno, "In the diffraction shadow: Norton waves versus surface plasmon polaritons in the optical region", *New J. Phys.* **11**, 123020 (2009).
145. C. R. Williams, M. Misra, S. R. Andrews, S. A. Maier, S. Carretero-Palacios, S. G. Rodrigo, F. J. Garcia-Vidal and L. Martin-Moreno, "Dual band terahertz waveguiding on a planar metal surface patterned with annular holes", *Appl. Phys. Lett.* **96**, 011101 (2010).
146. D. Martin-Cano, M. L. Nesterov, A. I. Fernandez-Dominguez, F. J. Garcia-Vidal, L. Martin-Moreno and Esteban Moreno, "Domino plasmons for subwavelength terahertz circuitry", *Opt. Express* **18**, 754 (2010).
147. M.L. Nesterov, D. Martin-Cano, A. I. Fernandez-Dominguez, E. Moreno, L. Martin-Moreno and F.J. Garcia-Vidal, "Geometrically induced modification of surface plasmons in the optical and telecom regimes", *Opt. Lett.* **35**, 423 (2010).
148. F.J. Garcia-Vidal, L. Martin-Moreno, T.W. Ebbesen and L. Kuipers, "Light passing through subwavelength apertures", *Rev. Mod. Phys.* **82**, 729 (2010).
149. M. Guillaume, A. Yu. Nikitin, M. J. Klein, L. A. Dunbar, V. Spassov, R. Eckert, L. Martin-Moreno, F.J. Garcia-Vidal and R.P. Stanley, "Observation of enhanced transmission for s-polarized light through a subwavelength slit", *Opt. Express* **18**, 9722 (2010).
150. J. Christensen, L. Martin-Moreno and F.J. Garcia-Vidal, "Enhanced acoustical transmission and beaming effect through a single aperture", *Phys. Rev. B* **81**, 174104 (2010).

151. P.A. Huidobro, M.L. Nesterov, L. Martin-Moreno and F.J. Garcia-Vidal, "Transformation optics for plasmonics", *NanoLetters* **10**, 1985 (2010).
152. O. Mahboub, S. Carretero-Palacios, C. Genet, F.J. Garcia-Vidal, S.G. Rodrigo, L. Martin-Moreno and T.W. Ebbesen, "Optimization of bull's eye structures for transmission enhancement", *Opt. Express* **18**, 11292 (2010).
153. J.-S. Bouillard, J. Einsle, W. Dickson, S.G. Rodrigo, S. Carretero-Palacios, L. Martin-Moreno, F.J. Garcia-Vidal and A.V. Zayats, "Optical transmission of periodic annular apertures in metal film on high-refractive index substrate: the role of the nanopillar shape", *Appl. Phys. Lett.* **96**, 201101 (2010).
154. J. Christensen, L. Martin-Moreno and F.J. Garcia-Vidal, "Collimation of horizontally polarized shear waves by means of ridge grating supported Love modes", *Appl. Phys. Lett.* **96**, 233505 (2010).
155. D. Martin-Cano, L. Martin-Moreno, F.J. Garcia-Vidal and E. Moreno, "Resonance energy transfer and superradiance mediated by plasmonic nanowaveguides", *NanoLetters* **10**, 3129 (2010).
156. A. Yu. Nikitin, F.J. Garcia-Vidal and L. Martin-Moreno, "Surface electromagnetic field radiated by a subwavelength hole in a metal film", *Phys. Rev. Lett.* **105**, 073902 (2010).
157. J. Christensen, L. Martin-Moreno and F.J. Garcia-Vidal, "All-angle blockage of sound by an acoustic double-fishnet metamaterial", *Appl. Phys. Lett.* **97**, 134106 (2010).
158. J. K. So, J.H. Won, M.A. Sattarov, S.H. Bak, K.H. Jang, G.S. Park, D.S. Kim and F.J. Garcia-Vidal, "Cerenkov radiation in metallic metamaterials", *Appl. Phys. Lett.* **97**, 151107 (2010).
159. Sergio G. Rodrigo, O. Mahboub, A. Degiron, Cyriaque Genet, F. J. Garcia-Vidal, L. Martin-Moreno and Thomas W. Ebbesen, "Holes with very acute angles: a new paradigm of extraordinary optical transmission through strongly localized modes", *Opt. Express* **18**, 26391 (2010).
