

Sanatan Chattoapadhyay

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6720621/publications.pdf>

Version: 2024-02-01

174
papers

2,767
citations

218592

26
h-index

254106

43
g-index

178
all docs

178
docs citations

178
times ranked

2394
citing authors

#	ARTICLE	IF	CITATIONS
1	Lac-extract doped polyaniline nano-ribbons as fluorescence sensor and molecular switch for detection of aqueous AsO ₄ ³⁻ and Fe ³⁺ contaminants. Journal of Photochemistry and Photobiology A: Chemistry, 2022, 431, 114000.	2.0	1
2	Yttrium (Y) doped ZnO nanowire/p-Si heterojunction devices for efficient self-powered UV-sensing applications. Vacuum, 2022, 202, 111214.	1.6	17
3	A diagrammatic approach of impedimetric phase angle-modulus sensing for identification and quantification of various polar and non-polar/ionic adulterants in milk. LWT - Food Science and Technology, 2021, 136, 110347.	2.5	5
4	Band splitting induced by momentum-quantization in semiconductor nanostructures: Observation of emission lines in Indium Phosphide (InP) nanotubes. Physics Letters, Section A: General, Atomic and Solid State Physics, 2021, 388, 127056.	0.9	5
5	Impact of surface defects in electron beam evaporated ZnO thin films on FET biosensing characteristics towards reliable PSA detection. Applied Surface Science, 2021, 537, 147895.	3.1	18
6	Impact of seed layer annealing on the optoelectronic properties of double-step CBD grown n-ZnO nanowires/p-Si heterojunctions. Optik, 2021, 228, 166141.	1.4	4
7	Fabrication and Characterization of Zinc Oxide Nanowire Based Two-electrode Capacitive Biosensors on Flexible Substrates for Estimating Glucose Content in a Sample. Electroanalysis, 2021, 33, 1185-1193.	1.5	7
8	Design and Modeling of High-Efficiency GaAs -Nanowire Metal-Oxide-Semiconductor Solar Cells beyond the Shockley-Queisser Limit: An NEGF Approach. Physical Review Applied, 2021, 15, .	1.5	6
9	Entangled electron-photon pair production by channel-exchange in high-energy Compton scattering. Quantum Information Processing, 2021, 20, 1.	1.0	0
10	Voltage-Tunable Quantum-Dot Array by Patterned Ge -Nanowire-Based Metal-Oxide-Semiconductor Devices. Physical Review Applied, 2021, 15, .	1.5	7
11	Site disorder and its tailoring in N implanted post-annealed ZnO: Prospects and problems. Materials Science in Semiconductor Processing, 2021, 135, 106068.	1.9	3
12	Low Frequency Impedimetric Cell Counting: Analytical Modeling and Measurements. Irbm, 2020, 41, 23-30.	3.7	6
13	Investigating the impact of thermal annealing on the photovoltaic performance of chemical bath deposited SnO ₂ /p-Si heterojunction solar cells. Microsystem Technologies, 2020, 26, 1351-1358.	1.2	4
14	Selective sensing of dopamine by sodium cholate tailored polypyrrole-silver nanocomposite. Synthetic Metals, 2020, 260, 116296.	2.1	25
15	Electrically isolated buried electrode biosensor for detecting folic acid concentration. , 2020, , .		0
16	Enhanced self-powered ultraviolet photoresponse of ZnO nanowires/p-Si heterojunction by selective in-situ Ga doping. Optical Materials, 2020, 105, 109928.	1.7	21
17	On-chip estimation of hematocrit level for diagnosing anemic conditions by Impedimetric techniques. Biomedical Microdevices, 2020, 22, 38.	1.4	10
18	Utilization of nanoporous biosilica of diatoms as a potential source material for fabrication of nanoelectronic device and their characterization. Journal of Applied Phycology, 2020, 32, 3041-3049.	1.5	4

