Chee Leong Tan

List of Publications by Year
in descending order

49 papers	715 citations	686830 13 h-index	580395 25 g-index
49 all docs	49 docs citations	49 times ranked	943 citing authors

#	Article	IF	Citations
1	Emerging technologies for high performance infrared detectors. Nanophotonics, 2018, 7, 169-197.	2.9	203
2	Analysis of nano-grating-assisted light absorption enhancement in metalâ€“semiconductorâ€“metal photodetectors patterned using focused ion-beam lithography. Optics Communications, 2011, 284, 1694-1700.	1.0	55
3	Absorption enhancement of 980nm MSM photodetector with a plasmonic grating structure. Optics Communications, 2010, 283, 1763-1767.	1.0	42
4	Localized surface plasmon resonance with broadband ultralow reflectivity from metal nanoparticles on glass and silicon subwavelength structures. Optics Express, 2012, 20, 17448.	1.7	35
5	High-responsivity plasmonics-based GaAs metal-semiconductor-metal photodetectors. Applied Physics Letters, 2011, 99, .	1.5	26
6	Bi-SERS sensing and enhancement by Au-Ag bimetallic non-alloyed nanoparticles on amorphous and crystalline silicon substrate. Optics Express, 2015, 23, 6254.	1.7	26
7	Bimetallic non-alloyed NPs for improving the broadband optical absorption of thin amorphous silicon substrates. Nanoscale Research Letters, 2014, 9, 181.	3.1	25
8	Surface passivation and aging of InGaAs/InP heterojunction phototransistors. Journal of Applied Physics, 2017, 121, .	1.1	24
9	A highly sensitive, large area, and self-powered UV photodetector based on coalesced gallium nitride nanorods/graphene/silicon (111) heterostructure. Applied Physics Letters, 2020, 117, .	1.5	23
10	Plasmon-enhanced reduced graphene oxide photodetector with monometallic of Au and Ag nanoparticles at VISâ€“NIR region. Scientific Reports, 2021, 11, 19688.	1.6	21
11	Sensitivity Limit of Nanoscale Phototransistors. IEEE Electron Device Letters, 2017, 38, 1051-1054.	2.2	18
12	InGaAs/InP quantum well infrared photodetector integrated on Si substrate by Mo/Au metal-assisted wafer bonding. Optical Materials Express, 2018, 8, 413.	1.6	16
13	Optical absorption enhancement of hybrid-plasmonic-based metal-semiconductor-metal photodetector incorporating metal nanogratings and embedded metal nanoparticles. Optics Express, 2013, 21, 1713.	1.7	15
14	Metamorphic InP/InGaAs heterojunction bipolar transistors on GaAs substrate: DC and microwave performances. IEEE Transactions on Electron Devices, 2001, 48, 2671-2676.	1.6	12
15	Temperature dependence of avalanche multiplication in inp-based HBTs with InGaAs/InP composite collector: device characterization and physics model. IEEE Transactions on Electron Devices, 2003, 50, 2335-2343.	1.6	12
16	Open architecture time of flight 3D SWIR camera operating at 150 MHz modulation frequency. Optics Express, 2017, 25, 19291.	1.7	12
17	Metal Nano-Grating Optimization for Higher Responsivity Plasmonic-Based GaAs Metal-Semiconductor-Metal Photodetector. Journal of Lightwave Technology, 2013, 31, 1088-1092.	2.7	11
18	Spatial frequency spectrum of SPR-TFBG: A simple spectral analysis for in-situ refractometry. Optik, 2020, 219, 164970.	1.4	11

