Anne Amy-Klein

List of Publications by Year
in descending order

130 papers	3,751 citations	147801 31 h-index	128289 60 g-index
131 all docs	131 docs citations	131 times ranked	1589 citing authors

#	Article	IF	Citations
1	A clock network for geodesy and fundamental science. Nature Communications, 2016, 7, 12443.	12.8	297
2	Limit on the Parity Nonconserving Energy Difference between the Enantiomers of a Chiral Molecule by Laser Spectroscopy. Physical Review Letters, 1999, 83, 1554-1557.	7.8	201
3	Stability of the Proton-to-Electron Mass Ratio. Physical Review Letters, 2008, 100, 150801.	7.8	181
4	Test of Special Relativity Using a Fiber Network of Optical Clocks. Physical Review Letters, 2017, 118, 221102.	7.8	155
5	High-resolution microwave frequency dissemination onÂanÂ86-kmÂurban optical link. Applied Physics B: Lasers and Optics, 2010, 98, 723-727.	2.2	150
6	High resolution frequency standard dissemination via optical fiber metropolitan network. Review of Scientific Instruments, 2006, 77, 064701.	1.3	140
7	Long-distance frequency transfer over an urban fiber link using optical phase stabilization. Journal of the Optical Society of America B: Optical Physics, 2008, 25, 2029.	2.1	139
8	Ultra-stable long distance optical frequency distribution using the Internet fiber network. Optics Express, 2012, 20, 23518.	3.4	132
9	Simultaneous remote transfer of accurate timing and optical frequency over a public fiber network. Applied Physics B: Lasers and Optics, 2013, 110, 3-6.	2.2	130
10	Progress toward the first observation of parity violation in chiral molecules by highâ€resolution laser spectroscopy. Chirality, 2010, 22, 870-884.	2.6	129
11	Long-Distance Frequency Dissemination with a Resolution of10â¯17. Physical Review Letters, 2005, 94, 203904.	7.8	127
12	Direct Determination of the Boltzmann Constant by an Optical Method. Physical Review Letters, 2007, 98, 250801.	7.8	125
13	Cascaded multiplexed optical link on a telecommunication network for frequency dissemination. Optics Express, 2010, 18, 16849.	3.4	125
14	86-km optical link with a resolution of 2â€‰Ã—â€‰10-18 for RF frequency transfer. European Physical Journal D, 2008, 48, 35-41.	1.3	122
15	Quantum cascade laser frequency stabilization at the sub-Hz level. Nature Photonics, 2015, 9, 456-460.	31.4	120
16	Cascaded optical fiber link using the internet network for remote clocks comparison. Optics Express, 2015, 23, 33927.	3.4	71
17	Probing weak force-induced parity violation by high-resolution mid-infrared molecular spectroscopy. Molecular Physics, 2013, 111, 2363-2373.	1.7	69
18	Search for transient variations of the fine structure constant and dark matter using fiber-linked optical atomic clocks. New Journal of Physics, 2020, 22, 093010.	2.9	67

