

Gil Travish

List of Publications by Year in descending order

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123
papers

2,353
citations

361045

20
h-index

214527

47
g-index

123
all docs

123
docs citations

123
times ranked

1671
citing authors

#	ARTICLE	IF	CITATIONS
1	Demonstration of electron acceleration in a laser-driven dielectric microstructure. <i>Nature</i> , 2013, 503, 91-94.	13.7	429
2	Dielectric laser accelerators. <i>Reviews of Modern Physics</i> , 2014, 86, 1337-1389.	16.4	286
3	Exponential Gain and Saturation of a Self-Amplified Spontaneous Emission Free-Electron Laser. <i>Science</i> , 2001, 292, 2037-2041.	6.0	259
4	Observation of Narrow-Band Terahertz Coherent Cherenkov Radiation from a Cylindrical Dielectric-Lined Waveguide. <i>Physical Review Letters</i> , 2009, 103, 095003.	2.9	171
5	Breakdown Limits on Gigavolt-per-Meter Electron-Beam-Driven Wakefields in Dielectric Structures. <i>Physical Review Letters</i> , 2008, 100, 214801.	2.9	123
6	Adjustable, short focal length permanent-magnet quadrupole based electron beam final focus system. <i>Physical Review Special Topics: Accelerators and Beams</i> , 2005, 8, .	1.8	85
7	Research and development toward a 4.5 μ m \times 1.5 μ m \times 1.5 μ m linac coherent light source (LCLS) at SLAC. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 1996, 375, 274-283.	0.7	79
8	Bunch length measurement of picosecond electron beams from a photoinjector using coherent transition radiation. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 1998, 410, 452-460.	0.7	69
9	Multiphoton Photoemission from a Copper Cathode Illuminated by Ultrashort Laser Pulses in an rf Photoinjector. <i>Physical Review Letters</i> , 2010, 104, 084801.	2.9	68
10	Velocity bunching of high-brightness electron beams. <i>Physical Review Special Topics: Accelerators and Beams</i> , 2005, 8, .	1.8	65
11	Measurements of High Gain and Intensity Fluctuations in a Self-Amplified, Spontaneous-Emission Free-Electron Laser. <i>Physical Review Letters</i> , 1998, 80, 289-292.	2.9	64
12	Observation of Self-Amplified Spontaneous Emission and Exponential Growth at 530 nm. <i>Physical Review Letters</i> , 2000, 85, 988-991.	2.9	63
13	Coherent transition radiation diagnosis of electron beam microbunching. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 1995, 365, 255-259.	0.7	49
14	High Energy Gain of Trapped Electrons in a Tapered, Diffraction-Dominated Inverse-Free-Electron Laser. <i>Physical Review Letters</i> , 2005, 94, 154801.	2.9	47
15	Short wavelength FELs using the SLAC linac. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 1994, 347, 199-205.	0.7	44
16	Sextupole correction of the longitudinal transport of relativistic beams in dispersionless translating sections. <i>Physical Review Special Topics: Accelerators and Beams</i> , 2005, 8, .	1.8	41
17	Generation and Measurement of Relativistic Electron Bunches Characterized by a Linearly Ramped Current Profile. <i>Physical Review Letters</i> , 2008, 100, 214802.	2.9	34
18	The SLAC soft X-ray high power FEL. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 1994, 341, 326-330.	0.7	32

