Curriculum Vitae of

Guy MILLOT - Physicist – Experimentalist

Guy Millot, is a physicist who has made numerous pioneering contributions in nonlinear optical physics including laser spectroscopy and ultrafast guided optics. During the first decade of his career (1984-1995) he obtained international recognition in the field of laser Raman spectroscopy applied to combustion media. In 1994 he was promoted to a full Professor position and began working on the theme of optical solitons and nonlinear fibre optics. In a very short space of time he developed in his laboratories in Dijon an internationally-leading research group in this field, which has achieved numerous important scientific breakthroughs and is internationally-acknowledged as one of the foremost groups working in the field. His personal input has been central to the expansion of the group into new and significant research fields.

He is regularly contacted by world-leading theoreticians in the field of nonlinear guided waves for collaborations. He is internationally considered amongst the world's expert in fields such as optical solitons and similaritons, modulation instabilities, polarization effects, rogue waves, nonlinear propagation dynamics in optical fibres and applications in telecommunications.

He has secured substantial direct funding resources to support his activities (~3 M€ in the last ten years). His research has been recognized by two prestigious awards: membership of the Institut Universitaire de France (IUF) and the silver medal from the CNRS. He is a frequently requested project expert and PhD examiner. A central feature of his research is that he carries out both fundamental and applied studies in the fields of laser spectroscopy in gases and ultrafast optics in nonlinear waveguides.

Personal data

Born in Alligny-en-Morvan (France) on January 3rd 1960; French citizen.
Position: Professor of Physics, University of Bourgogne (UB) – CNRS
Deputy Director of the Laboratoire Interdisciplinaire Carnot de Bourgogne (ICB)
Head of Soliton Group (SLCO, 35 members)
Address: ICB, 9 avenue Alain Savary, BP 47 870, 21078 Dijon, France
E-mail: Guy.Millot@u-bourgogne.fr; Website: http://icb.u-bourgogne.fr/en/membres/permanent-staff/164-teacher-researcher/724-guy-millot-version-anglaise.html
Tel. No. +33 (0)380395981; Mobile No. +33 (0)606700371

Education French Habilitation for PhD supervision (HDR), UB, 1994
Ph.D. Physics "Raman laser spectroscopy in gases," UB, 1986

Scientific awards and distinctions

- Fellow OSA (2012).
- Prize of research from the foundation iXCore (2011).
- Silver Medal from the CNRS (2004) http://www.cnrs.fr/fr/recherche/prix/argent/2004.htm for his experimental results on nonlinear wave propagation in optical fibers and their applications to ultrafast optical communication systems. Only one or two physicists are recipients of this highly prestigious medal every year.
- Member of the Institut Universitaire de France (2000-2005) http://iuf.amue.fr/iuf/presentation/. This is a very select French award, granted in 2000 to only 25 academics under the age of 40 across all disciplines.
- Award (*Prime*) for Scientific Excellence, French Ministry of Education (2010).
- Competitive Bonus Award for Research Supervision, French Ministry of Education (1990, 1994, 1998, 2002, 2006, 2014).

Work experience

- Full Professor in Physics (PRCE2, highest level), Department of Physics, UB (Dijon, France) 9/1994 -
- Associate Professor, Department of Physics, UB (Dijon, France) 10/1988 – 8/1994
- Research & Teaching Assistant, Department of Physics, UB (Dijon, France) 1/1988 – 9/1988
- Postdoctoral researcher, "Time-resolved infrared double resonance spectroscopy," Department of Chemistry, M.I.T. (Boston, USA) 7/1987 – 12/1987
- Research Engineer, Bourgogne Technology (Dijon, France) 9/1986 – 6/1987.

Research interests

1984 – 1995: nonlinear Raman high resolution spectroscopy → rotational and vibrational molecular structures; time-resolved Raman-infrared double resonance experiments; collisional effects on lineshapes for temperature and molecular species concentration measurements in combustion media (flames and rocket engines).

1995 - : nonlinear and ultrafast guided-wave optics → incoherent nonlinear optics; nonlinear Schrödinger equation; optical solitary waves; modulational instabilities; supercontinuum sources; Raman amplification and laser; ultra-high repetition rate laser sources; ultrashort pulse characterization; self-similar pulses; polarization attractors; optical rogue waves; linear and nonlinear properties of photonic crystal fibers; high-bit-rate optical communication systems and all-optical information processing devices, optical regeneration, pulse shaping; dual-comb spectroscopy with a continuous laser.

Major results in the last ten years

Observation of vector modulational instabilities and vector solitons - First observation of Raman optical parabolic pulses (similaritons) - Discovery of a polarization attraction process in optical fibers - Pioneering experimental results on incoherent optical solitons in a Kerr-medium - Experimental evidence of optical rogue waves and Peregrine soliton - Generation of ultra high repetition pulses (20 GHz to 1 THz) in optical fibers - Propagation of pulses in a recirculation fiber loop at 160 Gbit/s and over more than 1000 km (world-record at publication time).

Senior academic responsibilities

- Founder and leader of the team “Solitons, Lasers and Optical Communications” of ICB Laboratory, 35 members (1998 -). Team evaluated A+ by the French national evaluation agency AERES in 2011.
- Founder and director of the department “Optics and Matter-Wave Interaction” of ICB Laboratory, 80 members (2007 - 2011).
- Deputy director of ICB Laboratory, 300 members (2012 -) http://icb.u-bourgogne.fr/fr/
- Member of the scientific committee of University of Bourgogne (2004 - 2012).
- Director of a Master entitled “Light and Matter interaction” (2002 - 2004); Founder and director of a Master entitled “Physics and Novel Optical Technologies” (2004 - 2007).

