

Claudine CrÃ©pin

List of Publications by Year in descending order

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88
papers

982
citations

471061

17
h-index

580395

25
g-index

89
all docs

89
docs citations

89
times ranked

782
citing authors

#	ARTICLE	IF	CITATIONS
1	Infra-red and Raman spectroscopy of free-base and zinc phthalocyanines isolated in matrices. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 10406.	1.3	49
2	A crossed-beam experimental study of the Cs(7p) + H ₂ → CsH + H reaction: From the fifth to the first potential surface without energy loss. <i>Chemical Physics Letters</i> , 1984, 110, 395-399.	1.2	41
3	Infrared spectroscopy of aniline (C ₆ H ₅ NH ₂) and its cation in a cryogenic argon matrix. <i>Chemical Physics Letters</i> , 2001, 338, 130-136.	1.2	40
4	Investigations of the Optical Spectroscopy of Atomic Sodium Isolated in Solid Argon and Krypton: Experiments and Simulations.. <i>Journal of Physical Chemistry A</i> , 2010, 114, 3011-3024.	1.1	37
5	Visible luminescence spectroscopy of free-base and zinc phthalocyanines isolated in cryogenic matrices. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 17543.	1.3	37
6	Acetylacetone in hydrogen solids: IR signatures of the enol and keto tautomers and UV induced tautomerization. <i>Chemical Physics Letters</i> , 2011, 504, 142-147.	1.2	36
7	Spectra and relaxation paths of Hg(3P ₁) in rare gas matrices. <i>Journal of Chemical Physics</i> , 1992, 97, 4772-4780.	1.2	31
8	Ar ⁺ laser-induced fluorescence spectra of Cs ₂ : The E ₁ ¹ u ⁺ and (1) 1 ¹ g electronic states. <i>Journal of Molecular Spectroscopy</i> , 1984, 107, 28-47.	0.4	23
9	A simulation of naphthalene matrix isolation: comparison with experiments. <i>Chemical Physics</i> , 2001, 272, 243-258.	0.9	23
10	Electronic spectra and proton transfer in the phenol/(NH ₃) _n clusters in argon matrices. <i>Chemical Physics</i> , 1991, 156, 281-291.	0.9	22
11	Intrinsic lifetime of metastable excited C ₄ H ₂ : implications for the photochemistry of C ₄ H ₂ in Titan's atmosphere. <i>Planetary and Space Science</i> , 2003, 51, 847-852.	0.9	22
12	Electronic absorption and phosphorescence of cyanodiacetylene. <i>Journal of Chemical Physics</i> , 2010, 133, 074310.	1.2	22
13	Time Domain Investigation on Vibrational Dephasing and Spectral Diffusion in CO-Doped Solid N ₂ . <i>Physical Review Letters</i> , 2000, 85, 964-967.	2.9	20
14	Laser-induced fluorescence of CsH: The X ¹ Σ ⁺ state dissociation energy. <i>Chemical Physics Letters</i> , 1984, 112, 10-14.	1.2	18
15	IR spectra and vibrational dephasing of the CO stretching mode in W(CO) ₆ doped cryogenic matrices. <i>Chemical Physics</i> , 2007, 341, 207-217.	0.9	18
16	Infrared study of glycolaldehyde isolated in parahydrogen matrix. <i>Journal of Chemical Physics</i> , 2010, 133, 094502.	1.2	18
17	Vibrational dynamics of CO stretching in W(CO) ₆ -doped hybrid xerogels from 5 K to room temperature with the CLIO-FEL. <i>Journal of Luminescence</i> , 2000, 86, 363-370.	1.5	17
18	Dephasing of intersublevel polarizations in InAs/GaAs self-assembled quantum dots. <i>Physical Review B</i> , 2002, 66, .	1.1	17

