

Serge Haroche complete publication list (1965-2011)

1. C.Cohen-Tannoudji and S.Haroche,"Pompage atomique transversal: mise en évidence d'un nouveau spectre de raies de résonance magnétique", Comptes Rendus Acad. Sciences, 261, 5400 (1965)
2. C.Cohen-Tannoudji and S.Haroche, "Modification et annulation du facteur de Landé d'un atome par couplage avec un champ de radiofréquence", Comptes Rendus Acad. Sciences, 262, 268 (1966).
3. C.Cohen-Tannoudji and S.Haroche, "Interpretation de diverses résonances magnétiques en termes de croisements et anticroisements de niveaux d'énergie du système global atome-photons de radiofréquence", Comptes Rendus Acad. Sciences, 262, 37 (1966).
4. C.Cohen-Tannoudji and S.Haroche, "Interprétation de divers spectres de raies de résonance magnétique basée sur une résolution par itération des équations d'évolution de la matrice densité atomique", Comptes Rendus Acad. Sciences, 264, 626 (1967).
5. S.Haroche, "Etudes théorique et expérimentale d'un nouveau spectre de raies de résonance magnétique observé en pompage optique transversal, thèse de troisième cycle, Paris, 1967 (non publié).
6. S.Haroche and C.Cohen-Tannoudji, "Interprétation quantique des diverses résonances observées lors de la diffusion de photons optiques et de radiofréquence par un atome", J.Physique, 30, 125 (1969).
7. C.Cohen-Tannoudji and S.Haroche, "Absorption et diffusion de photons optiques par un atome en interaction avec des photons de radiofréquence", J.Physique, 30, 153 (1969).
8. J.Dupont-Roc, S.Haroche and C.Cohen-Tannoudji, "Detection of very weak magnetic fields (10^{-9} Gauss) by ^{87}Rb zero-field level crossing resonances", Phys.Lett.A, 28, 638 (1969).
9. C.Cohen-Tannoudji, J.Dupont-Roc, S.Haroche and F.Laloe, "Detection of the static magnetic field produced by the oriented nuclei of optically pumped He^3 gas", Phys.Rev.Lett. 22, 758 (1969).
10. C.Cohen-Tannoudji and S.Haroche, "Le concept d'atome habillé par des photons" in "Polarisation, matière et rayonnement" (livre jubilaire en l'honneur de A.Kastler, P.U.F., Paris (1969)).
11. C.Landré, C.Cohen-Tannoudji, J.Dupont-Roc and S.Haroche, "Etude expérimentale du diagramme d'énergie d'un atome habillé par des photons de radiofréquence", Comptes Rendus Acad. Sciences, 270, 73 (1970).
12. C.Landré, C.Cohen-Tannoudji, J.Dupont-Roc and S.Haroche, "Résonances paramétriques sur un atome habillé par un champ de radiofréquence linéaire", Comptes Rendus Acad. Sciences, 270, 339 (1970).
13. C.Landré, C.Cohen-Tannoudji, J.Dupont-Roc and S.Haroche, "Anisotropie des propriétés magnétiques d'un atome habillé par des photons de radiofréquence", J.Physique, 31, 971 (1970).
14. C.Cohen-Tannoudji, S.Haroche, C.Audoin and J.P.Schermann, "Modified Zeeman hyperfine spectra observed in H and Rb ground states interacting with a non resonant rf field", Phys.Rev.Lett. 24, 861 (1970).
15. S.Haroche and C.Cohen-Tannoudji, "Resonant transfer of coherence in non zero magnetic field between atomic levels of different g-factors", Phys.Rev.Lett. 24, 974 (1970).
16. C.Cohen-Tannoudji, J.Dupont-Roc, S.Haroche and F.Laloe, "Diverses résonances de croisement de niveaux sur des atomes pompés optiquement en champ nul, I:Théorie", Rev.Phys.Appl. 5, 95 (1970).
17. C.Cohen-Tannoudji, J.Dupont-Roc, S.Haroche and F.Laloe, "Diverses résonances de croisement de niveaux sur des atomes pompés optiquement en champ nul: Application à la mesure des champs faibles", Rev.Phys.Appl. 5, 102 (1970).
18. S.Haroche, "Etude théorique et expérimentale des propriétés physiques d'atomes en interaction avec des photons de radiofréquence" (thèse d'état), Ann.Phys. Paris, 6, 189 and 327 (1971).
19. M.Le Dourneuf, C.Cohen-Tannoudji, J.Dupont-Roc and S.Haroche, "Résoance magnétique de type Raman observable en champ nul sur des spins pompés optiquement", Comptes Rendus Acad.Sciences, 272, 985 (1971).
20. M.Le Dourneuf, C.Cohen-Tannoudji, J.Dupont-Roc and S.Haroche, "Champ magnétique statique fictif associé à un champ rf tournant", Comptes Rendus Acad.Sciences, 272, 1048 (1971).

21. M.Le Dourneuf, C.Cohen-Tannoudji, J.Dupont-Roc and S.Haroche, "Interaction d'atomes alcalins dans leur état fondamental avec un champ de radiofréquence tournant non résonnant", Comptes Rendus Acad.Sciences, 272, 1131 (1971).
22. S.Haroche, "Etude théorique de la relaxation magnétique d'atomes habillés par un champ de radiofréquence", Comptes Rendus Acad.Sciences. 273, 1123 (1971).
23. S.Haroche, "Etude expérimentale de la relaxation magnétique d'atomes habillés par un champ de radiofréquence", Comptes Rendus Acad.Sciences. 274, 19 (1972).
24. G.Grynberg, C.Cohen-Tannoudji, J.Dupont-Roc and S.Haroche, "Resonance Hanle observable en pompage longitudinal sur des atomes couplés à un champ rf", Opt.Comm. 6, 145 (1972).
25. S.Haroche and F.Hartmann, "Theory of Saturated Absorption Lineshapes", Phys.Rev. A6, 1280 (1972).
26. G.Grynberg, J.Dupont-Roc, S.Haroche and C.Cohen-Tannoudji, "Un croisement de niveaux singulier: l'anticroisement empêché ou croisement de deuxième espèce", J.Physique 34, 523 (1973).
27. G.Grynberg, J.Dupont-Roc, S.Haroche and C.Cohen-Tannoudji, Exemples de croisements de deuxième espèce dans le diagramme d'énergie d'un atome habillé par des photons de radiofréquence", J.Physique 34, 523 (1973).
28. S.Haroche, J.Paisner and A.L.Schawlow, "Hyperfine quantum beats observed in Cs vapor under pulsed dye laser excitation", Phys.Rev.Lett. 30, 948 (1973).
29. S.Haroche and J.Paisner, "Quantum beat spectroscopy using tunable pulsed dye lasers" in "Laser Spectroscopy I", G.Brewer editor (1973).
30. S.Haroche, M.Gross and M. Silverman, "Observation of fine structure quantum beats following stepwise excitation in Na nD states", Phys.Rev.Lett. 33, 1063 (1974).
31. S.Haroche, "Quantum beat spectroscopy" in "High resolution spectroscopy", Shimoda editor, Springer Verlag (1975).
32. S.Haroche, C.Fabre and M.Gross, "Determination by quantum beat spectroscopy of fine structure intervals in a series of highly excited sodium nD states", Opt.Comm. 13, 393 (1975).
33. C.Fabre and S.Haroche, "Observation of giant polarizabilities in atomic Rydberg states", Opt.Comm. 15, 254 (1975).
34. S.Haroche, B.Cagnac and S.Liberman, "Doppler free laser spectroscopy" in "Frontiers in Laser Spectroscopy", Haroche, Liberman and Balian editors, North Holland (1976).
35. M.Gross, C.Fabre, P.Pillet and S.Haroche, "Observation of near infrared Dicke superradiance on cascading transitions in atomic sodium", Phys.Rev.Lett. 36, 1035 (1976).
36. C.Fabre, M.Gross, P.Pillet and S.Haroche, "Time resolved laser spectroscopy" in Atomic Physics V, Marrus, Prior and Shugart editors, Plenum (1977).
37. C.Fabre, P.Goy and S.Haroche "Millimeter resonances in Na Rydberg levels detected by field ionization: quantum defects and Stark effect studies", J.Phys.B.Lett, 10, L-183 (1977).
38. M.Silverman, M.Gross and S.Haroche, "General Theory of laser induced quantum beats.I. Saturation effects of single laser excitation", Phys.Rev.A18, 1507 (1977).
39. M.Silverman, M.Gross and S.Haroche, "General Theory of laser induced quantum beats. II.Sequential laser excitation, effects of external static fields", Phys.Rev.A18, 1517 (1977).
40. S.Haroche, C.Fabre and P.Goy, "Millimeter spectroscopy in Rydberg levels" in "Etats Atomiques Couplés a un Continuum. Atomes et Molécules Hautement Excités", éditions du CNRS (1977).
41. S.Haroche, "High resolution spectroscopy in atomic Rydberg states" in "Coherence in Spectroscopy and Modern Physics", Arrechi, Bonifacio and Scully editors, Plenum (1978).
42. J.M.Raimond, M.Gross, C.Fabre, S.Haroche and H.Stroke, "Laser measurement of intensity ratio anomalies in principal series doublets of cesium Rydberg states: does the D1 line vanish?" J.Phys.B Lett. 11, L-765 (1978).
43. S.Haroche, "Des atomes géants", La Recherche (1978).

