Ant Ural

List of Publications by Year
in descending order

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	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
2	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
3	(Invited) Effect of Junction Resistance on the Percolation Conductivity of Metal Nanowire Networks for Transparent Conductors. ECS Meeting Abstracts, 2019, , .	0.0	0
4	Effect of nanowire curviness on the percolation resistivity of transparent, conductive metal nanowire networks. Journal of Applied Physics, 2018, 123, .	2.5	16
5	Characterization of Graphene Gate Electrodes for Metal-Oxide-Semiconductor Devices. MRS Advances, 2017, 2, 103-108.	0.9	1
6	Gate tunneling current and quantum capacitance in metal-oxide-semiconductor devices with graphene gate electrodes. Applied Physics Letters, 2016, 109, .	3.3	12
7	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
8	Noise spectroscopy of transport properties in carbon nanotube field-effect transistors. Carbon, 2013, 53, 252-259.	10.3	5
9	Metal-semiconductor-metal photodetectors based on graphene/<i>p</i>-type silicon Schottky junctions. Applied Physics Letters, 2013, 102, .	3.3	191
10	Characterization of carbon nanotube film-silicon Schottky barrier photodetectors. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2012, 30, .	1.2	17
11	Random telegraph signal and 1/<i>f</i> noise in forward-biased single-walled carbon nanotube film-silicon Schottky junctions. Applied Physics Letters, 2012, 100, .	3.3	9
12	Field-emission properties of individual GaN nanowires grown by chemical vapor deposition. Journal of Applied Physics, 2012, 111, .	2.5	16
13	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
14	Experimental study of graphitic nanoribbon films for ammonia sensing. Journal of Applied Physics, 2011, 109, .	2.5	45
15	Electronic Transport in Graphitic Nanoribbon Films. ACS Nano, 2011, 5, 1617-1622.	14.6	13
16	Hydrogen Sensing Using Pdâ€Functionalized Multiâ€Layer Graphene Nanoribbon Networks. Advanced Materials, 2010, 22, 4877-4880.	21.0	313
17	Transport properties of single-walled carbon nanotube transistors after gamma radiation treatment. Journal of Applied Physics, 2010, 107, .	2.5	36
18	Temperature-dependent transport and<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>1</mml:mn><mml:mo>/</mml:mo><mml:mi>f</mml:mi></mml:mrow></mml:math>noise mechanisms in single-walled carbon nanotube films. Physical Review B, 2010, 81, .	3.2	13

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19	Optimizing transistor performance of percolating carbon nanotube networks. Applied Physics Letters, 2010, 97, 043111.	3.3	37
20	Nitride and oxide semiconductor nanostructured hydrogen gas sensors. Semiconductor Science and Technology, 2010, 25, 024002.	2.0	68
21	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
22	Characterization of the metal-semiconductor and metal-insulator-semiconductor junctions between single-walled carbon nanotube films and Si substrates. , 2010, , .		1
23	Resistivity in percolation networks of one-dimensional elements with a length distribution. Physical Review E, 2009, 79, 012102.	2.1	41
24	Defect Noise Spectroscopy Results for GaN Nanowires. , 2009, , .		0
25	Patterned growth of silicon oxide nanowires from iron ion implanted SiO₂substrates. Nanotechnology, 2009, 20, 135307.	2.6	12
26	Modeling and Measurements of Low Frequency Noise in Single-Walled Carbon Nanotube Films with Bulk and Percolation Configurations. , 2009, , .		2
27	Electronic Properties of Carbon Nanotube Percolation Films and Nanotube Film-Semiconductor Junctions. ECS Transactions, 2009, 19, 43-54.	0.5	1
28	Ion Implanted SiO2 Substrates for Nucleating Silicon Oxide Nanowire Growth. Materials Research Society Symposia Proceedings, 2009, 1181, 90.	0.1	0
29	Growth and Characterization of GaN Nanowires for Hydrogen Sensors. Journal of Electronic Materials, 2009, 38, 490-494.	2.2	42
30	Hydrogen sensing with Pt-functionalized GaN nanowires. Sensors and Actuators B: Chemical, 2009, 140, 196-199.	7.8	82
31	A computational study of tunneling-percolation electrical transport in graphene-based nanocomposites. Applied Physics Letters, 2009, 95, .	3.3	81
32	Characterization and modeling of low frequency noise in single-walled carbon nanotube film-based devices. , 2009, , .		0
33	Experimental characterization of single-walled carbon nanotube film-Si Schottky contacts using metal-semiconductor-metal structures. Applied Physics Letters, 2008, 92, 243116.	3.3	53
34	GaN nanowire and Ga2O3 nanowire and nanoribbon growth from ion implanted iron catalyst. Journal of Vacuum Science & Technology B, 2008, 26, 1841-1847.	1.3	20
35	Room temperature hydrogen detection using Pd-coated GaN nanowires. Applied Physics Letters, 2008, 93, .	3.3	91
36	Metal-semiconductor-metal photodetectors based on single-walled carbon nanotube filmâ€“GaAs Schottky contacts. Journal of Applied Physics, 2008, 103, 114315.	2.5	37

