

# Hidenori Mimura

## List of Publications by Year in descending order

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118  
papers

858  
citations

687363

13  
h-index

501196

28  
g-index

120  
all docs

120  
docs citations

120  
times ranked

968  
citing authors

#	ARTICLE	IF	CITATIONS
1	Rapid-Response, Widely Stretchable Sensor of Aligned MWCNT/Elastomer Composites for Human Motion Detection. ACS Sensors, 2016, 1, 817-825.	7.8	165
2	One-step grown aligned bulk carbon nanotubes by chloride mediated chemical vapor deposition. Applied Physics Letters, 2008, 92, .	3.3	137
3	Energýband discontinuities in a heterojunction of amorphous hydrogenated Si and crystalline Si measured by internal photoemission. Applied Physics Letters, 1987, 50, 326-328.	3.3	86
4	The use of amorphousá€crystalline silicon heterojunctions for the application to an imaging device. Journal of Applied Physics, 1987, 61, 2575-2580.	2.5	33
5	High-performance planar-type electron source based on a graphene-oxide-semiconductor structure. Applied Physics Letters, 2019, 114, 213501.	3.3	29
6	Intense electron emission from graphite nanocraters and their application to time-resolved x-ray radiography. Applied Physics Letters, 2004, 84, 1804-1806.	3.3	27
7	Optoelectrical properties of amorphousá€crystalline silicon heterojunctions. Applied Physics Letters, 1984, 45, 452-454.	3.3	25
8	Modulation of the Work Function of Capped Single-Walled Carbon Nanotube by Alkali-Metal Adsorption: A Theoretical Study. Journal of Physical Chemistry C, 2011, 115, 8928-8933.	3.1	25
9	Neutron detection using boron gallium nitride semiconductor material. APL Materials, 2014, 2, .	5.1	24
10	Coreá€Shell Approach to Control Acidá€Base Properties of Surface of Dielectric and Permittivity of Its Composite. Chemistry Letters, 2015, 44, 197-199.	1.3	24
11	Beam profile measurement of volcano-structured double-gate Spindt-type field emitter arrays. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2016, 34, .	1.2	22
12	Smith-Purcell radiation from ultraviolet to infrared using a Si field emitter. Journal of Vacuum Science & Technology B, 2006, 24, 924.	1.3	21
13	Mechanism of Highly Efficient Electron Emission from a Graphene/Oxide/Semiconductor Structure. ACS Applied Electronic Materials, 2020, 2, 2265-2273.	4.3	18
14	Influence of Mg, Cu, and Ni Dopants on Amorphous TiO2 Thin Films Photocatalytic Activity. Materials, 2020, 13, 886.	2.9	15
15	High intensity pulse x-ray generation by using graphite-nanocrater cold cathode. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2005, 23, 831.	1.6	14
16	Electron emission from conduction band of heavily phosphorus doped diamond negative electron affinity surface. Journal Physics D: Applied Physics, 2016, 49, 045102.	2.8	13
17	$\text{In Situ}$ Measurement of Charging Process in Electret-Based Comb-Drive Actuator and High-Voltage Charging. Journal of Microelectromechanical Systems, 2015, 24, 1052-1060.	2.5	12
18	Smithá€Purcell radiation using a single-tip field emitter. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2005, 23, 840.	1.6	10