#	ARTICLE	IF	CITATIONS
19	Optical and electronic properties of chemical bath deposited p-CuO and n-ZnO nanowires on silicon substrates: p-CuO/n-ZnO nanowires solar cells with high open-circuit voltage and short-circuit current. <i>Thin Solid Films</i> , 2020, 699, 137861.	0.8	32
20	Investigation on the Effects of Substrate, Back-Gate Bias and Front-Gate Engineering on the Performance of DMTFET-Based Biosensors. <i>IEEE Sensors Journal</i> , 2020, 20, 10405-10414.	2.4	16
21	Investigating the impact of growth time on the electrical performance of vapour-liquid-solid (VLS) grown Ge/n-Si hetero-junction. , 2020, , .		0
22	Growth of ZnSnO ₃ nano-crystalloids on Si substrate by employing chemical bath deposition (CBD) technique for self-powered UV-light sensing applications. , 2020, , .		0
23	Comparative study for the impedimetric detection and quantification of adulterants in different bio-consumables. , 2020, , .		0
24	Investigation of density and alignment of ZnO-nanowires grown by double-step chemical bath deposition (CBD/CBD) technique on metallic, insulating and semiconducting substrates. , 2020, , .		0
25	Study of Optical and Electrical Characteristics of chemically extracted Lotus and Taro Bio-Wax for Hydrophobic Surface Engineering. , 2019, , .		2
26	Catalyst-modified vapor-liquid-solid (VLS) growth of single crystalline ³ Gallium Oxide (Ga ₂ O ₃) thin film on Si-substrate. <i>Superlattices and Microstructures</i> , 2019, 136, 106316.	1.4	12
27	Quantitative estimation of soda ash as an adulterant in aqueous sucrose solution by employing electrical impedance and capacitance spectroscopy. <i>Measurement: Journal of the International Measurement Confederation</i> , 2019, 148, 106937.	2.5	7
28	Impedimetric Approach for Estimating the Presence of Metanil Yellow in Turmeric Powder from Tunable Capacitance Measurement. <i>Food Analytical Methods</i> , 2019, 12, 1017-1027.	1.3	14
29	Graphene-nanoparticle incorporated responsivity tuning of p-CuO/n-Si-based heterojunction photodetectors. <i>Bulletin of Materials Science</i> , 2019, 42, 1.	0.8	2
30	Generation of oxygen interstitials with excess in situ Ga doping in chemical bath deposition process for the growth of p-type ZnO nanowires. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 8796-8804.	1.1	25
31	Understanding the electrostatics of top-electrode vertical quantized Si nanowire metal-insulator-semiconductor (MIS) structures for future nanoelectronic applications. <i>Journal of Computational Electronics</i> , 2019, 18, 465-472.	1.3	5
32	Green synthesis of cadmium oxide decorated reduced graphene oxide nanocomposites and its electrical and antibacterial properties. <i>Materials Science and Engineering C</i> , 2019, 99, 696-709.	3.8	62
33	Investigating the chemical bath deposited n-SnO ₂ /p-Si heterojunction devices for optoelectronic applications. , 2019, , .		0
34	Formation of High-Pressure Phase of Titanium Dioxide (TiO ₂) Thin Films by Vapor-Liquid-Solid Growth Process on GaAs Substrate. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2019, 216, 1800640.	0.8	8
35	Investigation of the performance of strain-engineered silicon nanowire field effect transistors (É-Si-NWFET) on IOS substrates. <i>Journal of Applied Physics</i> , 2019, 125, .	1.1	12
36	Designing InP-Nanowire Based Vertical Metal-Oxide-Semiconductor Capacitors for Wavelength Selective Visible Light Sensing. <i>Springer Proceedings in Physics</i> , 2019, , 957-962.	0.1	0

