

# Vijay Dixit

## List of Publications by Year in descending order

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79  
papers

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citations

516710

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docs citations

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times ranked

886  
citing authors

#	ARTICLE	IF	CITATIONS
1	Influence of interface states on built-in electric field and diamagnetic-Landau energy shifts in asymmetric modulation-doped InGaAs/GaAs QWs. Journal Physics D: Applied Physics, 2022, 55, 385101.	2.8	1
2	Effect of germanium auto-diffusion on the bond lengths of Ga and P atoms in GaP/Ge(111) investigated by using X-ray absorption spectroscopy. Journal of Synchrotron Radiation, 2021, 28, 480-489.	2.4	0
3	Anisotropic magnetic properties of excitons in GaAs multiple quantum wells. Superlattices and Microstructures, 2020, 137, 106332.	3.1	0
4	Photovoltaic Response and Charge Redistribution Processes in GaAs/AlGaAs Multiple Quantum Wells Structure. Physica Status Solidi (B): Basic Research, 2020, 257, 2000331.	1.5	3
5	Electric and magnetic field effects on the exciton localization in a modulation doped InGaAs/GaAs quantum well. AIP Conference Proceedings, 2020, , .	0.4	1
6	Investigation of relative content of zinc-blende and wurtzite phases in GaP/Ge(111) using Raman spectroscopy. AIP Conference Proceedings, 2019, , .	0.4	1
7	Development of a simple cost-effective maskless-photolithography system. AIP Conference Proceedings, 2019, , .	0.4	5
8	Surface and interface properties of ZrO <sub>2</sub> /GaAs, SiO <sub>2</sub> /GaAs and GaP/GaAs hetero structures investigated by surface photovoltage spectroscopy. Applied Surface Science, 2019, 476, 615-622.	6.1	13
9	Simultaneous magneto-electro-optical measurements in modulation-doped quantum well: An investigation on magneto-photoluminescence intensity oscillations. Journal of Applied Physics, 2019, 125, 205701.	2.5	1
10	Role of surface and interface states on the performance of GaAs based photodetectors. AIP Conference Proceedings, 2019, , .	0.4	0
11	Raman spectroscopy investigation of inter-diffusion in GaP/Ge(111) heterostructures. Superlattices and Microstructures, 2019, 125, 190-197.	3.1	2
12	A parallel magnetic field driven confinement versus separation of charges in GaAs quantum well investigated by magneto-photovoltage and magneto-photoluminescence spectroscopy. Journal of Luminescence, 2019, 206, 342-347.	3.1	3
13	Raman spectroscopy and atomic force microscopy study of interfacial polytypism in GaP/Ge(111) heterostructures. Applied Surface Science, 2018, 427, 754-762.	6.1	15
14	Radiative and non-radiative recombination of thermally activated magneto-excitons probed via quasi-simultaneous photoluminescence and surface-photovoltage spectroscopy. Journal of Applied Physics, 2018, 124, .	2.5	5
15	Effect of disorders on the optical properties of excitons in InAsP/InP quantum wells investigated by magneto-photoluminescence spectroscopy. Journal of the Optical Society of America B: Optical Physics, 2018, 35, 2405.	2.1	7
16	Anisotropic distribution of dislocations density in tensile strained GaP/GaAs epilayers. Vacuum, 2018, 154, 214-217.	3.5	3
17	Anisotropic distribution of microstructure in compressively strained InP/GaAs epitaxial layers. Superlattices and Microstructures, 2018, 122, 636-642.	3.1	1
18	Role of surface energy on the morphology and optical properties of GaP micro & nano structures grown on polar and non-polar substrates. Applied Surface Science, 2017, 419, 957-967.	6.1	16