#	ARTICLE	IF	CITATIONS
19	CO Gas-Induced Resonance Frequency Shift of ZnO-Functionalized Microcantilever in Humid Air. Journal of Nanomaterials, 2017, 2017, 1-7.	2.7	10
20	Observation of CO Detection Using Aluminum-Doped ZnO Nanorods on Microcantilever. Sensors, 2020, 20, 2013.	3.8	9
21	Field emission spectroscopy measurements of graphene/n-type diamond heterojunction. Applied Physics Letters, 2019, 114, .	3.3	8
22	Development of a Field Emission Image Sensor Tolerant to Gamma-Ray Irradiation. IEEE Transactions on Electron Devices, 2020, 67, 1660-1665.	3.0	8
23	Color scheme adjustment by fuzzy constraint satisfaction for color vision deficiencies. Color Research and Application, 2015, 40, 446-464.	1.6	7
24	Design of a 300GHz Band TWT with a Folded Waveguide Fabricated by Microelectromechanical Systems. Journal of Infrared, Millimeter, and Terahertz Waves, 2016, 37, 1166-1172.	2.2	7
25	A large piezoelectric response in highly-aligned electrospun poly(vinylidene fluoride) thin films. Journal of Applied Physics, 2012, 112, 014301.	2.6	7
26	Energy distributions of field emission electrons from silicon emitters. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2005, 23, 687.	1.6	6
27	Electron emission from planar-type cathodes based on nanocrystalline silicon thin films. Journal of Vacuum Science & Technology B, 2006, 24, 971.	1.3	6
28	Revealing real images of cloverleaf pattern emission sites by using field ion microscopy. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2010, 28, C2A1-C2A4.	1.2	6
29	Formation of p-n Junction in Si Thin Film and Its Application to High Sensitivity Photodetector Driven by Diamond Cold Cathode. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1700161.	1.8	6
30	Precise Deposition of Carbon Nanotube Bundles by Inkjet-Printing on a CMOS-Compatible Platform. Materials, 2022, 15, 4935.	2.9	6
31	Fabrication and characteristics of novel graphite field emitters for application to electron-beam-pumped light sources. Journal of Vacuum Science & Technology B, 2007, 25, 666.	1.3	5
32	Undoped ZnO phosphor with high luminescence efficiency grown by thermal oxidation. Journal of Applied Physics, 2008, 104, 073512.	2.5	5
33	Cathodoluminescence Properties of ZnO Tower-Like Structures Prepared by Thermal Oxidation. E-Journal of Surface Science and Nanotechnology, 2009, 7, 358-361.	0.4	5
34	Photo-assisted electron emission from MOS-type cathode based on nanocrystalline silicon. , 2010, , .		5
35	Plasmachemical modification effect on luminescence of AlBVI phosphors. Journal of Luminescence, 2014, 156, 69-73.	3.1	5
36	Research project on development of radiation tolerant compact image sensor with a field emitter array. , 2015, , .		5

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37	Field Emitter Equipped With a Suppressor to Control Emission Angle. IEEE Electron Device Letters, 2013, 34, 704-706.	3.9	3
38	Modification of internal barrier in hydrogen-terminated heavily phosphorus-doped diamond for field emission. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 2063-2068.	1.8	3
39	Expectation to Vacuum Nano-electronics. Journal of the Vacuum Society of Japan, 2017, 60, 2-7.	0.3	3
40	Self-Propelled Aero-GaN Based Liquid Marbles Exhibiting Pulsed Rotation on the Water Surface. Materials, 2021, 14, 5086.	2.9	3
41	The Status of Field Emission Displays. , 2007, , .		2
42	LOW VOLTAGE ELECTRON EMISSION FROM BaTiO <sub>3</sub> FERROELECTRIC THIN FILMS. Integrated Ferroelectrics, 2008, 104, 25-33.	0.7	2
43	Cathodoluminescence of Single Disk-Like ZnO Prepared by Low Temperature Solution-Based Method. E-Journal of Surface Science and Nanotechnology, 2009, 7, 354-357.	0.4	2
44	Verwey transition in field-emitted electrons from single $\gamma$ -110-oriented magnetite whisker. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2010, 28, C2A24-C2A27.	1.2	2
45	Modulation of the work function of graphene by Na and Cl coadsorbed on opposite sides on graphene. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2017, 35, 02C104.	1.2	2
46	Synthesis and Properties of Al-doped ZnO Thin Films for Photovoltaics. , 2018, , .		2
47	Structural Design of TiO <sub>2</sub> /Si Hybrid Photoelectrode and Pt-Free Counter Photoelectrodes for Charge Carrier Separation in Water-Splitting Reactions. ECS Journal of Solid State Science and Technology, 2021, 10, 103015.	1.8	2
48	Current-voltage and electron emission characteristics of diamond particles. Journal of Vacuum Science & Technology B, 2007, 25, 540.	1.3	1
49	Low Voltage Electron Emission from BaTiO <sub>3</sub> Thin Films Treated in Hydrochloric Acid. E-Journal of Surface Science and Nanotechnology, 2008, 6, 164-166.	0.4	1
50	Vertical thin film field emitter array for high resolution CdTe X-ray imaging device. , 2009, , .		1
51	Fabrication of a spin-polarized electron emitter with $\gamma$ -oriented magnetite whisker. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 2574-2577.	0.8	1
52	10.1: New functioned field emission array to controllable initial emission angle by introducing a suppressor gate. , 2010, , .		1
53	Development of a CdTe x-ray imaging device driven by a vertical thin film field emission array. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2010, 28, C2D22-C2D25.	1.2	1
54	Color Scheme Adjustment by Fuzzy Constraint Satisfaction for Three Types of Color Vision Deficiency. Transactions of the Japanese Society for Artificial Intelligence, 2011, 26, 518-526.	0.1	1