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19	UV-induced growth of cyanopolyynes chains in cryogenic solids. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 16780.	1.3	17
20	Photochemistry of acetylacetone isolated in parahydrogen matrices upon 266 nm irradiation. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 3450.	1.3	17
21	Electronic to vibrational energy transfer and relaxation in matrices. I. Hg in N ₂ matrix. <i>Chemical Physics</i> , 1987, 111, 169-182.	0.9	15
22	Rare-gas matrix as an infinite rare-gas cluster: a spectroscopic study of 9,10-dichloroanthracene in argon matrices. <i>Chemical Physics Letters</i> , 1990, 170, 446-450.	1.2	15
23	Site effect on radiative and non-radiative relaxation paths of naphthalene in low-temperature matrices. <i>Chemical Physics</i> , 2001, 272, 227-241.	0.9	15
24	Nuclear Spin Conversion to Probe the Methyl Rotation Effect on Hydrogenâ€”Bond and Vibrational Dynamics. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 6947-6950.	7.2	15
25	Synthesis and spectroscopy of cyanotriacetylene (HC ₇ N) in solid argon. <i>Journal of Chemical Physics</i> , 2014, 140, 044329.	1.2	15
26	Spectroscopy and relaxation paths of higher electronic states of Hg atoms and Hg ₂ molecules in rare-gas matrices. <i>Chemical Physics Letters</i> , 1992, 197, 467-475.	1.2	14
27	Vibrational dynamics of deuterium chloride in solid nitrogen probed by linear and nonlinear spectroscopy. <i>Journal of Chemical Physics</i> , 2003, 118, 9582-9588.	1.2	14
28	The first two excited 1 ¹ g ⁺ states of Cs ₂ . <i>Chemical Physics Letters</i> , 1984, 106, 162-165.	1.2	13
29	Electronic relaxation of aniline in argon matrix: A site selective laser spectroscopy. <i>Journal of Chemical Physics</i> , 2002, 116, 4993.	1.2	13
30	A site-selective spectroscopy of naphthalene and quinoline in TEOS/MTEOS xerogels. <i>Physical Chemistry Chemical Physics</i> , 2005, 7, 1933-1938.	1.3	13
31	The C ₃ N ⁻ anion: First detection of its electronic luminescence in rare gas solids. <i>Journal of Chemical Physics</i> , 2008, 128, 164304.	1.2	13
32	Low-temperature phosphorescence of dicyanoacetylene in rare gas solids. <i>Low Temperature Physics</i> , 2012, 38, 723-726.	0.2	13
33	Double deuterated acetylacetone in neon matrices: infrared spectroscopy, photoreactivity and the tunneling process. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 20713-20725.	1.3	13
34	Laser-induced infrared fluorescence of Cs ₂ . <i>Chemical Physics Letters</i> , 1983, 98, 608-610.	1.2	12
35	Quantum beats induced by spectral diffusion between independent two-level systems. <i>Physical Review A</i> , 2003, 67, .	1.0	11
36	Photochemistry of glycolaldehyde in cryogenic matrices. <i>Journal of Chemical Physics</i> , 2014, 140, 224319.	1.2	11