#	ARTICLE	IF	CITATIONS
37	Optical Analysis Authenticated Electrical Impedance Based Quantification of Aqueous Naphthalene. Brazilian Journal of Analytical Chemistry, 2019, 5, 30-39.	0.3	0
38	Optical Analysis Authenticated Electrical Impedance Based Quantification of Aqueous Naphthalene. Brazilian Journal of Analytical Chemistry, 2019, 5, 30-39.	0.3	0
39	Raman spectroscopic analysis on Li, N and (Li,N) implanted ZnO. Materials Science in Semiconductor Processing, 2018, 80, 111-117.	1.9	30
40	Ultrathin Vapor-Phase Liquid-Solid Grown Titanium Dioxide-II Film on Bulk GaAs Substrates for Advanced Metal-Oxide-Semiconductor Device Applications. IEEE Transactions on Electron Devices, 2018, 65, 1466-1472.	1.6	18
41	Tuning of transport properties of the double-step chemical bath deposition grown zinc oxide (ZnO) nanowires by controlled annealing: An approach to generate p-type ZnO nanowires. Thin Solid Films, 2018, 649, 129-135.	0.8	9
42	Clustered vacancies in ZnO: chemical aspects and consequences on physical properties. Journal Physics D: Applied Physics, 2018, 51, 105107.	1.3	40
43	Investigation of the comparative photovoltaic performance of n-ZnO nanowire/p-Si and n-ZnO nanowire/p-CuO heterojunctions grown by chemical bath deposition method. Optik, 2018, 164, 745-752.	1.4	24
44	Fraction of Insertion of the Channel Fin as Performance Booster in Strain-Engineered p-FinFET Devices With Insulator-on-Silicon Substrate. IEEE Transactions on Electron Devices, 2018, 65, 411-418.	1.6	13
45	Bio-dielectric variation as a signature of shape alteration and lysis of human erythrocytes: An on-chip analysis. , 2018, , .		7
46	Biosurfactant tailored synthesis of porous polypyrrole nanostructures: A facile approach towards CO ₂ adsorption and dopamine sensing. Synthetic Metals, 2018, 245, 209-222.	2.1	21
47	Bioelectronics at graphene-biofilm interface: Schottky junction formation and capacitive transitions. Medical Devices & Sensors, 2018, 1, e10013.	2.7	3
48	Incorporation of Tensile and Compressive Channel Stress by Modulating SiGe Stressor Length in Embedded Source/Drain Si-FinFET Architecture. , 2018, , .		2
49	Suppression of Ge-based defects and auto-doping of p-type epitaxial GaAs by employing Al _{0.3} Ga _{0.7} As bi-layer buffer. Journal of Alloys and Compounds, 2018, 765, 994-1002.	2.8	1
50	Chemical bath deposited n-ZnO nanostructures on p-Si substrate for photo-detecting applications: Impact of annealing temperature. , 2018, , .		0
51	Film thickness dependent photovoltaic performance investigation of p-CuO/n-Si heterojunctions grown by chemical bath deposition process. , 2018, , .		0
52	On-chip detection and quantification of soap as an adulterant in milk employing electrical impedance spectroscopy. , 2018, , .		12
53	Optimization of electron beam dose for reliable nanoscale growth template formation in electron beam lithography system. , 2018, , .		1
54	Optimizing the thermal annealing temperature: technological route for tuning the photo-detecting property of p-CuO thin films grown by chemical bath deposition method. Journal of Materials Science: Materials in Electronics, 2018, 29, 12878-12887.	1.1	25

