Stefano Leone

List of Publications by Year
in descending order

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84 papers	1,344 citations	394421 19 h-index	414414 32 g-index
84 all docs	84 docs citations	84 times ranked	885 citing authors

#	Article	IF	Citations
1	Leakage mechanism in Al x Ga1â^'x N/GaN heterostructures with AlN interlayer. Semiconductor Science and Technology, 2022, 37, 025016.	2.0	1
2	A Wideband E/W-Band Low-Noise Amplifier MMIC in a 70-nm Gate-Length GaN HEMT Technology. IEEE Transactions on Microwave Theory and Techniques, 2022, 70, 1367-1376.	4.6	17
3	On the origin of the turn-on voltage drop of GaN-based current aperture vertical electron transistors. Journal of Applied Physics, 2022, 131, .	2.5	3
4	Effect of V/III ratio and growth pressure on surface and crystal quality of AlN grown on sapphire by metal-organic chemical vapor deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2022, 40, .	2.1	4
5	Growth and Fabrication of Quasivertical Current Aperture Vertical Electron Transistor Structures. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2000379.	1.8	9
6	Technology of GaN-Based Large Area CAVETs With Co-Integrated HEMTs. IEEE Transactions on Electron Devices, 2021, 68, 5547-5552.	3.0	8
7	Improved AlScN/GaN heterostructures grown by metal-organic chemical vapor deposition. Semiconductor Science and Technology, 2021, 36, 034003.	2.0	34
8	Polarization induced interface and electron sheet charges of pseudomorphic ScAlN/GaN, GaAlN/GaN, InAlN/GaN, and InAlN/InN heterostructures. Journal of Applied Physics, 2021, 129, .	2.5	30
9	Metalâ€Organic Chemical Vapor Deposition of Aluminum Scandium Nitride. Physica Status Solidi - Rapid Research Letters, 2020, 14, 1900535.	2.4	54
10	Optimization of Metalâ€Organic Chemical Vapor Deposition Regrown nâ€GaN. Physica Status Solidi (B): Basic Research, 2020, 257, 1900436.	1.5	6
11	First Demonstration of G-Band Broadband GaN Power Amplifier MMICs Operating Beyond 200 GHz. , 2020, , .		8
12	Control of the Mechanical Adhesion of IIIâ€“V Materials Grown on Layered h-BN. ACS Applied Materials & Interfaces, 2020, 12, 55460-55466.	8.0	14
13	Metalorganic chemical vapor phase deposition of AlScN/GaN heterostructures. Journal of Applied Physics, 2020, 127, .	2.5	34
14	Epitaxial growth of GaN/Ga2O3 and Ga2O3/GaN heterostructures for novel high electron mobility transistors. Journal of Crystal Growth, 2020, 534, 125511.	1.5	35
15	190-GHz G-Band GaN Amplifier MMICs with 40GHz of Bandwidth. , 2019, , .		4
16	D-Band and G-Band High-Performance GaN Power Amplifier MMICs. IEEE Transactions on Microwave Theory and Techniques, 2019, 67, 5080-5089.	4.6	43
17	Epitaxial growth optimization of AlGaN/GaN high electron mobility transistor structures on 3C-SiC/Si. Journal of Applied Physics, 2019, 125, .	2.5	15
18	AlGaN avalanche Schottky diodes with high Al-content. Japanese Journal of Applied Physics, 2019, 58, SCCC11.	1.5	10