160. A. Yu. Nikitin, F. J. Garcia-Vidal and L. Martin-Moreno, "Influence of the dielectric substrate on the field emitted by a subwavelength slit in a metal film", *Phys. Status Solidi RRL* **4**, 250 (2010).
161. S. Carretero-Palacios, Alexander Minovich, Dragomir N. Neshev, Yuri S. Kivshar, F. J. Garcia-Vidal, L. Martin-Moreno and Sergio G. Rodrigo, "Optical switching in metal-slit arrays on nonlinear dielectric substrates", *Opt. Lett.* **35**, 4211 (2010).
162. J. Zhu, J. Christensen, J. Jung, L. Martin-Moreno, X. Yin, L. Fok, X. Zhang and F. J. Garcia-Vidal, "A holey-structured metamaterial for acoustic deep-subwavelength imaging", *Nature Physics* **7**, 52 (2011).
163. Y. M. Bahk, H. R. Park, K. J. Ahn, H. S. Kim, Y. H. Ahn, Dai-Sik Kim, J. Bravo-Abad, L. Martin-Moreno and F. J. Garcia-Vidal, "Anomalous Band Formation in Arrays of Terahertz Nanoresonators", *Phys. Rev. Lett.* **106**, 013902 (2011).
164. A. Gonzalez-Tudela, D. Martin-Cano, E. Moreno, L. Martin-Moreno, C. Tejedor and F. J. Garcia-Vidal, "Entanglement of Two Qubits Mediated by One-Dimensional Plasmonic Waveguides", *Phys. Rev. Lett.* **106**, 020501 (2011).
165. P. A. Huidobro, M.L. Nesterov, L. Martin-Moreno and F. J. Garcia-Vidal, "Moulding the flow of surface plasmons using conformal and quasiconformal mappings", *New J. Phys.* **13**, 033011 (2011).
166. A. Yu Nikitin, F. J. Garcia-Vidal and L. Martin-Moreno, "Oblique launching of optical surface waves by a subwavelength slit", *Phys. Rev. B* **83**, 155448 (2011).
167. S. Carretero-Palacios, O. Mahboub, F. J. Garcia-Vidal, L. Martin-Moreno, Sergio G. Rodrigo, C. Genet and T. W. Ebbesen, "Mechanisms for extraordinary optical transmission through bull's eye structures", *Opt. Express* **19**, 10429 (2011).
168. Sergio G. Rodrigo, S. Carretero-Palacios, F. J. Garcia-Vidal and L. Martin-Moreno, "Metallic slit arrays filled with third-order nonlinear media: Optical Kerr effect and third-harmonic generation", *Phys. Rev. B* **83**, 235425 (2011).

169. Jin-Kyu So, Kyu-Ha Jang, Gun-Sik Park and F. J. Garcia-Vidal, "Bulk and surface electromagnetic response of metallic metamaterials to convection electrons", *Appl. Phys. Lett.* **99**, 071106 (2011).
170. F. de Leon-Perez, F. J. Garcia-Vidal and L. Martin-Moreno, "Role of surface plasmon polaritons in the optical response of a hole pair", *Phys. Rev. B* **84**, 125414 (2011).
171. Hyeong-Ryeol Park, Young-Mi Bahk, Kwang Jun Ahn, Q-Han Park, Dai-Sik Kim, Luis Martin-Moreno, Francisco J. Garcia-Vidal and Jorge Bravo-Abad, "Controlling terahertz radiation with nanoscale metal barriers embedded in nano slot antennas", *ACS Nano* **10**, 8340 (2011).
172. A. Yu. Nikitin, F. Guinea, F. J. Garcia-Vidal and L. Martin-Moreno, "Edge and waveguide terahertz surface plasmon modes in graphene microribbons", *Phys. Rev. B (RC)* **84**, 161407 (2011).
173. F. Ruting, P. A. Huidobro and F. J. Garcia-Vidal, "Emergence of Anderson localization in plasmonic waveguides", *Opt. Lett.* **36**, 4341 (2011).