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19	First international comparison of fountain primary frequency standards via a long distance optical fiber link. Metrologia, 2017, 54, 348-354.	1.2	64
20	Two-way optical frequency comparisons at<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>5</mml:mn><mml:mo>Ã—</mml:mo><mml:msup><mm stability over 100-km telecommunication network fibers. Physical Review A, 2014, 90, .	2.5	61
21	CO/sub 2/ laser stabilization to 0.1-Hz level using external electrooptic modulation. IEEE Journal of Quantum Electronics, 1997, 33, 1282-1287.	1.9	56
22	High-resolution optical frequency dissemination on a telecommunications network with data traffic. Optics Letters, 2009, 34, 1573.	3.3	51
23	Absolute frequency measurement in the 28-THz spectral region with a femtosecond laser comb and a long-distance optical link to a primary standard. Applied Physics B: Lasers and Optics, 2004, 78, 25-30.	2.2	48
24	Frequency and time transfer for metrology and beyond using telecommunication network fibres. Comptes Rendus Physique, 2015, 16, 531-539.	0.9	48
25	Absolute frequency measurement of a SF_6 two-photon line by use of a femtosecond optical comb and sum-frequency generation. Optics Letters, 2005, 30, 3320.	3.3	46
26	A widely tunable 10-Î¼m quantum cascade laser phase-locked to a state-of-the-art mid-infrared reference for precision molecular spectroscopy. Applied Physics Letters, 2014, 104, .	3.3	44
27	Tackling the limits of optical fiber links. Journal of the Optical Society of America B: Optical Physics, 2015, 32, 787.	2.1	44
28	Measurement of the Boltzmann constant by the Doppler broadening technique at a<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" overflow="scroll"><mml:mn>3.8</mml:mn><mml:mo>Ã—</mml:mo><mml:msup><mml:mn>10</mml:mn><mml:mrow><mml:mo>â^' level. Comptes Rendus Physique, 2009, 10, 883-893.	0.9	43
29	In-line extraction of an ultrastable frequency signal over an optical fiber link. Journal of the Optical Society of America B: Optical Physics, 2014, 31, 678.	2.1	43
30	Determination of the Boltzmann Constant by Laser Spectroscopy as a Basis for Future Measurements of the Thermodynamic Temperature. International Journal of Thermophysics, 2010, 31, 1347-1359.	2.1	41
31	High-precision methanol spectroscopy with a widely tunable SI-traceable frequency-comb-based mid-infrared QCL. Optica, 2019, 6, 411.	9.3	38
32	First industrial-grade coherent fiber link for optical frequency standard dissemination. Applied Optics, 2018, 57, 7203.	1.8	32
33	A new experiment to test parity symmetry in cold chiral molecules using vibrational spectroscopy. Quantum Electronics, 2019, 49, 288-292.	1.0	31
34	Absolute frequency measurement of 12C16O2 laser lines with a femtosecond laser comb and new determination of the 12C16O2 molecular constants and frequency grid. Journal of Molecular Spectroscopy, 2004, 228, 206-212.	1.2	30
35	Mid-infrared laser phase-locking to a remote near-infrared frequency reference for high-precision molecular spectroscopy. New Journal of Physics, 2013, 15, 073003.	2.9	29
36	An accurate and robust metrological network for coherent optical frequency dissemination. New Journal of Physics, 2021, 23, 053027.	2.9	29

