Massimo Mazzer

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/7132960/publications.pdf

Version: 2024-02-01

81	1,914	279798	265206
papers	citations	23 h-index	42 g-index

81	81	81	1720
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Strain-balanced GaAsP/InGaAs quantum well solar cells. Applied Physics Letters, 1999, 75, 4195-4197.	3.3	258
2	Resolving the energy crisis: nuclear or photovoltaics?. Nature Materials, 2006, 5, 161-164.	27.5	183
3	Strained and strain-balanced quantum well devices for high-efficiency tandem solar cells. Solar Energy Materials and Solar Cells, 2001, 68, 71-87.	6.2	106
4	Symmetry-induced perfect transmission of light waves in quasiperiodic dielectric multilayers. Applied Physics Letters, 2002, 80, 3063-3065.	3.3	98
5	The challenge of high-performance selective emitters for thermophotovoltaic applications. Semiconductor Science and Technology, 2003, 18, S174-S183.	2.0	80
6	The origin of highly efficient selective emission in rare-earth oxides for thermophotovoltaic applications. Nature Materials, 2004, 3, 632-637.	27.5	78
7	Effect of well number on the performance of quantum-well solar cells. Journal of Applied Physics, 2005, 97, 124908.	2.5	70
8	Progress in quantum well solar cells. Thin Solid Films, 2006, 511-512, 76-83.	1.8	65
9	Observation of photon recycling in strain-balanced quantum well solar cells. Applied Physics Letters, 2007, 90, 213505.	3.3	49
10	15% efficient Cu(In,Ga)Se2 solar cells obtained by low-temperature pulsed electron deposition. Applied Physics Letters, 2012, 101, .	3.3	49
11	CuSbSe2 thin film solar cells with ~4% conversion efficiency grown by low-temperature pulsed electron deposition. Solar Energy Materials and Solar Cells, 2018, 185, 86-96.	6.2	48
12	Advances in Bragg stack quantum well solar cells. Solar Energy Materials and Solar Cells, 2005, 87, 169-179.	6.2	44
13	Effect of strain relaxation on forward bias dark currents in GaAs/InGaAs multiquantum wellpâ€“iâ€“ndiodes. Journal of Applied Physics, 1996, 80, 5815-5820.	2.5	41
14	Short-circuit current enhancement in Bragg stack multi-quantum-well solar cells for multi-junction space cell applications. Solar Energy Materials and Solar Cells, 2003, 75, 299-305.	6.2	41
15	Spectral response and I-V characteristics of large well number multi quantum well solar cells. Journal of Materials Science, 2005, 40, 1445-1449.	3.7	39
16	Low temperature deposition of bifacial CIGS solar cells on Al-doped Zinc Oxide back contacts. Applied Surface Science, 2017, 412, 52-57.	6.1	36
17	Efficiency enhancement of ideal photovoltaic solar cells by photonic excitations in multi-intermediate band structures. Applied Physics Letters, 2003, 83, 770-772.	3.3	33
18	Characterization of GaAs/InGaAs quantum wells using photocurrent spectroscopy. Journal of Applied Physics, 1996, 79, 7775-7779.	2.5	31

