Yosef Pinhasi

List of Publications by Year
in descending order

141	1,149	430874 18	526287 27
papers	citations	h-index	g-index

142	142	142	635
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	EHF for Satellite Communications: The New Broadband Frontier. Proceedings of the IEEE, 2011, 99, 1858-1881.	21.3	118
2	Superradiant and Stimulated Superradiant Emission in a Prebunched Beam Free-Electron Maser. Physical Review Letters, 2001, 86, 2561-2564.	7.8	34
3	Superradiant and stimulated-superradiant emission in prebunched electron-beam radiators. II. Radiation enhancement schemes. Physical Review Special Topics: Accelerators and Beams, 2005, 8, .	1.8	33
4	Propagation of ultra wide-band signals in lossy dispersive media. , 2008, , .		32
5	Three-dimensional coupled-mode theory of free-electron lasers in the collective regime. Physical Review E, 1995, 51, 2472-2479.	2.1	30
6	Non-Imaging MM-Wave FMCW Sensor for Pedestrian Detection. IEEE Sensors Journal, 2014, 14, 1232-1237.	4.7	29
7	Study of Ultrawide-Band Transmission in the Extremely High Frequency (EHF) Band. IEEE Transactions on Antennas and Propagation, 2004, 52, 2833-2842.	5.1	28
8	Space-frequency model of ultrawide-band interactions in free-electron lasers. Physical Review E, 2005, 71, 036503.	2.1	27
9	Dark Antibacterial Activity of Rose Bengal. International Journal of Molecular Sciences, 2019, 20, 3196.	4.1	27
10	Generalized theory and simulation of spontaneous and super-radiant emissions in electron devices and free-electron lasers. Physical Review E, 2002, 65, 026501.	2.1	26
11	Millimeter Wave High Resolution Radar Accuracy in Fog Conditionsâ€”Theory and Experimental Verification. Sensors, 2018, 18, 2148.	3.8	26
12	Enhanced super-radiance from energy-modulated short electron bunch free-electron lasers. Physical Review Special Topics: Accelerators and Beams, 2007, 10, .	1.8	25
13	330 GHz FMCW Image Sensor for Homeland Security Applications. Journal of Infrared, Millimeter, and Terahertz Waves, 2010, 31, 1370-1381.	2.2	25
14	Atmospheric and Fog Effects on Ultra-Wide Band Radar Operating at Extremely High Frequencies. Sensors, 2016, 16, 751.	3.8	25
15	Propagation properties of sub-millimeter waves in foggy conditions. Journal of Applied Physics, 2019, 125, .	2.5	24
16	Free electron maser experiment with a prebunched beam. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1995, 358, 82-85.	1.6	21
17	High Spectral Coherence in Long-Pulse and Continuous Free-Electron Laser: Measurements and Theoretical Limitations. Physical Review Letters, 1999, 82, 5257-5260.	7.8	20
18	Resonator design and characterization for the Israeli tandem electrostatic FEL project. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1995, 358, 323-326.	1.6	19