#	ARTICLE	IF	CITATIONS
55	Energy band-structure estimation of semiconductor nanotubes with consideration of momentum space quantization. , 2018, , .		0
56	Investigation of process induced stress in the channel of a SiGe embedded source/drain Ge-FinFET architecture. , 2018, , .		2
57	Comparative investigation of Ga- and Sn-doped ZnO nanowires/p-Si heterojunctions for UV-photo sensing. , 2018, , .		2
58	Selective strain incorporation and retention into Si-substrate through VLS growth of TiO ₂ nano-islands. Materials Research Express, 2017, 4, 025005.	0.8	6
59	FT-MIR supported Electrical Impedance Spectroscopy based study of sugar adulterated honeys from different floral origin. Talanta, 2017, 171, 327-334.	2.9	44
60	Analytical modelling of electrical impedance based adulterant sensor for aqueous sucrose solutions. Journal of Electroanalytical Chemistry, 2017, 784, 133-139.	1.9	21
61	A technique to incorporate both tensile and compressive channel stress in Ge FinFET architecture. Journal of Computational Electronics, 2017, 16, 620-630.	1.3	10
62	A Device Simulation-Based Investigation on Dielectrically Modulated Fringing Field-Effect Transistor for Biosensing Applications. IEEE Sensors Journal, 2017, 17, 1399-1406.	2.4	18
63	Chemical bath deposited (CBD) CuO thin films on n-silicon substrate for electronic and optical applications: Impact of growth time. Applied Surface Science, 2017, 418, 380-387.	3.1	69
64	Analytical modeling of the lattice and thermo-elastic coefficient mismatch-induced stress into silicon nanowires horizontally embedded on insulator-on-silicon substrates. Superlattices and Microstructures, 2017, 101, 384-396.	1.4	15
65	Electrical Characterization of n-ZnO NW/p-CuO Thin Film Hetero-Junction Solar Cell Grown by Chemical Bath Deposition and Vapor Liquid Solid Technique with Varying Reaction Time. Springer Proceedings in Physics, 2017, , 165-171.	0.1	0
66	Dielectric properties of plasma membrane: A signature for dyslipidemia in diabetes mellitus. Archives of Biochemistry and Biophysics, 2017, 635, 27-36.	1.4	14
67	Single In _x Ga _{1-x} As nanowire/p-Si heterojunction based nano-rectifier diode. Nanotechnology, 2017, 28, 385202.	1.3	9
68	Design and Investigation on Bioinverter and Bioring-Oscillator for Dielectrically Modulated Biosensing Applications. IEEE Nanotechnology Magazine, 2017, 16, 974-981.	1.1	2
69	A comparative study on the performance of RESET based electro-thermal process in ring shaped confined Ge ₂ Sb ₂ Te ₅ and Ge ₁ Cu ₂ Te ₃ chalcogenide memory structures. Materials Today Communications, 2017, 13, 325-331.	0.9	5
70	Removal of oxygen related defects from chemically synthesized In ₂ O ₃ thin film doped with Er by spin-on technique. Journal of Alloys and Compounds, 2017, 695, 1260-1265.	2.8	23
71	Analytical modeling to design the vertically aligned Si-nanowire metal-oxide-semiconductor photosensors for direct color sensing with high spectral resolution. Physica E: Low-Dimensional Systems and Nanostructures, 2017, 87, 44-50.	1.3	6
72	Effect of prolonged growth on the chemical bath deposited ZnO nanowires and consequent photovoltaic performance of n-ZnO NWs/p-CuO heterojunction solar cells. Materials Today: Proceedings, 2017, 4, 12496-12499.	0.9	3

#	ARTICLE	IF	CITATIONS
73	Efficiency enhancement of p-CuO/n-Si heterojunction solar cells: Impact of annealing on the photovoltaic properties of Vapour-Liquid-Solid (VLS) grown ultra-thin CuO film. <i>Materials Today: Proceedings</i> , 2017, 4, 12694-12697.	0.9	3
74	Thermal annealing of CBD-grown p-CuO/n-ZnO seeds and its impact on the performance of p-CuO/n-ZnO nanowire based heterojunction photo-detectors. , 2017, , .		0
75	Tuning the optical properties of p-CuO films by Graphene incorporation for superior p-CuO/n-Si heterojunction photo-detector performance. , 2017, , .		1
76	Analytical Modeling of Vertically Oriented Standalone Si-Nanowire Metal-Oxide-Semiconductor Capacitors for Wavelength Selective Near-Infrared Sensing Applications. <i>Springer Proceedings in Physics</i> , 2017, , 173-179.	0.1	0
77	Investigating the Growth-Time Dependent Comparative Performance of Vapour-Liquid-Solid (VLS) Grown p-CuO/n-Si Thin Film Hetero-Junction Solar Cells. <i>Springer Proceedings in Physics</i> , 2017, , 157-164.	0.1	2
78	An analysis of the growth of silver catalyzed In _x Ga _{1-x} As nanowires on Si (100) by metal organic chemical vapor deposition. <i>Journal of Applied Physics</i> , 2016, 120, 084309.	1.1	2
79	Physical and electrical characterization of reduced graphene oxide synthesized adopting green route. <i>Bulletin of Materials Science</i> , 2016, 39, 543-550.	0.8	26
80	Study and Analysis of the Effects of SiGe Source and Pocket-Doped Channel on Sensing Performance of Dielectrically Modulated Tunnel FET-Based Biosensors. <i>IEEE Transactions on Electron Devices</i> , 2016, 63, 2589-2596.	1.6	141
81	Temperature-dependent electrical characteristics of CBD/CBD grown n-ZnO nanowire/p-Si heterojunction diodes. <i>Journal Physics D: Applied Physics</i> , 2016, 49, 145105.	1.3	11
82	Modeling and estimation of process-induced stress in the nanowire field-effect-transistors (NW-FETs) on Insulator-on-Silicon substrates with high-k gate-dielectrics. <i>Superlattices and Microstructures</i> , 2016, 98, 194-202.	1.4	14
83	Unusual impact of electron-phonon scattering in Si nanowire field-effect-transistors: A possible route for energy harvesting. <i>Superlattices and Microstructures</i> , 2016, 97, 548-555.	1.4	5
84	Investigating the performance of SiGe embedded dual source p-FinFET architecture. <i>Superlattices and Microstructures</i> , 2016, 98, 37-45.	1.4	0
85	Self-powered rapid binary UV photoswitching with n-ZnO NW/p-Si photodiode. , 2016, , .		2
86	Characterization of nano-powder grown ultra-thin film p-CuO/n-Si hetero-junctions by employing vapour-liquid-solid method for photovoltaic applications. <i>Thin Solid Films</i> , 2016, 612, 331-336.	0.8	30
87	Synthesis and characterization of graphene from waste dry cell battery for electronic applications. <i>RSC Advances</i> , 2016, 6, 10557-10564.	1.7	69
88	An optoelectronic band-to-band tunnel transistor for near-infrared sensing applications: Device physics, modeling, and simulation. <i>Journal of Applied Physics</i> , 2016, 120, .	1.1	10
89	Impact Of Oxygen Diffusion On The Performance Of HfO ₂ /GaAs Metal-Oxide-Semiconductor Field-Effect-Transistors. <i>Advanced Materials Letters</i> , 2016, 7, 123-129.	0.3	4
90	Investigation Of The Properties Of Single-step And Double-step Grown ZnO Nanowires Using Chemical Bath Deposition Technique. <i>Advanced Materials Letters</i> , 2016, 7, 610-615.	0.3	20

