

Wei Dou

List of Publications by Year in descending order

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31
papers

1,105
citations

567281

15
h-index

580821

25
g-index

31
all docs

31
docs citations

31
times ranked

750
citing authors

#	ARTICLE	IF	CITATIONS
1	Investigation of SiGeSn/GeSn/SiGeSn single quantum well with enhanced well emission. Nanotechnology, 2022, 33, 085201.	2.6	5
2	Growth and Characterization of SiGe on c-Plane Sapphire Using a Chemical Vapor Deposition System. Journal of Electronic Materials, 2020, 49, 4809-4815.	2.2	2
3	Si-Based GeSn Photodetectors toward Mid-Infrared Imaging Applications. ACS Photonics, 2019, 6, 2807-2815.	6.6	124
4	Optically Pumped GeSn Lasers Operating at 270 K with Broad Waveguide Structures on Si. ACS Photonics, 2019, 6, 1434-1441.	6.6	109
5	Low temperature epitaxy of high-quality Ge buffer using plasma enhancement via UHV-CVD system for photonic device applications. Applied Surface Science, 2019, 481, 246-254.	6.1	13
6	Si-based Mid-Infrared GeSn-Edge-Emitting Laser with Operating Temperature up to 260 K. , 2019, , .		1
7	UHV-CVD growth of high quality GeSn using SnCl ₄ : from material growth development to prototype devices. Optical Materials Express, 2019, 9, 3277.	3.0	26
8	Investigation of SiGeSn/GeSn/SiGeSn Quantum Well Structures and Optically Pumped Lasers on Si. , 2019, , .		0
9	Investigation of GeSn Strain Relaxation and Spontaneous Composition Gradient for Low-Defect and High-Sn Alloy Growth. Scientific Reports, 2018, 8, 5640.	3.3	90
10	Direct bandgap type-I GeSn/GeSn quantum well on a GeSn- and Ge- buffered Si substrate. AIP Advances, 2018, 8, 025104.	1.3	19
11	Heteroepitaxial Growth of Germanium-on-Silicon Using Ultrahigh-Vacuum Chemical Vapor Deposition with RF Plasma Enhancement. Journal of Electronic Materials, 2018, 47, 4561-4570.	2.2	13
12	Si-Based GeSn Lasers with Wavelength Coverage of 2.3-3.4 μm and Operating Temperatures up to 180 K. ACS Photonics, 2018, 5, 827-833.	6.6	148
13	All group-IV SiGeSn/GeSn/SiGeSn QW laser on Si operating up to 90%K. Applied Physics Letters, 2018, 113, .	3.3	44
14	Study of direct bandgap type-I GeSn/GeSn double quantum well with improved carrier confinement. Nanotechnology, 2018, 29, 465201.	2.6	17
15	Optically pumped lasing at 3.4 μm from compositionally graded GeSn with tin up to 223%. Optics Letters, 2018, 43, 4558.	3.3	60
16	Development of SiGeSn Technique Towards Integrated Mid-Infrared Photonics Applications. , 2018, , .		1
17	Crystalline GeSn growth by plasma enhanced chemical vapor deposition. Optical Materials Express, 2018, 8, 3220.	3.0	18
18	Fundamentals of Ge _{1-x} Sn _x and Si _y Ge _{1-x-y} Sn _x RPCVD epitaxy. Materials Science in Semiconductor Processing, 2017, 70, 38-43.	4.0	36

#	ARTICLE	IF	CITATIONS
19	Comparison study of the low temperature growth of dilute GeSn and Ge. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2017, 35, 061204.	1.2	9
20	GeSn-based light sources and photoconductors towards integrated photonics for the mid-infrared. , 2017, , .		0
21	Study of material and optical properties of Si _{1-x} Ge _{1-x-y} Sn _y alloys for Si-based optoelectronic device applications. Optical Materials Express, 2017, 7, 3517.	3.0	7
22	Study of a SiGeSn/GeSn/SiGeSn structure toward direct bandgap type-I quantum well for all group-IV optoelectronics. Optics Letters, 2017, 42, 387.	3.3	39
23	Study of SiGeSn/GeSn/SiGeSn Quantum Well towards All Group-IV-Optoelectronics. , 2017, , .		0
24	Optically pumped Si-based edge-emitting GeSn laser. , 2017, , .		0
25	Systematic study of GeSn heterostructure-based light-emitting diodes towards mid-infrared applications. Journal of Applied Physics, 2016, 120, .	2.5	58
26	An optically pumped 2.5- μ m GeSn laser on Si operating at 110K. Applied Physics Letters, 2016, 109, .		186
27	Si _y Ge _{1-x} Sn _x films grown on Si using a cold-wall ultrahigh-vacuum chemical vapor deposition system. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2016, 34, 011201.	1.2	11
28	Optical Characterization of Si-Based Ge _{1-x} Sn _x Alloys with Sn Compositions up to 12%. Journal of Electronic Materials, 2016, 45, 2133-2141.	2.2	25
29	Buffer-Free GeSn and SiGeSn Growth on Si Substrate Using In Situ SnD ₄ Gas Mixing. Journal of Electronic Materials, 2016, 45, 2051-2058.	2.2	13
30	Study of High-Quality GeSn Alloys Grown by Chemical Vapor Deposition towards Mid-Infrared Applications. Journal of Electronic Materials, 2016, 45, 6251-6257.	2.2	15
31	Structural and Optical Characteristics of GeSn Quantum Wells for Silicon-Based Mid-Infrared Optoelectronic Applications. Journal of Electronic Materials, 2016, 45, 6265-6272.	2.2	16