44. C.Fabre, P.Goy and S.Haroche, "Millimeter spectroscopy in sodium Rydberg states: quantum defects, fine structure and polarizability measurements", Phys.Rev. A18, 229 (1978).
45. M.Gross, J.M.Raimond and S.Haroche, "Doppler beats in superradiance", Phys.Rev.Lett. 40, 1711 (1978).
46. S.Haroche, C.Fabre, P.Goy, M.Gross and J.M.Raimond, "Rydberg states and microwaves: high resolution spectroscopy, masers and superradiance" in "Laser Spectroscopy IV", Walther and Rothe editors, Springer (1979).
47. M.Gross, P.Goy, S.Haroche, C.Fabre and J.M.Raimond, "Maser oscillation and microwave superradiance in small systems of Rydberg atoms", Phys.Rev.Lett. 43, 343 (1979).
48. P.Goy, C.Fabre, M.Gross and S.Haroche, "High resolution two photon millimeter spectroscopy in sodium Rydberg levels: possible application to metrology", J.Phys.B.Lett. 13, L-83 (1980).
49. N.W.Carlson, D.J.Jackson, A.L.Schawlow, S.Haroche and M.Gross, "Superradiance Triggering Spectroscopy", Opt.Comm. 32, 350 (1980).
50. L.Moi, C.Fabre, P.Goy, M.Gross, S.Haroche, P.Encrenaz, G.Beaudin and B.Lazareff, "Heterodyne detection of Rydberg atom maser emission", Opt.Comm. 33, 47 (1980).
51. C.Fabre, P.Goy and S.Haroche, "Addendum to millimeter spectroscopy in Na Rydberg states", Phys.Rev A22, 778 (1980).
52. S.Haroche, "Rydberg atoms and radiation" in "Atomic Physics VII", D.Kleppner and F.Pipkin editors, Plenum (1981).
53. J.M.Raimond, G.Vitrant and S.Haroche, "Spectral line broadening due to the interaction between very excited atoms: the dense Rydberg gas", J.Phys.B.Lett. 14, L-655 (1981).
54. J.M.Raimond, P.Goy, G.Vitrant and S.Haroche, "Millimeter wave spectroscopy of cesium Rydberg states and possible applications to frequency metrology", J.Physique.Colloques, 42, C-8 (1981).
55. S.Haroche, "The physics of Rydberg atoms" in "Trends in Physics" (EPS meeting proceedings, Istanbul, 1981).
56. J.M.Raimond, P.Goy and S.Haroche, "Collective interaction of Rydberg states with microwaves", Appl.Phys.B29, 168 (1982).
57. G.Vitrant, J.M.Raimond, M.Gross and S.Haroche, "Rydberg to plasma evolution in a dense gas of very excited atoms", J.Phys.B.Lett. 15, L-49 (1982).
58. S.Haroche, C.Fabre, J.M.Raimond, P.Goy, M.Gross and L.Moi, "Rydberg atoms and radiation in a resonant cavity.I. Theory", J.Physique. Colloque C2, 43, 265 (1982).
59. , C.Fabre, S.Haroche, J.M.Raimond, P.Goy, M.Gross and L.Moi, "Rydberg atoms and radiation in a resonant cavity.II.Experiments", J.Physique. Colloque C2, 43, 275 (1982).
60. S.Haroche, "Le rayonnement des atomes géants", La Recherche 13, 222 (1982).
61. S.Haroche, G.Vitrant and J.M.Raimond, "Rydberg-Rydberg interactions in a dense system of very excited atoms" in "Laser Spectroscopy V", Keller, Oka , Stoicheff editors, Springer (1982).
62. L.Moi, C.Fabre, P.Goy, M.Gross, S.Haroche and J.M.Raimond, "Rydberg superradiance" in "Laser Spectroscopy V", Keller, Oka , Stoicheff editors, Springer (1982).
63. P.Goy, J.M.Raimond, G.Vitrant, C.Fabre, S.Haroche and M.Gross, "Precise determination of the S and P quantum defects in Na and Cs by millimeter and submillimeter spectroscopy between Rydberg states" in "Precision Measurements and Fundamental Constants II", Taylor and Phillips editors, 617 (1982).
64. S.Haroche, P.Goy, J.M.Raimond, C.Fabre and M.Gross, "Exploration of the radiative properties of very excited atoms", Phil.Trans.Roy.Soc.London A307, 659 (1982).
65. P.Goy, J.M.Raimond, G.Vitrant and S.Haroche, "Millimeter-wave spectroscopy in cesium Rydberg states: quantum defects, fine and hyperfine structure measurements", Phys.Rev. A26, 2733 (1982).
66. J.M.Raimond, P.Goy, M.Gross, C.Fabre and S.Haroche, "Collective absorption of blackbody radiation by Rydberg atoms in a cavity: an experiment on Bose statistics and Brownian motion", Phys.Rev.Lett. 49, 117 (1982).

