Ramon Corbalan

List of Publications by Year
in descending order

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114 papers	2,197 citations	318942 23 h-index	286692 43 g-index
114 all docs	114 docs citations	114 times ranked	1251 citing authors

#	Article	IF	Citations
1	Conical refraction healing after partially blocking the input beam. Physical Review A, 2015, 92, .	1.0	4
2	Optical quantum memory for polarization qubits withV-type three-level atoms. Journal of Physics B: Atomic, Molecular and Optical Physics, 2011, 44, 195504.	0.6	6
3	Filtering of matter-wave vibrational states via spatial adiabatic passage. Physical Review A, 2011, 83, .	1.0	12
4	Atomtronics with holes: Coherent transport of an empty site in a triple-well potential. Physical Review A, 2010, 82, .	1.0	46
5	Adiabatic splitting, transport, and self-trapping of a Bose-Einstein condensate in a double-well potential. Physical Review A, 2010, 81, .	1.0	34
6	Dipole spectrum structure of nonresonant nonpertubative driven two-level atoms. Physical Review A, 2010, 81, .	1.0	11
7	Doppler-free adiabatic self-induced transparency. Physical Review A, 2009, 79, .	1.0	8
8	Generation of entangled photon pairs in optical cavity-QED: operating in the bad cavity limit. Journal of Physics B: Atomic, Molecular and Optical Physics, 2008, 41, 045505.	0.6	3
9	Double-barrier potentials for matter-wave gap solitons. Physical Review A, 2008, 78, .	1.0	5
10	Quantum switches and quantum memories for matter-wave lattice solitons. New Journal of Physics, 2007, 9, 4-4.	1.2	16
11	Ultrashort pulse control of space-dependent excitations in a three-level system. Physical Review A, 2007, 75, .	1.0	10
12	Cavity-QED-based entangled photon pair gun. Journal of Physics: Conference Series, 2007, 84, 012008.	0.3	0
13	Cavity-quantum-electrodynamics entangled photon source based on two truncated Rabi oscillations. Journal of the Optical Society of America B: Optical Physics, 2007, 24, 257.	0.9	4
14	Three level atom optics in dipole traps and waveguides. Optics Communications, 2006, 264, 264-270.	1.0	56
15	Deterministic cavity-QED source of polarization-entangled photon pairs. Physical Review A, 2006, 74, .	1.0	6
16	Quantum Theory of a Polarization Phase Gate in an Atomic Tripod Configuration. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2005, 99, 264.	0.2	1
17	Frequency up-conversion He-Ne laser without inversion. Applied Physics B: Lasers and Optics, 2005, 80, 67-72.	1.1	10
18	A PROPOSAL FOR AN OPTICAL IMPLEMENTATION OF A UNIVERSAL QUANTUM PHASE GATE. International Journal of Quantum Information, 2005, 03, 245-250.	0.6	0

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19	Cavity QED quantum phase gates for a single longitudinal mode of the intracavity field. Physical Review A, 2004, 70, .	1.0	33
20	Three-level atom optics via the tunneling interaction. Physical Review A, 2004, 70, .	1.0	119
21	Polarization phase gate with a tripod atomic system. Physical Review A, 2004, 70, .	1.0	164
22	‹title›Single three-level atoms for quantum information‹/title›. , 2004, , .		0
23	Quantum-jump statistical analysis of three-level systems with arbitrary coupling laser intensities and detunings. Journal of the Optical Society of America B: Optical Physics, 2003, 20, 2368.	0.9	5
24	Cavity Solitons in Two-Level Lasers with Dense Amplifying Medium. Physical Review Letters, 2003, 91, 083901.	2.9	9
25	Enlargement of the inversionless lasing domain by using broad-area cavities. Journal of Optics B: Quantum and Semiclassical Optics, 2003, 5, 201-207.	1.4	4
26	Gain without inversion at two symmetrical sidebands of resonance in cold free87Rb atoms: an experimental proposal. Journal of Optics B: Quantum and Semiclassical Optics, 2003, 5, 268-271.	1.4	5
27	Phase scaling properties of perturbation-induced multistability in a driven nonlinear system. Physical Review E, 2002, 66, 016201.	0.8	2
28	Electromagnetically induced transparency in a Boseâ€“Einstein condensate. Optics Communications, 2002, 211, 159-165.	1.0	20
29	Electromagnetically induced transparency with a standing-wave drive in the frequency up-conversion regime. Physical Review A, 2001, 64, .	1.0	20
30	Shift of attractor boundaries in a system with a slow harmonic parameter perturbation. Physica D: Nonlinear Phenomena, 2001, 150, 14-24.	1.3	17
31	Nonlinear behaviour of a cascadeJ''= 0â†'J= 1â†')' = 0 vector laser. Journal of Optics B: Quantum and Semiclassical Optics, 2001, 3, S225-S233.	1.4	1
32	Generalized EinsteinBcoefficients for coherently driven three-level systems. Physical Review A, 2001, 63, .	1.0	7
33	SPLITTING OF ATTRACTORS INDUCED BY RESONANT PERTURBATIONS. , 2001, , .		0
34	Tracking unstable steady states by large-amplitude low-frequency periodic modulation of a control parameter: Phase-space analysis. Physical Review E, 2000, 61, 2500-2505.	0.8	2
35	Amplification of near-resonant signals via stochastic resonance in a chaoticCO2laser. Physical Review E, 2000, 61, 6500-6505.	0.8	8
36	Electromagnetically induced transparency in Doppler-broadened three-level systems with resonant standing-wave drive. Europhysics Letters, 2000, 51, 286-292.	0.7	20