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37	Cryogenic Photochemical Synthesis and Electronic Spectroscopy of Cyanotetracetylene. Journal of Physical Chemistry A, 2017, 121, 7374-7384.	1.1	11
38	Low temperature Raman spectra of cyanobutadiyne (HC5N). Vibrational Spectroscopy, 2012, 62, 268-272.	1.2	10
39	2-Chloromalonaldehyde, a model system of resonance-assisted hydrogen bonding: vibrational investigation. Physical Chemistry Chemical Physics, 2018, 20, 12888-12897.	1.3	10
40	Vibrational structure in atomic emission spectra: Hg atoms in molecular matrices. Journal of Chemical Physics, 1997, 107, 2205-2214.	1.2	9
41	Mechanism of Hg(3P1) relaxation in nitrogen matrices. II. Experimental results and interpretation. Chemical Physics, 1989, 136, 1-14.	0.9	8
42	Amplified emission of phthalocyanine isolated in cryogenic matrices. Physical Chemistry Chemical Physics, 2008, 10, 2167.	1.3	8
43	Vibrational Perturbations of W(CO) ₆ Trapped in a Molecular Lattice Probed by Linear and Nonlinear Spectroscopy. Journal of Physical Chemistry A, 2013, 117, 8145-8156.	1.1	8
44	Large amplitude motions within molecules trapped in solid parahydrogen. Faraday Discussions, 2018, 212, 499-515.	1.6	8
45	Co vibrational stimulated emission in a Hg-Co-N ₂ matrix. Optics Communications, 1986, 58, 100-102.	1.0	7
46	Spectra and dynamics of the b 4 $\tilde{\Lambda}^{\circ}$ state of NO in Ar and Kr matrices. Chemical Physics Letters, 1989, 164, 50-56.	1.2	7
47	Mechanism of Hg(3P) relaxation in nitrogen matrices. I. Theoretical study of HgN ₂ . Chemical Physics, 1989, 133, 377-393.	0.9	7
48	Probing molecular site structure in low-temperature matrices: An EXAFS study of carbonyl sulfide in solid argon. Journal of Chemical Physics, 1998, 109, 7945-7948.	1.2	7
49	Vibrational Dynamics in Molecular Condensed Phases With The Clio Free Electron Laser. Laser Chemistry, 1999, 19, 65-69.	0.5	7
50	Influence of a Weak Hydrogen Bond on Vibrational Coherence Probed by Photon Echoes in DCI Dimer Trapped in Solid Nitrogen. Journal of Physical Chemistry A, 2005, 109, 4873-4880.	1.1	7
51	Unveiled optical properties of tetrapyrrolic pigments in cryogenic environments. Low Temperature Physics, 2010, 36, 451-457.	0.2	7
52	Formation and Spectroscopy of Dicyanotriacetylene (NC ₈ N) in Solid Kr. Journal of Physical Chemistry A, 2015, 119, 2701-2708.	1.1	7
53	Low Temperature Synthesis and Phosphorescence of Methylcyanotriacetylene. Journal of Physical Chemistry A, 2018, 122, 89-99.	1.1	7
54	Phosphorescence excitation mapping and vibrational spectroscopy of HC9N and HC11N cyanopolynes in organic solvents. Journal of Molecular Structure, 2020, 1214, 128201.	1.8	7

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55	Electronic to vibrational energy transfer and relaxation in matrices. II. Hg in mixed N ₂ /Kr matrices. <i>Chemical Physics</i> , 1987, 111, 183-191.	0.9	6
56	Spectra and relaxation of Hg atoms and molecules in low temperature matrices. I. CH ₄ , CD ₄ , and mixed CH ₄ /Ar, CD ₄ /Ar matrices. <i>Journal of Chemical Physics</i> , 1994, 100, 5459-5466.	1.2	6
57	Spectra and relaxation of Hg atoms and molecules in low temperature matrices. III. Hgm and HgmXn (X=H ₂ O and NH ₃) systems in rare gas matrices. <i>Journal of Chemical Physics</i> , 1994, 100, 5475-5480.	1.2	6
58	Spectra and relaxation of Hg atoms and molecules in low temperature matrices. II. H ₂ O/Ar and NH ₃ /Ar matrices. <i>Journal of Chemical Physics</i> , 1994, 100, 5467-5474.	1.2	6
59	Infrared photon echo experiments on small molecules isolated in condensed phase. <i>Journal of Luminescence</i> , 2001, 94-95, 575-578.	1.5	6
60	Photodissociation of Dimethylmercury in Argon Matrixes by 193 and 248 nm Laser Irradiation. <i>Journal of Physical Chemistry A</i> , 1998, 102, 4014-4020.	1.1	4
61	EXAFS studies of the trapping site structure for molecules isolated in cryogenic matrices. <i>Low Temperature Physics</i> , 2000, 26, 691-698.	0.2	4
62	Exploring vibrational coherence of molecular systems with simultaneous excitation of close frequencies using the CLIO-FEL. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2004, 528, 636-640.	0.7	4
63	Environment effect on the vibrational dephasing of HCl, and HCl containing complexes, probed in van der Waals solids. <i>Chemical Physics Letters</i> , 2005, 416, 121-127.	1.2	4
64	Vibrational spectroscopy and dynamics of W(CO) ₆ in solid methane as a probe of lattice properties. <i>Journal of Chemical Physics</i> , 2016, 145, 214306.	1.2	4
65	A HELium NanoDroplet Isolation (HENDI) investigation of the weak hydrogen bonding in the propyne dimer (CH ₃ CCH) ₂ . <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 28658-28666.	1.3	4
66	Molecules in confinement in clusters, quantum solvents and matrices: general discussion. <i>Faraday Discussions</i> , 2018, 212, 569-601.	1.6	4
67	Matrix Isolation Spectroscopy and Nuclear Spin Conversion of Propyne Suspended in Solid Parahydrogen. <i>Journal of Physical Chemistry A</i> , 2020, 124, 4471-4483.	1.1	4
68	Intramolecular hydrogen tunneling in 2-chloromalonaldehyde trapped in solid para-hydrogen. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 6115-6121.	1.3	4
69	Electronic spectroscopy, stimulated emission, and persistent spectral hole burning of cryogenic nitrogen matrices doped with tetrabenzoporphin. <i>Low Temperature Physics</i> , 2012, 38, 727-731.	0.2	3
70	Hgâ€“Xe Exciplex Formation in Mixed Xe/Ar Matrices: Molecular Dynamics and Luminescence Study. <i>Journal of Physical Chemistry A</i> , 2015, 119, 2307-2317.	1.1	3
71	Excited electronic structure of methylcyanoacetylene probed by VUV Fourier-transform absorption spectroscopy. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2016, 182, 286-295.	1.1	3
72	Synthesis and Electronic Phosphorescence of Dicyanoocatetrayne (NC ₁₀ N) in Cryogenic Matrixes. <i>Journal of Physical Chemistry A</i> , 2018, 122, 5580-5588.	1.1	3