67. J.M.Raimond, P.Goy, M.Gross, C.Fabre and S.Haroche, "Statistics of millimeter-wave photon emitted by a Rydberg atom maser; an experimental study of fluctuations in single mode superradiance", Phys.Rev.Lett. 49, 1924 (1982).
68. M.Gross and S.Haroche, "Superradiance: an essay on the theory of collective spontaneous emission", Physics reports, 93, 302 (1982)
69. C.Fabre, M.Gross, J.M.Raimond and S.Haroche, "Measuring atomic dimensions by transmission of Rydberg atoms through micrometer size slits", J.Phys.B.16, 671 (1983).
70. J.M.Raimond, P.Goy, M.Gross, C.Fabre and S.Haroche, "Radiative properties of Rydberg atoms in resonant cavities" in "Laser Spectroscopy VI", Weber and Luthy editors, Springer (1983).
71. L.Moi, C.Fabre and S.Haroche, "Rydberg atom masers" in Laser Physics, Systems and Techniques", Proceedings of the 33rd Scottish Univ.Summer School in Physics, (1983).
72. L.Moi, P.Goy, M.Gross, J.M.Raimond, C.Fabre and S.Haroche, "Rydberg atom masers.I. A theoretical and experimental study of superradiant systems in the millimeter wave domain", Phys.Rev.A 27, 2043 (1983).
73. P.Goy, L.Moi, M.Gross, J.M.Raimond, C.Fabre and S.Haroche, "Rydberg atom masers.II. Triggering by external radiation and application to millimeter wave detectors", Phys.Rev.A 27, 2065 (1983).
74. P.Goy, J.M.Raimond, M.Gross and S.Haroche, "Observation of cavity-enhanced single atom spontaneous emission", Phys.Rev.Lett. 50, 1903 (1983).
75. Y.Kaluzny, P.Goy, M.Gross, J.M.Raimond and S.Haroche, "Observation of self-induced Rabi oscillations in two-level atoms excited inside a resonant cavity: the ringing regime of superradiance", Phys.Rev.Lett. 51, 1175 (1983).
76. S.Haroche, P.Goy, C.Fabre, M.Gross and J.M.Raimond, "Atomes de Rydberg et rayonnement millimetrique", Revue du CETHEDEC, Onde et Signal, 83-2, 109 (1983).
77. C.Fabre and S.Haroche, "Spectroscopy of one and two electron Rydberg atoms" in " Rydberg States of Atoms and Molecules", Cambridge University Press (1983).
78. J.M.Raimond and S.Haroche, "Atomes de Rydberg dans une cavité microonde: comment modifier l'émission spontanée?", Images de la Physique, CNRS internal Journal (1984).
79. P.Goy, J.M.Raimond, M.Gross and S.Haroche, "Small and sensitive systems interacting with millimeter and submillimeter waves: Rydberg atoms in a cavity", J.Appl.Phys. 56, 627 (1984).
80. C.Fabre, Y.Kaluzny, R.Calabrese, J.Liang, P.Goy and S.Haroche, "Study of non-hydrogenic near degeneracy between M-sublevels in the linear Stark effect of sodium Rydberg states", J.Phys.B, 17, 3217 (1984).
81. S.Haroche, "Rydberg atoms and radiation in a resonant cavity: a simple system to test basic quantum optics effects" in "New Trends in Atomic Physics", Grynberg and Stora editors, North Holland (1984).
82. S.Haroche and J.M.Raimond, "Radiative properties of Rydberg atoms in resonant cavities", Adv.Atom and Mol. Physics, 20, 347 (1985).
83. S.Haroche, "L'électrodynamique des atomes de Rydberg dans une cavité résonnante", Ann.Phys.France, 10 (1985).
84. S.Haroche, « Rydberg atoms radiating in free space or in cavities: new systems to test electrodynamics and quantum optics at an unusual scale » in « Atoms in unusual situations », J.P.Briand editor, Plenum (1985).
85. C.Fabre, P.Goy, M.Gross, S.Haroche, J.M.Raimond, A.Heidmann and S.Reynaud, "Atomic and field fluctuations in Rydberg masers: a potential source of squeezed radiation" in "Laser Spectroscopy VII", Springer, 1985.
86. S.Haroche, "Rydberg atoms and radiation" in "Fritz Haber Symposium Proceedings", Y.Prior editor, Plenum (1986).
87. S.Haroche, "Rydberg atoms in cavities: coherence, cooperation and fluctuations" in "Coherence, Cooperation and Fluctuations, Haake, Narducci and Walls editors, Cambridge University Press (1986).
88. J.Liang, M.Gross, P.Goy and S.Haroche, "Circular Rydberg state spectroscopy", Phys.Rev.A33, 4437 (1986).

89. P.Goy, J.Liang, M.Gross, S.Haroche, "Quantum defects and specific isotopic shift measurements in ns and np highly excited states of lithium: exchange effects between Rydberg and core electrons", Phys.Rev. A34, 2889 (1986).
90. A.Anderson, S.Haroche, E.Hinds, W.Jhe, D.Meschede and L.Moi, "Reflection of thermal cesium atoms grazing a polished glass surface", Phys.Rev A34, 3513 (1986).
91. M.Brune, J.M.Raimond, S.Haroche, "Theory of the Rydberg atom two-photon micromaser", Phys.Rev.A35, 154 (1987).
92. W.Jhe, A.Anderson, E.Hinds, D.Meschede, L.Moi and S.Haroche, "Suppression of spontaneous decay at optical frequencies: test of vacuum field anisotropy in confined space", Phys.Rev.Lett. 58, 666 (1987).
93. M.Brune, J.M.Raimond, P.Goy, L.Davidovich and S.Haroche, "Realization of a two-photon maser oscillator", Phys.Rev.lett. 59, 1899 (1987).
94. L.Davidovich, J.M.Raimond, M.Brune and S.Haroche, "Quantum Theory of a two-photon micromaser", Phys.Rev.A 36, 3771 (1987).
95. S.Haroche, "Spontaneous emission in confined space" in "Fundamentals in Quantum Optics II", F.Ehlotzky editor, Springer (1987).
96. L.Moi, S.Haroche, "Suppression de l'émission spontanée aux fréquences optiques par confinement d'atomes excités dans une cavité microscopique" in « Interaction of Radiation with Matter » (volume en l'honneur de Adriano Gozzini)", Quaderni (1987).
97. A.Anderson, S.Haroche, E.Hinds, W.Jhe and D.Meschede, "Atomic physics in confined space: suppressing spontaneous emission at optical frequencies and measuring the van der Waals atom-surface interaction", in "Laser Spectroscopy VIII", Persson and Svanberg editors, Springer (1987).
98. S.Haroche, "From micromasers to antimasers: when one photon in a cavity may be one too many" in "Lasers, Spectroscopy and New Ideas (a tribute to A.L.Schawlow)", Yen and Levenson editors, Springer (1987).
99. J.M.Raimond, M.Brune, P.Goy and S.Haroche, "Micromaser à deux photons", Bulletin de la société française de physique (1987).
100. M.Brune, J.M.Raimond, P.Goy, L.Davidovich and S.Haroche, "The two-photon Rydberg atom micromaser" IEEE J.Quant.Electron. **24** (1988), p. 1323.
101. L.Davidovich, J.M.Raimond, M.Brune and S.Haroche, "Multistability and chaos in a two-photon microscopic maser" in "Instabilities and chaos in quantum optics II", Abraham, Arecchi and Lugiatto éditeurs, (1988).
102. A.Anderson, E.Hinds, W.Jhe, D.Meschede and S.Haroche, "Measuring the van der Waals force between Rydberg atoms and a metallic surface". Phys Rev A **37**, 3594 (1988).
103. J.M.Raimond, M.Brune, L.Davidovich, P.Goy and S.Haroche, "The two-photon Rydberg atom micromaser" in Atomic Physics XI, Haroche, Gay et Grynberg éditeurs, World Scientific (1989).
104. A.Anderson, M.Boshier, E.Hinds, W.Jhe, S.Haroche and D.Meschede, "One dimensional trapping of an atomic beam in a single node of a standing wave" in Atomic Physics XI, Haroche, Gay et Grynberg éditeurs, World Scientific (1989).
105. M.Gross, J.Hare, P.Goy and S.Haroche, "The physics of circular atoms and the measurement of the Rydberg constant" in "Frequency standards and metrology, proceedings of the Ancona conference (1988). A.DeMarchi éditeur, Springer Verlag (1989).
106. M.Gross, J.Hare, P.Goy and S.Haroche, " Precision rf spectroscopy of circular Rydberg atoms" in "The Hydrogen Atom", Bassani, Inguscio et Hansch éditeurs, Springer Verlag (1989).
107. J.M.Raimond, M.Brune, J.Lepape and S.Haroche, "Rydberg atoms in a cavity: a new method to generate photon number states" in "Laser Spectroscopy IX", Feld, Thomas et Mooradian éditeurs, Academic Press (1989).
108. S.Haroche and D.Kleppner, "Cavity Quantum Electrodynamics". Physics Today, **42**-1, January 1989.
109. M.Brune, S.Haroche, V.Lefèvre-Seguin, J.M.Raimond and N.Zagury, "Quantum Nondemolition measurement of small photon number by Rydberg atom phase sensitive detection". Phys.Rev.Lett. **65** (1990) p. 976.