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37	Comparing ultrastable lasers at 7â€‰Ã—â€‰10â^'17 fractional frequency instability through a 2220â€‰km optical fibre network. Nature Communications, 2022, 13, 212.	12.8	27
38	Hybrid fiber links for accurate optical frequency comparison. Applied Physics B: Lasers and Optics, 2017, 123, 1.	2.2	26
39	Three-Level Non-linear Selective Reflection at a Dielectric/Cs Vapour Interface. Europhysics Letters, 1994, 25, 579-585.	2.0	25
40	Frequency Measurement of an Ar<tex>$^+$</tex>Laser Stabilized on Narrow Lines of Molecular Iodine at 501.7 nm. IEEE Transactions on Instrumentation and Measurement, 2005, 54, 754-758.	4.7	24
41	Studying the fundamental limit of optical fiber links to the 10^{â^'21} level. Optics Express, 2018, 26, 9515.	3.4	24
42	High resolution spectroscopy of methyltrioxorhenium: towards the observation of parity violation in chiral molecules. Physical Chemistry Chemical Physics, 2011, 13, 854-863.	2.8	23
43	Transmission of an Optical Carrier Frequency over a Telecommunication Fiber Link. , 2007, , .		21
44	Doppler - free spectroscopy and isotopic shift of the Mg I resonance line at 285 nm. Journal De Physique, 1988, 49, 885-887.	1.8	16
45	Frequency measurements of saturated-fluorescence-stabilized CO 2 laser lines: comparison with an OsO 4 -stabilized CO 2 laser standard. Applied Physics B: Lasers and Optics, 1998, 67, 217-221.	2.2	15
46	Combining fiber Brillouin amplification with a repeater laser station for fiber-based optical frequency dissemination over 1400 km. New Journal of Physics, 2019, 21, 123017.	2.9	15
47	Spectral purity and long-term stability of CO/sub 2/ lasers at the Hertz level. IEEE Journal of Quantum Electronics, 1995, 31, 1913-1918.	1.9	14
48	500-Hz two-photon Ramsey fringes with a SF6 beam: towards a new frequency standard in the 30-THz spectral region. Applied Physics B: Lasers and Optics, 2001, 73, 93-98.	2.2	14
49	Two-photon Ramsey fringes at 30 THz referenced to an H maser/Cs fountain via an optical-frequency comb at the 1-Hz level. IEEE Journal of Quantum Electronics, 2004, 40, 1023-1029.	1.9	14
50	Ultrastable optical frequency dissemination on a multi-access fibre network. Applied Physics B: Lasers and Optics, 2016, 122, 1.	2.2	14
51	Slow-molecule detection in Doppler-free two-photon spectroscopy. Europhysics Letters, 1997, 37, 103-108.	2.0	13
52	HCOOH high-resolution spectroscopy in the 9.18Î¼m region. Journal of Molecular Spectroscopy, 2008, 247, 41-46.	1.2	13
53	Three-level nonlinear selective reflection at a glassâ€“Cs-vapor interface. Physical Review A, 1995, 52, 3101-3109.	2.5	12
54	2.3-kHz two-photon Ramsey fringes at 30 THz. Physical Review A, 1999, 60, R753-R756.	2.5	11

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55	Reciprocity of propagation in optical fiber links demonstrated to 10^{â˜21}. Optics Express, 2019, 27, 36965.	3.4	11
56	Slow molecule detection or Ramsey fringes in two-photon spectroscopy: which is better for high resolution spectroscopy and metrology ?. Optics Express, 1999, 4, 67.	3.4	10
57	Absolute frequency measurement of the iodine-stabilized Ar+ laser at 514.6Ânm using a femtosecond optical frequency comb. Applied Physics B: Lasers and Optics, 2004, 78, 725-731.	2.2	10
58	Non-reciprocity in optical fiber links: experimental evidence. Optics Express, 2021, 29, 17476.	3.4	10
59	Saturation behavior and dynamic Stark splitting of nearly-degenerate four-wave and multiwave mixing in a forward boxcar configuration. Optics Communications, 1989, 73, 111-116.	2.1	9
60	Two-Branch Fiber Link for International Clock Networks. IEEE Transactions on Instrumentation and Measurement, 2019, 68, 2195-2200.	4.7	9
61	High-sensitivity detection of two-photon Ramsey fringes at 30 THz by frequency-comb assisted stimulated emission. IEEE Journal of Quantum Electronics, 2002, 38, 1406-1411.	1.9	8
62	High-resolution spectroscopy with a molecular beam at 10.6 Î¼m. Physical Review A, 2000, 63, .	2.5	7
63	Towards an optical measurement of the Boltzmann constant at the 10-5level. Annales De Physique, 2007, 32, 175-178.	0.2	7
64	Simultaneous remote transfer of accurate timing and optical frequency over a public fiber network. , 2013, , .		6
65	Ultra-stable long distance optical frequency distribution using the Internet fiber network and application to high-precision molecular spectroscopy. Journal of Physics: Conference Series, 2013, 467, 012002.	0.4	6
66	Saturation effects in three-level selective reflection. Physical Review A, 1996, 53, 3647-3651.	2.5	5
67	High performance frequency dissemination for metrology applications with optical fibers. , 0, , .		5
68	Progress on the REFIMEVE+ project for optical frequency standard dissemination. , 2017, , .		5
69	Limitations due to residual interference in a fiber-based optical frequency reference at 1.55â€‰â€‰Âµm. Journal of the Optical Society of America B: Optical Physics, 2022, 39, 438.	2.1	5
70	10-Î¼m wavefront spatial filtering: first results with chalcogenide fibers. , 2003, 4838, 273.		4
71	SPECTROSCOPIC DETERMINATION OF THE BOLTZMANN CONSTANT: FIRST RESULTS. , 2005, , .		4
72	CLONETS - clock network services: Strategy and innovation for clock services over optical-fibre networks. , 2017, , .		4