Professional society responsibilities, editorial activities, etc

- Program Committee Member of diverse national and international conferences:
  - COLOQ “COlloque sur les Lasers et l’Optique Quantique” 2003, 2005, 2007, 2009, 2011, 2013, 2015
  - FRISNO “French Israeli Symposium on Nonlinear and Quantum Optics” 2015 –
  - CLEO/Europe 1998, 2000, 2003, 2005, 2013, 2015
  - NLGWA “Nonlinear Guided Waves and their Applications” 2002, 2004
  - Summer School “Solitons and applications” Les Houches 1998
  - Summer School “New Concepts for Optical Communications” Dijon 2004
  - Summer School “Spatiotemporal complexity in nonlinear optics” Como 2015
- President of the organization committee of COLOQ9 Dijon 2005 (> 200 attendees).
- Supervisor of 12 PhD students and 3 postdoctoral researchers.

Activity as expert evaluator

- Member of the University National Council (CNU) in 1994; member of the National Scientific Research Committee of CNRS, section 04 (2008-12).
- Referee of more than 100 PhD theses or HDR in France and abroad.

Current and recent research grants

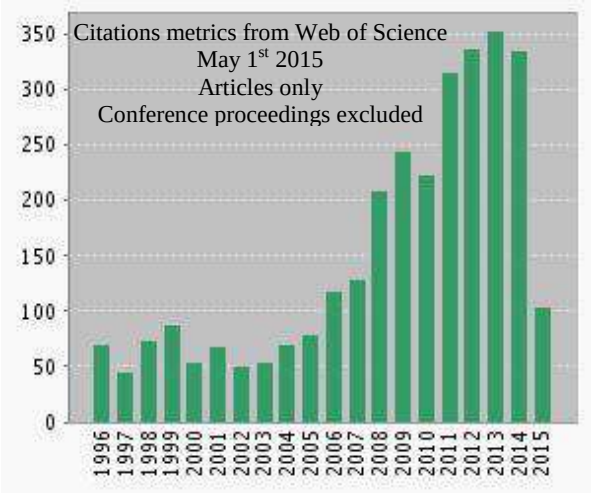
- Principal Investigator of the ANR grant Optiroc “Optical Rogue Waves in Nonlinear Cavities,” (2013-2015) 160 k€.
- Local Investigator of the ANR grant Manureva “Mathematical modelling and experimental study of nonlinear instabilities, rogue waves and extreme events,” (2009-2012) 73 k€.
- Local Investigator of the ANR grant Supercontinuum “Continuum laser cavity: Concept and applications,” (2010-2013) 120 k€.
- Member of the ANR grant Solicristal “Bunch of dissipative solitons in laser cavity,” (2011-2014) 150 k€.

- Head of the integrated project of research and innovation of the Regional Council of Bourgogne PHOTCOM “Advanced photonics for telecommunications, nanooptics and novel laser sources” about 500 k€/year since 2010.
- Prize of the foundation iXCore for research (2012-2014) 50 k€.

Publication records

- 61 invited talks in national and international conferences; 22 seminars.
- Refereed international papers: 165 total cited articles (1 Phys. Report, 2 Nat. Phys.; 2 Scientific Rep., 5 PRL; 2 PRX, 23 Opt. Lett.; 15 Opt. Exp.; 15 J. Chem. Phys.; 4 PRA; 4 PRE; 13 JOSAB, ...); more than 100 conference proceedings; more than 150 other communications; 14 book chapters; 1 *Patent.*

Citations (May 2015): h-Index of 39 and total cites > 4900 (Google Scholar). h-Index of 35 (Web of Sciences); total cites > 3580; maximum cites: 264; 18 articles with at least 50 citations; average cites/paper: 21.6. Web of Sciences citation analysis (see figure) clearly indicates the significant and emerging influence of Guy Millot in his new field eg: 350 citations in 2013.



Publications of Guy MILLOT

(1st May 2015)

165 Refereed international papers

3 others international publications

1 patent

14 Chapters in books

55 Published Contributions to international academic conferences in the last 10 years

61 Invited Conferences

Refereed international papers:

P1 G.Millot, B.Lavorel, R.Saint-Loup and H.Berger,
Journal de Physique (Paris) 16, 1925-1936 (1985):
N_2 collisional narrowing shown by stimulated Raman spectroscopy.

P2 B. Lavorel, G. Millot, R. Saint-Loup, C. Wenger, H. Berger, J.P. Sala, J. Bonamy, and D. Robert,
Journal de Physique (Paris) 47, 417-425 (1986):
Rotational collisional line broadening at high temperatures in the N_2 fundamental Q-branch studied with stimulated Raman spectroscopy.

P3 J.-P.Sala, J.Bonamy, D.Robert, B.Lavorel, G.Millot, and H.Berger,
Chemical Physics 106, 427-439 (1986):
A rotational thermalisation model for the calculation of collisionally narrowed isotropic Raman scattering spectra. Application to the S.R.S. N_2 Q-branch.

P4 B.Lavorel, G.Millot, J.Bonamy, and D.Robert,
Chemical Physics 115, 69-78 (1987):
Study of rotational relaxation fitting laws from calculation of SRS N_2 Q-branch.

P5 G.Millot, B Lavorel, R.Chaux, R.Saint-Loup, G.Pierre, H.Berger, J.I.Steinfeld, and B.Foy,
Journal of Molecular Spectroscopy 127, 156-177 (1988):
High resolution stimulated Raman spectroscopy of methane $^{13}CD_4$ in the pentad region.