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19	Three-dimensional codes for simulating electron beam transport and free-electron laser operation including space-charge effects. International Journal of Electronics, 1995, 78, 581-590.	1.4	19
20	Theory and simulation of transverse supermode evolution in a free-electron laser oscillator. Physical Review E, 1996, 54, 6774-6779.	2.1	19
21	Selective amplification of the lower-frequency branch via stimulated super-radiance in a waveguided free electron laser oscillator driven by short electron bunches. Applied Physics Letters, 2010, 97, 231109.	3.3	18
22	Measurements and simulation of the radiation build-up process in a prebunched free-electron maser oscillator. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1996, 375, 164-168.	1.6	16
23	Study of waveguide resonators for FEL operating at submillimeter wavelengths. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1996, 375, 260-263.	1.6	16
24	Propagation analysis of ultrashort pulses in resonant dielectric media. Journal of the Optical Society of America B: Optical Physics, 2009, 26, 2404.	2.1	16
25	Multi Ray Model for Near-Ground Millimeter Wave Radar. Sensors, 2017, 17, 1983.	3.8	16
26	Transverse mode excitation and coupling in a waveguide free electron laser. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1992, 318, 523-527.	1.6	14
27	Super-radiance in a prebunched beam free electron maser. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2000, 445, 247-252.	1.6	14
28	Model and simulation of wide-band interaction in free-electron lasers. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 475, 147-152.	1.6	14
29	Single pass, THz spectral range free-electron laser driven by a photocathode hybrid rf linear accelerator. Physical Review Special Topics: Accelerators and Beams, 2015, 18, .	1.8	14
30	Efficiency enhancement of free electron Maser oscillator by mode selection with a prebunched electron beam. Applied Physics Letters, 2000, 76, 16-18.	3.3	13
31	Characterization of a Schottky Diode Rectenna for Millimeter Wave Power Beaming Using High Power Radiation Sources. Acta Physica Polonica A, 2017, 131, 1280-1285.	0.5	13
32	Coupled-mode theory of Langmuir space-charge waves for general electron-beam and waveguide cross sections. Physical Review E, 1993, 48, 3925-3929.	2.1	12
33	Lasing and radiation-mode dynamics in a Van de Graaff acceleratorâ€“free-electron laser with an internal cavity. Applied Physics Letters, 1997, 71, 3776-3778.	3.3	12
34	Linear FM radar operating in the Tera-Hertz regime for concealed objects detection. , 2009, , .		12
35	W-Band Rectenna Coupled With Low-Barrier Mott Diode. IEEE Microwave and Wireless Components Letters, 2016, 26, 637-639.	3.2	11
36	Radiation measurements in the new tandem accelerator FEL. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2004, 528, 23-27.	1.6	10

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37	FMCW MM-wave non-imaging sensor for detecting hidden objects. , 2011, , .		10
38	Atmospheric Effects on Millimeter and Sub-millimeter (THz) Satellite Communication Paths. Journal of Infrared, Millimeter, and Terahertz Waves, 2019, 40, 219-230.	2.2	10
39	Time-Frequency Spectral Signature of Limb Movements and Height Estimation Using Micro-Doppler Millimeter-Wave Radar. Sensors, 2020, 20, 4660.	3.8	10
40	Efficient electrostatic-accelerator free-electron masers for atmospheric power beaming. IEEE Transactions on Plasma Science, 1996, 24, 1050-1057.	1.3	9
41	First operation of the Israeli Tandem Electrostatic Accelerator Free-Electron Laser. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1998, 407, 16-20.	1.6	9
42	Spectral characteristics of gaseous media and their effects on propagation of ultra-wideband radiation in the millimeter wavelengths. Journal of Non-Crystalline Solids, 2005, 351, 2925-2928.	3.1	9
43	A New Approach for the Characterization of Nonstationary Oscillators Using the Wigner-Ville Distribution. Mathematical Problems in Engineering, 2018, 2018, 1-14.	1.1	9
44	The Israeli tandem electrostatic accelerator FEL - status report. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1993, 331, ABS20.	1.6	8
45	Diagnostics and electron-optics of a high current electron beam in the Tandem free electron laser â€" status report. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1996, 375, ABS1-ABS3.	1.6	8
46	Visualization and simulation of electron beam transport along a FEL planar wiggler. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1997, 393, 419-425.	1.6	8
47	Scaled Modeling and Measurement for Studying Radio Wave Propagation in Tunnels. Electronics (Switzerland), 2021, 10, 53.	3.1	8
48	Spontaneous emission in waveguide free-electron masers near waveguide cutoff. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1997, 393, 316-322.	1.6	7
49	Performance improvement of FEMs by prebunching of the electron beam. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1997, 393, 361-365.	1.6	7
50	Simulation of predicted performance and interpretation of radiation measurements on the Israeli tandem free-electron laser. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1998, 407, 81-86.	1.6	7
51	Free electron maser oscillations near waveguide cutoff. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1998, 407, 95-101.	1.6	7
52	Power, bistability and post-saturation optimization in a pre-bunched free electron laser. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2000, 445, 28-33.	1.6	7
53	Optimization of power output and study of electron beam energy spread in a Free Electron Laser oscillator. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 475, 579-582.	1.6	7
54	Space-frequency model of amplified spontaneous emission and super-radiance in free-electron laser operating in the linear and non-linear regimes. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2002, 483, 510-515.	1.6	7

