Amir Abramovich

List of Publications by Year
in descending order

121	865	516215 16	552369 26
papers	citations	h-index	g-index

122	122	122	426
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Inexpensive detector for terahertz imaging. Applied Optics, 2007, 46, 7207.	2.1	80
2	Terahertz detection mechanism of inexpensive sensitive glow discharge detectors. Journal of Applied Physics, 2008, 103, 093306.	1.1	49
3	THz Polarization Effects on Detection Responsivity of Glow Discharge Detectors (GDDs). IEEE Sensors Journal, 2009, 9, 1181-1184.	2.4	42
4	Design of inexpensive diffraction limited focal plane arrays for millimeter wavelength and terahertz radiation using glow discharge detector pixels. Journal of Applied Physics, 2008, 104, 033302.	1.1	41
5	Inexpensive THz Focal Plane Array Imaging Using Miniature Neon Indicator Lamps as Detectors. IEEE Sensors Journal, 2011, 11, 1962-1968.	2.4	41
6	Superradiant and Stimulated Superradiant Emission in a Prebunched Beam Free-Electron Maser. Physical Review Letters, 2001, 86, 2561-2564.	2.9	34
7	Effects of a Prolonged Submersion on Bone Strength and Metabolism in Young Healthy Submariners. Calcified Tissue International, 2010, 86, 8-13.	1.5	28
8	Prehospital intubation success rates among Israel Defense Forces providers. Journal of Trauma and Acute Care Surgery, 2013, 75, S178-S183.	1.1	26
9	W-Band Chirp Radar Mock-Up Using a Glow Discharge Detector. IEEE Sensors Journal, 2013, 13, 139-145.	2.4	25
10	Heterodyne Detection by Miniature Neon Indicator Lamp Glow Discharge Detectors. IEEE Sensors Journal, 2011, 11, 1879-1884.	2.4	24
11	Heterodyne detection at 300ÂGHz using neon indicator lamp glow discharge detector. Applied Optics, 2013, 52, 4077.	0.9	23
12	Effect of 99â€‰GHz continuous millimeter wave electro-magnetic radiation onE. coliviability and metabolic activity. International Journal of Radiation Biology, 2010, 86, 390-399.	1.0	22
13	High Spectral Coherence in Long-Pulse and Continuous Free-Electron Laser: Measurements and Theoretical Limitations. Physical Review Letters, 1999, 82, 5257-5260.	2.9	20
14	Tissue repair genes: the TiRe database and its implication for skin wound healing. Oncotarget, 2016, 7, 21145-21155.	0.8	20
15	Detection and upconversion of three-dimensional MMW/THz images to the visible. Photonics Research, 2016, 4, 306.	3.4	19
16	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.	0.7	16
17	Performance quantification of a millimeter-wavelength imaging system based on inexpensive glow-discharge-detector focal-plane array. Applied Optics, 2013, 52, C43.	0.9	16
18	The TeraMOS sensor for monolithic passive THz imagers. , 2011, , .		15