#	Article	IF	Citations
19	Impact of Nanograting Phase-Shift on Light Absorption Enhancement in Plasmonics-Based Metal-Semiconductor-Metal Photodetectors. Advances in Optical Technologies, 2011, 2011, 1-8.	0.8	9
20	Understanding of the excess channel noise in InAlAsâˆ•InGaAsâˆ•InP high electron mobility transistors in impact ionization regime. Applied Physics Letters, 2007, 90, 103503.	1.5	8
21	High-efficiency light-trapping effect using silver nanoparticles on thin amorphous silicon subwavelength structure. Optics Letters, 2013, 38, 4943.	1.7	8
22	AuAg bimetallic nonalloyed nanoparticles on a periodically nanostructured GaAs substrate for enhancing light trapping. Optics Letters, 2015, 40, 5798.	1.7	8
23	Engineering the gain-bandwidth product of phototransistor diodes. Applied Physics Letters, 2019, 115, 051104.	1.5	8
24	Absorption enhancement of MSM photodetector structure with a plasmonic double grating structure. , 2010, , .		7
25	InGaAs based heterojunction phototransistors: Viable solution for high-speed and low-noise short wave infrared imaging. Applied Physics Letters, 2019, 114, .	1.5	7
26	Investigation of drain current transient in BCB- and SiN-passivated Al0.25Ga0.75Asâˆ•In0.2Ga0.8As pseudomorphic high electron mobility transistors. Applied Physics Letters, 2007, 90, 033501.	1.5	6
27	Design of high-sensitivity plasmonics-assisted GaAs metal-semiconductor-metal photodetectors. , 2010, , .		6
28	Metal-semiconductor-metal (MSM) photodetectors with plasmonic nanogratings*. Pure and Applied Chemistry, 2011, 83, 2107-2113.	0.9	6
29	Groove shape-dependent absorption enhancement of 850 nm MSM photodetectors with nano-gratings. , 2010, , .		5
30	Light trapping enhancement induced by bimetallic non-alloyed nanoparticles on a disordered subwavelength flexible thin film crystalline silicon substrate using metal-assisted chemical etching. Optics Letters, 2017, 42, 431.	1.7	5
31	On the thermal resistance of metamorphic and lattice-matched InP HBTs: a comparative study. , 0, , .		4
32	Light absorption enhancement in metal-semiconductor-metal photodetectors using plasmonic nanostructure gratings. , 2009, , .		4
33	Transmittance design of internal reflection triangular-groove grating at large dimension domain. Optics and Lasers in Engineering, 2013, 51, 402-409.	2.0	4
34	Heterojunction phototransistor for highly sensitive infrared detection. Proceedings of SPIE, 2017, , .	0.8	4
35	Broadband high responsivity large-area plasmonic-enhanced multilayer MoS₂ on p-type silicon photodetector using Au nanostructures. Materials Research Express, 2019, 6, 105090.	0.8	4
36	Photocatalytic Application of Two-dimensional Materials-based Heterostructure Based on Molybdenum and Tungsten Disulfides and Gallium Nitride: A Density-Functional Theory Study. Materials Today Communications, 2020, 25, 101646.	0.9	4

#	Article	IF	Citations
37	Functionalized fiber-optic long-period grating with reduced cladding size for humidity sensing. Optical Engineering, 2019, 58, 1.	0.5	4
38	When shot-noise-limited photodetectors disobey Poisson statistics. Optics Letters, 2020, 45, 3009.	1.7	4
39	Hot-Electron-Induced Degradation in BCB- and SiN-Passivated $hbox{Al}_{0.25}hbox{Ga}_{0.75}hbox{As/In}_{0.2}hbox{Ga}_{0.8}hbox{As}$ PHEMTs. IEEE Transactions on Device and Materials Reliability, 2007, 7, 488-493.	1.5	3
40	Enhancement of confined femto-ablation at SiO2/Si interface by embedded metallic nanoparticles. Materials Today Physics, 2018, 4, 58-63.	2.9	3
41	The Effect of Temperature on the Operation of Quantum Well Laser: A Simulation Study Based on Three-Level Rate Equations. Fiber and Integrated Optics, 2006, 25, 441-450.	1.7	2
42	New progress in electron-injection detectors for NIR imagers with low noise and high frame rates. Proceedings of SPIE, 2016, , .	0.8	2
43	Si<inf>3</inf>N<inf>4</inf> / SiO<inf>2</inf> passivation layer on InP for optimization of the 1.55μm MQW FP laser performance. , 2009, , .		1
44	Impact of metal nano-grating phase-shift on plasmonic MSM photodetectors. , 2010, , .		1
45	Narrow bandwidth optimization using a polymer microring resonator in a thuliumâ€“holmium fiber laser cavity. Optics Communications, 2020, 466, 125574.	1.0	1
46	Evidence of Existence of Different Surface States in INP-Based High Electron Mobility Transistors (HEMTs). Indium Phosphide and Related Materials Conference (IPRM), IEEE International Conference on, 2007, , .	0.0	0
47	Nano-patterned high-responsivity GaAs metal-semiconductor-metal photodetector. , 2011, , .		0
48	Plasmonic-based GaAs balanced metal-semiconductor-metal photodetector with high common mode rejection ratio. , 2012, , .		0
49	AuAg Bimetallic Non-Alloyed Nanoparticles on SiO₂ Spacer Layer for Improved Light Absorption in Thin-Film c-Si Solar Cells. Journal of Nanoscience and Nanotechnology, 2018, 18, 2117-2120.	0.9	0