110. S.Haroche and J.M.Raimond, "Electrodynamics of single atom in a cavity" in "Lasers and Quantum Optics", proceedings of Mar del Plata Summer School, Argentina (1988); Narducci, Quel, Tredicce éditeurs. World Scientific (1990).
111. J.M.Raimond, M.Brune, P.Goy and S.Haroche, "Micromaser à deux photons". Annales de Physique (France), Colloque n°1, **15**, (1990), p.17.
112. S.Haroche, "La physique atomique en microcavité". Annales de Physique (France), Colloque n°1,**15**, (1990), p.101.
113. S.Haroche, "Probing the vacuum noise in confined space" in "Noise and chaos in nonlinear dynamical systems", Grigolini et al éditeurs, Cambridge Univ.Press. (1990).
114. S.Haroche, "Vacuum induced kinetic effects on an atom in a cavity" in "Light induced kinetic effects on atoms, ions and molecules", proceedings of the Elba conference (May 1990); Moi, Gozzini, Gabbanini, Arimondo et Strumia éditeurs, Ets Editrice, Pisa (1991).
115. S.Haroche, M.Brune and J.M.Raimond, "Radiative shifts in Cavity QED and their use in quantum nondemolition measurements of small photon number fields" in Atomic Physics XII, Zorn et Lewis éditeurs. American Institute of Physics (1991).
116. S.Haroche, M.Brune and J.M.Raimond, "Trapping atoms by the vacuum field in a cavity". Euro.Phys.Lett. **14**, 19 (1991).
117. A.Nussenzweig, J.Hare, A.Steinberg, L.Moi, M.Gross and S.Haroche, "A continuous beam of circular Rydberg atoms for fundamental tests and applications in metrology". Euro.Phys.Lett. **14**, 755(1991).
118. S.Haroche, "Cavity QED: the physics of an atom and a few photons in a box". Physics World (March 1991).
119. S.Haroche, "Cavity Quantum Electrodynamics" in "Fundamental Systems in Quantum Optics" les Houches session LIII J. Dalibard, J.M. Raimond et J. Zinn Justin éditeurs, Elsevier Science Publishers (1992).
120. M.Brune, S.Haroche, J.M.Raimond, L.Davidovich and N.Zagury, "Manipulation of photons in a cavity by dispersive atom-field coupling: quantum nondemolition measurements and generation of Schrödinger cats" Phys.Rev.A **45** 5193(1992).
121. F.Bernardot, P.Nussenzveig, M.Brune, J.M.Raimond and S.Haroche, "Vacuum Rabi Splitting observed on a microscopic atomic sample in a microwave cavity". Euro.Phys.Lett. **17** 33(1992).
122. S.Haroche, M.Brune and J.M.Raimond, "Manipulation of optical fields by atomic interferometry: quantum variations on a theme by Young". Appl.Phys.B. **54** 355(1992).
123. S.Haroche, M.Brune and J.M.Raimond, "Measuring photon numbers in a cavity by atomic interferometry: optimizing the convergence procedure". J.Physique II 659(1992).
124. V.Sandoghdar, C.Sukenik, E.Hinds and S.Haroche, "Direct measurement of the van der Waals interaction between an atom and its images in a micron-sized cavity". Phys.Rev.Lett. **68** 3432(1992).
125. M.Brune, J.M.Raimond, S.Haroche and L.Davidovich, " QND measurements and Schrödinger cat states generation in cavity QED" in Laser Spectroscopy X, Ducloy, Giacobino et Camy éditeurs, World Scientific (1992).
126. J.Hare, A.Nussenzweig, C.Gabbanini, P.Goy, M.Gross and S.Haroche, "Towards a Rydberg constant measurement on circular atoms" IEEE Transactions on Instrum. and Measur. **42** (1993).
127. L.Collot, V.Lefèvre-Seguin, M.Brune, J.M.Raimond and S.Haroche, "Very high Q whispering gallery mode resonances observed on fused silica microspheres. Euro.Phys.Lett. **23** 327 (1993).
128. M.Weidemuller, C.Gabbanini, J.Hare, M.Gross and S.Haroche, "A beam of laser cooled lithium Rydberg atoms for precision microwave spectroscopy", Opt.Comm. **101**, 342 (1993).
129. S.Haroche, M.Brune and J.M.Raimond, "Atomic motion in the field of a few photons stored in a high Q cavity and matter-wave interferometry" in Atomic Physics XIII, Walther, Hansch and Neizert editors, A.I.P. (1993).
130. E.Hinds, V.Sandoghdar, C.Sukenik and S.Haroche, "Spectroscopy in a micronsized cavity" in Atomic Physics XIII, Walther, Hansch and Neizert editors, A.I.P. (1993).
131. S.Haroche and J.M.Raimond, "Cavity Quantum Electrodynamics" Scientific American (April 1993).