#	Article	IF	Citations
19	Innovative Reconfigurable Metasurface 2-D Beam-Steerable Reflector for 5G Wireless Communication. Electronics (Switzerland), 2020, 9, 1191.	1.8	15
20	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.	0.7	14
21	Efficiency enhancement of free electron Maser oscillator by mode selection with a prebunched electron beam. Applied Physics Letters, 2000, 76, 16-18.	1.5	13
22	Relaxation spectra of polymers and phenomena of electrical and hydrophobic recovery: Interplay between bulk and surface properties of polymers. Journal of Polymer Science, Part B: Polymer Physics, 2017, 55, 198-205.	2.4	13
23	Ultra-Wideband Reconfigurable X-Band and Ku-Band Metasurface Beam-Steerable Reflector for Satellite Communications. Electronics (Switzerland), 2021, 10, 2165.	1.8	13
24	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.	1.5	12
25	Realization and validation of continuous tunable metasurface for high resolution beam steering reflector at Kâ€band frequency. International Journal of RF and Microwave Computer-Aided Engineering, 2021, 31, e22559.	0.8	12
26	Wideband reconfigurable entire Kuâ€band metasurface beamâ€steerable reflector for satellite communications. IET Microwaves, Antennas and Propagation, 2019, 13, 334-339.	0.7	11
27	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.	0.7	10
28	Terahertz Frequency Modulated Continuous Wave Radar using Glow Discharge Detector. IEEE Sensors Journal, 2016, , 1-1.	2.4	10
29	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.	0.7	9
30	Switching and Fast Operation of Glow Discharge Detector for Millimeter Wave Focal Plane Array Imaging Systems. IEEE Sensors Journal, 2015, 15, 6659-6663.	2.4	9
31	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.	0.7	8
32	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.	0.7	8
33	Oversampling advances in millimeter-wave scan imaging using inexpensive neon indicator lamp detectors. Optical Engineering, 2013, 52, 063202.	0.5	8
34	Calibration Method for MMW Imaging Using Inexpensive Miniature Neon Indicator Lamp Detectors. IEEE Sensors Journal, 2014, 14, 1677-1681.	2.4	8
35	Flat mirror for millimeter-wave and terahertz imaging systems using an inexpensive metasurface. Chinese Optics Letters, 2017, 15, 011101-11105.	1.3	8
36	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.	0.7	7

#	Article	IF	Citations
37	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.	0.7	7
38	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.	0.7	7
39	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.	0.7	7
40	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.	0.7	7
41	Spectroscopic Study of Containers and Their Content Using a High-Resolution THz System. IEEE Sensors Journal, 2010, 10, 379-383.	2.4	7
42	The interaction of H2O with the surface of polycrystalline gadolinium at the temperature range of 300â€“570K. Surface Science, 2013, 617, 29-35.	0.8	7
43	Performance Enhancement of Reconfigurable Metamaterial Reflector Antenna by Decreasing the Absorption of the Reflected Beam. Applied Sciences (Switzerland), 2021, 11, 8999.	1.3	7
44	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.	0.7	6
45	Real-Time Metasurface Sensor for Monitoring Micropoisons in Aqueous Solutions Based on Gold Nanoparticles and Terahertz Spectroscopy. Sensors, 2022, 22, 1279.	2.1	6
46	Super resolution and optical properties of THz double row array based on inexpensive Glow Discharge Detector (GDD) pixels. Proceedings of SPIE, 2011, , .	0.8	5
47	Real time detection and recognition of micro-poisons in aqueous solutions and atmosphere using perfect absorber metamaterial in millimeter wavelength regime. , 2015, , .		5
48	A Phase Ib/II Study Evaluating the Combination of Weekly Docetaxel and Cisplatin Together with Capecitabine and Bevacizumab in Patients with Advanced Esophago-Gastric Cancer. PLoS ONE, 2016, 11, e0157548.	1.1	5
49	Real-time advanced spectroscopic monitoring of Ammonia concentration in water. Aquacultural Engineering, 2018, 83, 103-108.	1.4	4
50	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.	0.7	3
51	VHF multi-channel coupler for RF communication. , 2009, , .		3
52	mm wave and THz imaging using very inexpensive neon-indicator lamp detector focal-plane arrays. , 2011, , .		3
53	Capability of long distance 100â€‰â€‰GHz FMCW using a single GDD lamp sensor. Applied Optics, 2014, 53, 8549.	1.9	3
54	Robust, Sensitive, and Inexpensive 2D Focal Plane Array Upconverting MMW Imaging Into the Visible. IEEE Photonics Technology Letters, 2019, 31, 747-750.	1.3	3