#	ARTICLE	IF	CITATIONS
19	Inverse Compton scattering gamma ray source. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 608, S54-S56.	0.7	23
20	Space-charge oscillations in a self-modulated electron beam in multi-undulator free-electron lasers. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1997, 393, 376-379.	0.7	22
21	Initial measurements of the UCLA rf photoinjector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1994, 340, 219-230.	0.7	21
22	High-Power Tunable Terahertz Radiation by High-Order Harmonic Generation. IEEE Transactions on Electron Devices, 2013, 60, 482-486.	1.6	21
23	Addressable flat-panel x-ray sources for medical, security, and industrial applications. Proceedings of SPIE, 2012, , .	0.8	15
24	Experimental confirmation of transverse focusing and adiabatic damping in a standing wave linear accelerator. Physical Review E, 1997, 56, 3572-3577.	0.8	14
25	Observation of anomalously large spectral bandwidth in a high-gain self-amplified spontaneous emission free-electron laser. Physical Review Letters, 2005, 95, 054801.	2.9	13
26	Observations of low-aberration plasma lens focusing of relativistic electron beams at the underdense threshold. Physics of Plasmas, 2010, 17, 073105.	0.7	13
27	High Frequency, High Gradient Dielectric Wakefield Acceleration Experiments at SLAC and BNL. , 2010, , .		10
28	Novel folded frame slow-wave structure for millimeter-wave traveling-wave tube. IEEE Transactions on Electron Devices, 2013, 60, 3895-3900.	1.6	10
29	Third-harmonic traveling-wave tube multiplier-amplifier. IEEE Transactions on Electron Devices, 2018, 65, 2189-2194.	1.6	10
30	The operation of the BNL/ATF GUN-IV photocathode RF gun at the Advanced Photon Source. , 0, , .		9
31	A 2-4 nm Linac Coherent Light Source (LCLS) using the SLAC linac. , 0, , .		9
32	Initial operation of the UCLA plane wave transformer (PWT) linac. , 0, , .		9
33	Parametric study of an X-ray FEL. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1995, 358, 60-63.	0.7	8
34	TDA3D: Updates and improvements to the widely used three-dimensional free electron laser simulation. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1997, 393, 277-279.	0.7	8
35	Performance characteristics, optimization, and error tolerances of a 4 nm FEL based on the SLAC linac. , 0, , .		7
36	<title>FEL development at the Advanced Photon Source</title>. , 1999, , .		7

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37	The UCLA IR FEL project. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1993, 331, 228-231.	0.7	6
38	Strong sextupole focusing in planar undulators. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1994, 345, 585-593.	0.7	6
39	Observation and analysis of self-amplified spontaneous emission at the APS low-energy undulator test line. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 475, 28-37.	0.7	6
40	RF and Magnetic Measurements on the SPARC Photoinjector and Solenoid at UCLA. , 0, , .		5
41	Laser-powered dielectric-structures for the production of high-brightness electron and x-ray beams. Proceedings of SPIE, 2011, , .	0.8	5
42	Teravolt-per-meter beam and plasma fields from low-charge femtosecond electron beams. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, , .	0.7	5
43	Generation of high-power tunable terahertz-radiation by nonrelativistic beam-echo harmonic effect. Physics of Plasmas, 2013, 20, 013303.	0.7	5
44	Strong focusing for planar undulators. AIP Conference Proceedings, 1992, , .	0.3	4
45	Creation of plasma density transitions short compared to the plasma skin depth. Review of Scientific Instruments, 2005, 76, 013303.	0.6	4
46	Optimization and beam dynamics of a superconducting radio-frequency gun. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 557, 98-102.	0.7	4
47	Laser-powered dielectric structure as a micron-scale electron source. , 2007, , .		4
48	Operating high-current field emitters in a commercial X-ray source. , 2017, , .		4
49	Emittance measurements of the 4.5 MeV UCLA RF photoinjector. , 0, , .		3
50	Numerical studies of strong focusing in planar undulators. , 0, , .		3
51	Performance simulation and parameter optimization for high gain short wavelength FEL amplifiers. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1995, 358, 48-51.	0.7	3
52	X-Band Dipole Mode Deflecting Cavity for the UCLA Neptune Beamline. , 0, , .		3
53	3D Simulations for a Micron-Scale, Dielectric-Based Acceleration Experiment. , 2009, , .		3
54	A monolithic relativistic electron beam source based on a dielectric laser accelerator structure. , 2013, , .		3

