Yuksel Ergun

List of Publications by Year
in descending order

63 papers	492 citations	840776 11 h-index	839539 18 g-index
63 all docs	63 docs citations	63 times ranked	254 citing authors

#	Article	IF	Citations
1	â€œNâ€•structure for type-II superlattice photodetectors. Applied Physics Letters, 2012, 101, 073505.	3.3	42
2	The self-consistent calculation of Si Î´-doped GaAs structures. Applied Physics A: Materials Science and Processing, 2001, 73, 749-754.	2.3	28
3	Si Î´-doped GaAs structure with different dopant distribution models. Journal of Applied Physics, 2002, 91, 2118-2122.	2.5	28
4	Effect of the Passivation Layer on the Noise Characteristics of Mid-Wave-Infrared InAs/GaSb Superlattice Photodiodes. IEEE Photonics Technology Letters, 2012, 24, 790-792.	2.5	26
5	Electronic subband of single SiÎ´-doped GaAs structures. Superlattices and Microstructures, 2000, 28, 35-45.	3.1	23
6	Electronic properties of Si Î´-doped GaAs under an applied electric field. Semiconductor Science and Technology, 2001, 16, 421-426.	2.0	20
7	Binding energy of excitons in symmetric and asymmetric coupled double quantum wells in a uniform magnetic field. Semiconductor Science and Technology, 2000, 15, 219-224.	2.0	17
8	N-structure based on InAs/AlSb/GaSb superlattice photodetectors. Superlattices and Microstructures, 2015, 79, 116-122.	3.1	14
9	Electrical performance of InAs/AlSb/GaSb superlattice photodetectors. Superlattices and Microstructures, 2016, 91, 1-7.	3.1	13
10	The triple Si Î´ -doped GaAs structure. Applied Physics A: Materials Science and Processing, 2005, 80, 167-171.	2.3	12
11	A new approach to quantum well infrared photodetectors: Staircase-like quantum well and barriers. Infrared Physics and Technology, 2006, 48, 101-108.	2.9	11
12	Electronic properties of two coupled SiÎ´-doped GaAs structures. EPJ Applied Physics, 2003, 21, 91-95.	0.7	11
13	In-plane photoconductive properties of MBE-grown GaAs/GaAlAs multiple quantum wells. Semiconductor Science and Technology, 1993, 8, 1337-1346.	2.0	10
14	The electronic structure of a quantum well under an applied electric field. Superlattices and Microstructures, 1996, 20, 163-172.	3.1	10
15	The effect of the donor distribution on the electronic structure of two coupled Si Î´-doped layers in GaAs. Physica B: Condensed Matter, 2003, 334, 1-8.	2.7	10
16	Ground state energy of excitons in quantum dot treated variationally via Hylleraas-like wavefunction. Chinese Physics B, 2009, 18, 1578-1585.	1.4	10
17	Three-color broadband asymmetric quantum well infrared photodetectors in long wavelength infrared range (LWIR). Applied Physics A: Materials Science and Processing, 2010, 98, 269-273.	2.3	10
18	Electronic structure of two coupled Si Î´-doped GaAs as dependent on the donor thickness. Applied Physics A: Materials Science and Processing, 2003, 77, 427-431.	2.3	9

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19	Tunable long-wavelength broad band asymmetric quantum well infrared photodetector. Semiconductor Science and Technology, 2007, 22, 422-426.	2.0	9
20	The variation of electronic properties with the doping concentration of modulation-doped AlxGa1â^’xAsâ€“GaAs double quantum wells. Superlattices and Microstructures, 2007, 41, 22-28.	3.1	9
21	Comprehensive growth and characterization study on highly n-doped InGaAs as a contact layer for quantum cascade laser applications. Semiconductor Science and Technology, 2018, 33, 055005.	2.0	9
22	Electron energy levels in a QW within a tilted magnetic field. Superlattices and Microstructures, 1995, 17, 321.	3.1	8
23	Binding energies of excitons in symmetric and asymmetric quantum wells in a magnetic field. Superlattices and Microstructures, 1998, 24, 359-368.	3.1	8
24	A study of photomodulated reflectance on staircase-like, n-doped GaAs/Al x Ga1â^’xAs quantum well structures. Nanoscale Research Letters, 2012, 7, 622.	5.7	8
25	Large hh-lh splitting energy for InAs/AlSb/GaSb based N-structure photodetectors. Journal of Applied Physics, 2018, 123, .	2.5	8
26	Improvement in intersubband optical absorption and the effects of device parameter variations in quantum wells with an applied electric field. Superlattices and Microstructures, 1999, 26, 395-404.	3.1	7
27	Voltage Tunable Dual-Band Quantum-Well Infrared Photodetector for Third-Generation Thermal Imaging. IEEE Photonics Technology Letters, 2011, 23, 1370-1372.	2.5	7
28	Theoretical investigation of InAs/GaSb type-II pin superlattice infrared detector in the mid wavelength infrared range. Journal of Applied Physics, 2013, 113, .	2.5	7
29	Electronic and optical properties of 4.2Î¼mâ€œNâ€•structured superlattice MWIR photodetectors. Infrared Physics and Technology, 2013, 59, 36-40.	2.9	7
30	The investigation of quantum efficiency constituents of InAs/AlSb/GaSb based N structure type-II SL photodetectors with InAlAs interface. Semiconductor Science and Technology, 2018, 33, 094001.	2.0	7
31	Influence of temperature on the electronic properties of SiÎ´-doped GaAs structures. EPJ Applied Physics, 2003, 21, 97-101.	0.7	7
32	Intersubband electron transition across a staircase potential containing quantum wells: light emission. Superlattices and Microstructures, 2005, 37, 163-170.	3.1	6
33	Effect of exchangeâ€“correlation potential on the plasmon dispersions in a doped symmetrical double quantum well. Physica Status Solidi (B): Basic Research, 2007, 244, 635-641.	1.5	6
34	The orbit centre dependence of the energy levels in a single quantum well under external tilted magnetic and electric fields. Semiconductor Science and Technology, 1997, 12, 802-807.	2.0	5
35	Electric field dependence of the excitonic properties in graded double quantum wells. Semiconductor Science and Technology, 1999, 14, 412-418.	2.0	5
36	Subband structure and band bending in symmetric modulation-doped double quantum wells. EPJ Applied Physics, 2005, 29, 27-31.	0.7	5