#	Article	IF	Citations
19	Recent results on quantum well solar cells. Journal of Materials Science: Materials in Electronics, 2000, 11, 531-536.	2.2	28
20	Strain-balanced quantum well solar cells. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 14, 132-135.	2.7	27
21	Erbium containing ceramic emitters for thermophotovoltaic energy conversion. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2003, 98, 144-149.	3.5	26
22	Elastic distortion field in single layer heterostructures in the presence of misfit dislocations. Journal of Applied Physics, 1990, 68, 531-539.	2.5	24
23	Structural and analytical characterization of Si1-x Gex /Si heterostructures by Rutherford backscattering spectrometry and channeling, analytical electron microscopy and double crystal X-ray diffractometry. Microscopy Microanalysis Microstructures, 1992, 3, 363-384.	0.4	24
24	Structural characterization of InGaAs/InP heterostructures grown under compressive and tensile stress. Applied Surface Science, 2002, 188, 36-48.	6.1	23
25	Progress on Low-Temperature Pulsed Electron Deposition of CuInGaSe2 Solar Cells. Energies, 2016, 9, 207.	3.1	21
26	Determination of surface lattice strain in ZnTe epilayers on {100}GaAs by ion channeling and reflectance spectroscopy. Applied Physics Letters, 1993, 63, 3452-3454.	3.3	19
27	Sol-Gel Preparation of Selective Emitters for Thermophotovoltaic Conversion. Journal of Sol-Gel Science and Technology, 2003, 26, 1119-1123.	2.4	18
28	Nanoscale potential distribution across multiquantum well structures: Kelvin probe force microscopy and secondary electron imaging. Journal of Applied Physics, 2005, 98, 084310.	2.5	18
29	InGaAs/InGaAs strain-compensated quantum well cells for thermophotovoltaic applications. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 14, 158-161.	2.7	17
30	Benefits of photovoltaic power in supplying national electricity demand. Energy Policy, 2013, 54, 385-390.	8.8	17
31	Study of misfit dislocations by EBIC, CL and HRTEM in GaAs/InGaAs lattice-strained multi-quantum well p-i-n solar cells. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1996, 42, 43-51.	3.5	15
32	Influence of surface morphology on ordered GaInP structures. Applied Physics Letters, 1996, 68, 3263-3265.	3.3	15
33	Porous Garnet Coatings Tailoring the Emissivity of Thermostructural Materials. Journal of Sol-Gel Science and Technology, 2004, 32, 247-251.	2.4	15
34	Properties and structure of antiphase boundaries in GaAs/Ge solar cells. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1996, 42, 204-207.	3.5	14
35	InP/GaAs selfâ€assembled nanostructures: Modelization and experiment. Journal of Applied Physics, 1996, 80, 1931-1933.	2.5	14
36	Selective ion-channeling study of misfit dislocation grids in semiconductor heterostructures: Theory and experiments. Physical Review B, 1997, 56, 6895-6910.	3.2	14

#	Article	IF	Citations
37	A SnO2 microsensor device for sub-ppm NO2 detection. Sensors and Actuators B: Chemical, 1999, 58, 552-555.	7.8	14
38	Diethyldisulphide as sulphur precursor for the low temperature metalorganic vapour-phase epitaxy of ZnS: growth, morphology and cathodoluminescence results. Journal of Crystal Growth, 1999, 204, 29-34.	1.5	14
39	Mechanisms of strain relaxation in IIIâ€“V semiconductor heterostructures. Journal of Crystal Growth, 1993, 126, 125-132.	1.5	13
40	InP-based lattice-matched InGaAsP and strain-compensated InGaAsâˆ•InGaAs quantum well cells for thermophotovoltaic applications. Journal of Applied Physics, 2006, 100, 114510.	2.5	13
41	Self-organized growth of ZnTe nanoscale islands on (001)GaAs. Applied Physics Letters, 1998, 72, 359-361.	3.3	11
42	Sub-micron photocurrent mapping of heterostructures by micro-probe optical-beam induced current. Review of Scientific Instruments, 1999, 70, 3429-3431.	1.3	10
43	Electron-beam-induced current and cathodoluminescence characterization of InGaAs strain-balanced multiquantum well photovoltaic cells. Journal of Applied Physics, 2003, 94, 6341-6345.	2.5	10
44	Wavy growth onset in strain-balanced InGaAs multi-quantum wells. Journal of Crystal Growth, 2005, 274, 65-72.	1.5	9
45	Progress towards an all-renewable electricity supply. Nature Materials, 2012, 11, 908-909.	27.5	9
46	Recent progress towards all-renewable electricity supplies. Nature Materials, 2016, 15, 115-116.	27.5	9
47	Structural study of (100) CdTe epilayers grown by MOVPE on ZnTe buffered and unbuffered (100) GaAs. Journal of Crystal Growth, 1997, 170, 553-557.	1.5	8
48	Strain-balanced materials for high-efficiency solar cells. , 0, , .		8
49	Dechanneling cross section for misfit dislocations. Nuclear Instruments & Methods in Physics Research B, 1992, 63, 36-40.	1.4	7
50	Electrical and photoelectrical properties of a GaAs-based p-i-n structure grown by MOVPE. Crystal Research and Technology, 2005, 40, 1033-1038.	1.3	7
51	Dechanneling by misfit dislocations in IIIâ€“V semiconductor heterostructures. Nuclear Instruments & Methods in Physics Research B, 1992, 64, 103-107.	1.4	6
52	Study of degradation mechanisms in compound semiconductor based devices by SEM-cathodoluminescence. Microelectronics Reliability, 1998, 38, 1199-1210.	1.7	6
53	Hydrogen transport vapor phase epitaxy of CdTe on hybrid substrates for x-ray detector applications. Journal of Electronic Materials, 1999, 28, 695-699.	2.2	6
54	Engineering the strain field for the control of quantum confinement: An analytical model for arbitrary shape nanostructures. Journal of Applied Physics, 1998, 84, 3437-3441.	2.5	5