P6 G.Millot, J.Hetzler, B.Foy, and J.I.Steinfeld,
Journal of Chemical Physics 88, 6742-6746 (1988):
Infrared double resonance of SiH_4 with a tunable diode laser: two-photon absorptions and relaxation times.

P7 H.W.Schrötter, H.Berger, J.-P.Boquillon, B.Lavorel, and G.Millot,
Croatica Chemica Acta 61, 487-503 (1988):
High-resolution non-linear Raman spectroscopy in gases.

P8 B.Foy, J.Hetzler, G.Millot, and J.I.Steinfeld,
Journal of Chemical Physics 88, 6838-6852 (1988):
State-to-state rotational energy transfer in methane ($^{13}CD_4$) from infrared double resonance experiments with a tunable diode laser.

P9 B.Lavorel, G.Millot, M.Lefebvre, and M.Péalat,
Journal of Raman Spectroscopy 19, 375-378 (1988):
Dunham coefficients of $^{14}N_2$ from CARS measurements of high vibrational states in a low pressure discharge.

P10 R.Chaux, C.Milan, G.Millot, B.Lavorel, R.Saint-Loup, and J.Moret-Bailly,
Journal of Optics (Paris) 19, 3-14 (1988):
Wavelength measurements of continuous wave lasers with a wavemeter. Applications to high-resolution Raman-spectra calibration.

P11 G.Pierre, G.Millot, A.Valentin, L.Henry, B.Foy, and J.I.Steinfeld,
Canadian Journal of Physics 66(7), 622-629 (1988):
Absorption-sepctrum of $^{13}CD_4$ methane in the 1000 cm^{-1} region. Analysis of the ν_2/ν_4 dyad.

P12 G.Millot, J.Hetzler, G.Pierre, and J.I.Steinfeld,
Spectrochimica Acta A 45 , 5-15 (1989):
Infrared double-resonance lineshapes in strongly pumped spherical-top molecules.

P13 J.Hetzler, G.Millot, and J.I.Steinfeld,
Journal of Chemical Physics 90, 5434-5442 (1989):
Rotationally mediated vibration-rotation and vibration-translation energy transfer in silane.

P14 B.Lavorel, G.Millot, Q.L.Kou, G.Guelachvili, K.Bouzouba, P.Lepage, Vl.G.Tyuterev, and G.Pierre,
Journal of Molecular Spectroscopy 143, 35-49 (1990):
Study ν_1/ν_3 interacting bands of silane: analysis of infrared and Raman spectra.

P15 H.W.Schrötter, H.Berger, J.-P.Boquillon, B.Lavorel, and G.Millot,
Journal of Raman Spectroscopy 21, 781-789 (1990):
High resolution nonlinear Raman spectroscopy in gases.

P16 G. Millot,
Journal of Chemical Physics 93, 8001-8010 (1990):
Rotationally inelastic rates over a wide temperature range based on an energy corrected sudden-exponential-power theoretical analysis of Raman line broadening coefficients and Q-branch collapse.

P17 B.Lavorel, G.Millot, R.Saint-Loup, H.Berger, L.Bonamy, J.Bonamy, and D.Robert,
Journal of Chemical Physics 93, 2185-2191 (1990):
Study of collisional effects on band shapes of the □□□□□□ Fermi dyad in CO_2 gas with stimulated Raman spectroscopy: Simultaneous line mixing and Dicke narrowing in the □□ band.

P18 M.L.Gonze, R.Saint-Loup, J.Santos, B.Lavorel, R.Chaux, G.Millot, H.Berger, L.Bonamy, J.Bonamy, and D.Robert,
Chemical Physics 148, 417-428 (1990):
Collisional line broadening and line shifting in N_2-CO_2 mixture studied by inverse Raman spectroscopy.

P19 R.Saint-Loup, B.Lavorel, G Millot, C.Wenger, and H.Berger,
Journal of Raman Spectroscopy 21, 77-83 (1990):
Enhancement of sensitivity in high resolution stimulated Raman spectroscopy of gases: Application to the $2\nu_2$ (1285 cm^{-1}) band of CO_2.

P20 G. Millot, A. Boutahar, B. Lavorel, C. Wenger, R. Saint-Loup, and H. Berger,
Journal of Raman Spectroscopy 21, 803-808 (1990):
Measurements of collisional linewidths in the stimulated Raman Q-branch of the ν_1 band of silane.

P21 A.Tabyaoui, B.Lavorel, G.Millot, R.Saint-Loup, R.Chaux, and H.Berger,
Journal of Raman Spectroscopy 21, 809-812 (1990):
Accurate spectroscopic constants of nitrogen determined from stimulated Raman spectra of the fundamental and first hot bands.

P22 B.Lavorel, G.Millot, R.Saint-Loup, H.Berger, L.Bonamy, J.Bonamy, and D.Robert,
Journal of Chemical Physics 93, 2176-2184 (1990):

Study of collisional effects on band shapes of the $\nu_1/2\nu_2$ Fermi dyad in CO_2 gas with stimulated Raman spectroscopy: Rotational and vibrational relaxation in the ν_1 band.

P23 J.Bonamy, L.Bonamy, D.Robert, M.L.Gonze, G.Millot, B.Lavorel, and H.Berger,
Journal of Chemical Physics 94, 6584-6589 (1991):
Rotational relaxation of nitrogen in ternary mixtures N_2-CO_2-H_2O: consequences in coherent anti-Stokes Raman spectroscopy thermometry.