#	ARTICLE	IF	CITATIONS
91	Copper Oxide Nano-particles Film On Glass By Using Sputter And Chemical Bath Deposition Technique. Advanced Materials Letters, 2016, 7, 600-603.	0.3	7
92	Analyzing The Quasi-oscillatory Nature Of Electrical Parameters With The Concentration Of Sucrose In Aqueous Solution At Room Temperature. Advanced Materials Proceedings, 2016, 1, 25-31.	0.2	1
93	Investigation of oxygen vacancy induced resistive switching memory behavior in low-temperature grown n-ZnO/p-Si heterojunction diode. , 2016, , 225-230.		0
94	Studying the comparative performance of p-CuO/n-Si thin film hetero-junction solar cells grown by chemical bath deposition and vapor liquid solid processes. , 2016, , 221-224.		2
95	Process-induced strain engineering in the silicon-on-sapphire (SOS) fin field effect transistor (FinFET) channels. , 2015, , .		1
96	Performance investigation of n-ZnO nanowire/p-CuO thin film heterojunction solar cell grown by chemical bath deposition and vapour liquid solid technique. , 2015, , .		1
97	Investigating the performance of Short Gate Insulator Less Dielectrically Modulated Tunnel Field Effect Transistor based bio-sensors. , 2015, , .		5
98	Physical and electrochemical characterization of reduced graphene oxide/silver nanocomposites synthesized by adopting a green approach. RSC Advances, 2015, 5, 25357-25364.	1.7	63
99	Comparative Performance Analysis of the Dielectrically Modulated Full- Gate and Short-Gate Tunnel FET-Based Biosensors. IEEE Transactions on Electron Devices, 2015, 62, 994-1001.	1.6	151
100	A Novel Photosensitive Tunneling Transistor for Near-Infrared Sensing Applications: Design, Modeling, and Simulation. IEEE Transactions on Electron Devices, 2015, 62, 1516-1523.	1.6	7
101	Silver catalyzed growth of In _x Ga _{1-x} As nanowires on Si(001) by metal-organic chemical vapor deposition. CrystEngComm, 2015, 17, 8519-8528.	1.3	10
102	Defect driven ferromagnetism in SnO ₂ : a combined study using density functional theory and positron annihilation spectroscopy. RSC Advances, 2015, 5, 1148-1152.	1.7	35
103	Investigating the quasi-oscillatory behavior of electrical parameters with the concentration of D-glucose in aqueous solution. Journal of Electrical Bioimpedance, 2015, 6, 10-17.	0.5	16
104	Investigating the impact of source/drain doping dependent effective masses on the transport characteristics of ballistic Si-nanowire field-effect-transistors. Journal of Applied Physics, 2014, 115, 124502.	1.1	13
105	Investigation of the electrical switching and rectification characteristics of a single standalone n-type ZnO-nanowire/p-Si junction diode. Applied Physics Letters, 2014, 105, 083106.	1.5	17
106	Effect of band alignment on photoluminescence and carrier escape from InP surface quantum dots grown by metalorganic chemical vapor deposition on Si. Journal of Applied Physics, 2014, 115, 043101.	1.1	2
107	Poloxamer and gelatin gel guided polyaniline nanofibers: synthesis and characterization. Polymer International, 2014, 63, 1505-1512.	1.6	17
108	Green synthesis of silver nanoparticles-based nanofluids and investigation of their antimicrobial activities. Microfluidics and Nanofluidics, 2014, 16, 541-551.	1.0	39