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37	Broadband staircase quantum well infrared photodetector with low dark current. Infrared Physics and Technology, 2006, 48, 109-114.	2.9	5
38	Barrier lowering effect and dark current characteristics in asymmetric GaAs/AlGaAs multi quantum well structure. Applied Physics A: Materials Science and Processing, 2011, 105, 833-839.	2.3	5
39	Exciton quantization in parabolic quantum wells. Superlattices and Microstructures, 1995, 17, 187-191.	3.1	4
40	Electronic energy spectra in a multiple quantum well within external electric and tilted magnetic fields. Semiconductor Science and Technology, 2000, 15, 1087-1092.	2.0	4
41	I-V characterization of a staircase quantum well infrared photodetector. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 1633-1636.	0.8	4
42	EXCITON STATES IN A QUANTUM DOT WITH PARABOLIC CONFINEMENT. International Journal of Modern Physics B, 2011, 25, 4489-4497.	2.0	4
43	Iâ€"V characterization of a quantum well infrared photodetector with stepped and graded barriers. Superlattices and Microstructures, 2012, 52, 585-593.	3.1	4
44	Dark current and optical properties in asymmetric GaAs/AlGaAs staircase-like multiquantum well structure. Infrared Physics and Technology, 2013, 58, 74-79.	2.9	4
45	Voltage tunable terahertz QWIP containing asymmetric step-like coupled double quantum wells. Optical and Quantum Electronics, 2022, 54, 1.	3.3	4
46	Stark localization and mixing phenomena between different Stark-ladders in coupled quantum wells. Superlattices and Microstructures, 1995, 17, 457.	3.1	3
47	An alternative method for the exact calculation of Wannierâ€"Stark localization in superlattices. Superlattices and Microstructures, 2001, 29, 73-81.	3.1	2
48	VARIATIONAL COMPUTATIONS FOR EXCITONS IN QUANTUM DOTS: A QUANTUM MONTE CARLO STUDY. International Journal of Modern Physics B, 2011, 25, 119-130.	2.0	2
49	Zero-bias offsets in Iâ€"V characteristics of the staircase type quantum well infrared photodetectors. Applied Surface Science, 2014, 318, 95-99.	6.1	2
50	AlSb and InAs-GaSb layer thickness effect on HH-LH splitting and band gap energies in InAs/AlSb/GaSb type-II superlattices. Opto-electronics Review, 2015, 23, .	2.4	2
51	Gibbs free energy assisted passivation layers. , 2016, , .		2
52	Electrical and optical performances with extracted minority carrier lifetimes of InAs/GaSb SL photodetector operating in the mid wavelength infrared range. Superlattices and Microstructures, 2017, 111, 1211-1216.	3.1	2
53	The detailed analysis of wavefunction overlaps for InAs/AlSb/GaSb based N-structure type-II SL pin photodetectors. Physica Scripta, 2019, 94, 075007.	2.5	2
54	Subband and excitonic binding of graded GaAs/Ga1â€"xAlxAs quantum wells under an electric field. Superlattices and Microstructures, 1998, 23, 1067-1074.	3.1	1

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55	Double quantum well electronic energy spectrum within a tilted magnetic field. Superlattices and Microstructures, 1999, 26, 299-305.	3.1	1
56	Tilted magnetic field effect on the subbands of a GaAlAs diode with a GaAs quantum well. Superlattices and Microstructures, 2003, 33, 235-245.	3.1	1
57	Low dark current N structure superlattice MWIR photodetectors. , 2014, , .		1
58	Interband optical absorption obtained by pseudopotential method for type-II InAs/GaSb SL photodetectors. Journal Physics D: Applied Physics, 2021, 54, 195103.	2.8	1
59	Influence of an applied electric field on the electronic properties of SiÎ´-doped GaAs. EPJ Applied Physics, 2003, 24, 189-194.	0.7	0
60	Broadband asymmetric quantum-well infrared photodetector in long-wavelength infrared range (LWIR). , 2007, , .		0
61	Broadband staircase quantum well infrared photodetector: working in long wavelength infrared range (LWIR). Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 607-610.	0.8	0
62	Structural investigation on InAs/GaSb thin films. Acta Crystallographica Section A: Foundations and Advances, 2011, 67, C237-C237.	0.3	0
63	High quantum efficiency Type-II superlattice N-structure photodetectors with thin intrinsic layers. , 2013, , .		0