132. S.Haroche "Measuring photons non destructively" *Europhysics News*,**24**, 51, April 1993.
133. P.Nussenzveig, F.Bernardot, M.Brune, J.Hare, J.M.Raimond, S.Haroche and G.Gawlik, "Preparation of high-principal-quantum-number "circular" states of rubidium". *Phys.Rev A***48**, 3991 (1993).
134. L.Davidovich, A.Maali, M.Brune, J.M.Raimond and S.Haroche, "Quantum switches and nonlocal microwave fields" *Phys.Rev.Lett.* **71**, 2360 (1993).
135. S.Haroche and J.M.Raimond, "Manipulation of non classical field states by atom interferometry" in "Cavity Quantum Electrodynamics", supplément de Advances in Atom. and Molec. Physics, Berman éditeur, Academic Press (1994).
136. S.Haroche, M.Brune, J.M.Raimond and L.Davidovich, "Mesoscopic Quantum Coherences in Cavity QED" in "Fundamentals of Quantum Optics III", Ehlotzky éditeur, Springer Verlag (1994).
137. S.Haroche, "Cavity Quantum Electrodynamics", in "Frontiers in Laser Spectroscopy", Proceedings of the International School of Physics Enrico Fermi (Course CXX), M Inguscio et T.Hansch editors, North Holland (1994).
138. S.Haroche, J.M.Raimond and M.Brune, "Manipulation of Quantum Fields in a cavity by atomic interferometry" in "Atomic Interferometry", édité par DeMartini et Zollinger, World Scientific (1994).
139. J.M.Raimond and S.Haroche, "Atoms in cavities" in "Confined electrons and photons", Weisbuch et Braunstein éditeurs, Plenum Press (1994).
140. M.Brune, P.Nussenzveig, F.Schmidt-Kaler, F.Bernardot, A.Maali, J.M.Raimond and S.Haroche, "From Lamb shift to Light shifts: Vacuum and sub-photon cavity fields measured by atomic interferometry" *Phys.Rev.Lett.* **72**, 3339 (1994).
141. L.Davidovich, N.Zagury, M.Brune, J.M.Raimond and S.Haroche, "Teleportation of an atomic state between two cavities using nonlocal microwave fields", *Phys.Rev.A* **50**, R895 (1994).
142. F.Treussart, J.Hare, L.Collot, V.Lefèvre-Seguin, D.Weiss, V.Sandoghdar, J.M.Raimond and S.Haroche, "Quantized atom-field force at the surface of a microsphere", *Opt.Lett.*, **19**, 1653 (1994).
143. S.Haroche, "Manipulating quantum fields with a single atom in a cavity" in "Proceedings of the Resonance Ionization Spectroscopy Conference 1994", H.Kluge editor (1994).
144. S.Haroche, "Experiments with single atoms, molecules or photons" in "Advances in Quantum Phenomena", Proceedings of a Nato Ettore Majorana School in Physics, Beltrametti and Levy-Leblond editors, Plenum (1995).
145. S.Haroche, "Atoms and photons in high-Q cavities: new tests of quantum theory" in "Fundamental Problems in Quantum Theory", D.Greenberger editor, Annals New York Academy of Sciences (1995).
146. S.Haroche and J.M.Raimond, "Cavity QED, Entanglement and Mesoscopic Quantum Coherences" in "Coherence and Quantum Optics VII", Proceedings of the 7th Rochester Conference, Eberly et al editors (1995).
147. S.Haroche, M.Brune and J.M.Raimond, "Atoms and Photons in High Q Cavities: Towards simple Quantum Logic Gates" in Laser Spectroscopy 12, Proceedings of the 12th International Conference on Laser Spectroscopy, M.Inguscio et al editors, World Scientific (1995).
148. P.Domokos, J.M.Raimond, M.Brune and S.Haroche,"A Simple Cavity-QED two-bit universal quantum logic gate: principle and expected performances", *Phys.Rev A* **52**, 3554 (1995).
149. J.C.Knight, N.Dubreuil, V.Sandoghdar, J.Hare, V.Lefevre, J.M.Raimond and S.Haroche, "Mapping whispering-gallery modes in microspheres with a near-field probe", *Opt.Lett* **20**, 1515 (1995).
150. D.S.Weiss, V.Sandoghdar, J.Hare, V.Lefevre, J.M.Raimond and S.Haroche, "Splitting of high-Q Mie modes induced by light backscattering in silica microspheres", *Opt.Lett.* **20**, 1835 (1995).
151. P.Domokos, J.M.Raimond, M.Brune and S.Haroche, "Power and limits of quantum computing: analysis via a concrete algorithm", in the Proceedings of the Cargese schoolworkshop (Sept 1995).
152. L.Davidovich, M.Brune, J.M.Raimond and S.Haroche, "Mesoscopic quantum coherences in cavity QED: preparation and decoherence monitoring schemes", *Phys Rev A* **53**, 1295 (1996).
153. V.Lefevre, J.C.Knight, V.Sandoghdar, D.S.Weiss, J.Hare, J.M.Raimond and S.Haroche, " Very high Q whispering gallery modes in silica microspheres for cavity-QED experiments" in Advanced series in Applied Physics Vol 3, R.Chang and A.Campillo editors (1996).