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73	Towards a First Observation of Molecular Parity Violation by Laser Spectroscopy. , 2006, , 324-331.		4
74	Doppler-free spectroscopy of Mg using uv-visible saturated absorption. Optics Communications, 1992, 90, 265-269.	2.1	3
75	Search for a frequency difference in the spectrum of the enantiomers of chiral molecules: How to reach a sensitivity better than 10-14?. , 2001, , .		3
76	Fiber frequency dissemination with resolution in the 10Â¿18 range. , 2006, , .		3
77	High-resolution optical frequency dissemination on a telecommunication network. , 2009, , .		3
78	CLONETS â€“ Clock network services strategy and innovation for clock services over optical-fibre networks. , 2017, , .		3
79	Polarization Scramblers to Solve Practical Limitations of Frequency Transfer. Journal of Lightwave Technology, 2021, 39, 3106-3111.	4.6	3
80	Unidirectional two-way optical frequency comparison and its fundamental limitations. Optics Letters, 2020, 45, 6074.	3.3	3
81	Ultraviolet continuous-wave phase conjugation at 285 nm. Optics Letters, 1989, 14, 60.	3.3	2
82	Multiplexed optical link for ultra-stable frequency dissemination. , 2010, , .		2
83	Bi-directional optical amplifiers for long-distance fibre links. , 2013, , .		2
84	Cascaded optical link on a telecommunication fiber network for ultra-stable frequency dissemination. , 2015, , .		2
85	The H2020 Project CLONETS: Clock Services over Optical-fibre Networks in Europe. , 2018, , .		2
86	Frequency dissemination with a 86-km optical fibre for fundamental tests of physics. Annales De Physique, 2007, 32, 187-189.	0.2	2
87	Nulling interferometry for the DARWIN mission: experimental demonstration of the concept in the thermal infrared with high levels of rejection. , 2000, 4006, 354.		1
88	Premiers rÃ©sultats de mesure optique de la constante de Boltzmann par mÃ©trologie des frÃ©quences. European Physical Journal Special Topics, 2006, 135, 181-182.	0.2	1
89	Absolute frequency measurements for hyperfine structure determination of the R(26) 62-0 transition at 501.7â€‰nm in molecular iodine. Metrologia, 2007, 44, 275-278.	1.2	1
90	Long-distance ultrastable frequency transfer over urban fiber link: toward a European network. Proceedings of SPIE, 2009, , .	0.8	1

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91	Progress on an optical link for ultra-stable frequency dissemination using a public telecommunication network. , 2011, , .		1
92	Mid-IR frequency measurement using an optical frequency comb and a long-distance remote frequency reference. , 2012, , .		1
93	Long distance ultra-stable frequency dissemination on a dedicated wavelength channel of a telecommunication network. , 2013, , .		1
94	REFIMEVE+: Optical Frequency Dissemination Over 2x1300 km of a Telecom Network. , 2019, , .		1
95	Spectroscopie de molÃ©cules chirales : recherche d'un effet de violation de la paritÃ©. European Physical Journal Special Topics, 2000, 10, Pr8-45.	0.2	1
96	Mesures absolues de frÃ©quences optiques avec un laser femtoseconde. European Physical Journal Special Topics, 2004, 119, 3-8.	0.2	1
97	Linear and nonlinear selective reflection spectroscopy. AIP Conference Proceedings, 1993, , .	0.4	0
98	Optical selection of slow molecules in Doppler-free two-photon spectroscopy. , 0, , .		0
99	Determination of CO/sub 2//SF/sub 6/ metrological characteristics with a femtosecond laser system: 1 Hz reproducibility at 10 /spl mu/m. , 2003, , .		0
100	Absolute frequency measurement around 30 THz with a femtosecond laser comb. , 2004, , .		0
101	Mesure de la frÃ©quence absolue d'une raie Ã deux photons de SF6 en utilisant un peigne femtoseconde. European Physical Journal Special Topics, 2006, 135, 183-184.	0.2	0
102	Ultra-stable optical frequency transfer over an optical telecommunications network with live data traffic. , 2009, , .		0
103	OPTICAL FREQUENCY TRANSFER OVER 172 KM OF INSTALLED FIBER. , 2009, , .		0
104	Multiplexed optical link for ultra-stable frequency dissemination. , 2010, , .		0
105	Towards large scale metrological fibre network. , 2013, , .		0
106	Mid-IR frequency control using an optical frequency comb and a remote near-infrared frequency reference. , 2013, , .		0
107	Quantum cascade laser spectrometer for frequency metrology and high accuracy molecular spectroscopy around 10 μm. , 2013, , .		0
108	Long distance phase-coherent link between near- and mid-infrared frequencies. , 2013, , .		0

