

List of Publications by Year in descending order

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56 papers

257 citations

1040056 9 h-index 1125743 13 g-index

56 all docs 56
docs citations

56 times ranked 74 citing authors

#	Article	IF	Citations
1	Real-time implementation of the "orthodoxy test―for conformity of current–voltage characteristics with classical field electron emission theory. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2016, 34, 041802.	1.2	18
2	Local current–voltage estimation and characteristization based on field emission image processing of large-area field emitters. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2018, 36, 02C106.	1.2	17
3	The pre-exponential voltage-exponent as a sensitive test parameter for field emission theories. Royal Society Open Science, 2021, 8, 201986.	2.4	17
4	Mass-spectrum investigation of the phenomena accompanying field electron emission. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2015, 33, 03C109.	1.2	14
5	Comparison of macroscopic and microscopic emission characteristics of large area field emitters based on carbon nanotubes and graphene. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2020, 38, 043203.	1.2	14
6	Determining the field enhancement factors of various field electron emitters with high numerical accuracy. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2021, 39, .	1.2	14
7	Evolution of the characteristics of a field-electron emitter based on nitrocellulose-carbon nanotube composite. Technical Physics Letters, 2013, 39, 484-487.	0.7	13
8	Electrical field admissible values for the classical field emitter regime in the study of large area emitters. AIP Advances, $2019, 9, .$	1.3	12
9	Statistical dispersion of nanocomposite emission parameters. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2015, 33, 03C104.	1.2	10
10	Influence of the distribution of local field enhancement factors on the shape of the current-voltage characteristics of carbon-nanotube-based large-area emitters. Vacuum, 2020, 173, 109159.	3.5	10
11	Statistical dispersion of the field emission parameters of multipoint cathodes based on a polymer-carbon nanotube composite. Technical Physics Letters, 2014, 40, 438-441.	0.7	9
12	Ten Approaches to Define the Field Emission Area. Technical Physics, 2019, 64, 1530-1540.	0.7	9
13	Development of Technological Principles for Creating a System of Microfocus X-Ray Tubes Based on Silicon Field Emission Nanocathodes. Technical Physics, 2019, 64, 1742-1748.	0.7	9
14	A Test for Compliance with the Cold Field Emission Regime Using the Elinson–Schrednik and Forbes–Deane Approximations (Murphy–Good Plot). Technical Physics Letters, 2020, 46, 838-842.	0.7	8
15	Development of on-line emission parameters processing research technique of polymer-MWCNT emitters. , 2012, , .		6
16	Hysteresis phenomenon of the field emission from carbon nanotube/polymer nanocomposite. Journal of Physics: Conference Series, 2015, 643, 012101.	0.4	6
17	Evaluation of numerical characteristics of the current load distribution on the surface of multi-tip field emitters. Journal of Physics: Conference Series, 2017, 917, 092022.	0.4	5
18	A Test for the Applicability of the Field Emission Law to Studying Multitip Field Emitters by Analysis of the Preexponential Voltage Factor. Technical Physics Letters, 2019, 45, 916-919.	0.7	5