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19	Suppression of Iron Memory Effect in GaN Epitaxial Layers. Physica Status Solidi (B): Basic Research, 2018, 255, 1700377.	1.5	24
20	Effect of Different Carbon Doping Techniques on the Dynamic Properties of GaN-on-Si Buffers. IEEE Transactions on Electron Devices, 2017, 64, 991-997.	3.0	31
21	Optical properties and Zeeman spectroscopy of niobium in silicon carbide. Physical Review B, 2015, 92, .	3.2	6
22	Epitaxial growth of SiC with chlorinated precursors on different off-angle substrates. Journal of Crystal Growth, 2013, 362, 170-173.	1.5	18
23	Electron Paramagnetic Resonance Studies of Nb in 6H-SiC. Materials Science Forum, 2013, 740-742, 385-388.	0.3	0
24	Chloride-Based CVD of 4H-SiC at High Growth Rates on Substrates with Different Off-Angles. Materials Science Forum, 2012, 717-720, 113-116.	0.3	2
25	Electronic Configuration of Tungsten in 4H-, 6H-, and 15R-SiC. Materials Science Forum, 2012, 717-720, 211-216.	0.3	0
26	CVD Growth of 3C-SiC on 4H-SiC Substrate. Materials Science Forum, 2012, 711, 16-21.	0.3	2
27	Electron paramagnetic resonance and theoretical studies of Nb in 4H- and 6H-SiC. Journal of Applied Physics, 2012, 112, .	2.5	11
28	Gas-Phase Modeling of Chlorine-Based Chemical Vapor Deposition of Silicon Carbide. Crystal Growth and Design, 2012, 12, 1977-1984.	3.0	17
29	Chloride-Based CVD Growth of Silicon Carbide for Electronic Applications. Chemical Reviews, 2012, 112, 2434-2453.	47.7	99
30	Optical identification and electronic configuration of tungsten in 4H- and 6H-SiC. Physica B: Condensed Matter, 2012, 407, 1462-1466.	2.7	14
31	SiC epitaxy growth using chloride-based CVD. Physica B: Condensed Matter, 2012, 407, 1467-1471.	2.7	13
32	Chloride-Based CVD at High Rates of 4H-SiC on On-Axis Si-Face Substrates. Materials Science Forum, 2011, 679-680, 59-62.	0.3	7
33	Deep levels in tungsten doped n-type 3Câ€“SiC. Applied Physics Letters, 2011, 98, 152104.	3.3	16
34	Deep levels in iron doped n- and p-type 4H-SiC. Journal of Applied Physics, 2011, 110, 123701.	2.5	21
35	Growth of smooth 4H-SiC epilayers on 4Â° off-axis substrates with chloride-based CVD at very high growth rate. Materials Research Bulletin, 2011, 46, 1272-1275.	5.2	20
36	Nanoscale characterization of electrical transport at metal/3C-SiC interfaces. Nanoscale Research Letters, 2011, 6, 120.	5.7	7

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37	Chlorinated precursor study in low temperature chemical vapor deposition of 4H-SiC. Thin Solid Films, 2011, 519, 3074-3080.	1.8	16
38	Chloride Based CVD of 3C-SiC on (0001) Î±-SiC Substrates. Materials Science Forum, 2011, 679-680, 75-78.	0.3	6
39	Chlorideâ€based CVD of 3Câ€SiC epitaxial layers on 6H(0001) SiC. Physica Status Solidi - Rapid Research Letters, 2010, 4, 305-307.	2.4	24
40	On the Viability of Au/3C-SiC Schottky Barrier Diodes. Materials Science Forum, 2010, 645-648, 677-680.	0.3	4
41	Optimization of a Concentrated Chloride-Based CVD Process for 4Hâ€“SiC Epilayers. Journal of the Electrochemical Society, 2010, 157, H969.	2.9	9
42	Chloride-based CVD of 3C-SiC Epitaxial Layers on On-axis 6H (0001) SiC Substrates. , 2010, , .		2
43	Deep levels in hetero-epitaxial as-grown 3C-SiC. , 2010, , .		1
44	High Growth Rate of 4H-SiC Epilayers on On-Axis Substrates with Different Chlorinated Precursors. Crystal Growth and Design, 2010, 10, 5334-5340.	3.0	22
45	Chloride-Based SiC Epitaxial Growth toward Low Temperature Bulk Growth. Crystal Growth and Design, 2010, 10, 3743-3751.	3.0	13
46	Demonstration of Defect-Induced Limitations on the Properties of Au/3C-SiC Schottky Barrier Diodes. Solid State Phenomena, 2009, 156-158, 331-336.	0.3	3
47	Toward an ideal Schottky barrier on 3C-SiC. Applied Physics Letters, 2009, 95, .	3.3	49
48	Growth of Thick 4H-SiC Epitaxial Layers on On-Axis Si-Face Substrates with HCl Addition. Materials Science Forum, 2009, 615-617, 93-96.	0.3	7
49	Chloride-Based SiC Epitaxial Growth. Materials Science Forum, 2009, 615-617, 89-92.	0.3	2
50	Thick homoepitaxial layers grown on on-axis Si-face 6H- and 4H-SiC substrates with HCl addition. Journal of Crystal Growth, 2009, 312, 24-32.	1.5	38
51	Improved morphology for epitaxial growth on 4Â° off-axis 4H-SiC substrates. Journal of Crystal Growth, 2009, 311, 3265-3272.	1.5	45
52	Very high crystalline quality of thick 4Hâ€SiC epilayers grown from methyltrichlorosilane (MTS). Physica Status Solidi - Rapid Research Letters, 2008, 2, 188-190.	2.4	24
53	Growth characteristics of chlorideâ€based SiC epitaxial growth. Physica Status Solidi - Rapid Research Letters, 2008, 2, 278-280.	2.4	32
54	Optical and electrical properties of 4H-SiC epitaxial layer grown with HCl addition. Journal of Applied Physics, 2007, 102, 043523.	2.5	17