154. M.Brune, F.Schmidt-Kaler, A.Maali, J.Dreyer, E.Hagley, J.M.Raimond and S.Haroche, "Quantum Rabi Oscillation: A direct test of Field Quantization in a cavity", Phys.Rev.Lett 76, 1800 (1996).
155. V.Sandoghdar, C.Sukenik, S.Haroche and E.Hinds, "Spectroscopy of atoms confined to the single node of a standing wave in a parallel plate cavity", PRA 53, 1919 (1996).
156. P.J.Bardroff, E.Mayr, W.P.Schleich, P.Domokos, M.Brune, J.M.Raimond and S.Haroche, "Simulation of Quantum state endoscopy", PRA 53, 2736 (1996).
157. J.C.Knight, N.Dubreuil, V.Sandoghdar, J.Hare, V.Lefevre-Seguin, J.M.Raimond and S.Haroche, "Characterizing whispering-gallery modes in microspheres by direct observation of the optical standing wave in the near field", Optics Letters 21, 698 (1996).
158. V.Sandoghdar, F.Treussart, J.Hare, V.Levefre-Seguin, J.M.Raimond and S.Haroche "Very low threshold whispering gallery mode microsphere laser", Phys.Rev.A 54, R1777 (1996).
159. J.M.Raimond and S.Haroche "Quantum Computing: Dream or nightmare" in Proceedings of XXXIst Rencontres de Moriond , "Dark Matter in Cosmology, Quantum measurements, Experimental gravitation", R. Ansari, Y. Giraud and J. Tran Van eds, Editions Frontières, p341 (1996).
160. S.Haroche and J.M.Raimond "Quantum Computing: Dream or nightmare?" Physics Today, August 1996, Page 51.
161. M.Brune, E.Hagley, J.Dreyer, X.Maitre, A.Maali, C.Wunderlich, J.M.Raimond and S.Haroche, "Observing the progressive decoherence of the meter in a quantum measurement", Phys.Rev.Lett. 77, 4887 (1996).
162. S.Haroche, M.Brune, J.M.Raimond, E.Hagley, C.Wunderlich, A.Maali, J.Dreyer and X.Maitre, "Generation of a Schrödinger Cat of radiation and observation of its decoherence" in Proceedings of the 15th International Conference on Atomic Physics, Walraven et al editors, (1996).
163. E.Hagley, X.Maître, G.Nogues, C.Wunderlich, M.Brune, J.M.Raimond and S.Haroche, « Generation of Einstein-Podolsky-Rosen pairs of atoms », Phys.Rev.Lett. 79, 1 (1997).
164. X.Maître, E.Hagley, G.Nogues, C.Wunderlich, P.Goy, M.Brune, J.M.Raimond and S.Haroche, « Quantum memory with a single photon in a cavity », Phys.Rev.Lett. 79, 769 (1997).
165. J.M.Raimond, M.Brune and S. Haroche, « Reversible decoherence of a mesoscopic superposition of field states », Phys.Rev.Lett. 79, 1964 (1997).
166. S.Haroche, J.M.Raimond and M.Brune, « Le chat de Schrödinger se prête à l'expérience », La Recherche, Septembre 1997 (page 50).
167. S.Haroche, M.Brune and J.M.Raimond, « Schrödinger cats and entanglement experiments in Cavity QED », Proceedins of THICOLS, 13th International Conference on Laser Spectrosocopy, World Scientific, (1997).
168. S.Haroche, M.Brune and J.M.Raimond, « Experiments with single atoms in a cavity: entanglement, Schrödinger's cats and decoherence », Phil. Trans. Roy. Soc. 355, 2367 (1997)
169. X.Maître, E.Hagley, J.Dreyer, A.Maali, C.Wunderlich, M.Brune, J.M.Raimond and S.Haroche, « An experimental study of a Schrödinger cat decoherence with atoms and cavities », Jour.Mod.Optics, 44, 2023 (1997).
170. S.Haroche, « Entanglement, mesoscopic superpositions and decoherence studies with atoms and photons in a cavity », Physica Scripta, Vol T76, 159 (1998).
171. S.Haroche, « Observing the decoherence of the meter in a measurement: a variation on Schrödinger's cat experiment », in « Quantum Future», P.Blancharde et A.Jadczyk, éditeurs, Springer Lecture Notes in Physics (1998).
172. S.Haroche, « Tests of quantum mechanics with single atoms in high Q cavities », Proceedings of the 3rd Euroconference on atomic physics with stored highly charged ions, R.Calabrese, V.guidi, H.J.Kluge and L.Moi editeurs, Baltzer Science Publishers (1998).
173. S.Haroche, « Entanglement, decoherence and the quantum-classical boundary », Physics Today, July 1998.
174. J.M. Raimond, M. Brune et S. Haroche, Proceedings of the FICSSUR conference, Balatonfured,D. Han et al eds, NASA/CP-1998-206855, p.491 (1998) : "Atoms and cavities: an experimental study of decoherence".

175. J.M. Raimond, E. Hagley, X. Maitre, G. Nogues, C. Wunderlich, M. Brune et S. Haroche, Atomic Physics 16, W.E.Baylis and G.W.F. Drake, eds., AIP 1999, p209-222 "Atoms and cavities: explorations of quantum entanglement"
176. S.Haroche, « Quantum Engineering with atoms and photons in a cavity » in Epistemological and Experimental Perspectives in Quantum Physics, Greenberger, Reiter and Zeilinger, editors, Kluwer academic publishers, (1999).
177. S.Haroche, « Cavity Quantum Electrodynamics: a review of Rydberg atom- microwave experiments on entanglement and decoherence » in Proceedings of Latino-American Summer School in Physics, S.Hacyan, R. Jauregui and R. Lopez-Peña editors, American Institute of Physics (1999).
178. S.Haroche, « Engineering entanglement between atoms and photons in a cavity: non-locality, Schrödinger cats and decoherence », Proceedings of International Symposium on Quantum Mechanics'98, Y.Ono editor, Tokyo (1999).
179. S.Haroche, « Quantum Knitting in Cavity QED: from the non-destructive measurement of a single photon to three-atom-entanglement » in ICOLS 1999, Proceedings of the 14th International Conference on Laser Spectroscopy, R.Blatt editor, World Scientific (1999).
180. A.Rauschenbeutel, G.Nogues, S.Osnaghi, M.brune, J.M.Raimond and S.Haroche, « Generation of GHZ type three atom-correlations in a cavity QED experiment » in ICOLS 1999, Proceedings of the 14th International Conference on Laser Spectroscopy, R.Blatt editor, World Scientific (1999).
181. G.Nogues, A.Rauschenbeutel, S.Osnaghi, M.Brune, J.M.Raimond and S.Haroche, « Seeing a single photon without destroying it », Nature, 400, 239 (1999).
182. W. von Klitzing, E. Jahier, R. Long, F. Lissillour, V. Lefevre-Seguin, J. Hare, J.-M. Raimond, S. Haroche, « Very low threshold lasing in Er³⁺ doped ZBLAN microsphere », Electronics Letters, à paraître (1999).
183. J.M. Raimond et S. Haroche, International trends in optics and photonics, ICO IV, T. Asakura, ed., Springer Verlag, 1999 p40-53 "Atoms and cavities: the birth of a Schrödinger cat of the radiation field"
184. A.Rauschenbeutel, G.Nogues, S.Osnaghi, P.Bertet, M.Brune, Jean-Michel Raimond and S.Haroche, " Coherent Operation of a tunable quantum phase gate in Cavity QED ", Phys.Rev.Lett. 83, 5166 (1999).
185. A.Rauschenbeutel, G.Nogues, S.Osnaghi, P.Bertet, M.Brune, Jean-Michel Raimond and Serge Haroche, " Step by step engineered multiparticle entanglement ", Science, 288, 2024 (2000).
186. S.Haroche, G.Nogues, A .Rauschenbeutel, S.Osnaghi, P.Bertet, M.brune and J.M.Raimond, " Step by step engineered entanglement with atoms and photons in a cavity ", in ICAP'2000 edited by P.De Natale, AIP conference proceedings, (2000)
187. S.Haroche, "Une exploration au cœur du monde quantique (quand les expériences de pensée deviennent réelles" dans Université de tous les savoirs Vol 3 "Qu'est ce que l'Univers?", Odile Jacob, (2000). 185. P.Bertet, S.Osnaghi,
188. P.Bertet, A.Rauschenbeutel, G.Noguès, A.Auffeves, M.Brune, J.M.Raimond and S.Haroche, "A complementarity experiment with an interferometer at the quantum-classical boundary", Nature, 411, 166 (2001)
189. S.Haroche, M.Brune and J.M.Ramond, "Counting and entangling Planck's quanta with atoms in a box", Proceedings of the Symposia Quantum Theory Centenary, Ann.Physik10, 1-2, 55 (2001).
190. S.Haroche, "Entanglement and decoherence in Cavity Quantum Electrodynamics Experiments", Proceedings of NATO ARW on ``Decoherence and its Implications ...'' (2001).
191. J.M.Raimond, M.Brune and S.Haroche, "Colloquium: Manipulating quantum entanglement with atoms and photons in a cavity", Rev.Mod.Phys. 73, 565 (2001).
192. S.Osnaghi, P.Bertet, A.Auffeves, P.Maioli,M.Brune, J.M.Ramond and S.Haroche, "Coherent Control of an atomic collision in a cavity" Phys.Rev.Lett. 87, 037902-1 (2001).
193. A.Rauschenbeutel, P.Bertet, S.Osnaghi, G.Noguès, M.Brune, J.M.Ramond and S.Haroche, "Controlled entanglement of two field modes in a cavity quantum electrodynamics experiment" Phys.RevA, 64, 050301(R), (2001).
194. J.M. Raimond, P. Bertet, S. Osnaghi, A. Rauschenbeutel, G. Nogues,A. Auffeves, M. Brune and S. Haroche, Laser Spectroscopy 15, proceedings of the Icols XV conference, In press: "A interferometer with a mesoscopic beam splitter: an experiment on complementarity and entanglement" (2001).