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19	The effect of magnetic field on free and bound exciton luminescence in GaAs/AlGaAs multiple quantum well structures: a quantitative study on the estimation of ultra-low disorder. Journal Physics D: Applied Physics, 2017, 50, 335107.	2.8	6
20	Self-catalyst assisted and catalyst-free epitaxial growth of InAs on Ge (111): Role of substrate surface and evolution of polytypism. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2017, 35, .	2.1	1
21	Estimation of electron spin polarization from circularly polarized photoluminescence in strained quantum wells. Journal of Applied Physics, 2017, 122, 025703.	2.5	0
22	Effect of carrier confinement on effective mass of excitons and estimation of ultralow disorder in Al <sub>x</sub> Ga <sub>1-x</sub> As/GaAs quantum wells by magneto-photoluminescence. Scientific Reports, 2017, 7, 4905.	3.3	24
23	Growth and surface topography of WSe <sub>2</sub> single crystal. AIP Conference Proceedings, 2016, , .	0.4	16
24	Observation of anisotropic distribution of microstructure in GaP/GaAs epitaxial layers. Journal of Applied Physics, 2016, 120, .	2.5	6
25	Charge carrier localization effects on the quantum efficiency and operating temperature range of InAs <sub>x</sub> P <sub>1-x</sub> /InP quantum well detectors. Journal of Applied Physics, 2016, 119, .	2.5	10
26	Development and application of InAsP/InP quantum well infrared detector. AIP Conference Proceedings, 2016, , .	0.4	0
27	Study of the microstructure information of GaAs epilayers grown on silicon substrate using synchrotron radiation. Journal of Synchrotron Radiation, 2016, 23, 238-243.	2.4	3
28	Effect of surface morphology on the optical properties of InAs/Ge (1 1 1). Applied Surface Science, 2016, 372, 70-78.	6.1	6
29	Dislocation-assisted tunnelling of charge carriers across the Schottky barrier on the hydride vapour phase epitaxy grown GaN. Journal of Applied Physics, 2015, 118, .	2.5	21
30	Dislocations limited electronic transport in hydride vapour phase epitaxy grown GaN templates: A word of caution for the epitaxial growers. Applied Physics Letters, 2015, 106, .	3.3	9
31	Evaluation of structural and microscopic properties of tetragonal ZrO <sub>2</sub> for the facet coating of 980-nm semiconductor laser diodes. Journal Physics D: Applied Physics, 2015, 48, 105102.	2.8	7
32	Crystalline and band alignment properties of InAs/Ge (111) heterostructure. Journal of Alloys and Compounds, 2015, 646, 393-398.	5.5	9
33	Effect of high dose <sup>137</sup> Cs-ray irradiation on GaAs p-i-n photodetectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 785, 93-98.	1.6	17
34	Investigation of crystalline and electronic band alignment properties of GaP/Ge(111) heterostructure. Applied Physics Letters, 2014, 104, .	3.3	16
35	Observation of room temperature optical absorption in InP/GaAs type-II ultrathin quantum wells and quantum dots. Journal of Applied Physics, 2014, 115, 223505.	2.5	1
36	A versatile phenomenological model for the S-shaped temperature dependence of photoluminescence energy for an accurate determination of the exciton localization energy in bulk and quantum well structures. Journal Physics D: Applied Physics, 2014, 47, 065103.	2.8	37

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37	Temperature dependence of the photo-induced inverse spin Hall effect in Au/InP hybrid structures. Applied Physics Letters, 2014, 104, 042102.	3.3	11
38	An Accurate Measurement of Carrier Concentration in an Inhomogeneous GaN Epitaxial Layer from Hall Measurements. Environmental Science and Engineering, 2014, , 767-769.	0.2	2
39	Low- and high-density InAs nanowires on Si(100) and their Raman imaging. Semiconductor Science and Technology, 2013, 28, 015025.	2.0	6
40	Intersubband plasmon-phonon coupling in GaAsP/AlGaAs near surface quantum well. Applied Physics Letters, 2013, 102, 181120.	3.3	2
41	A comparison of inverse spin hall spectra in Pt/III-V hybrid structures. , 2012, , .		0
42	Effect of $\beta$ -ray irradiation on breakdown voltage, ideality factor, dark current and series resistance of GaAs p-n diode. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2012, 685, 41-45.	1.6	16
43	Evaluation of electronic transport properties and conduction band offsets of asymmetric InAs/InGaAs/GaAs dot-in-well structures. Journal Physics D: Applied Physics, 2012, 45, 365104.	2.8	6
44	Band alignment and quantum states of InAs P <sub>1-x</sub> /InP surface quantum wells investigated from ultraviolet photoelectron spectroscopy and photoluminescence. Materials Letters, 2012, 87, 69-72.	2.6	6
45	Structural and Electronic Properties of a Mn Oxide Diffusion Barrier Layer Formed by Chemical Vapor Deposition. IEEE Transactions on Device and Materials Reliability, 2011, 11, 295-302.	2.0	38
46	Conduction band offset and quantum states probed by capacitance-voltage measurements for InP/GaAs type-II ultrathin quantum wells. Journal of Applied Physics, 2011, 109, .	2.5	7
47	Ultraviolet photoelectron spectroscopy of nano In clusters Schottky barriers on sputtered InP. Applied Surface Science, 2011, 258, 143-146.	6.1	10
48	Studies of Valence Band Alignment Between Nitrided GaPN/GaP (111) Interface Using X-ray Photoelectron Spectroscopy. AIP Conference Proceedings, 2011, , .	0.4	2
49	Effect of $^{60}\text{Co}$ $\beta$ -ray irradiation on electrical properties of GaAs epilayer and GaAs p-n diode. Nuclear Instruments & Methods in Physics Research B, 2011, 269, 272-276.	1.4	22
50	Determination of band offsets in strained InAs <sub>x</sub> P <sub>1-x</sub> /InP quantum well by capacitance voltage profile and photoluminescence spectroscopy. Journal of Applied Physics, 2011, 109, .	2.5	10
51	Numerical simulation of inverse spin Hall spectra in Pt/GaAs hybrid structure. Journal Physics D: Applied Physics, 2011, 44, 265104.	2.8	10
52	Quantum States Probed By Temperature Dependence Capacitance-Voltage Measurements For InP-GaAs Type-II Ultrathin Quantum Well. , 2011, , .		0
53	Temperature dependence of the photoluminescence from InP/GaAs type-II ultrathin quantum wells. Journal Physics D: Applied Physics, 2010, 43, 455410.	2.8	9
54	Structural, Optical And Electrical Properties Of MOVPE Grown InP-GaAs Type-II Ultrathin Quantum Well. , 2010, , .		0