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109	Quantum cascade laser at Hz-level by use of a frequency comb and an optical link. , 2014, , .		0
110	Progress on a cascaded optical link between Paris and Strasbourg. , 2014, , .		0
111	Ultra-stable Mid-IR quantum cascade laser for high-resolution spectroscopy and metrology. , 2014, , .		0
112	In-line extraction of an ultra-stable frequency signal over an optical fiber link. , 2014, , .		0
113	Quantum cascade laser stabilization at sub-Hz-level by use of a frequency comb and an optical link. , 2015, , .		0
114	Frequency comb-assisted QCL stabilization for high resolution molecular spectroscopy. , 2017, , .		0
115	Hybrid optical link for ultra-stable frequency comparison. , 2017, , .		0
116	Precise molecular spectroscopy using a stable and tuneable frequency comb. , 2017, , .		0
117	High-Precision Mid-IR Molecular Spectroscopy with Traceability to Primary Standards. , 2018, , .		0
118	REFIMEVE+: Towards a Wide Optical Fiber Network for Optical Frequency Standard Dissemination. , 2018, , .		0
119	Two-Branch Fiber Links for International Clock Networks. , 2018, , .		0
120	The H2020 European project CLONETS: Clock services over optical-fibre networks in Europe. , 2018, , .		0
121	High-Precision Mid-Infrared Spectroscopy with a Widely Tuneable SI-Traceable Frequency-Comb-Stabilised QCL. , 2019, , .		0
122	CLONETS â€“ Clock Network Services : Optical-fibre network for clock services in Europe: recent progress. , 2019, , .		0
123	Franges de Ramsey Ã deux photons Ã 10 mm : vers une nouvelle gÃ©nÃ©ration d'Ã©talons de frÃ©quence dans le domaine infrarouge. European Physical Journal Special Topics, 2000, 10, Pr8-199.	0.2	0
124	Franges de Ramsey Ã deux photons Ã 10,6ÂÎ¼m amÃ©lioration de la rÃ©solution et perspectives mÃ©trologiques. European Physical Journal Special Topics, 2002, 12, 127-129.	0.2	0
125	Narrow lines in molecular iodine near the dissociation limit. , 2004, , .		0
126	STABILITY OF THE PROTON-TO-ELECTRON MASS RATIO TESTED WITH MOLECULES USING AN OPTICAL LINK TO PRIMARY CLOCK. , 2010, , .		0

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127	Project CLONETS. , 0, , .		0
128	The CLONETS â€“ Clock Network Services: Strategy and innovation for clock services over optical-fibre networks. , 2019, , .		0
129	The CLONETS ï¿½ Clock Network Services Strategy and Innovation for Clock Services Over Optical-Fibre Networks. , 0, , .		0
130	Mise en Pratique of the New Kelvin Using Doppler Broadening Thermometry with a Direct Link to the Primary Frequency Standards. , 2020, , .		0