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55	The electron optics properties of micro-column with field emitter. , 2012, , .		1
56	Class Responsibility Assignment as Fuzzy Constraint Satisfaction. , 2014, , .		1
57	Development of CdTe based photoconductive target for radiation tolerant compact image sensors. , 2016, , .		1
58	Recent progress in development of radiation tolerant image sensor with field emitter array. , 2018, , .		1
59	Development of a small X-ray source using an ultraviolet laser and pyroelectric crystal. X-Ray Spectrometry, 2019, 48, 691-695.	1.4	1
60	Diamond Radiation Detector with Built-in Boron-Doped Neutron Converter Layer. Physica Status Solidi (A) Applications and Materials Science, 0, , 2100315.	1.8	1
61	Microscope equipped with graphene-oxide-semiconductor electron source. , 2021, , .		1
62	Controlled Release of Microcantilever from a Silicon-on-Insulator Wafer with Oxide Brace. , 2021, , .		1
63	CdTe X-ray Sensing Driven by Electron Beam From Field Emitters. , 2006, , .		0
64	Electron Emission from Nanocrystalline Silicon Based Metal-Oxide-Semiconductor Cathodes. , 2006, , .		0
65	Fabrication and Characteristics of Novel Graphite Field-Emitters for Application to Electron-Beam Pumped Light Sources. , 2006, , .		0
66	Stable Electron Emission from Graphite-Nanoneedles and Their Application to Scanning Electron Microscopes. , 2006, , .		0
67	Fabrication and Characteristics of Double-Gated Field Emitters with Thick Extraction Gate Electrode. , 2006, , .		0
68	Electron Emission from Ferroelectrics Copolymer Thin Film (PVDF-TRFE) Cathode Excited by Voltage Pulses. , 2006, , .		0
69	I-V Characteristic of Diamond Pparticles and Planner Electron Emission Based on Diamond Films. , 2006, , .		0
70	Fabrication and Characteristics of GaAs Field Emitters. , 2006, , .		0
71	Smith-Purcell Radiation from Ultraviolet to Infrared Using a Si-field Emitter. , 2007, , .		0
72	Improvement of emission efficiency of nanocrystalline silicon planar cathodes. , 2007, , .		0

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73	The detailed analysis of field emission under stabilized operation using field effect transistor. , 2007, , .		0
74	Electron-beam-pumped Light Sources Using Field Emitters. , 2007, , .		0
75	BaTiO <sub>3</sub> thin films for ferroelectric electron emission. , 2007, , .		0
76	Emission Properties of Metal-oxide-semiconductor Cathodes based on Nanocrystalline Silicon. , 2007, , .		0
77	Electron-beam-pumped light sources using graphite nanoneedle field emitters and Si electron-transparent films. IEEJ Transactions on Electrical and Electronic Engineering, 2007, 2, 272-277.	1.4	0
78	Nano-sized hexagonal platelet-like ZnO for the nano-phosphor application. , 2009, , .		0
79	Emission characteristics and application of graphite nanospine cathode. , 2009, , .		0
80	Vacuum nanoelectronics for nanovision science. , 2009, , .		0
81	Electron emission characteristics of BaTiO <sub>3</sub> thin films. , 2009, , .		0
82	Emission uniformity of nanocrystalline silicon based metal-oxide-semiconductor cathodes. , 2009, , .		0
83	Fabrication and emission characteristics for a single magnetite whisker. , 2009, , .		0
84	The control of carbon nanotubes density by gas-phase catalytic chemical vapor deposition. , 2009, , .		0
85	Fabrication of field emitters using GaN particles. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 1832-1834.	0.8	0
86	Sequential multi sliced X-ray CT by using vertical projection for high speed CT. , 2010, , .		0
87	P1&#x2013;20: Specifying the necessary conditions for cloverleaf patterns formation in field emission microscope. , 2010, , .		0
88	6.2: A multi-gated FEA for low energy acceleration micro-column microscopes. , 2010, , .		0
89	P2&#x2013;7: Pulsed thermionic emission from carbon nanotube fibers. , 2010, , .		0
90	11.4: Thermionic emission from long spun carbon nanotube fiber. , 2010, , .		0