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37	Propagation effects on lasing without population inversion. Journal of Optics B: Quantum and Semiclassical Optics, 2000, 2, 359-363.	1.4	18
38	Lasing without inversion. Journal of Optics B: Quantum and Semiclassical Optics, 2000, 2, R7-R24.	1.4	263
39	Transverse profile effects on lasing without population inversion. Journal of Optics B: Quantum and Semiclassical Optics, 1999, 1, 146-152.	1.4	1
40	Dynamical manifestations of two mechanisms of lasing without inversion. Journal of Optics B: Quantum and Semiclassical Optics, 1999, 1, 580-587.	1.4	2
41	Lasing without inversion with frequency up-conversion in a Doppler-broadened V-type three-level system. Physical Review A, 1999, 60, 614-620.	1.0	20
42	Giant pulse lasing in three-level systems. Physical Review A, 1999, 59, 3038-3043.	1.0	5
43	Parametric nonfeedback resonance in period doubling systems. Physical Review E, 1999, 59, 1669-1674.	0.8	20
44	Nonlinear dynamics of an optically pumped laser with pump polarization modulation:stabilization of unstable steady states. Journal of the Optical Society of America B: Optical Physics, 1999, 16, 1049.	0.9	1
45	<title>Lasing without inversion: realities and prospects</title>. , 1999, , .		1
46	Lasing without inversion in the V-type three-level system under the two-photon resonance condition. Optics Communications, 1998, 147, 299-304.	1.0	22
47	Inversionless amplification in three-level systems: dressed states quantum interference and quantum-jump analyses. Optics Communications, 1998, 156, 133-144.	1.0	30
48	Dynamic Stabilization of Unstable Periodic Orbits in a CO2 Laser by Slow Modulation of Cavity Detuning. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 1998, 08, 1783-1789.	0.7	7
49	Interpretation of transient V scheme amplification without inversion. Quantum and Semiclassical Optics: Journal of the European Optical Society Part B, 1998, 10, 355-363.	1.0	8
50	Polarization phenomena in a laser coherently pumped by a linearly polarized field. Quantum and Semiclassical Optics: Journal of the European Optical Society Part B, 1998, 10, 37-54.	1.0	4
51	Self-pulsing lasing without inversion in the double- scheme. Quantum and Semiclassical Optics: Journal of the European Optical Society Part B, 1998, 10, 309-319.	1.0	3
52	Stochastic resonance in a chaotic laser. Physical Review E, 1998, 58, R2697-R2700.	0.8	26
53	Lasing without inversion in three-level systems: Self-pulsing in the cascade schemes. Physical Review A, 1998, 57, 2163-2168.	1.0	38
54	Stabilizing unstable orbits by slow modulation of a control parameter in a dissipative dynamic system. Physical Review E, 1998, 57, 4046-4053.	0.8	22