174. A. Yu. Nikitin, F. Guinea, F. J. Garcia-Vidal and L. Martin-Moreno, "Fields radiated by a nanoemitter in a graphene sheet", *Phys. Rev. B* **84**, 195446 (2011).
175. Diego Martin-Cano, O. Quevedo-Teruel, Esteban Moreno, L. Martin-Moreno and F. J. Garcia-Vidal, "Waveguided spoof surface plasmons with deep-subwavelength lateral confinement", *Opt. Lett.* **36**, 4635 (2011).
176. Diego Martin-Cano, Alejandro Gonzalez-Tudela, L. Martin-Moreno, F. J. Garcia-Vidal, Carlos Tejedor and Esteban Moreno, "Dissipation-driven generation of two-qubit entanglement mediated by plasmonic waveguides", *Phys. Rev. B* **84**, 235306 (2011).
177. S. Carretero-Palacios, F. J. Garcia-Vidal, L. Martin-Moreno and Sergio G. Rodrigo, "Effect of film thickness and dielectric environment on optical transmission through subwavelength holes", *Phys. Rev. B* **85**, 035417 (2012).
178. R. Marani, A. D'Orazio, V. Petruzzelli, S. G. Rodrigo, L. Martin-Moreno, F. J. Garcia-Vidal and J. Bravo-Abad, "Gain-assisted extraordinary optical transmission through periodic arrays of subwavelength apertures", *New J. Phys.* **14**, 013020 (2012).
179. A. Yu. Nikitin, F. Guinea, F. J. Garcia-Vidal and L. Martin-Moreno, "Surface plasmon enhanced absorption and suppressed transmission in periodic arrays of graphene ribbons", *Phys. Rev. B (RC)* **85**, 081405 (2012).
180. A.I. Fernandez-Dominguez, A. Wiener, F. J. Garcia-Vidal, S.A. Maier and J.B. Pendry, "Transformation-Optics description of nonlocal effects in plasmonic nanostructures", *Phys. Rev. Lett.* **108**, 106802 (2012).
181. P.A. Huidobro, A.Y. Nikitin, C. Gonzalez-Ballester, L. Martin-Moreno and F. J. Garcia-Vidal, "Superradiance mediated by graphene surface plasmons", *Phys. Rev. B* **85**, 155438 (2012).
182. Anders Pors, Esteban Moreno, L. Martin-Moreno, J.B. Pendry and F. J. Garcia-Vidal, "Localized Spoof Plasmons arise while texturing closed surfaces", *Phys. Rev. Lett.* **108**, 223905 (2012).
183. Felix Ruting, A.I. Fernandez-Dominguez, L. Martin-Moreno and F. J. Garcia-Vidal, "Subwavelength chiral surface plasmons that carry tuneable orbital angular momentum", *Phys. Rev. B* **86**, 075437 (2012).
184. Bing Wang, Xiang Zhang, F. J. Garcia-Vidal, Xiaocong Yuan and Jinghua Teng, "Strong Coupling of Surface Plasmon Polaritons in Monolayer Graphene Sheet Arrays", *Phys. Rev. Lett.* **109**, 073901 (2012).
185. Muamer Kadic, Sébastien Guenneau, Stefan Enoch, Paloma A. Huidobro, Luis Martin-Moreno, Francisco J. Garcia-Vidal, Jan Renger and Romain Quidant, "Transformation plasmonics", *Nanophotonics* **1**, 51 (2012).

186. F. Villate-Guio, F. Lopez-Tejeira, F.J. Garcia-Vidal, L. Martin-Moreno and F. de Leon-Perez, "Optimal light harvesting structures at optical and infrared frequencies", *Opt. Express* **20**, 23 (2012).
187. A.I. Fernandez-Dominguez, P. Zhang, Y. Luo, S.A. Maier, F.J. García-Vidal and J.B. Pendry, "Transformation-optics insight into nonlocal effects in separated nanowires", *Phys. Rev. B (RC)* **86**, 241110 (2012).
188. Xiaopeng Shen, Tie Jun Cui, Diego Martin-Cano and Francisco J. Garcia-Vidal, "Conformal surface plasmons propagating on ultrathin and flexible films", *Proc. Nat. Acad. Sci* **110**, 40 (2013).