P24 G.Millot, B.Lavorel, and J.I.Steinfeld,
Journal of Chemical Physics 95, 7938-7946 (1991):
Collisional broadening, line shifting and line mixing in the stimulated Raman $2\nu_2$ Q-branch of CH_4.

P25 J.I.Steinfeld, P.Ruttenberg, G.Millot, G.Fanjoux, and B.Lavorel,
Journal of Physical Chemistry 95, 9638-9647 (1991):
Scaling laws for inelastic collision processes in diatomic molecules.

P26 G.Millot, R.Saint-Loup, J.Santos, R.Chaux, H.Berger, and J.Bonamy,
Journal of Chemical Physics 96, 961-971 (1992):
Collisional effects in the stimulated Raman Q-branch of O_2 and O_2-N_2.

P27 G.Millot, B.Lavorel, and J.I.Steinfeld,
Journal of Quantum Spectroscopy and Radiative Transfer 47, 81-90 (1992):
Collisional broadening of rotational lines in the stimulated Raman pentad Q-branch of CD_4.

P28 B.Lavorel, G.Millot, M.Rotger, G.Rouillé, H.Berger, and H.W.Schrötter,
Journal of Molecular Structure 273, 49-59 (1992):
Non-linear Raman spectroscopy in gases.

P29 G.Rouillé, G.Millot, R.Saint-Loup, and H.Berger,
Journal of Molecular Spectroscopy 154, 372-382 (1992):
High-Resolution stimulated Raman spectroscopy of O_2.

P30 B.Lavorel, R.Pykhov, and G.Millot,
Journal of Quantum Spectroscopy and Radiative Transfer 49, 579-584 (1993):
Line mixing in the stimulated Raman spectrum of the ν_1 band of SiH_4 at 0.4-1.0 bar.

P31 G.Millot, B.Lavorel, G.Fanjoux, and C.Wenger,
Applied Physics B56, 287-293 (1993):
Determination of temperature by stimulated Raman scattering of molecular Nitrogen, Oxygen and Carbon dioxide.

P32 G.Millot, C.Roche, R.Saint-Loup, R.Chaux, H.Berger, and J.Santos,
Chemical Physics 173, 505-512 (1993):
Collisional narrowing and shifting in the Raman Q-branch of oxygen at high density.

P33 G.Fanjoux, G.Millot, R.Saint-Loup, R.Chaux, and L.Rosenmann,
Journal of Chemical Physics 101, 1061-1071 (1994):
Coherent anti-Stokes Raman spectroscopy study of collisional broadening in the O_2-H_2O Q-branch.

P34 C.Roche, G.Millot, R.Chaux, and R.Saint-Loup,
Journal of Chemical Physics 101, 2863-2870 (1994):
Rotational and vibrational relaxation of the Fermi $\nu_1/2\nu_2$ dyad in CO_2 gas from Raman-infrared double resonance experiments.

P35 B.Lavorel, G.Millot, G.Fanjoux, and R.Saint-Loup,
Journal of Chemical Physics 101, 174-177 (1994):

Study of collisional effects on band shapes of the $\nu_1/2\nu_2$ Fermi dyad in CO_2 gas with stimulated Raman spectroscopy. III. Modeling of collisional narrowing and study of vibrational shifting and broadening at high temperature.

P36 L.Bonamy, J.Bonamy, D.Robert, S.I.Temkin, G.Millot, and B.Lavorel,
Journal of Chemical Physics 101, 7350-7356 (1994):
Line coupling in Anisotropic Raman Branches.

P37 A. Boutahar, L. Touzani, M. Loëte, G. Millot, and B. Lavorel,
Journal of Molecular Spectroscopy 169, 38-57 (1995):
Raman intensities of the dyad ν_1/ν_3 of $^{28}SiH_4$.

P38 L. Touzani, M. Loëte, B. Lavorel, and G. Millot,
Journal of Molecular Spectroscopy 171, 58-85 (1995):
Measurement and Analysis of the Raman intensities of $^{12}CD_4$.

P39 B.Lavorel, G. Fanjoux, G. Millot, L. Bonamy, and F. Emond,
Journal of Chemical Physics 103, 9903-9906 (1995):
Line coupling effects in anisotropic Raman Q Branches of the $\nu_1/2\nu_2$ Fermi dyad in CO_2.

P40 G. Fanjoux, G. Millot, and B. Lavorel,
Journal of Raman Spectroscopy 27, 475-483 (1996):
Collisional Shifting and Broadening Coefficients for the Rovibrational Anisotropic S(J) Lines of Nitrogen Studied by Inverse Raman Spectroscopy.

P41 G. Millot, B. Lavorel, and G. Fanjoux,
Journal of Molecular Spectroscopy 176, 211-218 (1996):
Pressure Broadening, Shift, and Interference Effect for a multiplet Line in the Rovibrational Anisotropic Stimulated Raman Spectrum of Molecular Oxygen.

P42 G. Fanjoux, R. Chaux, and G. Millot,
Applied Physics B 62, 521-525 (1996):
Shot-by-shot frequency calibration of CARS spectra: Application to the measurement of the collisional line shift in oxygen.

P43 G. Millot, G. Fanjoux, and B. Lavorel,
Journal of Chemical Physics 104, 5347-5348 (1996):
Fitting and scaling laws for high temperature Q branch collapse in the O_2 stimulated Raman spectra in O_2-H_2O mixtures.

P44 P. Tchofo Dinda, G. Millot, E. Seve, and M. Haelterman,
Optics Letters 21, 1640-1642 (1996):
Demonstration of a nonlinear gap in the modulational instability spectra of wave propagation in highly birefringent fibers.