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55	Coherence limits and chirp control in long pulse free electron laser oscillator. Physical Review Special Topics: Accelerators and Beams, 2005, 8, .	1.8	7
56	Detection of Low RCS Supersonic Flying Targets with a High-Resolution MMW Radar. Sensors, 2020, 20, 3284.	3.8	7
57	A unified analysis of spontaneous and super-radiant emissions in free-electron lasers. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1997, 393, 343-347.	1.6	6
58	Experimental investigation of mode build-up and mode competition process in a prebunched free-electron maser oscillator. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1998, 407, 87-94.	1.6	6
59	Spectral and variational principles of electromagnetic field excitation in wave guides. Physics Letters, Section A: General, Atomic and Solid State Physics, 2005, 344, 18-28.	2.1	6
60	Complex Permittivity Measurements of Textiles and Leather in a Free Space: An Angular-Invariant Approach. International Journal of Microwave Science and Technology, 2012, 2012, 1-7.	0.6	6
61	Identifying low-RCS targets using micro-Doppler high-resolution radar in the millimeter waves. , 2020, , .		6
62	Experimental Study of Fog and Suspended Water Effects on the 5G Millimeter Wave Communication Channel. Electronics (Switzerland), 2020, 9, 720.	3.1	6
63	A novel free-electron maser as a high power microwave source of sophisticated signals. , 0, , .		5
64	Transverse mode coupling and supermode establishment in a free-electron laser oscillator. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1996, 375, 233-236.	1.6	5
65	Millimeter Wave Propagation in Long Corridors and Tunnelsâ€"Theoretical Model and Experimental Verification. Electronics (Switzerland), 2020, 9, 707.	3.1	5
66	A free-electron maser for thermonuclear fusion. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1992, 318, 16-19.	1.6	4
67	A generalized analysis of binary halftone representation of images. Optics Communications, 1993, 101, 277-285.	2.1	4
68	The Israeli tandem electrostatic accelerator FEL â€" status report. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1994, 341, ABS57-ABS58.	1.6	4
69	Study of radiation spectrum in a free-electron laser oscillator from noise to saturation. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2004, 528, 62-66.	1.6	4
70	A new THz FEL development project. , 2008, , .		4
71	Measurement of Complex Permittivity of Lossy Materials in Free Space Using Matched THz Power Meter. Journal of Infrared, Millimeter, and Terahertz Waves, 2011, 32, 1446-1456.	2.2	4
72	Constant Envelope Phase Modulation Inspired by Orthogonal Waveforms. IEEE Communications Letters, 2016, 20, 2169-2172.	4.1	4