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55	Experimental Switchings in Bistability Domains Induced by Resonant Perturbations. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 1998, 08, 1777-1782.	0.7	11
56	Self-pulsing lasing without inversion in the double-Î› scheme. Quantum and Semiclassical Optics: Journal of the European Optical Society Part B, 1998, 10, 661-661.	1.0	0
57	The dynamics of optically pumped molecular lasers. On its relation with the Lorenz - Haken model. Quantum and Semiclassical Optics: Journal of the European Optical Society Part B, 1997, 9, R1-R35.	1.0	16
58	Topological analysis of chaos in the optically pumped laser. Physical Review E, 1997, 55, 2479-2487.	0.8	11
59	Attractor splitting induced by resonant perturbations. Physical Review E, 1997, 56, 1580-1584.	0.8	38
60	Experimental control of nonlinear dynamics by slow parametric modulation. Physical Review E, 1997, 55, 2455-2461.	0.8	30
61	Scattering of second-harmonic light from small spherical particles ordered in a crystalline lattice. Physical Review A, 1997, 55, 4520-4525.	1.0	97
62	Second harmonic generation in a photonic crystal. Applied Physics Letters, 1997, 70, 702-704.	1.5	152
63	Pseudo-metal reflection at the interface between a linear and a nonlinear material. Optics Communications, 1997, 144, 65-69.	1.0	11
64	Phase-dependent scaling law for signal amplification and squeezing near period-doubling bifurcation in a CO2 laser. Infrared Physics and Technology, 1997, 38, 101-105.	1.3	3
65	FIR spectroscopy of ethyl bromide and trioxane: New laser transitions and assignments. Infrared Physics and Technology, 1997, 38, 437-442.	1.3	3
66	Experimental study of bi-directional pumping of a far-infrared laser. Optics Communications, 1997, 133, 225-228.	1.0	10
67	<title>Second-harmonic generation in localized modes of a truncated dielectric periodic structure</title>. , 1996, , .		1
68	<title>Enhancement of second-harmonic generation in a one-dimensional periodic structure</title>. , 1996, , .		0
69	<title>Polarization chaos in optically pumped lasers</title>. , 1996, , .		0
70	Strong grating-wave effects in degenerate four-wave mixing. , 1996, 2800, 222.		0
71	<title>Nonlinear parametric effects near period doubling in a loss-modulated CO2 laser</title>. , 1996, , .		0
72	Tracking unstable steady states by large periodic modulation of a control parameter in a nonlinear system. Physical Review E, 1996, 54, 82-85.	0.8	17

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73	Experimental observation of parametric effects near period doubling in a loss-modulatedCO2laser. Physical Review A, 1996, 53, 1830-1833.	1.0	12
74	Competition and bistability of longitudinal modes in a Raman laser. Physical Review A, 1996, 53, 481-485.	1.0	5
75	Experimental observation of perturbation-induced intermittency in the dynamics of a loss-modulatedCO2laser. Physical Review E, 1996, 54, 4576-4579.	0.8	17
76	<title>Polarization effects in the dynamics of optically pumped lasers</title>. , 1996, , .		0
77	Models, predictions, and experimental measurements of far-infrared NH3-laser dynamics and comparisons with the Lorenz-Haken model. Applied Physics B: Lasers and Optics, 1995, 61, 223-242.	1.1	28
78	CO2 laser response to loss perturbation near period-doubling. Infrared Physics and Technology, 1995, 36, 71-79.	1.3	6
79	Bi-directional pumping of far-infrared lasers: Theoretical gain spectrum and transferred Lamb-dip line shape. Optics Communications, 1995, 114, 519-528.	1.0	5
80	Phase-sensitive signal amplification and squeezing near period-doubling bifurcation in a CO2 laser. Optics Communications, 1995, 118, 309-316.	1.0	14
81	26th EGAS Conference of the European Group for Atomic Spectroscopy. Physica Scripta, 1995, T58, 3-3.	1.2	0
82	Investigation of aCO2laser response to loss perturbation near period doubling. Physical Review A, 1995, 51, 663-668.	1.0	31
83	Polarization chaos in an optically pumped laser. Optics Letters, 1995, 20, 1353.	1.7	24
84	Second-harmonic generation in local modes of a truncated periodic structure. Optics Letters, 1995, 20, 1746.	1.7	96
85	Full polarization chaos in a pump-polarization modulated isotropic cavity laser. Optics Letters, 1995, 20, 2390.	1.7	16
86	Dynamics of a Gain Anisotropic Optically Pumped Laser with Arbitrary Angle Between Linear Polarizations of Pump and Laser Fields. Journal of Modern Optics, 1995, 42, 2295-2307.	0.6	9
87	Type-I intermittency in a four-level coherently pumped laser. Physical Review A, 1994, 50, 871-874.	1.0	11
88	Polarization-sensitive population trapping in an optically pumped laser. Physical Review A, 1994, 49, 1487-1490.	1.0	17
89	Enhancement of second harmonic generation in a periodic structure with a defect. Optics Communications, 1994, 108, 319-323.	1.0	58
90	Revealing of hidden resonances through high-contrast absorption spectroscopy. Optics Communications, 1993, 98, 72-76.	1.0	3