195. S.Haroche, JM. Raimond, M. Brune, Proceedings of the Varenna summer school, 2001, in press: "Entanglement, complementarity and decoherence in cavity QED experiments" (2001)
196. S.Haroche, M. Brune, J.M. Raimond, Proceedings of the Rochester conference, 2001, In press: "Manipulating entanglement with atoms and photons in a box" (2001).
197. P.Bertet, S.Osnaghi , P.Milman, A.Auffeves, P.Maioli, M.Brune, J.M.Raimond and S.Haroche, « Generating and Probing a Two-Photon Fock State with a Single Atom in a Cavity », Phys.Rev.Lett. 88, 143601 (2002).
198. F.Yamagushi, P.Milman, M.Brune, J.M.Raimond and S.Haroche « Quantum Search with two-atom collisions in Cavity QED », Phys.Rev.A, Rapid Comm. 66, 010302-1 (2002).
199. S.Haroche « La Physique Quantique », Leçon Inaugurale du Collège de France (2002).
200. S.Haroche, « Entanglement Experiments in Cavity QED », Proceedings of the Quantum Interferometry VI Conference, De Martini and Mataloni edotors (2002).
201. P.Bertet, A. Auffeves, P.Maioli, S.Osnaghi, T.Meunier, M.Brune, J.M.Raimond and S.Haroche « Direct Measurement of the Wigner Function of a one-photon Fock state in a Cavity », Phys.Rev.Lett 89, 200402-1 (2002).
202. S.Haroche "Quantum Information with atoms and photons in a cavity: entanglement, complementarity and decoherence studies Physica Scripta T102, 128 (2002).
203. P.Milman, H.Ollivier, F.Yamagushi, M.Brune, J.M.Raimond et S.Haroche "Simple quantum algorithms in Cavity QED", J.Mod.Optics, 50, 901 (2003).
204. S.Haroche, "Manipulating quantum entanglement and generating nonclassical states with atoms and photons in a cavity", dans Proceedings of the 6th International Conference on quantum communication, Measurement and computing", J.H.Shapiro et O.Hirota editeurs, Rinton Press, Princeton (2003).
205. S.Haroche "Quantum Information in cavity quantum electrodynamics: logical gates, entanglement engineering and "Schrödinger cat states", Phil.Trans.R.Soc. London (to be publsihed 2003)
206. S.Haroche, Vérité et réalité du monde quantique microscopique, dans "La vérité dans les sciences", J.P.Changeux éditeur, Odile Jacob, 2003.
207. A.Auffeves, P.Maioli, T.Meunier, S.Gleyzes, G.Nogues, M.Brune, J.M.Raimond et S.Haroche "Entanglement of a mesoscopic field with an atom induced by photon graininess in a cavity" Phys.Rev.Lett. 91, 230405 (2003).
208. S.Haroche "Breeding non-local Schrödinger cats: a thought experiment to explore the quantum-classical boundary" dans "Science and ultimate reality-", J.D.Barrow, P.W.C.Davies et C.L.Harper editeurs, Cambridge University Press (2004).
209. S.Haroche, « Mesoscopic state superpositions and decoherence in quantum optics » in Les Houches session LXXIX, 2003, Intrication quantique et traitement de l'information, D.Estève, J-M.Raimond et J.Dalibard éditeurs, 2004, Elsevier Science.
210. S.Haroche, A.Auffeves, P.Maioli , T.Meunier, S.Gleyzes, G.Nogues, M.Brune et J.M.Raimond "Manipulating mesoscopic fields with a single atom in a cavity ", Proceedings of ICOLS (International Laser Spectroscopy), P.Hannaford, A.Sidorov, H.Bachor et K.Baldwin, éditeurs. World Scientific, 2004.
211. P.Hayfil, J.Mosley, A.Perrin, I.Tailleur, G.Nogues, M.Brune, J-M.Raimond et S.Haroche « Coherence preserving trap architecture for long term control of giant Rydberg atoms », Phys.Rev.Lett. **93**, 103001 (2004).
212. P.Milman, A.Auffeves, F.Yamagushi, M.Brune, J-M.Raimond et S.Haroche, « A proposal to test Bell's inequalities with mesoscopic non-local fields in cavity QED », EPJD32 , 233 (2005).
213. T.Meunier, S.Gleyzes, P.Maioli, A.Auffeves, G.Nogues, M.Brune, J-M.Raimond and S.Haroche, « Rabi oscillations revivals induced by time reversal : a test of mesoscopic quantum coherence », Phys.Rev.Lett. 94, 010401 (2005).
214. J-M.Raimond, T.Meunier, P.Bertet, S.Gleyzes, P.Maioli, A.Auffeves, G.Nogues, M.Brune and S.Haroche « Probing a quantum field in a photon box », J.phys.B. 38, S535 (2005).