189. M.L. Nesterov, J. Bravo-Abad, A. Yu. Nikitin, F.J. García-Vidal and L. Martín-Moreno, "Graphene supports the propagation of subwavelength optical solitons", *Laser and Photonics Reviews* **7**, L7-L11 (2013) (cover page).
190. T. Hummer, F.J. García-Vidal, L. Martín-Moreno and D. Zueco, "Weak and strong coupling regimes in plasmonic QED", *Phys. Rev. B* **87**, 115419 (2013).
191. A. Gonzalez-Tudela, P.A. Huidobro, L. Martin-Moreno, C. Tejedor and F.J. García-Vidal, "Theory of strong coupling between quantum emitters and propagating surface plasmons", *Phys. Rev. Lett.* **110**, 126801 (2013).
192. J. Zhu, Y. Chen, X. Zhu, F.J. García-Vidal, X. Yin, W. Zhang and X. Zhang, "Acoustic rainbow trapping", *Sci. Rep.* **3**, 1728 (2013).
193. L. Stella, P. Zhang, F.J. García-Vidal, A. Rubio and P. García-González, "Performance of nonlocal optics when applied to plasmonic nanostructures", *J. Phys. Chem. C* **117**, 8941 (2013).
194. A. Y. Nikitin, F.J. García-Vidal and L. Martín-Moreno, "Analytical expressions for the electromagnetic dyadic Green's function in graphene and thin layers", *IEEE J. Selec. Top. Quantum Electronics* **19**, 4600611 (2013).
195. J. Bravo-Abad and F.J. García-Vidal, "A sense of direction", *Nature Nanotechnology* **8**, 479 (2013).
196. C. Gonzalez-Ballester, F.J. García-Vidal and E. Moreno, "Non-Markovian effects in waveguide-mediated entanglement", *New J. Phys.* **15**, 073015 (2013).
197. S.R.K. Rodriguez, J. Feist, M.A. Verschuuren, F.J. García-Vidal and J. Gómez-Rivas, "Thermalization and cooling of plasmon-exciton-polaritons: towards quantum condensation", *Phys. Rev. Lett.* **111**, 166802 (2013).
198. S. G. Rodrigo, F.J. García-Vidal and L. Martín-Moreno, "Theory of absorption-induced transparency", *Phys. Rev. B* **88**, 155126 (2013).
199. H. Da, Q. Bao, R. Sanaei, J. Teng, K.P. Loh, F.J. García-Vidal and C.W. Qiu, "Monolayer graphene photonic metastructures: giant Faraday rotation and nearly perfect transmission", *Phys. Rev. B* **88**, 205405 (2013).
200. P. A. Huidobro, S. Ota, X. Yang, F.J. García-Vidal and X. Zhang, "Plasmonic brownian ratchet", *Phys. Rev. B (RC)* **88**, 201401 (2013).
201. A. González-Tudela, P. A. Huidobro, L. Martín-Moreno, C. Tejedor and F.J. García-Vidal, "Reversible dynamics of single quantum emitters near metal-dielectric interfaces", *Phys. Rev. B (RC)* **89**, 041402 (2014).
202. P. A. Huidobro, X. Shen, J. Cuerda, E. Moreno, L. Martín-Moreno, F.J. García-Vidal, T.J. Cui and J.B. Pendry, "Magnetic localized surface plasmons", *Phys. Rev. X* **4**, 021003 (2014).
203. C. González-Ballester, E. Moreno and F.J. García-Vidal, "Generation, manipulation, and detection of two-qubit entanglement in waveguide QED", *Phys. Rev. A* **89**, 042328 (2014).
204. R. Quesada, D. Martín-Cano, F.J. García-Vidal and J. Bravo-Abad, "Deep-subwavelength negative-index waveguiding enabled by coupled conformal surface plasmons", *Opt. Lett.* **39**, 2990 (2014).
205. J. Del Pino, J. Feist, F.J. García-Vidal and J.J. García-Ripoll, "Entanglement detection in coupled particle plasmons", *Phys. Rev. Lett.* **112**, 216805 (2014)

206. A. Delga, J. Feist, J. Bravo-Abad, and F. J. Garcia-Vidal, "Quantum Emitters Near a Metal Nanoparticle: Strong Coupling and Quenching", *Phys. Rev. Lett.* **112**, 253601 (2014).