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55	Observation of electron confinement in InP/GaAs type-II ultrathin quantum wells. Applied Physics Letters, 2010, 97, .	3.3	22
56	DVCC based voltage-mode multifunctional biquadratic filter. , 2009, , .		1
57	Effect of two-step growth process on structural, optical and electrical properties of MOVPE-grown GaP/Si. Journal of Crystal Growth, 2008, 310, 3428-3435.	1.5	38
58	Optimization of the properties of MOVPE-grown GaP epitaxial layers on GaP (1â€%1â€%1)B substrates. Semiconductor Science and Technology, 2008, 23, 075031.	2.0	4
59	Alloying induced degradation of the absorption edge of InAs <sub>x</sub> Sb <sub>1-â€%x</sub> . Applied Physics Letters, 2007, 90, 101905.	3.3	20
60	Micro Raman and Photoluminescence Spectroscopy of Nano-Porous n and p Type GaN/Sapphire(0001). Journal of Nanoscience and Nanotechnology, 2007, 7, 2186-2191.	0.9	3
61	A comparative study on nanotextured high density Mg-doped and undoped GaN. Journal of Applied Physics, 2007, 101, 044311.	2.5	10
62	Comparative studies on As-grown and nanotextured GaN:Mg epilayer. , 2007, , .		0
63	Studies on GaAs/AlGaAs based (p and n-type) quantum well infrared photodetector structures grown using MOVPE. , 2007, , .		1
64	Electrical and optical characterization of photooxidized TPD. Journal of Materials Chemistry, 2007, 17, 343-348.	6.7	8
65	Transparent p-AgCoO <sub>2</sub> /n-ZnO diode heterojunction fabricated by pulsed laser deposition. Thin Solid Films, 2007, 515, 7352-7356.	1.8	62
66	Studies on MOVPE growth of GaP epitaxial layer on Si(001) substrate and effects of annealing. Journal of Crystal Growth, 2006, 293, 5-13.	1.5	25
67	Effect of excess plasma on photoelectron spectra of nanoporous GaP. Applied Physics Letters, 2006, 88, 083115.	3.3	13
68	Studies on high resolution x-ray diffraction, optical and transport properties of InAs <sub>x</sub> Sb <sub>1-â€%x</sub> •GaAs (xâ€%1/20.06) heterostructure grown using liquid phase epitaxy. Journal of Applied Physics, 2004, 96, 4989-4997.	2.5	23
69	Transport, optical and magnetotransport properties of hetero-epitaxial InAs <sub>x</sub> Sb <sub>1-â€%x</sub> /GaAs(xâ€%1/20.06) and bulk crystals: experiment and theoretical analysis. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 20, 272-277.	2.7	4
70	Crystal growth and characterization of a new nonlinear optical material: Urea l-Malic Acid. Journal of Crystal Growth, 2003, 253, 460-466.	1.5	35
71	Structural and compositional analysis of InBixAsySb(1â€%xâ€%y) films grown on GaAs(0 0 1) substrates by liquid phase epitaxy. Applied Surface Science, 2003, 220, 321-326.	6.1	9
72	Temperature dependence of the energy gap and free carrier absorption in bulk InAs <sub>0.05</sub> Sb <sub>0.95</sub> single crystals. Applied Physics Letters, 2003, 82, 4720-4722.	3.3	16

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73	Structural, optical, and electrical properties of bulk single crystals of $\text{InAs}_x\text{Sb}(1-x)$ grown by rotatory Bridgman method. Applied Physics Letters, 2002, 81, 1630-1632.	3.3	15
74	High-mobility InSb epitaxial films grown on a GaAs (001) substrate using liquid-phase epitaxy. Applied Physics Letters, 2002, 80, 2102-2104.	3.3	18
75	Growth of InSb epitaxial layers on GaAs (001) substrates by LPE and their characterizations. Journal of Crystal Growth, 2002, 235, 154-160.	1.5	26
76	Growth of $\text{InBi}_x\text{Sb}(1-x)$ films on GaAs(001) substrates using liquid phase epitaxy and their characterization. Journal of Crystal Growth, 2002, 241, 171-176.	1.5	15
77	Experimental setup for rapid crystallization using favoured chemical potential and hydrodynamic conditions. Bulletin of Materials Science, 2001, 24, 455-459.	1.7	9
78	Effect of lithium ion irradiation on the transport and optical properties of Bridgman grown-type InSb single crystals. Journal of Applied Physics, 2001, 90, 1750-1753.	2.5	10
79	Growth of $\text{InSb}(1-x)\text{Bi}_x$ crystals by rotatory Bridgman method and their characterization. Journal of Crystal Growth, 2000, 217, 40-46.	1.5	12