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55	QPSK MMW Wireless Communication System Based On p-i-n InGaAs Photomixer. Electronics (Switzerland), 2020, 9, 1182.	1.8	3
56	Inexpensive Millimeter-Wave Communication Channel Using Glow Discharge Detector and Satellite Dish Antenna. Electronics (Switzerland), 2020, 9, 677.	1.8	3
57	Ultra-wideband and inexpensive glow discharge detector for millimeter-wave wireless communication based on upconversion to visual light. Applied Optics, 2019, 58, F26.	0.9	3
58	Metal Nano Layer Coating for Improving the Detection and Recognition of Micro-Poisons Using Reflection Spectroscopic Measurement. Optics and Photonics Journal, 2015, 05, 193-199.	0.3	3
59	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.	0.7	2
60	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.	0.7	2
61	Relatively inexpensive terahertz imaging. , 2008, , .		2
62	Low-cost plasma terahertz heterodyne image detection. Proceedings of SPIE, 2010, , .	0.8	2
63	Polarization effects on heterodyne detection and imaging using Glow Discharge Detector at millimeter wavelengths. Proceedings of SPIE, 2014, , .	0.8	2
64	Real-time 3D millimeter wave imaging based FMCW using GGD focal plane array as detectors. , 2014, , .		2
65	Millimetre wavelength variable focusing antenna for power beaming and active denial systems. IET Microwaves, Antennas and Propagation, 2015, 9, 1167-1172.	0.7	2
66	QPSK detection using glow discharge detector and a photodiode for millimeterâ€wave and terahertz communication. Microwave and Optical Technology Letters, 2020, 62, 2674-2682.	0.9	2
67	<title>Israeli tandem FEL: first-lasing results and future plans</title>. , 1997, , .		1
68	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.	0.7	1
69	Attenuated Total Reflectance (ATR)-FTIR spectral measurements in MIR and FIR (THz) range. , 2009, , .		1
70	THz imaging of inexpensive glow discharge detector (GDD) pixel. , 2009, , .		1
71	First operation of 8Ã—8 glow discharge detector VLSI focal plane array toward mm wave and THz radiation video rate imaging. , 2009, , .		1
72	THz imaging using Glow Discharge Detector (GDD) focal plane arrays and large aperture quasi optic mirrors. Proceedings of SPIE, 2010, , .	0.8	1

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73	High resolution reflection measurements of dielectrics in W-band (92–100 GHz). , 2011, , .		1
74	Sub-wavelength resolution of MMW imaging systems using extremely inexpensive scanning Glow Discharge Detector (GDD) double row camera. , 2012, , .		1
75	Optimization of the electron-beam transport in the Israeli tandem FEL. , 1998, , 350-355.		1
76	MMW/THz imaging using upconversion to visible, based on glow discharge detector array and CCD camera. , 2017, , .		1
77	Inexpensive and simple MMW imaging using optical detection of light emitted from glow discharge detectors. , 2018, , .		1
78	Polarization consideration of 2-D beam-steering metasurface reflector at Ka-band for wireless communication. , 2021, , .		1
79	Steer by Image Technology for Intelligent Reflecting Surface Based on Reconfigurable Metasurface with Photodiodes as Tunable Elements. Crystals, 2022, 12, 951.	1.0	1
80	Versatile FEM of high efficiency and high spectral purity. , 0, , .		0
81	Design and development of the TAU Tandem FEL. , 0, , .		0
82	Beam dynamics in the 1.4 MeV tandem accelerator of the TAU FEL. , 0, , .		0
83	First lasing of the Israeli tandem electrostatic accelerator free electron laser. , 0, , .		0
84	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.	0.7	0
85	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.	0.6	0
86	Glow discharge detector for terahertz and millimeter wave radiation detection and imaging. , 2007, , .		0
87	Y1â^'xCaxBa2Cu3O7â^'Î´ thin films: From phase fluctuations to a complex order parameter. Journal of Physics and Chemistry of Solids, 2008, 69, 3082-3084.	1.9	0
88	Novel mm-wave and THz radiation active imaging system based on glow discharge detector (GDD) pixel. Proceedings of SPIE, 2008, , .	0.8	0
89	High resolution high power W-band spectroscopy system (92–100 GHz). , 2009, , .		0
90	The Surface impedance for various doping of Y_{1-x}Ca_xBa₂Cu₃O_{7-Î´}thin films. Journal of Physics: Conference Series, 2009, 150, 052051.	0.3	0