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91	Type-III intermittency in a four-level coherently pumped laser. Physical Review A, 1993, 48, 2251-2255.	1.0	10
92	Dynamics of coherently pumped lasers with linearly polarized pump and generated fields. Physical Review A, 1993, 48, 1483-1496.	1.0	40
93	On the resolving power of high-contrast saturated absorption spectroscopy. Optics Communications, 1992, 90, 251-254.	1.0	5
94	Theoretical gain spectrum of coherently pumped mid-infrared Fabry-PÃ©rot lasers. Optics Communications, 1992, 94, 589-598.	1.0	1
95	Influence of light polarization on the dynamics of optically pumped lasers. Physical Review A, 1990, 41, 6559-6562.	1.0	25
96	Saturation spectroscopy in optically thick three-level gas media. Optics Letters, 1990, 15, 63.	1.7	10
97	Lorenz-like dynamics in Doppler broadened coherently pumped lasers. Optics Communications, 1989, 71, 290-294.	1.0	28
98	Theoretical study of bi-directional emission in optically-pumped ring-cavity FIR lasers. Optics Communications, 1989, 70, 131-136.	1.0	10
99	Phase dynamics in a Doppler broadened optically-pumped laser. Optics Communications, 1989, 73, 506-510.	1.0	22
100	Influence of pump coherence on the dynamic behavior of a laser. Journal of the Optical Society of America B: Optical Physics, 1988, 5, 1004.	0.9	41
101	Dynamics of a detuned, optically pumped far-infrared laser. Journal Physics D: Applied Physics, 1988, 21, S180-S183.	1.3	7
102	INSTABILITIES IN DOPPLER BROADENED OPTICALLY PUMPED FAR-INFRARED LASERS. Journal De Physique Colloque, 1988, 49, C2-409-C2-412.	0.2	5
103	Instabilities in optically pumped infrared lasers. Journal of Infrared, Millimeter and Terahertz Waves, 1987, 8, 299-305.	0.6	7
104	Standing-Wave Forward-Backward Gain Asymmetry in Optically Pumped Gas Lasers. Physical Review Letters, 1986, 57, 831-834.	2.9	4
105	Competition and coupling between forward and backward waves in optically-pumped linear-cavity fir lasers. Optics Communications, 1985, 55, 353-358.	1.0	4
106	Gain saturation in optically pumped standing-wave gas lasers. Optics Communications, 1985, 53, 329-334.	1.0	4
107	Three-level Doppler-free two- and three-photon resonances. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1985, 6, 173-182.	0.4	0
108	Four-wave mixing effects in the probe absorption spectroscopy of three-level systems with standing-wave laser beams. Optics Communications, 1984, 50, 90-94.	1.0	0

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109	Laser irradiation of a three-level gas system: Continued-fraction theory and applications. Applied Physics B, Photophysics and Laser Chemistry, 1984, 34, 73-82.	1.5	18
110	Dressed-atom approach for probe spectroscopy in Doppler-broadened three-level systems with standing-wave saturator. Applied Physics B, Photophysics and Laser Chemistry, 1983, 31, 115-129.	1.5	21
111	New phenomena in Doppleron resonances. Optics Communications, 1981, 38, 113-118.	1.0	10
112	Saturation by a standing-wave laser of a Doppler-broadened three-level system: Narrow resonance due to stationary molecules. Optics Communications, 1981, 40, 29-34.	1.0	3
113	Multiple quantum transitions in optically oriented87Rb vapour. Journal of Physics B: Atomic and Molecular Physics, 1974, 7, 2368-2374.	1.6	8
114	On spin relaxation of optically pumped cesium vapour. Optics Communications, 1974, 10, 81-84.	1.0	3