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55	An Active Transmission Matrix-Based Nonlinear Analysis for Folded Waveguide TWT. IEEE Transactions on Electron Devices, 2020, 67, 1205-1210.	1.6	3
56	Slippage, noise and superradiant effects in the UCLA FEL experiment. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1994, 341, 285-288.	0.7	2
57	The UCLA high gain infrared FEL. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1995, 358, ABS75-ABS76.	0.7	2
58	The APS SASE FEL: status and commissioning results. , 1999, , .		2
59	Investigation of X-Ray Harmonics of the Polarized Inverse Compton Scattering Experiment at UCLA. , 0, , .		2
60	THE LCLS SINGLE-SHOT RELATIVE BUNCH LENGTH MONITOR SYSTEM. International Journal of Modern Physics A, 2007, 22, 4125-4133.	0.5	2
61	BEAM SHAPING AND PERMANENT MAGNET QUADRUPOLE FOCUSING WITH APPLICATIONS TO THE PLASMA WAKEFIELD ACCELERATOR. International Journal of Modern Physics A, 2007, 22, 4134-4145.	0.5	2
62	Commissioning of the UCLA Neptune x-band deflecting cavity and applications to current profile measurement of ramped electron bunches. , 2007, , .		2
63	Experimental Testing of a Micron-Scale Laser-Powered Accelerator. , 2009, , .		2
64	Controlling thermal failure of silicon field emitters in a commercial X-ray source. , 2018, , .		2
65	Measurements of high gain and noise fluctuations in a SASE free electron laser. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1998, 407, 257-260.	0.7	1
66	A high current superconducting proton linac for an accelerator driven transmutation system. , 0, , .		1
67	Optimal scaled photoinjector designs for FEL applications. , 0, , .		1
68	Investigations of electron-beam microbunching and beam coalignment using CTR in a high-gain SASE FEL. , 0, , .		1
69	A PMQ-based, Ultra-short Focal Length, Final Focus System for Next Generation Beam-Radiation and Beam-Plasma Experiments. AIP Conference Proceedings, 2004, , .	0.3	1
70	High Energy, High Brightness X-Rays Produced by Compton Backscattering at the Livermore Pleiades Facility. , 0, , .		1
71	The UCLA/SLAC Ultra-High Gradient Cerenkov Wakefield Accelerator Experiment. , 0, , .		1
72	High Energy Gain IFEL at UCLA Neptune Laboratory. , 0, , .		1

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73	RESULTS FROM THE UCLA/FNPL UNDERDENSE PLASMA LENS EXPERIMENT. International Journal of Modern Physics A, 2007, 22, 3979-3987.	0.5	1
74	Fabrication of a Prototype All-Dielectric Micro-Accelerator. , 2010, , .		1
75	An Examination of Resonance, Acceleration, and Particle Dynamics in the Micro-Accelerator Platform. , 2010, , .		1
76	Fabrication of the micro accelerator platform for x-ray applications. , 2011, , .		1
77	Analysis of 140GHz folded frame travelling wave tube. Physics of Plasmas, 2013, 20, .	0.7	1
78	Applying high frame-rate digital radiography and dual-energy distributed-sources for advanced tomosynthesis. Proceedings of SPIE, 2013, , .	0.8	1
79	The research of 140GHz high harmonic traveling wave tube. , 2016, , .		1
80	Experimental results from the micro-accelerator platform, a resonant slab-symmetric dielectric laser accelerator. AIP Conference Proceedings, 2016, , .	0.3	1
81	Experimental investigation of the high harmonic traveling-wave tube. , 2017, , .		1
82	Novel Dual Beam Cascaded Schemes for 346 GHz Harmonic-Enhanced TWTs. Electronics (Switzerland), 2021, 10, 195.	1.8	1
83	Observing Performance of Individual Metal-Coated Silicon Field-Emitters in an X-ray Generator. , 2020, , .		1
84	Status of the UCLA pegasus laboratory. , 0, , .		0
85	Beam break-up in the two-beam accelerator. , 0, , .		0
86	Initial operation and beam characteristics of the UCLA S-band RF photo-injector. , 0, , .		0
87	<title>Linac coherent light source (LCLS) at 2-4 nm using the SLAC linac</title>. , 1993, 2013, 116.		0
88	Status of the UCLA high-gain infrared free electron laser. , 0, , .		0
89	Where do we stand with high gain FEL simulations?. , 1997, , .		0
90	The UCLA high gain infrared free electron laser. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1997, 393, 216-219.	0.7	0