207. F. Rütting, J. Cuerda, J. Bravo-Abad, and F. J. Garcia-Vidal, "Lasing action assisted by long-range surface plasmons", *Laser & Photonics Rev.* **8**, 5 (2014).
208. Pu Zhang, Johannes Feist, Angel Rubio, Pablo García-González, and F. J. García-Vidal, "Ab initio nanoplasmonics: The impact of atomic structure" *Phys. Rev. B* **90**, 161407(R) (2014).
209. A. Delga, J. Feist, J. Bravo-Abad, and F. J. Garcia-Vidal, "Theory of strong coupling between quantum emitters and localized surface plasmons", *J. of Optics* **16**, 114018 (2014).
210. J. Cuerda, F. Rütting, F. J. García-Vidal, and J. Bravo-Abad, "Theory of lasing action in plasmonic crystals", *Phys. Rev. B* **91**, 041118(R) (2015).
211. Bai Song, Yashar Ganjeh, Seid Sadat, Dakotah Thompson, Anthony Fiorino, Víctor Fernández-Hurtado, Johannes Feist, Francisco J. Garcia-Vidal, Juan Carlos Cuevas, Pramod Reddy and Edgar Meyhofer, "Enhancement of near-field radiative heat transfer using polar dielectric thin films", *Nature Nanotechnology* **10**, 253 (2015).
212. Alejandro Varas, Pablo García-González, F. J. García-Vidal, and Angel Rubio, "Anisotropy Effects on the Plasmonic Response of Nanoparticle Dimers" *J. Phys. Chem. Lett.* **6**, 1891 (2015).
213. Kun Huang, Hong Liu, Francisco J. Garcia-Vidal, Minghui Hong, Boris Luk'yanchuk, Jinghua Teng, and Cheng-Wei Qiu, "Ultrahigh-capacity non-periodic photon sieves operating in visible light", *Nature Communications* **6**, 7059 (2015).
214. Johannes Feist and Francisco J. Garcia-Vidal, "Extraordinary Exciton Conductance Induced by Strong Coupling", *Phys. Rev. Lett.* **114**, 196402 (2015).
215. Rubén Esteban, Asier Zugarramurdi, Pu Zhang, Peter Nordlander, Francisco J. García-Vidal, Andrei G. Borisov and Javier Aizpurua, "A classical treatment of optical tunneling in plasmonic gaps: extending the quantum corrected model to practical situations", *Faraday Discussions* **178**, 151 (2015).
216. Javier del Pino, Johannes Feist and Francisco J Garcia-Vidal, "Quantum theory of collective strong coupling of molecular vibrations with a microcavity mode", *New J. Phys.* **17**, 053040 (2015).
217. Deok-Soo Kim, Hyuksang Kwon, Alexey Yu. Nikitin, Seongjin Ahn, Luis Martín-Moreno, Francisco J. García-Vidal, Sunmin Ryu, Hongki Min, and Zee Hwan Kim, "Stacking Structures of Few-Layer Graphene Revealed by Phase-Sensitive Infrared Nanoscopy", *ACS Nano* **9**, 6765 (2015).
218. Esteban Bermúdez-Ureña, Carlos Gonzalez-Ballester, Michael Geiselmann, Renaud Marty, Ilya P. Radko, Tobias Holmgaard, Yury Alaverdyan, Esteban Moreno, Francisco J. García-Vidal, Sergey I. Bozhevolnyi, and Romain Quidant, "Coupling of individual quantum emitters to channel plasmons", *Nature Communications* **6**, 7883 (2015).
219. Carlos Gonzalez-Ballester, Johannes Feist, Esteban Moreno, and Francisco J. Garcia-Vidal, "Harvesting excitons through plasmonic strong coupling", *Phys. Rev. B* **92**, 121402 (R) (2015).
220. E. Moncada-Villa, V. Fernández-Hurtado, F. J. García-Vidal, A. García-Martín, and J. C. Cuevas, "Magnetic field control of near-field radiative heat transfer and the realization of highly tunable hyperbolic thermal emitters", *Phys. Rev. B* **92**, 125418 (2015).