P45 E. Seve, P. Tchofo Dinda, G. Millot, M. Remoissenet, J.M. Bilbault, and M. Haelterman,
Physical Review A 54, 3519-3534 (1996):
Modulational instability and critical regime in a highly birefringent fiber.

P46 G. Millot, E. Sève, and S. Wabnitz,
Physical Review Letters 79, 661-664 (1997):
Polarization symmetry breaking and pulse train generation from the modulation of light waves.

P47 P. Tchofo Dinda, G. Millot, and S. Wabnitz,
Optics Letters 22, 1595-1597 (1997):
Polarization switching of stimulated Raman scattering in optical fibers by dual-frequency pumping.

P48 G. Millot, S. Pitois, P. Tchofo Dinda, and M. Haelterman,
Optics Letters 22, 1686-1688 (1997):
Observation of modulational instability induced by velocity-matched cross-phase modulation in a normally dispersive bimodal fiber.

P49 G. Millot, E. Sève, S. Wabnitz, and S. Trillo,
Physical Review Letters 80, 504-507 (1998):
Observation of a novel large-signal four-photon instability in optical wave mixing.

P50 S. Trillo, G. Millot, E. Sève, and S. Wabnitz,
Applied Physics Letters 72, 150-152 (1998):
Failure of phase-matching concept in large-signal parametric frequency conversion.

P51 G. Millot, E. Sève, S. Wabnitz, and M. Haelterman,
Journal of Optical Society of America B 15 , 1266-1277 (1998):
Observation of induced modulational polarization instabilities and pulse train generation in the normal dispersion regime of a birefringent optical fiber.

P52 G. Millot, E. Sève, S. Wabnitz, and M. Haelterman,
Optics Letters 23 , 511-513 (1998):
Dark - soliton - like pulse train generation from induced modulational polarization instability in a birefringent fiber.

P53 G. Fanjoux, B. Lavorel, and G. Millot,
Journal of Raman Spectroscopy 29, 391-397 (1998):
Collisional shifting and broadening coefficients for the rovibrational anisotropic lines of the $\nu_1/2\nu_2$ Fermi dyad in CO_2 gas studied by stimulated Raman spectroscopy.

P54 G. Millot, and C. Roche,
Journal of Raman Spectroscopy 29, 313-320 (1998):
State-to-state vibrational and rotational energy transfer in CO_2 gas from time-resolved Raman-infrared double resonance experiments.

P55 P. Tchofo Dinda, G. Millot, and S. Wabnitz,
Journal of Optical Society of America B 15, 1433-1441 (1998):
Polarization switching and suppression of stimulated Raman scattering in birefringent optical fibers.

P56 E. Sève, G. Millot, S. Trillo, and S. Wabnitz
Journal of Optical Society of America B 15, 2537-2551 (1998):
Large-signal enhanced frequency conversion in a birefringent optical fibers: theory and experiments.

P57 S. Pitois, G. Millot, and S. Wabnitz,
Physical Review Letters 81, 1409-1412 (1998):
Polarization domain wall solitons with counterpropagating laser beams.

P58 S. Pitois, G. Millot, and P. Tchofo Dinda,
Optics Letters 23, 1456-1458 (1998):
Influence of parametric four-wave mixing effects on stimulated Raman scattering in bimodal optical fibers.

P59 E. Sève, G. Millot, and S. Wabnitz,
Optics Letters 23 , 1829-1831 (1998):
Buildup of terahertz vector dark-soliton trains from induced modulation instability in highly birefringent optical fiber.

P60 S. Pitois, G. Millot, P. Grelu, and M. Haelterman,
Physical Review E 60, 994-1000 (1999):
Generation of optical domain-wall structures from modulational instability in a bimodal fiber.

P61 E. Sève, G. Millot, S. Wabnitz, T. Sylvestre, and H. Maillotte,

Journal of Optical Society of America B 16, 1642-1650 (1999):
Generation of vector dark soliton trains by induced modulational instability in a highly birefringent fiber.

P62 P. Kockaert, M. Haelterman, S. Pitois, and G. Millot,
Applied Physics Letters 75, 2873-2875 (1999):
Isotropic polarization modulational instability and domain walls in spun fibers.

P63 F. Gutty, S. Pitois, P. Grelu, G. Millot, M.D. Thomson, and J.M. Dudley,
Optics Letters 24, 1389-1391 (1999):
Generation and characterization of 0.6 THz polarisation domain wall trains in an ultra-low birefringence spun fiber.

P64 J.M. Dudley, M.D. Thomson, F. Gutty, S. Pitois, P. Grelu, and G. Millot,
Electronics Letters 35, 2042-2044 (1999):
Complete intensity and phase characterisation of optical pulse trains at terahertz repetition rates.

P65 E. Sève, G. Millot, and S. Trillo,
Physical Review E 61, 3139-3150 (2000):
Strong four photon conversion regime of cross-modulation induced modulational instability.

P66 P. Tchofo Dinda, G. Millot, and P. Louis,
Journal of Optical Society of America B 17, 1730-1739 (2000):
Simultaneous achievement of suppression of modulational instability and stimulated Raman scattering in optical fibers by orthogonal polarization pumping.

P67 S. Pitois, G. Millot, and S. Wabnitz,
Journal of Optical Society of America B 18, 432-443 (2001):
Nonlinear polarization dynamics of counterpropagating waves in an isotropic optical fiber: theory and experiments.