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73	Quasi Optical Multi-Ray Model For Wireless Communication Link in Millimeter Wavelengths. MATEC Web of Conferences, 2018, 210, 03006.	0.2	4
74	Study of 5G-NR-MIMO Links in the Presence of an Interferer. Electronics (Switzerland), 2021, 10, 732.	3.1	4
75	Mode-locked super-radiant free-electron laser oscillator. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1995, 358, 86-89.	1.6	3
76	Enhancement of FEM radiation by prebunching of the e-beam (stimulated super-radiance). Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 475, 303-307.	1.6	3
77	Control of wave propagation in a dielectric medium by tailoring its dispersive properties. Journal of Non-Crystalline Solids, 2005, 351, 2922-2924.	3.1	3
78	THz characterization of lossy materials using multi-layers measuring cell. , 2008, , .		3
79	Modal description of longitudinal space-charge fields in pulse-driven free-electron devices. Physical Review Special Topics: Accelerators and Beams, 2010, 13, .	1.8	3
80	Quasi-noise illumination in mm-wave imaging: From concept to realization. , 2012, , .		3
81	Ultra wideband wireless satellite communications in the 94 GHz band. , 2012, , .		3
82	Short circuit fault detection in two wire transmission line. , 2016, , .		3
83	Atmospheric Effects on OFDM Wireless Links Operating in the Millimeter Wave Regime. Electronics (Switzerland), 2020, 9, 1598.	3.1	3
84	Characterization of Nonstationary Phase Noise Using the Wignerâ€“Ville Distribution. Mathematical Problems in Engineering, 2020, 2020, 1-7.	1.1	3
85	Microwave Spectroscopy as a Potential Tool for Color Grading Diamonds. Energies, 2021, 14, 3507.	3.1	3
86	Dielectric Characterization of Fog in the Terahertz Regime. Acta Physica Polonica A, 2019, 136, 749-753.	0.5	3
87	Tracking of Evasive Objects Using Bistatic Doppler Radar Operating in the Millimeter Wave Regime. Remote Sensing, 2022, 14, 867.	4.0	3
88	Gain analysis of a strong-pump FEL operating at the fundamental and high harmonics. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1991, 304, 481-486.	1.6	2
89	The Israeli tandem electrostatic accelerator FEL â€" status report. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1995, 358, ABS7-ABS8.	1.6	2
90	Efficiency enhancement of a pre-bunched free-electron maser oscillator by locking to a single eigen frequency of the resonator. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1999, 429, 107-110.	1.6	2

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91	Enhanced super-radiant emission of FEM near waveguide-cutoff and near zero-slippage conditions. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2002, 483, 220-224.	1.6	2
92	Application of the matched THz power meter for material characterization in free space. , 2011, , .		2
93	W-band Imaging Detector with Incoherent Illumination. Journal of Infrared, Millimeter, and Terahertz Waves, 2013, 34, 556-565.	2.2	2
94	Millimetre wavelength variable focusing antenna for power beaming and active denial systems. IET Microwaves, Antennas and Propagation, 2015, 9, 1167-1172.	1.4	2
95	Coherent Integration Loss Due to Nonstationary Phase Noise in High-Resolution Millimeter-Wave Radars. Remote Sensing, 2021, 13, 1755.	4.0	2
96	Prebunched-beam free electron maser. , 1994, , .		1
97	Theoretical investigation of a free-electron maser operating with a TEM transmission line. IEEE Transactions on Microwave Theory and Techniques, 1996, 44, 607-613.	4.6	1
98	<title>Israeli tandem FEL: first-lasing results and future plans</title>. , 1997, , .		1
99	Optimization of the electron-beam transport in the Israeli tandem FEL. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1998, 407, 350-355.	1.6	1
100	Electrostatic-Accelerator Free-Electron Lasers. , 2005, , 378-390.		1
101	Backward Wave Excitation and Generation of Oscillations in Free-Electron Lasers in the Absence of Feedbackâ€"Beyond the High Gain Approximation. IEEE Journal of Quantum Electronics, 2007, 43, 849-854.	1.9	1
102	Covariant formulation of the dynamics in a dissipative quantum dielectric obtained from a simplified Lagrangian. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 2941-2948.	2.1	1
103	Single pixel THz detector for remote imaging. , 2009, , .		1
104	Transmission through multiple layers in UWB and narrow band communications. , 2009, , .		1
105	Detecting power lines using 330GHz FMCW sensor. , 2011, , .		1
106	Variable focusing antenna for wireless power transmission and remote sensing at millimeter wavelengths. , 2012, , .		1
107	Constant Envelope Modulation Techniques for Limited Power Millimeter Wave Links. Electronics (Switzerland), 2019, 8, 1521.	3.1	1
108	Effectiveness of Various 5G Modulation Techniques in Different Weather Conditions. , 2019, , .		1