#	ARTICLE	IF	CITATIONS
109	Post Optimization of a Clock Tree for Dynamic Clock Tree Power Reduction in 45 nm and Below Technology Nodes. Journal of Low Power Electronics, 2014, 10, 32-37.	0.6	1
110	Surface defects induced ferromagnetism in mechanically milled nanocrystalline ZnO. Journal of Applied Physics, 2013, 114, .	1.1	33
111	Defects in 700keV oxygen ion irradiated ZnO. Nuclear Instruments & Methods in Physics Research B, 2013, 311, 20-26.	0.6	18
112	Surface Passivation and Interface Properties of Bulk GaAs and Epitaxial-GaAs/Ge Using Atomic Layer Deposited TiAlO Alloy Dielectric. ACS Applied Materials & Interfaces, 2013, 5, 949-957.	4.0	25
113	Structural modification by Li ³⁺ ion irradiation and intrinsic magnetic properties of un-irradiated and Li ³⁺ irradiated Zn _{0.96} Mn _{0.04} O samples. Journal of Alloys and Compounds, 2013, 573, 76-82.	2.8	15
114	<i>In situ</i> fabrication of polyaniline-silver nanocomposites using soft template of sodium alginate. Journal of Applied Polymer Science, 2013, 129, 3551-3557.	1.3	18
115	Synthesis of HPMC stabilized nickel nanoparticles and investigation of their magnetic and catalytic properties. Carbohydrate Polymers, 2013, 98, 80-88.	5.1	25
116	Investigation of the Role of Aspect Ratio for the Design of Si-Nanowire Field-Effect-Transistors in Ballistic Regime. Nanoscience and Nanotechnology Letters, 2013, 5, 1087-1090.	0.4	5
117	Estimation of step-by-step induced stress in a sequential process integration of nano-scale SOS MOSFETs with high- κ gate dielectrics. Semiconductor Science and Technology, 2013, 28, 125011.	1.0	26
118	Optical and electrical characterization of atomic layer deposited (ALD) HfO ₂ /p-GaAs MOS capacitors. , 2012, , .		1
119	A study on the performance of stress induced p-channel MOSFETs with embedded Si _{1-x} Ge _x source/drain. , 2012, , .		1
120	Optimization of cross-sectional aspect ratio of ballistic Si nanobar MOSFETs for superior current-voltage characteristics. , 2012, , .		0
121	Characterization of epitaxial GaAs MOS capacitors using atomic layer-deposited TiO ₂ /Al ₂ O ₃ gate stack: study of Ge auto-doping and p-type Zn doping. Nanoscale Research Letters, 2012, 7, 99.	3.1	13
122	Optical property modification of ZnO: Effect of 1.2 MeV Ar irradiation. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 512-515.	0.8	13
123	Interplay of defects in 1.2 MeV Ar irradiated ZnO. Journal of Applied Physics, 2010, 107, .	1.1	43
124	Extraction of Exact Layer Thickness of Ultra-thin Gate Dielectrics in Nanoscaled CMOS under Strong Inversion. Journal of Semiconductor Technology and Science, 2010, 10, 100-106.	0.1	0
125	Effect of channel implantation on the design of high frequency nanoscale n-FinFETs. , 2009, , .		1
126	Electrical resistivity peculiarities and positron lifetime in annealed CdO. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 2526-2529.	0.8	2