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73	Selective photoisomerisation of 2-chloromalonaldehyde. Journal of Chemical Physics, 2019, 150, 034305.	1.2	3
74	Influence of complexation and solid environment on the vibrational coherence of DCl. European Physical Journal D, 2005, 36, 41-47.	0.6	2
75	A DFT study of reversed isotope shifts in H/D substitution of free-base porphyrin and related free-base tetrapyrroles. Canadian Journal of Chemistry, 2012, 90, 1078-1091.	0.6	2
76	Stimulated emission in cryogenic samples doped with free-base tetraazaporphine. Physical Chemistry Chemical Physics, 2015, 17, 14931-14942.	1.3	2
77	W(CO)6 in cryogenic solids: A comparative study of vibrational properties. Journal of Luminescence, 2017, 191, 78-86.	1.5	2
78	Hidden Isomer of Trifluoroacetylacetone Revealed by Matrix Isolation Infrared and Raman Spectroscopy. Journal of Physical Chemistry A, 2021, 125, 2249-2266.	1.1	2
79	Site effects on the electronic relaxation of aromatic molecules in van der Waals solids. Journal of Luminescence, 2001, 94-95, 457-460.	1.5	1
80	Free base tetraazaporphine isolated in inert gas hosts: Matrix influence on its spectroscopic and photochemical properties. Journal of Chemical Physics, 2014, 141, 124303.	1.2	1
81	Cavity Ring Down Spectroscopy Measurements for High-Overtone Vibrational Bands of HC ₃ N. Journal of Physical Chemistry A, 2015, 119, 9494-9505.	1.1	1
82	The role of spin-orbit coupling in the optical spectroscopy of atomic sodium isolated in solid xenon. Low Temperature Physics, 2019, 45, 715-720.	0.2	1
83	Spectroscopy of methylcyanodiacetylene revisited. Solid parahydrogen and solid neon matrix studies. Journal of Molecular Structure, 2020, 1218, 128437.	1.8	1
84	Vibrational dynamics of iron pentacarbonyl in cryogenic matrices. Journal of Chemical Physics, 2022, 156, 024301.	1.2	1
85	Non-linear infrared properties of InAs/GaAs self-assembled quantum dots. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2003, 507, 569-571.	0.7	0
86	Theoretical study of "trapping sites" in cryogenic rare gas solids doped with \hat{I}^2 -dicarbonyl molecules. Low Temperature Physics, 2019, 45, 317-324.	0.2	0
87	Exploring vibrational coherence of molecular systems with simultaneous excitation of close frequencies using the CLIO-FEL. , 2004, , 636-640.		0
88	Phosphorescence of C5N ⁺ in Rare Gas Solids. Photochem, 2022, 2, 263-271.	1.3	0