P68 J. Dudley, F. Gutty, S. Pitois, and G. Millot,
IEEE Journal of Quantum Electronics 37, 587-594 (2001):
Complete characterization of THz pulse trains generated from nonlinear processes in optical fibers.

P69 P. Tchofo Dinda, E. Sève, G. Millot, T. Sylvestre, H. Maillotte, and E. Lantz,
Optics Communications 192, 107-121 (2001):
Raman-assisted three-wave mixing of non-phase-matched waves in optical fibers. Application to wide-range frequency conversion.

P70 G. Millot, P. Tchofo Dinda, E. Sève, and S. Wabnitz,
Optical Fiber Technology (Invited Paper) 7, 170-205 (2001):
Modulational instability and stimulated Raman scattering in normally dispersive highly birefringent fibers.

P71 S. Pitois, M. Haelterman, and G. Millot,
Optics Letters 26, 780-782 (2001):
Bragg modulational instability induced by a dynamical grating in an optical fiber.

P72 J.M. Dudley, A.C. Peacock, and G. Millot,
Optics Communications 193, 253-259 (2001):
The cancellation of the dispersive and nonlinear phase shift across the fundamental optical fiber soliton : a pedagogical note.

P73 G. Millot,
Optics Letters 26, 1391-1393 (2001):
Multiple four-wave mixing induced modulational instability in highly birefringent fibers.

P74 F. Gutty, P. Grelu, N. Huot, G. Vienne, and G. Millot,
Electronics Letters 37, 745-746 (2001):

Stabilisation of mode-locking in a fibre ring laser through pulse bunching.

P75 G. Millot, S. Pitois, and P. Tchofo Dinda,
Journal of Optical Society of America B 19, 454-460 (2002):
Modulational instability processes in optical isotropic fibers under dual-frequency circular-polarization pumping.

P76 S. Pitois, M. Haelterman, and G. Millot,
Journal of Optical Society of America B 19, 782-791 (2002):
Theoretical and experimental study of Bragg modulational instability in a dynamic fiber grating.

P77 P. Tchofo Dinda and G. Millot,
Optics Letters 27, 225-227 (2002):
Strong reduction of optimum pump power for efficient wave conversion in optical fibers with dual-frequency circularly polarized pump waves.

P78 G. Millot and J.M. Dudley,
Applied Optics (Engineering and Laboratory Notes) 41, 2589-2591 (2002):
Polarization-mode dispersion measurements in high-birefringence fibers by means of stimulated Raman scattering.

P79 G. Millot, A. Sauter, L. Provino, J.M. Dudley, and R.W. Windeler,
Optics Letters 27, 695-697 (2002):
Polarization mode dispersion and vectorial modulational instability in air-silica microstructure fiber.

P80 P. Grelu, F. Gutty, and G. Millot,
IEEE Photonics Technology Letters 14, 672-674 (2002):Pseudo-random pulse sequence characterization with frequency-resolved optical gating.

P81 S. Pitois, J. Fatome, and G. Millot,
Optics Letters 27, 1729-1731 (2002):
Generation of 160-GHz transform-limited pedestal-free pulse train through multiwave mixing compression of a dual frequency beat signal.

P82 P. Tchofo Dinda, A. Labruyere, A. B. Moubissi, K. Nakkeeran, J. Fatome, S. Pitois, and G. Millot,
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- ***Invited Conferences :***

Ci1 G. Millot, B. Lavorel, and H. Berger,
Samarkand URSS, **1st International Colloquium of Coherent Raman Spectrosocopy 1990**:
Collisional relaxation processes studied by coherent Raman Spectroscopy of major species present in combustions.

Ci2 G. Millot,
Dijon France, **9th European CARS Workshop 1990**:
Collisional effects in the SRS Q-branch of O_2 and O_2-N_2.

Ci3 H. Berger, B. Lavorel, G. Millot, M. Rotger, R. Saint-Loup, R. Chaux, and G. Rouillé,
Würzburg Allemagne, **XIIIth International conference on Raman Spectroscopy 1992**:
High resolution Raman spectroscopies : recent performances and limits of SRS, CARS and PARS.

Ci4 G. Millot,
Durham Royaume-Uni, **CCP6 Workshop on inelastic collisions and dynamics in the atmosphere 1995**:
Collisional effects in the Raman Q-branch of methane, oxygen, and carbon dioxide.

Ci5 G. Millot, P. Tchofo-Dinda, E. Sève, et M.Haelterman,
Nice France, **Journées Nationales d'Optique Guidée 1996**:
Effets de puissance sur les spectres d'instabilité modulationnelle dans les fibres biréfringentes.

Ci6 A. Déroussiaux, B. Lavorel, and G. Millot,
Heidelberg Allemagne, **XVI European CARS Workshop 1997**:
Vibrational and rotational collisional relaxation in the CO_2-He and CO_2-Ar mixtures studied by double resonance spectroscopy.

Ci7 P. Tchofo-Dinda, G. Millot, et S. Wabnitz,
Saint-Etienne France, **Journées Nationales d'Optique Guidée 1997**:
Suppression et commutation de polarisation de la diffusion Raman stimulée dasn une fibre biréfringente par pompage à deux fréquences.

Ci8 G. Millot, S. Pitois, E. Sève, P. Tchofo-Dinda, S. Wabnitz, S. Trillo, M. Haelterman, and J.M. Soto Crespo,
Kyoto Japon, **International Symposium on New Trend in Optical Soliton Transmission Systems 1997**:
Generation of high-repetition-rate dark soliton trains and frequency conversion in optical fibers.