- 215 S.Haroche, A.Auffeves, T.Meunier, P.Maioli, S.Gleyzes, G.Nogues, M.Brune and J-M.Raimond «Single atom index effects on mesoscopic fields in a cavity », Proceedins og the 17th International Atomic Physics Coference, Rio (2005).
216. P.Maioli, T.Meunier, P.Bertet, S.Gleyzes, A.Auffeves, G.Nogues, M.Brune, J-M.Raimond and S.Haroche, “Non Destructive Rydberg atom counting with mesoscopic fields in a cavity”, Phys.Rev.Lett. **94**, 113601 (2005).
- 217.J.M. Raimond, T. Meunier, S. Gleyzes, P. Maioli, A. Auffeves, G. Nogues, M. Brune, S. Haroche, in « Proceedings of the XVII international conference on laser spectroscopy, E. Hinds, A. Ferguson et E. Riis eds, world scientific 2005 p371: « Giant atoms for explorations of the mesoscopic world »
218. J.Mozley, P.Hayfil, G.Nogues, M.Brune, J-M.Raimond and S.Haroche, “Trapping and coherent manipulation of a Rydberg atom on a microfabricated device: a proposal”, Euro. Phys. Journal D **35**, 43 (2005).
219. Zoller P, Beth T, Binosi D, Blatt R, Briegel H, Bruss D, Calarco T, Cirac JI, Deutsch D, Eisert J, Ekert A, Fabre C, Gisin N, Grangiere P, Grassl M, Haroche S, Imamoglu A, Karlson A, Kempe J, Kouwenhoven L, Kroll S, Leuchs G, Lewenstein M, Loss D, Lutkenhaus N, Massar S, Mooij JE, Plenio MB, Polzik E, Popescu S, Rempe G, Sergienko A, Suter D, Twamley J, Wendl G, Werner R, Winter A, Wrachtrup J, Zeilinger A, “Quantum information processing and communication-Strategic report on current status, vision, and goals for research in Europe”, Euro. Phys. Journal D, **36**, 203 (2005).
- 220.J.M. Raimond and S.Haroche, Procceedings of the Poincaré Seminar, Progress in mathematical physics, Birkhauser, in press, B. Duplantier et al eds: « Monitoring the decoherence of mesoscopic quantum superpositions in a cavity »(2006).
221. T.Nirrengarten, A.Qarry, C.Roux, A.Emmert, G.Nogues, M.Brune, J.M.Raimond and S.Haroche “Realization of a superconducting atom chip”, Phys.Rev.Lett . **97**, 200405 (2006).
222. S. Gleyzes, S.Kuhr, C. Guerlin, J. Bernu, S. Deléglise, U. Busk Hoff, M. Brune, J-M. Raimond and S. Haroche «Quantum jumps of light recording the birth and death of a photon in a cavity », Nature, **446**, 297 (2007).
223. C.Guerlin, J.Bernu, S.Deléglise, C.Sayrin, S.Gleyzes, S.Kuhr, M.Brune, J-M.Raimond and S.Haroche “Progressive field-state collapse and quantum non-demolition photon counting”, Nature, **448**, 889 (2007).
224. S.Kuhr, S.Gleyzes, C.Guerlin, J.Bernu, UB.Hoff, S.Deléglise, S.Osnaghi, M.brune, J-M.Raimond, S.Haroche, E.Jacques, P.Bosland and B.Visentin “Ultrahigh finesse Fabry Perot superconducting resonator”, Appl.Phys.Lett. **90**, 164101 (2007).
225. S.Haroche, M.Brune and J-M.Raimond “Measuring the photon number parity in a cavity: from light quantum jumps to the tomography of non-classical field states”, Journal of Modern Optics, **54**, 2101 (2007).
226. S.Haroche, M.Brune and J-M.Raimond, “Schrödinger cat states and decoherence stdies in cavity QED”, European Physical Journal-Special Topics, **159**, 19, (2008).
227. C.Roux, A.Emmert, A.Lupascu, T.Nirrengarten, G.Nogues, M.Brune, J-M.Raimond and S.Haroche “Bose Einstein Condensation on a superconducting atom chip” , Euro.Phys.Letters, **81**, 56004 (2008).
228. S.Deléglise, I.Dotsenko, C.Sayrin, J.Bernu, M.Brune, J-M.Raimond and S.Haroche, “Reconstruction of non-classical cavity field states with snapshots of their decoherence”, Nature, **455**, 510 (2008).
229. S.Haroche, “Essay: fifty years of atomic, molecular and optical physics in Physical Review Letters”, Phys.Rev.Lett. **101**, 160001 (2008).
230. J.Bernu, S.Deléglise, C.Sayrin, S.Kuhr, I.Dotsenko, M.Brune, J-M.Raimond and S.Haroche “Freezing a coherent field growth in a cavity by quantum Zeno effect”, Phys.Rev.Lett., **101**, 180402 (2008).
231. M.Brune, J.Bernu, C.Guerlin, S.Deléglise, C.Sayrin, S.Gleyzes, S.Kuhr, I.Dotsenko, J-M.Raimond and S.Haroche “Process tomography of field damping and measurement of Fock state lifetimes by quantum non demolition photon counting in a cavity” Phys.Rev.Lett. **101**, 240402 (2008).
232. A.Emmert, A.Lupascu, G.Nogues, M.Brune, J-m.Raimond and S.Haroche “Measurement of the trapping lifetime close to a cold metallic surface on a cryogenic atom chip” European Physical Journal D **51**, 173 (2009).

- 233 I.Dotsenko, M.Mirrahimi, M.Brune, S.Haroche, J-M.Raimond and P.Rouchon “Quantum feedback by discrete quantum non-demolition measurements: towards on-demand generation of photon-number states, Phys.Rev.A **80**, 013805 (2009).
234. G.Nogues, C.Roux, T.Nirrengarten, A.Lupascu, A.emmert, M.Brune, J-M.Raimond, S.Haroche, B.Plaçais and JJ.Greffet, EPL, **87**, 13002 (2009).
235. A.Emmert, A.Lupascu, M.Brune, J-M.Raimond, S.Haroche and G.Nogues, “Microtraps for neutral atoms using superconducting sturctures in the critical state”, Phys.Rev.A **80**, 061604 (2009).
236. S.Haroche, I.Dotsenko, S.Deléglise, C.Sayrin, X.Zhou; S.Gleyzes, C.Guerlin, S.Kuhr, M.Brune and J-M.Raimond “Manipulating and probing microwave fields in a cavity by quantum non-demolition photon counting” Physica Scripta T137, 014014 (2009).
237. M.Brune, I.Dotsenko, S.Deléglise, C.Sayrin, X.Zhou, S.Gleyzes, C.Guerlin, S.Kuhr, J-M.Raimond and S.Haroche “Quantum field state measurement and reconstruction in a cavity by quantum non-demolition photon counting”, Laser Spectrsocopy, Proceedings of the 19th International Conference on Laser Spectroscopy, page 155 (2010).
238. I.Dotsenko, J.Bernu, S.Deléglise, C.Sayrin, M.Brune; J-M.Raimond, S.Haroche, M.Mirrahimi and P.Rouchon, “The quantum Zeno effect and quantum feedback in cavity QED”, Physica Scripta T140, 014004 (2010).
239. J-M.Raimond, C.Sayrin, S.Gleyzes, I.Dotsenko, M.Brune, S.Haroche, P.Facchi and S.Pascazio “Phase space tweezers for tailoring cavity fields by quantum Zeno dynamics”, Phys.Rev.Lett. 105, 213601 (2010).
240. C.Sayrin, I.Dotsenko, XX.Zhou, B.Peaudecerf, T.Rybarczyk, S.Gleyzes, P.Rouchon, M.Mirrahimi, H.Amini, M.Brune, J-M.Raimond and S.Haroche “Real-time quantum feedback prepares and stabilizes photon number states”, Nature **477**, 73 (2011).

Book editor :

1. Laser Spectroscopy, Proceedings of the Second International Conference, Megève (1975), coeditors: S.Haroche, J.C.Pebay-Peyroula, ,T.Hansch and S.Harris, Springer (1975).
2. Frontiers in Laser Spectrscopy, Proceedings of Les Houches summer school, session XXVII, coeditors: R. Balian, S.Haroche and S. Liberman, North Holland (1977).
3. Atomic Physics 11, Proceedings of the 11th International Conference in Atomic Physics (1988), coeditors: S.Haroche, J.C.Gay and G.Grynberg, World Scientific (1989).

Books :

-**La physique quantique** (Fayard, Paris, 2004)

-**Exploring the quantum: atoms, cavities and photons**, Oxford University Press (2006). Co-authored with Jean-Michel Raimond.