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109	Digital Signal Detection by a Glow Discharge Detector. IEEE Transactions on Plasma Science, 2019, 47, 95-99.	1.3	1
110	Optimization of the electron-beam transport in the Israeli tandem FEL. , 1998, , 350-355.		1
111	Super Directional Antennaâ€"3D Phased Array Antenna Based on Directional Elements. Electronics (Switzerland), 2022, 11, 2233.	3.1	1
112	<title>Novel concepts for high-power electrostatic accelerator free-electron lasers</title>. , 1995, , .		0
113	Versatile FEM of high efficiency and high spectral purity. , 0, , .		0
114	Design and development of the TAU Tandem FEL. , 0, , .		0
115	Beam dynamics in the 1.4 MeV tandem accelerator of the TAU FEL. , 0, , .		0
116	First lasing of the Israeli tandem electrostatic accelerator free electron laser. , 0, , .		0
117	Study of radiation build-up and spectral evolution in the Israeli electrostatic accelerator free-electron laser oscillator. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1999, 429, 101-106.	1.6	0
118	Study of radiation build up and mode evolution in the Israeli electrostatic accelerator free-electron laser oscillator. IEEE Transactions on Plasma Science, 1999, 27, 563-567.	1.3	0
119	Analysis of linear system response to wide band signals with applications to filters. , 0, , .		0
120	Statistical study of undulator radiated power by a classical detection system in the mm-wave regime. Physical Review Special Topics: Accelerators and Beams, 2009, 12, .	1.8	0
121	Sub-MM wave imager based on horn antennas with focusing lenses. , 2010, , .		0
122	Monitoring of atmosphere attenuation in W-band. , 2012, , .		0
123	Microwave target enhancement using the perspectives of multiple-angular images. , 2012, , .		0
124	A Systematic Approach for Calculating the Symbol Error Rate for the Entire Range of above and below the Threshold Point for the CE-OFDM System. Mathematical Problems in Engineering, 2013, 2013, 1-11.	1.1	0
125	Millimeter-Wave Imager With Multi-Source Noise Illumination. IEEE Sensors Journal, 2016, 16, 1325-1332.	4.7	0
126	Efficient constant envelope orthogonal modulation. , 2018, , .		0

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127	Characterization of Diamond Colors via Microwave Spectroscopy. , 2019, , .		0
128	Study of radiation spectrum in a free-electron laser oscillator from noise to saturation. , 2004, , 62-66.		0
129	Space Charge Effects in a Prebunched Beam Free Electron Maser (FEM). , 2004, , II-25-II-26.		0
130	Radiation measurements in the new tandem accelerator FEL. , 2004, , 23-27.		0
131	CONTROL OF INTENSE MILLIMETER WAVE PROPAGATION BY TAILORING THE DISPERSIVE PROPERTIES OF THE MEDIUM. NATO Science Series Series II, Mathematics, Physics and Chemistry, 2005, , 219-239.	0.1	0
132	Coupled-Mode Theory of Electromagnetism including Wide Band Distributed Interactions. , 2011, , 55-85.		0
133	First operation of the Israeli Tandem Electrostatic Accelerator Free-Electron Laser. , 1998, , 16-20.		0
134	Experimental investigation of mode build-up and mode competition process in a prebunched free-electron maser oscillator. , 1998, , 87-94.		0
135	Free electron maser oscillations near waveguide cutoff. , 1998, , 95-101.		0
136	Simulation of predicted performance and interpretation of radiation measurements on the Israeli tandem free-electron laser. , 1998, , 81-86.		0
137	Generation of Intense Free-Electron Laser Radiation in the Terahertz Regime. Acta Physica Polonica A, 2015, 128, 315-319.	0.5	0
138	Microwave spectroscopy as a potential tool for characterizing synthetic HPHT diamonds. CrystEngComm, 2022, 24, 1849-1858.	2.6	0
139	Real-Time Fault Location Using the Retardation Method. Electronics (Switzerland), 2022, 11, 980.	3.1	0
140	Retardation in Service of Real Time Fault Detection and Location. , 2021, , .		0
141	High-Resolution Delay Spread of Wide-Band Wireless Link in Long Tunnelsâ€"Theory and Experimental Verification. Electronics (Switzerland), 2022, 11, 2140.	3.1	0