

# Ant Ural

## List of Publications by Year in descending order

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Version: 2024-02-01

61  
papers

4,138  
citations

218677

26  
h-index

197818

49  
g-index

61  
all docs

61  
docs citations

61  
times ranked

5044  
citing authors

#	ARTICLE	IF	CITATIONS
1	High- $\epsilon_r$ dielectrics for advanced carbon-nanotube transistors and logic gates. <i>Nature Materials</i> , 2002, 1, 241-246.	27.5	928
2	Preferential Growth of Semiconducting Single-Walled Carbon Nanotubes by a Plasma Enhanced CVD Method. <i>Nano Letters</i> , 2004, 4, 317-321.	9.1	485
3	Carbon Nanotube Transistor Arrays for Multistage Complementary Logic and Ring Oscillators. <i>Nano Letters</i> , 2002, 2, 929-932.	9.1	325
4	Hydrogen Sensing Using Pd-Functionalized Multi-Layer Graphene Nanoribbon Networks. <i>Advanced Materials</i> , 2010, 22, 4877-4880.	21.0	313
5	Electric-field-aligned growth of single-walled carbon nanotubes on surfaces. <i>Applied Physics Letters</i> , 2002, 81, 3464-3466.	3.3	280
6	Metal-semiconductor-metal photodetectors based on graphene/ <i>p</i> -type silicon Schottky junctions. <i>Applied Physics Letters</i> , 2013, 102, .	3.3	191
7	Fractional contributions of microscopic diffusion mechanisms for common dopants and self-diffusion in silicon. <i>Journal of Applied Physics</i> , 1999, 85, 6440-6446.	2.5	162
8	Self-Diffusion in Silicon: Similarity between the Properties of Native Point Defects. <i>Physical Review Letters</i> , 1999, 83, 3454-3457.	7.8	138
9	Effects of nanotube alignment and measurement direction on percolation resistivity in single-walled carbon nanotube films. <i>Journal of Applied Physics</i> , 2007, 102, .	2.5	136
10	Room temperature hydrogen detection using Pd-coated GaN nanowires. <i>Applied Physics Letters</i> , 2008, 93, .	3.3	91
11	Hydrogen sensing with Pt-functionalized GaN nanowires. <i>Sensors and Actuators B: Chemical</i> , 2009, 140, 196-199.	7.8	82
12	Computational study of geometry-dependent resistivity scaling in single-walled carbon nanotube films. <i>Physical Review B</i> , 2007, 75, .	3.2	81
13	A computational study of tunneling-percolation electrical transport in graphene-based nanocomposites. <i>Applied Physics Letters</i> , 2009, 95, .	3.3	81
14	Nitride and oxide semiconductor nanostructured hydrogen gas sensors. <i>Semiconductor Science and Technology</i> , 2010, 25, 024002.	2.0	68
15	Resistivity scaling in single-walled carbon nanotube films patterned to submicron dimensions. <i>Applied Physics Letters</i> , 2006, 89, 093107.	3.3	53
16	Experimental characterization of single-walled carbon nanotube film-Si Schottky contacts using metal-semiconductor-metal structures. <i>Applied Physics Letters</i> , 2008, 92, 243116.	3.3	53
17	Nanolithographic patterning of transparent, conductive single-walled carbon nanotube films by inductively coupled plasma reactive ion etching. <i>Journal of Vacuum Science &amp; Technology B</i> , 2007, 25, 348.	1.3	47
18	Electric-field-directed growth of carbon nanotubes in two dimensions. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2004, 22, 3421.	1.6	46

#	ARTICLE	IF	CITATIONS
19	Experimental study of graphitic nanoribbon films for ammonia sensing. Journal of Applied Physics, 2011, 109, .	2.5	45
20	Growth and Characterization of GaN Nanowires for Hydrogen Sensors. Journal of Electronic Materials, 2009, 38, 490-494.	2.2	42
21	Resistivity in percolation networks of one-dimensional elements with a length distribution. Physical Review E, 2009, 79, 012102.	2.1	41
22	Forward-bias diode parameters, electronic noise, and photoresponse of graphene/silicon Schottky junctions with an interfacial native oxide layer. Journal of Applied Physics, 2015, 118, .	2.5	41
23	Experimental evidence for a dual vacancy-interstitial mechanism of self-diffusion in silicon. Applied Physics Letters, 1998, 73, 1706-1708.	3.3	37
24	Metal-semiconductor-metal photodetectors based on single-walled carbon nanotube film-GaAs Schottky contacts. Journal of Applied Physics, 2008, 103, 114315.	2.5	37
25	Optimizing transistor performance of percolating carbon nanotube networks. Applied Physics Letters, 2010, 97, 043111.	3.3	37
26	Transport properties of single-walled carbon nanotube transistors after gamma radiation treatment. Journal of Applied Physics, 2010, 107, .	2.5	36
27	Percolation scaling of $\frac{1}{\sigma} \propto L^{-1}$ and noise in single-walled carbon nanotube films. Physical Review B, 2008, 78, .	3.3	36
28	GaN nanowire and Ga <sub>2</sub> O <sub>3</sub> nanowire and nanoribbon growth from ion implanted iron catalyst. Journal of Vacuum Science & Technology B, 2008, 26, 1841-1847.	1.3	20
29	Single-walled carbon nanotube growth from ion implanted Fe catalyst. Applied Physics Letters, 2006, 89, 153130.	3.3	18
30	Silicon self-diffusion under extrinsic conditions. Applied Physics Letters, 2001, 79, 4328-4330.	3.3	17
31	Characterization of carbon nanotube film-silicon Schottky barrier photodetectors. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2012, 30, .	1.2	17
32	Field-emission properties of individual GaN nanowires grown by chemical vapor deposition. Journal of Applied Physics, 2012, 111, .	2.5	16
33	Effect of nanowire curviness on the percolation resistivity of transparent, conductive metal nanowire networks. Journal of Applied Physics, 2018, 123, .	2.5	16
34	Temperature-dependent transport and $\frac{1}{\sigma} \propto L^{-1}$ noise mechanisms in single-walled carbon nanotube films. Physical Review B, 2010, 81, .	3.3	16
35	Electronic Transport in Graphitic Nanoribbon Films. ACS Nano, 2011, 5, 1617-1622.	14.6	13
36	Patterned growth of silicon oxide nanowires from iron ion implanted SiO <sub>2</sub> substrates. Nanotechnology, 2009, 20, 135307.	2.6	12