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55	Carbonization Study of Different Silicon Orientations. Materials Science Forum, 2007, 556-557, 171-174.	0.3	3
56	Very High Growth Rate Epitaxy Processes with Chlorine Addition. Materials Science Forum, 2007, 556-557, 157-160.	0.3	15
57	Film Morphology and Process Conditions in Epitaxial Silicon Carbide Growth via Chlorides Route. Materials Science Forum, 2007, 556-557, 93-96.	0.3	7
58	Optimisation of Epitaxial Layer Growth with HCl Addition by Optical and Electrical Characterization. Materials Science Forum, 2007, 556-557, 137-140.	0.3	3
59	Very high epitaxial growth rate of SiC using MTS as chloride-based precursor. Surface and Coatings Technology, 2007, 201, 8931-8934.	4.8	9
60	Very high growth rate of 4H-SiC epilayers using the chlorinated precursor methyltrichlorosilane (MTS). Journal of Crystal Growth, 2007, 307, 334-340.	1.5	83
61	Heteroepitaxial Growth of 3C-SiC on Silicon-Porous Silicon-Silicon (SPS) Substrates. ECS Transactions, 2006, 3, 287-298.	0.5	5
62	In situ etch treatments of silicon carbide epitaxial layer for morphological quality improvement of the surfaces. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 2294-2297.	1.8	0
63	High growth rate process in a SiC horizontal CVD reactor using HCl. Microelectronic Engineering, 2006, 83, 48-50.	2.4	17
64	In situ etch treatment of bulk surface for epitaxial layer growth optimization. Microelectronic Engineering, 2006, 83, 82-85.	2.4	2
65	4H SiC Epitaxial Growth with Chlorine Addition. Chemical Vapor Deposition, 2006, 12, 509-515.	1.3	82
66	High Growth Rate Process in a SiC Horizontal Reactor with HCl Addition: Structural and Electrical Characterization. Materials Research Society Symposia Proceedings, 2006, 911, 1.	0.1	0
67	Effect of Dopant Concentration on High Voltage 4H-SiC Schottky Diodes. Materials Research Society Symposia Proceedings, 2006, 911, 2.	0.1	3
68	Optimisation of Epitaxial Layer Growth by Schottky Diodes Electrical Characterization. Materials Science Forum, 2006, 527-529, 199-202.	0.3	1
69	SiC-4H Epitaxial Layer Growth Using Trichlorosilane (TCS) as Silicon Precursor. Materials Science Forum, 2006, 527-529, 179-182.	0.3	24
70	Epitaxial Layers Grown with HCl Addition: A Comparison with the Standard Process. Materials Science Forum, 2006, 527-529, 163-166.	0.3	13
71	Modeling of epitaxial silicon carbide deposition. Journal of Crystal Growth, 2005, 275, e295-e300.	1.5	19
72	Horizontal hot wall reactor design for epi-SiC growth. Crystal Research and Technology, 2005, 40, 972-975.	1.3	5

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73	Epitaxial Deposition of Silicon Carbide Films in a Horizontal Hot-Wall CVD Reactor. Materials Science Forum, 2005, 483-485, 57-60.	0.3	7
74	Effects of Epitaxial Layer Growth Parameters on the Defect Density and on the Electrical Characteristics of Schottky Diodes. Materials Science Forum, 2005, 483-485, 429-432.	0.3	1
75	New Achievements on CVD Based Methods for SiC Epitaxial Growth. Materials Science Forum, 2005, 483-485, 67-72.	0.3	48
76	Homoepitaxial Growth of 4H-SiC on On-Axis Si-Face Substrates Using Chloride-Based CVD. Materials Science Forum, 0, 600-603, 107-110.	0.3	17
77	Very High Growth Rate of 4H-SiC Using MTS as Chloride-Based Precursor. Materials Science Forum, 0, 600-603, 115-118.	0.3	6
78	Growth of 4H-SiC Epitaxial Layers on 4Â° Off-Axis Si-Face Substrates. Materials Science Forum, 0, 615-617, 81-84.	0.3	0
79	Chloride-Based CVD at High Growth Rates on 3â€•Vicinal Off-Angles SiC Wafers. Materials Science Forum, 0, 645-648, 107-110.	0.3	7
80	Concentrated Chloride-Based Epitaxial Growth of 4H-SiC. Materials Science Forum, 0, 645-648, 95-98.	0.3	3
81	Carrot Defect Control in Chloride-Based CVD through Optimized Ramp up Conditions. Materials Science Forum, 0, 717-720, 109-112.	0.3	7
82	CVD Heteroepitaxial Growth of 3C-SiC on 4H-SiC (0001) Substrates. Materials Science Forum, 0, 717-720, 189-192.	0.3	2
83	Identification of Niobium in 4H-SiC by EPR and <i>Ab Initio</i> Studies. Materials Science Forum, 0, 717-720, 217-220.	0.3	3
84	Optical Properties of the Niobium Centre in 4H, 6H, and 15R SiC. Materials Science Forum, 0, 740-742, 405-408.	0.3	1