David J Wallis

List of Publications by Year in descending order

37 papers	1,705 citations	567281 15 h-index	345221 36 g-index
39 all docs	39 docs citations	39 times ranked	2407 citing authors

#	Article	IF	Citations
1	Influence of Al _x Ga_{1â^'x}N nucleation layers on MOVPE-grown zincblende GaN epilayers on 3C-SiC/Si(001). Journal Physics D: Applied Physics, 2022, 55, 175110.	2.8	4
2	Investigation of wurtzite formation in MOVPE-grown zincblende GaN epilayers on AlxGa1â^'xN nucleation layers. Journal of Applied Physics, 2022, 131, .	2.5	3
3	Origin(s) of Anomalous Substrate Conduction in MOVPE-Grown GaN HEMTs on Highly Resistive Silicon. ACS Applied Electronic Materials, 2021, 3, 813-824.	4.3	14
4	Defect structures in (001) zincblende GaN/3C-SiC nucleation layers. Journal of Applied Physics, 2021, 129, .	2.5	10
5	Photoluminescence efficiency of zincblende InGaN/GaN quantum wells. Journal of Applied Physics, 2021, 129, .	2.5	9
6	The effect of thermal annealing on the optical properties of Mg-doped zincblende GaN epilayers. Journal of Applied Physics, 2021, 130, .	2.5	3
7	Multimicroscopy of cross-section zincblende GaN LED heterostructure. Journal of Applied Physics, 2021, 130, .	2.5	6
8	Alloy segregation at stacking faults in zincblende GaN heterostructures. Journal of Applied Physics, 2020, 128, 145703.	2.5	8
9	Stacking fault-associated polarized surface-emitted photoluminescence from zincblende InGaN/GaN quantum wells. Applied Physics Letters, 2020, 117, .	3.3	6
10	Thin film Gallium nitride (GaN) based acoustofluidic Tweezer: Modelling and microparticle manipulation. Ultrasonics, 2020, 108, 106202.	3.9	11
11	Gallium Nitride: A Versatile Compound Semiconductor as Novel Piezoelectric Film for Acoustic Tweezer in Manipulation of Cancer Cells. IEEE Transactions on Electron Devices, 2020, 67, 3355-3361.	3.0	11
12	A poly(urethane)-encapsulated benzo[2,3-d:6,7-dâ€²]diimidazole organic down-converter for green hybrid LEDs. Materials Chemistry Frontiers, 2020, 4, 1006-1012.	5.9	7
13	Thick, Adherent Diamond Films on AlN with Low Thermal Barrier Resistance. ACS Applied Materials & Interfaces, 2019, 11, 40826-40834.	8.0	45
14	Implementing fluorescent MOFs as down-converting layers in hybrid light-emitting diodes. Journal of Materials Chemistry C, 2019, 7, 2394-2400.	5.5	23
15	Investigation of stacking faults in MOVPE-grown zincblende GaN by XRD and TEM. Journal of Applied Physics, 2019, 125, .	2.5	17
16	Nanoscale structural and chemical analysis of F-implanted enhancement-mode InAlN/GaN heterostructure field effect transistors. Journal of Applied Physics, 2018, 123, 024902.	2.5	2
17	High-Performance MMIC Inductors for GaN-on-Low-Resistivity Silicon for Microwave Applications. IEEE Microwave and Wireless Components Letters, 2018, 28, 99-101.	3.2	10
18	The 2018 GaN power electronics roadmap. Journal Physics D: Applied Physics, 2018, 51, 163001.	2.8	843

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19	Effect of growth temperature and V/III-ratio on the surface morphology of MOVPE-grown cubic zincblende GaN. Journal of Applied Physics, 2018, 124, .	2.5	20
20	Effect of stacking faults on the photoluminescence spectrum of zincblende GaN. Journal of Applied Physics, 2018, 123, .	2.5	10
21	Vertical leakage mechanism in GaN on Si high electron mobility transistor buffer layers. Journal of Applied Physics, 2018, 124, .	2.5	28
22	All-GaN-Integrated Cascode Heterojunction Field Effect Transistors. IEEE Transactions on Power Electronics, 2017, 32, 8743-8750.	7.9	16
23	Low-Loss MMICs Viable Transmission Media for GaN-on-Low Resistivity Silicon Technology. IEEE Microwave and Wireless Components Letters, 2017, 27, 10-12.	3.2	8
24	Photoluminescence studies of cubic GaN epilayers. Physica Status Solidi (B): Basic Research, 2017, 254, 1600733.	1.5	16
25	Surface Zeta Potential and Diamond Seeding on Gallium Nitride Films. ACS Omega, 2017, 2, 7275-7280.	3.5	33
26	X-ray diffraction analysis of cubic zincblende III-nitrides. Journal Physics D: Applied Physics, 2017, 50, 433002.	2.8	41
27	Dual barrier InAlN/AlGaN/GaN-on-silicon high-electron-mobility transistors with Pt- and Ni-based gate stacks. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600835.	1.8	2
28	Modelling the closely-coupled cascode switching process. , 2016, , .		1
29	Colour tuning in white hybrid inorganic/organic light-emitting diodes. Journal Physics D: Applied Physics, 2016, 49, 405103.	2.8	15
30	Cool to warm white light emission from hybrid inorganic/organic light-emitting diodes. Journal of Materials Chemistry C, 2016, 4, 11499-11507.	5.5	28
31	Nano-cathodoluminescence reveals the effect of electron damage on the optical properties of nitride optoelectronics and the damage threshold. Journal of Applied Physics, 2016, 120, 165704.	2.5	10
32	High Performance GaN High Electron Mobility Transistors on Low Resistivity Silicon for <inline-formula> <tex-math notation="LaTeX">X </tex-math></inline-formula>-Band Applications. IEEE Electron Device Letters, 2015, 36, 899-901.	3.9	25
33	Nanocathodoluminescence Reveals Mitigation of the Stark Shift in InGaN Quantum Wells by Si Doping. Nano Letters, 2015, 15, 7639-7643.	9.1	33
34	Novel Shielded Coplanar Waveguides on GaN-on-Low Resistivity Si Substrates for MMIC Applications. IEEE Microwave and Wireless Components Letters, 2015, 25, 427-429.	3.2	12
35	An Organic Downâ€Converting Material for Whiteâ€Light Emission from Hybrid LEDs. Advanced Materials, 2014, 26, 7290-7294.	21.0	111
36	Prospects of III-nitride optoelectronics grown on Si. Reports on Progress in Physics, 2013, 76, 106501.	20.1	249

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37	Origin of kink effect in AlGaN/GaN high electron mobility transistors: Yellow luminescence and Fe doping. Applied Physics Letters, 2012, 101, .	3.3	15