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37	Electronic properties of metal-semiconductor and metal-oxide-semiconductor structures composed of carbon nanotube film on silicon. Applied Physics Letters, 2010, 97, 233105.	3.3	12
38	Gate tunneling current and quantum capacitance in metal-oxide-semiconductor devices with graphene gate electrodes. Applied Physics Letters, 2016, 109, .	3.3	12
39	Effect of junction-to-nanowire resistance ratio on the percolation conductivity and critical exponents of nanowire networks. Journal of Applied Physics, 2020, 128, .	2.5	12
40	Localized Growth of Carbon Nanotubes on CMOS Substrate at Room Temperature Using Maskless Post-CMOS Processing. IEEE Nanotechnology Magazine, 2012, 11, 16-20.	2.0	11
41	Ural, Griffin, and Plummer Reply:. Physical Review Letters, 2000, 85, 4836-4836.	7.8	9
42	Random telegraph signal and $1/f$ noise in forward-biased single-walled carbon nanotube film-silicon Schottky junctions. Applied Physics Letters, 2012, 100, .	3.3	9
43	Atomic-scale diffusion mechanisms via intermediate species. Physical Review B, 2002, 65, .	3.2	8
44	Nonequilibrium experiments on self-diffusion in silicon at low temperatures using isotopically enriched structures. Physica B: Condensed Matter, 1999, 273-274, 512-515.	2.7	6
45	Noise spectroscopy of transport properties in carbon nanotube field-effect transistors. Carbon, 2013, 53, 252-259.	10.3	5
46	Micromachined silicon transmission electron microscopy grids for direct characterization of as-grown nanotubes. Nanotechnology, 2006, 17, 4635-4639.	2.6	3
47	Modeling and Measurements of Low Frequency Noise in Single-Walled Carbon Nanotube Films with Bulk and Percolation Configurations. , 2009, , .		2
48	Electronic Properties of Carbon Nanotube Percolation Films and Nanotube Film-Semiconductor Junctions. ECS Transactions, 2009, 19, 43-54.	0.5	1
49	Characterization of the metal-semiconductor and metal-insulator-semiconductor junctions between single-walled carbon nanotube films and Si substrates. , 2010, , .		1
50	Characterization of Graphene Gate Electrodes for Metal-Oxide-Semiconductor Devices. MRS Advances, 2017, 2, 103-108.	0.9	1
51	Computational Study of the Curviness Percolation Threshold in Nanotube/Nanowire Networks for Flexible and Transparent Conductors. ECS Meeting Abstracts, 2021, MA2021-01, 565-565.	0.0	1
52	Experimental Study of Self-Diffusion in Silicon Using Isotopically Enriched Structures. Materials Research Society Symposia Proceedings, 1999, 568, 97.	0.1	0
53	What Does Self-Diffusion Tell Us about Ultra Shallow Junctions?. Materials Research Society Symposia Proceedings, 2000, 610, 4111.	0.1	0
54	Carbon Nanotube Growth from Nanoscale Clusters Formed by Ion Implantation. Materials Research Society Symposia Proceedings, 2005, 908, 1.	0.1	0

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55	Micromachined Silicon Grids for Direct TEM Characterization of Carbon Nanotubes Grown by CVD. Materials Research Society Symposia Proceedings, 2006, 963, 1.	0.1	0
56	Geometry Dependent Resistivity in Single-walled Carbon Nanotube Films Patterned Down to Submicron Dimensions. Materials Research Society Symposia Proceedings, 2006, 963, 1.	0.1	0
57	Metal-Semiconductor-Metal (MSM) Photodetectors Based on Single-walled Carbon Nanotube Film-GaAs Schottky Contacts. Materials Research Society Symposia Proceedings, 2007, 1057, 1.	0.1	0
58	Defect Noise Spectroscopy Results for GaN Nanowires. , 2009, , .		0
59	Ion Implanted SiO <sub>2</sub> Substrates for Nucleating Silicon Oxide Nanowire Growth. Materials Research Society Symposia Proceedings, 2009, 1181, 90.	0.1	0
60	Characterization and modeling of low frequency noise in single-walled carbon nanotube film-based devices. , 2009, , .		0
61	(Invited) Effect of Junction Resistance on the Percolation Conductivity of Metal Nanowire Networks for Transparent Conductors. ECS Meeting Abstracts, 2019, , .	0.0	0