#	ARTICLE	IF	CITATIONS
127	A comparative study of surface quantization effects in Si and strained-Si MOS structures with ultrathin gate oxides. , 2009, , .		0
128	Effects of Rapid Thermal Annealing Temperature on Performances of Nanoscale FinFETs. Journal of Semiconductor Technology and Science, 2009, 9, 266-272.	0.1	4
129	Statistical modelling of the variation in advanced process technologies using a multi-level partitioned response surface approach. IET Circuits, Devices and Systems, 2008, 2, 451.	0.9	10
130	Impact of strain on the design of low-power high-speed circuits. , 2007, , .		3
131	Impact of Interfacial Nitridation of HfO ₂ High-k Gate Dielectric Stack on 4H-SiC. Materials Research Society Symposia Proceedings, 2007, 996, 1.	0.1	0
132	A Semianalytical Description of the Hole Band Structure in Inversion Layers for the Physically Based Modeling of pMOS Transistors. IEEE Transactions on Electron Devices, 2007, 54, 2164-2173.	1.6	41
133	Modeling of the Threshold Voltage in Strained $\text{Si}_{1-x}\text{Ge}_x/\text{Si}_{1-y}\text{Ge}_y$ CMOS Architectures. IEEE Transactions on Electron Devices, 2007, 54, 3040-3048.	1.6	17
134	Rapid thermal oxidation of Ge-rich Si _{1-x} Ge _x heterolayers. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2006, 24, 84-90.	0.9	11
135	Prediction of barrier inhomogeneities and carrier transport in Ni-silicided Schottky diode. Applied Surface Science, 2006, 252, 3933-3937.	3.1	4
136	Impact of Ge content on the gate oxide reliability of strained-Si/SiGe MOS devices. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2006, 135, 207-209.	1.7	5
137	High temperature characterization of high- $\hat{\rho}$ dielectrics on SiC. Materials Science in Semiconductor Processing, 2006, 9, 1133-1136.	1.9	16
138	Reliability study of ultra-thin gate oxides on strained-Si/SiGe MOS structures. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2006, 135, 203-206.	1.7	8
139	Determination of the interface properties of Ni-silicided strained-Si/SiGe heterostructure Schottky diodes using capacitance-voltage technique. Solid-State Electronics, 2006, 50, 1269-1275.	0.8	13
140	Effect of silicidation on the electrical characteristics of polycrystalline-SiGe Schottky diode. Thin Solid Films, 2006, 504, 86-90.	0.8	2
141	Surface roughness and interface engineering for gate dielectrics on strained layers. Journal of Materials Science: Materials in Electronics, 2006, 17, 711-722.	1.1	3
142	Doubling speed using strained Si/SiGe CMOS technology. Thin Solid Films, 2006, 508, 338-341.	0.8	2
143	Impact of strained-Si thickness and Ge out-diffusion on gate oxide quality for strained-Si surface channel n-MOSFETs. IEEE Transactions on Electron Devices, 2006, 53, 1142-1152.	1.6	74
144	Control of Self-Heating in Thin Virtual Substrate Strained Si MOSFETs. IEEE Transactions on Electron Devices, 2006, 53, 2296-2305.	1.6	17