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91	Self-amplified spontaneous emission saturation at the Advanced Photon Source free-electron laser (abstract) (invited). Review of Scientific Instruments, 2002, 73, 1407-1407.	0.6	0
92	Design and operation of Pegasus thermionic cathode. , 0, , .		0
93	The FEL program at the PEGASUS injector. , 0, , .		0
94	Free-electron lasers as pumps for high-energy solid-state lasers. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2004, 528, 525-529.	0.7	0
95	Chirped pulse amplification at VISA-FEL. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2004, 528, 463-466.	0.7	0
96	Production of High Harmonic X-Ray Radiation from Non-Linear Thomson Scattering at LLNL Pleiades. , 0, , .		0
97	The UCLA/FNPL Time Resolved Underdense Plasma Lens Experiment. , 0, , .		0
98	Ultra-High Density Electron Beams for Beam Radiation and Beam Plasma Interaction. , 0, , .		0
99	The UCLA/FNPL Underdense Plasma Lens Experiment. IEEE International Conference on Plasma Science, 2005, , .	0.0	0
100	PRELIMINARY RESULTS FROM THE UCLA/SLAC ULTRA-HIGH GRADIENT CERENKOV WAKEFIELD ACCELERATOR EXPERIMENT. International Journal of Modern Physics A, 2007, 22, 4343-4354.	0.5	0
101	PRODUCTION OF FEMTOSECOND PULSES AND MICRON BEAM SPOTS FOR HIGH BRIGHTNESS ELECTRON BEAM APPLICATIONS. International Journal of Modern Physics A, 2007, 22, 3726-3735.	0.5	0
102	SUMMARY OF WORKING GROUP 2: DIAGNOSTICS AND BEAM MANIPULATION. International Journal of Modern Physics A, 2007, 22, 4094-4100.	0.5	0
103	STATUS OF THE POLARIZED NONLINEAR INVERSE COMPTON SCATTERING EXPERIMENT AT UCLA. International Journal of Modern Physics A, 2007, 22, 4355-4362.	0.5	0
104	Observations of underdense plasma lens focusing of relativistic electron beams. , 2007, , .		0
105	Dielectric wakefield accelerator experiments at the SABER facility. , 2007, , .		0
106	Beam-driven dielectric wakefield accelerating structure as a ThZ radiation source. , 2007, , .		0
107	High average current betatrons for industrial and security applications. , 2007, , .		0
108	Observation of multi-GeV breakdown thresholds in dielectric wakefield structures. , 2007, , .		0

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109	The UCLA helical permanent-magnet inverse free electron laser. , 2007, , .		0
110	Status of Coherent Cherenkov Wakefield Experiment at UCLA. , 2009, , .		0
111	Guiding of X-rays from Inverse Compton Scattering as a means to enhance flux and brightness. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 608, S87-S89.	0.7	0
112	Breaking the Attosecond, Angstrom and TV \hat{m} Field Barriers with Ultrafast Electron Beams. , 2010, , .		0
113	Development of a Laser-Powered Dielectric Structure-Based Accelerator as a Stand-Alone Particle Source. , 2010, , .		0
114	Experimental progress towards laser acceleration of relativistic electrons with the Micro Accelerator Platform (MAP). , 2013, , .		0
115	Experimental progress towards laser acceleration of relativistic electrons with the micro accelerator platform (MAP). , 2013, , .		0
116	Dielectric laser accelerators: Are they viable advanced accelerator concepts?. , 2013, , .		0
117	Resonance, particle dynamics, and particle transmission in the micro-accelerator platform. , 2013, , .		0
118	Simulation of an EEHG terahertz traveling wave tube. , 2016, , .		0
119	Summary report of working group 3: Laser and high-gradient structure-based acceleration. AIP Conference Proceedings, 2016, , .	0.3	0
120	Fabrication of optical scale dielectric laser accelerators: Challenges, tolerances and other scary tales from the foundry. AIP Conference Proceedings, 2016, , .	0.3	0
121	Design of a 346GHz high harmonic traveling wave tube. , 2017, , .		0
122	The UCLA compact high brightness electron accelerator. , 0, , .		0
123	Measurements of high gain and noise fluctuations in a SASE free electron laser. , 0, , .		0