Ci9 G. Millot,
Les Houches France, **Ecole de physique internationale, Optical Solitons: Theoretical Challenges and Industrial Perspectives 1998**:
Vector modulational instabilities and soliton experiments.

Ci10 G. Millot, S. Pitois, and S. Wabnitz,
Victoria Canada, **Victoria Meetings, Workshop on Novel Solitons and Nonlinear Periodic Structures 1998**:
Polarization domain wall solitons with counterpropagating beams in optical fibers.

Ci11 G. Millot,
Dijon France, **Nonlinear Guided Waves and Their Applications'99, OSA 1999**:
Frequency conversion and switching in birefringent fibers.

Ci12 G. Millot,
Kochi Inde, **International Workshop on Optical solitons : Theory and Experiments (OSTE) 2002**:
Modulational instability and vector solitons in optical fibers : theory and experiment.

Ci13 J. Fatome, S. Pitois, and G. Millot,
Beaune France, **25th International Congress on High Speed Photography and Photonics 2002**:

Generation and characterization of ultrahigh-repetition-rate pulse trains for optical fiber communications lines.

Ci14 G. Millot,
Les Houches France, **Ecole de physique internationale, Physics, Signal, Physics : on the links between nonlinear physics and information sciences 2002**:
Applications of nonlinear fiber optics to ultrafast telecommunications (cours de 3h).

Ci15 G. Millot,
Munich Allemagne, **Conference on Lasers and Electro-Optics Europe, CLEO2003**, **2003**:
Nonlinear Polarization Effects.

Ci16 A. Picozzi, M. Haelterman, S. Pitois and G. Millot,
Puerto Rico USA, **Annual Meeting of the IEEE Lasers and Electro-Optics Society, LEOS**, 7-11 Novembre **2004**:
Incoherent solitons and condensation processes.

Ci17 S. Pitois, G. Millot, A. Sauter, H.R. Jauslin, A. Picozzi, and M. Haelterman,
Dijon France, **International Summer School : New Concepts in Photonics and Optical Communications,** 21-25 Juin **2004**:
Polarization attractors.

Ci18 A. Picozzi, M. Haelterman, S. Pitois and G. Millot,
Dijon France, **International Summer School : New Concepts in Photonics and Optical Communications,** 21-25 Juin **2004**:
Incoherent solitons and condensation processes.

Ci19 A. Picozzi, M. Haelterman, S. Pitois and G. Millot,
Baltimore USA, **Conference on Lasers and Electro-Optics, CLEO** 24-26 Mai **2005**:
Condensation processes of incoherent optical waves.

Ci20 S. Wabnitz, A. Tonello, G. Millot, S. Pitois, and E. Poliakov,
Warsaw Pologne, **International SPIE Congress on Optics and Optoelectronics, 2005**:
Parametric and Raman amplification in photonic crystal fibers.

Ci21 J.M. Dudley, C. Billet, C. Finot, and G. Millot,
Sydney Australie, **Poling and Photosensitivity / 30th Australian Conference on Optical Fiber Technology (BGPP/ACOFT), 2005**:
Intermediate asymptotic evolution and photonic bandgap fiber compression of optical similaritons.

Ci22 P. Tchofo-Dinda, G. Millot, A. Labruyère, S. Pitois, et J. Fatome,
14th Nonlinear Dynamics of Electronic Systems (NDES 2006), conf. inv. internat., 6-9 juin, Dijon, France **2006**:
Soliton-based optical communication systems: basic concepts and new trends.

Ci23 S. Wabnitz, A. Tonello, S. Pitois, G. Millot, T. Martynkien, W. Urbanczyk, J. Wojcik, A. Locatelli, M. Conforti, et C. De Angelis,
XII Conference on Lasers Optics, Proc. Soc. Photo-Opt. Instrum. Eng. (SPIE), 26-30 juin, St. Petersburg (Russie) **2006** :
Experiments and theory of tunable broadband parametric gain in photonic crystal fibers.

Ci24 G. Millot
8èmes Rencontres Nationales du Réseau des Electroniciens du CNRS, Annecy, France juin **2006** :
Des fibres qui fusent.

Ci25 C. Finot, J.M. Dudley, et G. Millot
Journée Fibre Optique Femtoseconde – Réseau des technologies femtosecondes, Palaiseau, France octobre **2006** :
Amplification parabolique: aspects fondamentaux.

Ci26 G. Millot,
Journées scientifiques de l'IUF « la communication », Avignon, France **2007** :
Des lasers pour communiquer.

Ci27 G. Millot, C. Finot et J.M. Dudley
Rencontre du Non Linéaire, Paris, France mars **2008** :
Auto-similarité en Optique Non Linéaire.

Ci28 C. Ware, S. Cordette, C. Lepers, I. Fsaifes, B. Kibler, C. Finot, and G. Millot, 10th International Conference on Transparent Optical Networks, Athens, Grêce juin 2008:
Spectral slicing of supercontinuum source for WDM/DS-OCDMA applications.

Ci29 G. Millot
E2Phys2008, Physique et sport, la physique en mouvement, Dijon, France aôut **2008** :
De la Ola des stades aux solitons dans les fibres optiques.

Ci30 Kamal Hammani, Christophe Finot, Stéphane Pitois, John M. Dudley et Guy Millot

Journées Nationales d'Optique Guidée, Lannion, France octobre **2008**:
Ondes scélérates optiques.

Ci31 Christophe Finot, Bertrand Kibler, John M. Dudley and Guy Millot
CPNLW-09 "Solitons in their Roaring Forties: Coherence and Persistence in Nonlinear Waves", Nice, France janvier **2009:**
Optical solitons and similaritons in fiber based systems.