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19	Theoretical methods for definition of the emission area of multi-tip cathodes and their experimental validation. Journal of Physics: Conference Series, 2019, 1400, 077059.	0.4	5
20	Properties of blade-like field emitters. Ultramicroscopy, 2022, 233, 113462.	1.9	5
21	Application of slope-intercept diagram to determine the parameters of the nanocomposite field emitters in-situ. Journal of Physics: Conference Series, 2016, 741, 012031.	0.4	4
22	The emission characteristics of graphene in different modes of high-voltage power supply. Journal of Physics: Conference Series, 2016, 741, 012029.	0.4	4
23	Extracting formal emission area by on-line processing of current-voltage data, using FN-type equations for the Schottky-Nordheim barrier. , 2016, , .		3
24	SK analysis of the volt-ampere characteristics in graphene-based nanocomposite field emitters. Technical Physics, 2017, 62, 1097-1103.	0.7	3
25	Experimental confirmation of the nearly power-law relation between macroscopic current and characteristic current density in carbon nanotube-based large-area field emitters. Journal of Applied Physics, 2019, 126, .	2.5	3
26	Analysis of the Behavior of Individual Emission Sites on the Surface of a Multi-Tip Field Cathode. Technical Physics Letters, 2019, 45, 304-307.	0.7	3
27	Modeling basic tip forms and its effective field emission parameters. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2021, 39, 044002.	1.2	3
28	Comparison of the effective parameters of single-tip tungsten emitter using Fowler–Nordheim and Murphy–Good plots. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2022, 40, .	1.2	3
29	Liquid-metal field electron source based on porous GaP. Technical Physics, 2017, 62, 1424-1430.	0.7	2
30	FEF distribution influence on linearity of Fowler-Nordheim plots: Modeling and experiment., 2017,,.		2
31	Estimation and analysis of local current-voltage characteristics based on processing of field emission images of large area field emitters. , 2017, , .		2
32	The technique of visualization and evaluation of the emission site distribution for large area field emitters. Journal of Physics: Conference Series, 2017, 929, 012057.	0.4	2
33	Fluctuations of the emission characteristics of multi-tip field cathodes. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2019, 37, 031803.	1.2	2
34	Investigation of multi-tip large area emitters using computerized field emission projector. IOP Conference Series: Materials Science and Engineering, 0, 525, 012051.	0.6	2
35	Investigation of the current level instability of the multitip field emitters with computerized field emission projector. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2020, 38, 062806.	1.2	2
36	Modeling basic tip forms and its field emission. , 2020, , .		2

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37	Numerical simulations of field emission characteristics of open CNT. Ultramicroscopy, 2021, 230, 113362.	1.9	2
38	Research of the polymer-MWCNT emitters in AC power supply. , 2012, , .		1
39	A study of the electrical properties of the porous GaP (111) surface. Technical Physics Letters, 2016, 42, 1118-1121.	0.7	1
40	The technique of online analysis of the current-voltage characteristics of nanocomposite field emitters using the SK-charts. , $2016, \ldots$		1
41	Estimation of the area of field emission of a carbon nanotube using modelling in COMSOL Multiphysics. Journal of Physics: Conference Series, 2018, 1038, 012121.	0.4	1
42	A Study of the Residual Gas Composition in the Vacuum System of the Cyclotron of the Ioffe Physical Technical Institute. Technical Physics Letters, 2019, 45, 827-830.	0.7	1
43	Investigation of the emission properties of a silicon blade-type cathode. Journal of Physics: Conference Series, 2019, 1400, 055011.	0.4	1
44	Outgassing during large area field emitter operation in the diode system. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2022, 40, 024002.	1.2	1
45	MS-TOF as a unique instrument for research of multi-tip field emitters. , $2014, \ldots$		O
46	The emission structures stability in alternating electrical fields. , 2014, , .		0
47	The technique of field emission parameters research for nanostructured materials improvement. Journal of Physics: Conference Series, 2014, 572, 012026.	0.4	О
48	Current-voltage characteristic hysteresis dependence on power supply regime for large area field emitters. , 2016, , .		0
49	Empirical evaluation of the field enhancement factor as a function from electrode spacing for LAFE and single emitter. Journal of Physics: Conference Series, 2017, 917, 092025.	0.4	O
50	Simulation of nanocomposite field emitters in COMSOL Multiphysics using field emission projector data. Journal of Physics: Conference Series, 2018, 1135, 012028.	0.4	0
51	Analysis of microscopic emission sites regularity of nanocomposite field cathodes. Journal of Physics: Conference Series, 2018, 1135, 012027.	0.4	O
52	Modeling of stochastic processes in the emission characteristics of multitips electron sources. Journal of Physics: Conference Series, 2018, 1135, 012035.	0.4	0
53	Comparison of the effective parameters of single-tip tungsten emitter using FN and MG-plots. , 2021, , .		О
54	Experimental study of the multi-tip field emitter based on the array of silicon pyramidal microstructures. , 2021 , , .		0

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55	Degradation of an emitter based on VACNT made by DC-PECVD during field emission. , 2021, , .		O
56	Fabrication and complex investigation of LAFE based on CNT by PECVD with island catalyst. Journal of Physics: Conference Series, 2021, 2103, 012110.	0.4	0