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91	Active terahertz imaging with Ne indicator lamp detector arrays. , 2009, , .		0
92	Terahertz Conductivity of Overdoped Y1â^'x Ca x B2Cu3O7â^'Î´. Journal of Low Temperature Physics, 2010, 158, 647-652.	0.6	0
93	Inexpensive imaging at THz frequencies with Ne indicator lamp detector arrays. , 2010, , .		0
94	High resolution remote sensing of particles and aerosols in the W-band (92–100 GHz). , 2011, , .		0
95	Low-cost THz heterodyne detection by miniature neon indicator lamp glow discharge detector. , 2011, , .		0
96	Measurements and simulations of the optical parameters of the Glow Discharge Detector (GDD) Focal Plane Array (FPA) millimeter wavelength imaging system. , 2011, , .		0
97	Down-conversion detection in 300 GHz radiation using Glow Discharge Detector (GDD). Proceedings of SPIE, 2012, , .	0.8	0
98	Heterodyne detection at 300 GHz using glow discharge detectors with efficient quasi-optical design. Proceedings of SPIE, 2013, , .	0.8	0
99	Millimeter wavelength imaging system based on Flat Parabolic Surface. , 2013, , .		0
100	Heterodyne detection and polarization effects at 300 GHz using Ne indicator lamp glow discharge detectors. , 2013, , .		0
101	3D Millimeter Wave imaging system using chirp radar and Glow Discharge Detector pixel. , 2013, , .		0
102	Detection of hidden objects using a real-time 3-D millimeter-wave imaging system. Proceedings of SPIE, 2014, , .	0.8	0
103	Real time three-dimensional space video rate sensors for millimeter waves imaging based very inexpensive plasma LED lamps. Proceedings of SPIE, 2014, , .	0.8	0
104	Fourier imaging and distance approximation using time of flight method for terahertz wave imaging. Optical Engineering, 2014, 53, 083104.	0.5	0
105	Large distance 3D imaging of hidden objects. Proceedings of SPIE, 2014, , .	0.8	0
106	THz Upconversion imaging system, based on 1.55 Âμm coherent electro-optical sampling method using GaAs crystal. , 2015, , .		0
107	Feasibility of Radon projection acquisition for compressive imaging in MMW region based new video rate 16Ã—16 GDD FPA camera. , 2015, , .		0
108	Up-conversion of MMW radiation to visual band using glow discharge detector and silicon detector. , 2016, , .		0

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109	Perfect absorber metamaterial for real time detection and recognition of micro-poisons in aqueous solutions and atmosphere using millimeter wavelength spectroscopy. Proceedings of SPIE, 2016, , .	0.8	0
110	Effects of ion irradiation damage on the initial interactions of oxygen with polycrystalline gadolinium. Solid State Ionics, 2017, 309, 130-136.	1.3	0
111	MMW coherence detection for 5th generation of cellular communication. , 2019, , .		0
112	Up-conversion MMW imaging system based on Glow Discharge Detector row attached to commercial contact image sensor. , 2019, , .		0
113	Performance Enhancement of Inexpensive Glow Discharge Detector Operating in Up-Conversion Mode in Millimeter Wave Detection for Focal Plane Arrays. Applied Sciences (Switzerland), 2021, 11, 9564.	1.3	0
114	Radiation measurements in the new tandem accelerator FEL. , 2004, , 23-27.		0
115	Relatively inexpensive real time active millimeter wave and terahertz imaging systems. , 2013, , .		0
116	First operation of the Israeli Tandem Electrostatic Accelerator Free-Electron Laser. , 1998, , 16-20.		0
117	Experimental investigation of mode build-up and mode competition process in a prebunched free-electron maser oscillator. , 1998, , 87-94.		0
118	Free electron maser oscillations near waveguide cutoff. , 1998, , 95-101.		0
119	Simulation of predicted performance and interpretation of radiation measurements on the Israeli tandem free-electron laser. , 1998, , 81-86.		0
120	Ultrafast, sensitive, and inexpensive 3 dimensional MMW/THz imaging system using Glow Discharge Detector Array and CCD camera based on upconversion to visual band. , 2018, , .		0
121	Awake endoscopic (esophageal) ultrasound using the endobronchial scope (EUS-B) for patients with high risk for sedation. , 2018, , .		0