

# **Curriculum Vitae – Francisco J. García-Vidal**

## **(March 2018)**

### **Address**

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### **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
  - Visiting professor, Jul. 2017-Aug. 2017

### **Professional Activities**

- **Supervision of PhD students**
  1. Pilar Fernández de Pablo (2004).
  2. Jorge Bravo Abad (2006) is now associate professor at UAM,
  3. Blanca Biel Ruiz (2006) is now associate professor at the University of Granada (Spain).
  4. Antonio I. Fernández Domínguez (2009) is now a Ramón y Cajal Fellow.

5. Johan Christensen (2010) is now a Ramón y Cajal Fellow and has been awarded by an ERC Starting Grant in year 2016.
  6. Diego Martín-Cano (2013) is now working at the Max Planck Institute for the Science of Light in Erlangen (Germany) as a postdoc in the group of Prof. Vahid Sandoghdar.
  7. Paloma Arroyo Huidobro (2013) is now working at the Imperial College of London (UK) as a postdoc in the group of Prof. Sir John Pendry.
  8. Carlos González Ballesteros (2017) is now working at IQOQI-Innsbruck (Austria) in the group led by Prof. Oriol Romero-Isart
  9. Javier Cuerda Rodríguez (2017).
- **Supervision of postdocs (the most relevant)**
    - Dr. Juan Antonio Porto (2001-2005). Dr. Porto is now associate professor at UAM after being a Ramón y Cajal Fellow in my group.
    - Dr. Esteban Moreno Soriano (2003-2007). Dr. Moreno is now associate professor at UAM after being a Ramón y Cajal Fellow in my group.
    - Dr. Johannes Feist (2012-2017). Dr. Feist worked as a senior postdoc in my group funded by the ERC Advanced Grant "PLASMONANOQUANTA". He has been awarded by an ERC Starting Grant in year 2016 and by a Ramón y Cajal fellowship in year 2017.
  - **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.
    - Workshop on Quantum Nanophotonics, Benasque (Spain), February 2017.
  - **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, Nature Nanotechnology, Nature Communications, 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.
    - Divisional Associate Editor (DAE) of Physical Review Letters from March 2017
  - **Plenary, Keynote and Invited Talks**
    - More than 90 plenary, keynote and invited talks in the most important conferences devoted to Nanophotonics, Plasmonics and Metamaterials.

## **Research Group**

(As of March 2018)

- 4 PhD students and 1 research associate.
- Funded by the Spanish Ministry of Science and the European Union (EU).

## **Publications**

- 254 refereed journal articles.
- Total citations (ISI Web of Knowledge): **19.737**. The h-index: **63**
- Total citations (Google Scholar): **27.401**. The h-index: **74**

### **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  $\{\backslash\bf k\}$ -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 pasivating 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  $\text{SiO}_2$  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 Au/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 Demultiplexing 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-Tejeira, 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-Tejeira, 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).
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