#	Article	IF	Citations
55	Extended defects in InGaAs/InGaAs strain-balanced multiple quantum wells for photovoltaic applications. Journal of Physics Condensed Matter, 2002, 14, 13367-13373.	1.8	5
56	Characterisation Of Strain-Compensated InGaAs/InGaAs Quantum Well Cells For TPV Applications. AIP Conference Proceedings, 2003, , .	0.4	5
57	Ion beam analysis of mismatched epitaxial heterostructures. Nuclear Instruments & Methods in Physics Research B, 1992, 63, 30-35.	1.4	4
58	A percolative simulation of dielectric-like breakdown. Microelectronics Reliability, 1998, 38, 249-253.	1.7	4
59	Structural characterization techniques for the analysis of semiconductor strained heterostructures. Mikrochimica Acta, 1994, 114-115, 431-440.	5.0	3
60	Deep blue emitting ZnS/ZnSe multiple quantum well lasers grown by MOVPE on (001) GaAs. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1997, 43, 97-101.	3.5	3
61	Stranskiâ€“Krastanow MOVPE growth of nanoscale ZnTe islands on (0 0 1)GaAs. Journal of Crystal Growth, 1998, 184-185, 1332-1334.	1.5	3
62	Strain-balanced In/sub 0.62/Ga/sub 0.38/As/In/sub 0.47/Ga/sub 0.53/As(InP) quantum well cell for thermophotovoltaics. , 0, , .		3
63	Demonstration of additivity in strain-balanced quantum well solar cells and efficiency enhancement at high concentration. , 0, , .		3
64	Secondary Electron Emission Contrast of Quantum Wells in GaAs p-i-n Junctions. Microscopy and Microanalysis, 2009, 15, 125-129.	0.4	3
65	Grid-assisted photovoltaic power supply to improve self-sustainability of ground-source heat pump systems. , 2013, , .		3
66	Title is missing!. Journal of Materials Science: Materials in Electronics, 1998, 9, 249-253.	2.2	2
67	A comparative study of bulk InGaAs and InGaAs/InGaAs strain-compensated quantum well cells for thermophotovoltaic applications. , 0, , .		2
68	Observation of reduced radiative recombination in low-well-number strain-balanced quantum well solar cells. Journal of Applied Physics, 2010, 107, 044502.	2.5	2
69	Ultrashort pulse laser scribing of CIGS-based thin film solar cells. , 2020, , .		2
70	Mechanisms of strain release in molecular beam epitaxy grown InGaAs/GaAs buffer heterostructures. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1994, 28, 510-514.	3.5	1
71	Radiative recombination in strain-balanced quantum well solar cells. , 0, , .		1
72	Efficiency Enhancement of Single Junction GAAS Solar Cells using Strain-Balanced Quantum Well Structures Under Concentration. , 2006, , .		1

#	Article	IF	Citations
73	Investigation of Strain Relaxation Mechanisms in InGaAs/GaAs Single Layer Films. Microscopy Microanalysis Microstructures, 1995, 6, 491-498.	0.4	1
74	Intrinsic Johnson noise in a rf-SQUID: A numerical analysis. IEEE Transactions on Magnetics, 1987, 23, 1090-1092.	2.1	0
75	Transition from island to continuous InP layer growth on (001) GaAs by MOCVD. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1994, 28, 214-218.	3.5	0
76	Production and Characterization of Quantum Nanostructures of Epitaxial Semiconductors. European Physical Journal Special Topics, 1995, 05, C5-1157-C5-1163.	0.2	0
77	<title>Systems engineering approach to maintainability optimization with case studies on ion implanters and sputtering tools</title>. Proceedings of SPIE, 1996, , .	0.8	0
78	A NEW METHOD FOR THE GROWTH OF CdTe CRYSTALS FOR RT X-RAY PHOTON DETECTORS IN THE 1-100 keV RANGE. , 2000, , .		0
79	Electron beam induced current studies of strain balanced InGaAs/InGaAs multiquantum wells. Materials Science and Technology, 2003, 19, 977-980.	1.6	0
80	A Comparative Study of Front and Back Illuminated Strain Balanced InGaAs MQW Thermophotovoltaic Cells on n-InP Substrate For High Power Applications. AIP Conference Proceedings, 2004, , .	0.4	0
81	Laser scribing of Sb2Se3 thin-film solar cells. , 2021, , .		0