Ci32 C. Finot, J.-M. Dudley, D.J. Richardson and G. Millot
LEOS "Nonlinear dynamics in photonic systems ", Innsbruck, Autriche janvier **2009**:
Parabolic pulse generation and applications.

Ci33 S. Pitois, J. Fatome, A. Picozzi and G. Millot
LEOS "Nonlinear processing in optical fibers", Innsbruck, Autriche janvier **2009**:
New concepts based on nonlinear polarization effects and Raman amplification in optical fibers.

Ci34 C. Finot, J.-M. Dudley, D.J. Richardson and G. Millot
Optical Fiber Communication Conference "Fibers and Optical Propagation Effects", San Diego USA mars **2009**:
Parabolic pulse formation and applications.

Ci35 C. Finot, J.-M. Dudley, D.J. Richardson and G. Millot
11th International Conference on Transparent Optical Networks (ICTON), Azores Portugal juin **2009**:
Generation of parabolic pulses and applications for optical telecommunications.

Ci36 K. Hammani, C. Finot, B. Kibler, J.-M. Dudley and G. Millot
Conférence sur les Lasers et l'Optique Quantique (COLOQ11), Mouans-Sartoux France septembre **2009**:
Ondes scélérates dans les fibres optiques.

Ci37 B. Kibler, B. Barviau, S. Coen, J. Fleischer, A. Kudlinski, P. Aschieri, G. Millot and A. Picozzi
Frontiers in Optics, San Jose, USA, Octobre **2009** :
Thermodynamic approach of statistical nonlinear optics.

Ci38 J. Fatome, S. Pitois, C. Finot, and G. Millot
12th International Conference on Transparent Optical Network (ICTON), Munich, Allemagne 27 juin - Juillet **2010**:
Light by light polarization control for telecommunication applications.

Ci39 C. Ware, S. Cordette, C. Lepers, I. Fsaifes, A. Tonello, V. Couderc, M. Douay, C. Finot, and G. Millot
12th International Conference on Transparent Optical Network (ICTON), Munich, Allemagne 27 juin - Juillet **2010**:
Optical CDMA enhanced by nonlinear optics.

Ci40 J. Fatome, S. Pitois, P. Morin, C. Finot and G. Millot, *Light-by-Light polarization control for telecommunication applications,* **International Conference on Transparent Optical Networks**, Juin 27-Juillet 01, 2010, Munich, Allemagne.

Ci41 B. Kibler, K. Hammani, C. Finot, and G. Millot
IEEE/LEOS Summer Topical Meetings, Playa del Carmen Mexico, Mexique Juillet **2010**:
Emergence of extreme events in fiber based nonlinear devices.

Ci42 B. Kibler, J. Fatome, C. Finot, G. Millot, F. Dias, G. Genty, N. Akhmediev, J.M. Dudley **:** *Solitons to supercontinuum : new nonlinear structures in fiber propagation,* **Photonics Global Conference 2010**, Singapore, 14-16 (Dec. 2010).

Ci43 K. Hammani, B. Kibler, C. Finot, I. El-Mansouri, J. Fatome, J.M. Dudley and G. Millot **:** *Optical Peregrine soliton generation in standard telecommunications fiber,* 13th **International Conference on Transparent Optical Network (ICTON**), Stockholm, Suède, 26-30 june 2011.

Ci44 J. Fatome, P. Morin, S. Pitois, C. Finot and G. Millot, *Light-by-light polarization control and its applications in optical communications*, **Nonlinear Photonics**, Saint Petersburg, 24 -26 august 2011.

Ci45 K. Hammani, B. Kibler, C. Michel, C. Finot, G. Millot, and A. Picozzi. "*Emergence of rogue waves from optical wave turbulence*". **Progress In Electromagnetics Research Symposium** (29th PIERS), Marrakesh, Morocco, Mars 2011.

Ci46 G. Genty, B. Kibler, J. Fatome, G. Millot, F. Dias, N. Akhmediev, J.M. Dudley. "*Optical Rogue Waves: Physics and Impact*". Paper OThS1, The Optical Fiber Communication Conference **OFC/NFOEC**, Los Angeles, Mars 2011.

Ci47 B. Kibler, K. Hammani, J. Fatome, G. Millot, F. Dias, G. Genty, N. Akhmediev, B. Wetzel, J.M. Dudley and C. Finot **:** *The Peregrine soliton in nonlinear fiber optics*, **Nonlinear Photonics : Theory, Materials, Applications**, Saint Petersburg, 24-26 august 2011.

Ci48 B. Kibler, K. Hammani, A. Picozzi, J. Fatome, C. Michel, J. M. Dudley, G. Millot and C. Finot : *Rogue waves, Peregrine and rationnal solitons and wave turbulence theory,* **Nonlinear Photonics 2012**, Colorado Springs, 17-21 june 2012.

Ci49 C. Finot, V. Couderc, C. Lepers, C. Ware, B. Kibler, S. Cordette, I. Fsaifes, A. Tonello, M. Douay, S. Wabnitz and G. Millot **:** *Supercontinuum généré par fibre optique à cristal photonique pour l'accès multiple à répartition par code***, deuxième grand colloque STIC,** Cité des Sciences et de l'Industrie, Paris, 5-7 Janvier 2010.

Ci50 K. Hammani, B. Kibler, C. Finot, G. Millot : *Les solitons optiques : un modèle pour les vagues scélérates océaniques ? ,* **109ième session de l'Association Technique Maritime et Aéronautique,** Paris, 23-24 mai 2011.

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