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37	Percolation scaling of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>1</mml:mn><mml:mo>/</mml:mo><mml:mi>f</mml:mi></mml:mrow></mml:math>noise in single-walled carbon nanotube films. Physical Review B, 2008, 78, .	3.2	27
38	Nanolithographic patterning of transparent, conductive single-walled carbon nanotube films by inductively coupled plasma reactive ion etching. Journal of Vacuum Science & Technology B, 2007, 25, 348.	1.3	47
39	Computational study of geometry-dependent resistivity scaling in single-walled carbon nanotube films. Physical Review B, 2007, 75, .	3.2	81
40	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
41	Effects of nanotube alignment and measurement direction on percolation resistivity in single-walled carbon nanotube films. Journal of Applied Physics, 2007, 102, .	2.5	136
42	Micromachined silicon transmission electron microscopy grids for direct characterization of as-grown nanotubes. Nanotechnology, 2006, 17, 4635-4639.	2.6	3
43	Micromachined Silicon Grids for Direct TEM Characterization of Carbon Nanotubes Grown by CVD. Materials Research Society Symposia Proceedings, 2006, 963, 1.	0.1	0
44	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
45	Single-walled carbon nanotube growth from ion implanted Fe catalyst. Applied Physics Letters, 2006, 89, 153130.	3.3	18
46	Resistivity scaling in single-walled carbon nanotube films patterned to submicron dimensions. Applied Physics Letters, 2006, 89, 093107.	3.3	53
47	Carbon Nanotube Growth from Nanoscale Clusters Formed by Ion Implantation. Materials Research Society Symposia Proceedings, 2005, 908, 1.	0.1	0
48	Electric-field-directed growth of carbon nanotubes in two dimensions. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2004, 22, 3421.	1.6	46
49	Preferential Growth of Semiconducting Single-Walled Carbon Nanotubes by a Plasma Enhanced CVD Method. Nano Letters, 2004, 4, 317-321.	9.1	485
50	Atomic-scale diffusion mechanisms via intermediate species. Physical Review B, 2002, 65, .	3.2	8
51	Carbon Nanotube Transistor Arrays for Multistage Complementary Logic and Ring Oscillators. Nano Letters, 2002, 2, 929-932.	9.1	325
52	Electric-field-aligned growth of single-walled carbon nanotubes on surfaces. Applied Physics Letters, 2002, 81, 3464-3466.	3.3	280
53	High-Îº dielectrics for advanced carbon-nanotube transistors and logic gates. Nature Materials, 2002, 1, 241-246.	27.5	928
54	Silicon self-diffusion under extrinsic conditions. Applied Physics Letters, 2001, 79, 4328-4330.	3.3	17

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55	What Does Self-Diffusion Tell Us about Ultra Shallow Junctions?. Materials Research Society Symposia Proceedings, 2000, 610, 4111.	0.1	0
56	Ural, Griffin, and Plummer Reply:. Physical Review Letters, 2000, 85, 4836-4836.	7.8	9
57	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
58	Self-Diffusion in Silicon: Similarity between the Properties of Native Point Defects. Physical Review Letters, 1999, 83, 3454-3457.	7.8	138
59	Fractional contributions of microscopic diffusion mechanisms for common dopants and self-diffusion in silicon. Journal of Applied Physics, 1999, 85, 6440-6446.	2.5	162
60	Experimental Study of Self-Diffusion in Silicon Using Isotopically Enriched Structures. Materials Research Society Symposia Proceedings, 1999, 568, 97.	0.1	0
61	Experimental evidence for a dual vacancyâ€“interstitial mechanism of self-diffusion in silicon. Applied Physics Letters, 1998, 73, 1706-1708.	3.3	37