#	ARTICLE	IF	CITATIONS
145	Ge out-diffusion and its Effect on Electrical Properties in s-Si/SiGe Devices. Materials Research Society Symposia Proceedings, 2006, 912, 1.	0.1	1
146	Quantum-mechanical modeling of current-voltage characteristics of Ti-silicided Schottky diodes. Journal of Applied Physics, 2006, 99, 113707.	1.1	2
147	Extraction of strained-Si metal-oxide-semiconductor field-effect transistor parameters using small signal channel conductance method. Journal of Applied Physics, 2006, 99, 034501.	1.1	9
148	Strained silicon technology. , 2006, , .		2
149	Effect of annealing on interface state density of Ni-silicided/Si ^{1-x} Ge ^x Schottky diode. Materials Science in Semiconductor Processing, 2005, 8, 249-253.	1.9	14
150	An investigation of electrical and structural properties of Ni-germanosilicided Schottky diode. Microelectronics Reliability, 2005, 45, 1154-1160.	0.9	0
151	Study of strain relaxation in Si/SiGe metal-oxide-semiconductor field-effect transistors. Journal of Applied Physics, 2005, 97, 114504.	1.1	26
152	Evaluation of strained Si/SiGe material for high performance CMOS. Semiconductor Science and Technology, 2004, 19, 707-714.	1.0	10
153	Impact of Ge diffusion and wafer cross hatching on strained Si MOSFET electrical parameters. Materials Research Society Symposia Proceedings, 2004, 809, B10.5.1.	0.1	0
154	Design, fabrication and characterisation of strained Si ^{1-x} SiGe MOS transistors. IET Circuits, Devices and Systems, 2004, 151, 431.	0.6	22
155	Optimization of Alloy Composition for High-Performance Strained-Si ^{1-x} SiGe N-Channel MOSFETs. IEEE Transactions on Electron Devices, 2004, 51, 1156-1163.	1.6	20
156	Thermal oxidation of strained Si/SiGe: impact of surface morphology and effect on MOS devices. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2004, 109, 78-84.	1.7	13
157	Strained Si MOSFETs on relaxed SiGe platforms: performance and challenges. Solid-State Electronics, 2004, 48, 1407-1416.	0.8	19
158	Contact metallization on strained-Si. Solid-State Electronics, 2004, 48, 1391-1399.	0.8	13
159	Study of Single- and Dual-Channel Designs for High-Performance Strained-Si ^{1-x} SiGe n-MOSFETs. IEEE Transactions on Electron Devices, 2004, 51, 1245-1253.	1.6	33
160	High-performance nMOSFETs using a novel strained Si/SiGe CMOS architecture. IEEE Transactions on Electron Devices, 2003, 50, 1961-1969.	1.6	81
161	A model for capacitance reconstruction from measured lossy MOS capacitance-voltage characteristics. Semiconductor Science and Technology, 2003, 18, 82-87.	1.0	96
162	C-V characterization of strained Si/SiGe multiple heterojunction capacitors as a tool for heterojunction MOSFET channel design. Semiconductor Science and Technology, 2003, 18, 738-744.	1.0	32

#	ARTICLE	IF	CITATIONS
163	Impact of virtual substrate growth on high performance strained Si/SiGe double quantum well metal-oxide-semiconductor field-effect transistors. Journal of Applied Physics, 2003, 94, 6855-6863.	1.1	16
164	Thermal reaction of nickel and Si[sub 0.75]Ge[sub 0.25] alloy. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2002, 20, 1903.	0.9	52
165	Interfacial reactions of Ni on Si1 [~] xGex (x=0.2,â€‰0.3) at low temperature by rapid thermal annealing. Journal of Applied Physics, 2002, 92, 214-217.	1.1	57
166	Photoresponse of Si1 [~] xGex heteroepitaxial p [~] n photodiodes. Solid-State Electronics, 1999, 43, 1741-1745.	0.8	1
167	Determination of interface state density of PtSi/strained-Si1-xGex/Si Schottky diodes. Journal of Materials Science: Materials in Electronics, 1998, 9, 403-407.	1.1	19
168	Extraction of interface state density of Pt/p-strained-Si Schottky diode. Thin Solid Films, 1998, 335, 142-145.	0.8	31
169	Strained-Si heterostructure field effect transistors. Semiconductor Science and Technology, 1998, 13, 1225-1246.	1.0	116
170	Molecular beam epitaxial growth of strained layers on graded for Pt silicide Schottky diodes. Semiconductor Science and Technology, 1998, 13, 214-219.	1.0	7
171	Pt/p-strained-Si Schottky diode characteristics at low temperature. Applied Physics Letters, 1997, 71, 942-944.	1.5	13
172	Schottky diode characteristics of Ti on strained-Si. Solid-State Electronics, 1997, 41, 1891-1893.	0.8	9
173	Optimisation of channel thickness in strained Si/SiGe MOSFETs. , 0, , .		7
174	Electrical characterization of Ni/sub y/(Si/sub 1-x/Ge/sub x)/sub 1-y//Si/sub 1-x/Ge/sub x/ and NiSi/Si Schottky diodes. , 0, , .		0