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91	P1&#x2013;13: Revised fabrication of field emitters with a multi-stacked electrostatic lens. , 2010, , .		0
92	Photoresponse of nanocrystalline silicon based MOS cathodes. , 2012, , .		0
93	New photo cathode driven by surface plasmon resonance. , 2012, , .		0
94	Temporal changes of output signals from CdTe radiation detector measured by optical laser pulses. , 2012, , .		0
95	Field emitter technology for nanovision science. , 2012, , .		0
96	Optically modulated electron emission from nanocrystalline silicon based metal-oxide-semiconductor cathodes. , 2013, , .		0
97	Measurement of polarization phenomena in CdTe radiation detector by optical laser pulses. , 2013, , .		0
98	Laser-induced electron emission from p-type silicon emitters. , 2014, , .		0
99	Field emission characteristics of graphite field emitters. , 2014, , .		0
100	Activation process of GaAs NEA photocathode and its spectral sensitivity. , 2015, , .		0
101	Beam profile measurement of volcano-structured double-gated Spindt-type filed emitter arrays. , 2015, , .		0
102	Photoresponse of p-type silicon emitter array. , 2015, , .		0
103	Modulation of the work function of graphene by Na and Cl co-adsorbed on opposite sides on graphene. , 2016, , .		0
104	Permeation of electron beam through graphene. , 2016, , .		0
105	Field emission from gated silicon field emitter array induced by sub-nanosecond laser pulses. , 2016, , .		0
106	Process technology for volcano-structured double-gate Spindt-type field emitter arrays. , 2017, , .		0
107	Characterization of amorphous selenium based photoconductor for a high-sensitivity photodetector driven by diamond cold cathode. , 2017, , .		0
108	Dependence of light polarization on electron emission from gated silicon field emitter arrays. , 2017, , .		0

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109	Study of alkali photocathode for ultrafast electron pulse. , 2017, , .		0
110	Electron emission from nanocrystalline silicon planar cathode in gaseous environments. , 2018, , .		0
111	Electron Emission Mechanism of Heavily Phosphorusâ€Doped Diamond with Oxidized Surface. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1801025.	1.8	0
112	Physicalâ€Chemical Properties of Self-Assembled Structures in Solution of Zinc Phthalocyanine and Bis-3-pentyl-PTCDI Derivative. Journal of Physical Chemistry C, 2020, 124, 9470-9483.	3.1	0
113	High-Temperature Operation Method for Image Pickup Tube. IEEE Electron Device Letters, 2021, 42, 256-259.	3.9	0
114	MORPHOLOGICAL AND PHYSICAL PROPERTIES OF ZnO NANOSTRUCTURES GROWN ON Sb-DOPED ZnO SEEDING FILMS ANNEALED UNDER DIFFERENT ATMOSPHERES. Surface Review and Letters, 2021, 28, .	1.1	0
115	Dependence of the Light Emission Characteristics on the Ne Gas Pressure in an Electron-beam-pumped Light Source Using a Field Emitter. Shinku/Journal of the Vacuum Society of Japan, 2007, 50, 319-323.	0.2	0
116	X-ray Imaging Technology using Field Emission Array. Hyomen Kagaku, 2008, 29, 701-706.	0.0	0
117	1 X-ray Imaging, Kyokai Joho Imeji Zasshi/Journal of the Institute of Image Information and Television Engineers, 2013, 67, 447-450.	0.1	0
118	Planar type electron emission device using atomic layered materials and it applications. , 2021, , .		0