221. Carlos Gonzalez-Ballester, Alejandro Gonzalez-Tudela, Francisco J. Garcia-Vidal, and Esteban Moreno, "Chiral route to spontaneous entanglement generation", *Phys. Rev. B* **92**, 155304 (2015).

222. Luis Martín-Moreno, F. Javier García de Abajo, and Francisco J. García-Vidal, "Ultraefficient Coupling of a Quantum Emitter to the Tunable Guided Plasmons of a Carbon Nanotube", *Phys. Rev. Lett.* **115**, 173601 (2015).
223. Javier Galego, Francisco J. Garcia-Vidal, and Johannes Feist, "Cavity-Induced Modifications of Molecular Structure in the Strong-Coupling Regime", *Physical Review X* **5**, 041022 (2015).
224. Shahriar Memaran, Nihar R. Pradhan, Zhengguang Lu, Daniel Rhodes, Jonathan Ludwig, Qiong Zhou, Omotola Ogunsolu, Pulickel M. Ajayan, Dmitry Smirnov, Antonio I. Fernández-Domínguez, Francisco J. García-Vidal, and Luis Balicas, "Pronounced Photovoltaic Response from Multilayered Transition-Metal Dichalcogenides PN-Junctions", *Nano Lett.* **15**, 7532 (2015).
225. Kyeongtae Kim, Bai Song, Víctor Fernández-Hurtado, Woochul Lee, Wonho Jeong, Longji Cui, Dakotah Thompson, Johannes Feist, M. T. Homer Reid, Francisco J. García-Vidal, Juan Carlos Cuevas, Edgar Meyhofer, and Pramod Reddy, "Radiative heat transfer in the extreme near field", *Nature* **528**, 387 (2015).
226. Javier del Pino, Johannes Feist and F. J. Garcia-Vidal, "Signatures of vibrational strong coupling in Raman scattering", *J. Phys. Chem C* **119**, 29132 (2015).
227. J. M. Hamm, A. F. Page, J. Bravo-Abad, F. J. Garcia-Vidal, and O. Hess, "Nonequilibrium plasmon emission drives ultrafast carrier relaxation dynamics in photoexcited graphene", *Phys. Rev. B* **93**, 041480(R) (2016).
228. A. Varas, P. Garcia-Gonzalez, J. Feist, F. J. Garcia-Vidal, and A. Rubio, "Quantum plasmonics: from jellium models to ab-initio calculations", *Nanophotonics* **5**, 409 (2016).
229. Rui-Qi Li, D. Hernangomez-Perez, F. J. Garcia-Vidal, and A. I. Fernandez-Dominguez, "Transformation Optics approach to plasmon-exciton strong coupling in nanocavities", *Phys. Rev. Lett.* **117**, 107401 (2016).
230. J. Cuerda, F. J. Garcia-Vidal, and J. Bravo-Abad, "Spatio-temporal modeling of lasing action in core-shell metallic nanoparticles", *ACS Photonics* **3**, 1952 (2016).
231. C. Gonzalez-Ballester, J. Feist, E. Gonzalo-Badia, E. Moreno, and F. J. Garcia-Vidal, "Uncoupled dark states can inherit polaritonic properties", *Phys. Rev. Lett.* **117**, 156402 (2016).
232. N. Wu, J. Feist and F. J. Garcia-Vidal, "When polarons meet polaritons: exciton-vibration interactions in organic molecules coupled to confined light fields", *Phys. Rev. B* **94**, 195409 (2016).
233. C. Gonzalez-Ballester, E. Moreno, F. J. Garcia-Vidal, and A. Gonzalez-Tudela, "Nonreciprocal few-photon routing schemes based on chiral waveguide-emitter couplings", *Phys. Rev. A* **94**, 063817 (2016).
234. J. Galego, F. J. Garcia-Vidal and J. Feist, "Suppressing photochemical reactions with quantized light fields", *Nature Communications* **7**, 13841 (2016).
235. J. del Pino, F. J. Garcia-Vidal and J. Feist, "Exploiting vibrational strong coupling to make an optical parametric oscillator out of a Raman laser", *Phys. Rev. Lett.* **117**, 277401 (2016).