Stefano Leone

List of Publications by Year in Descending Order

83 papers	1,031 citations	17 h-index	27 g-index
84 ext. papers	1,165 ext. citations	2.6 avg, IF	3.79 L-index

#	Paper	IF	Citations
83	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	4.1	2
82	Leakage mechanism in Al x Ga1⊠ N/GaN heterostructures with AlN interlayer. *Semiconductor Science and Technology*, **2022**, 37, 025016	1.8	
81	On the origin of the turn-on voltage drop of GaN-based current aperture vertical electron transistors. *Journal of Applied Physics*, **2022**, 131, 114502	2.5	1
80	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, 032702	2.9	0
79	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, 204501	2.5	10
78	Growth and Fabrication of Quasivertical Current Aperture Vertical Electron Transistor Structures. *Physica Status Solidi (A) Applications and Materials Science*, **2021**, 218, 2000379	1.6	5
77	Technology of GaN-Based Large Area CAVETs With Co-Integrated HEMTs. *IEEE Transactions on Electron Devices*, **2021**, 1-6	2.9	3
76	Improved AlScN/GaN heterostructures grown by metal-organic chemical vapor deposition. *Semiconductor Science and Technology*, **2021**, 36, 034003	1.8	14
75	Metalorganic chemical vapor phase deposition of AlScN/GaN heterostructures. *Journal of Applied Physics*, **2020**, 127, 195704	2.5	17
74	Epitaxial growth of GaN/Ga2O3 and Ga2O3/GaN heterostructures for novel high electron mobility transistors. *Journal of Crystal Growth*, **2020**, 534, 125511	1.6	16
73	Metal-Organic Chemical Vapor Deposition of Aluminum Scandium Nitride. *Physica Status Solidi - Rapid Research Letters*, **2020**, 14, 1900535	2.5	34
72	Optimization of Metal-Organic Chemical Vapor Deposition Regrown n-GaN. *Physica Status Solidi (B): Basic Research*, **2020**, 257, 1900436	1.3	4
71	First Demonstration of G-Band Broadband GaN Power Amplifier MMICs Operating Beyond 200 GHz **2020**,		5
70	Control of the Mechanical Adhesion of III-V Materials Grown on Layered h-BN. *ACS Applied Materials & Interfaces*, **2020**, 12, 55460-55466	9.5	4
69	D-Band and G-Band High-Performance GaN Power Amplifier MMICs. *IEEE Transactions on Microwave Theory and Techniques*, **2019**, 67, 5080-5089	4.1	13
68	Epitaxial growth optimization of AlGaN/GaN high electron mobility transistor structures on 3C-SiC/Si. *Journal of Applied Physics*, **2019**, 125, 235701	2.5	7
67	AlGaN avalanche Schottky diodes with high Al-content. *Japanese Journal of Applied Physics*, **2019**, 58, SCCC11	1.4	7

66	Suppression of Iron Memory Effect in GaN Epitaxial Layers. *Physica Status Solidi (B): Basic Research*, **2018**, 255, 1700377	1.3	17
65	Effect of Different Carbon Doping Techniques on the Dynamic Properties of GaN-on-Si Buffers. *IEEE Transactions on Electron Devices*, **2017**, 64, 991-997	2.9	16
64	Optical properties and Zeeman spectroscopy of niobium in silicon carbide. *Physical Review B*, **2015**, 92,	3.3	5
63	Epitaxial growth of SiC with chlorinated precursors on different off-angle substrates. *Journal of Crystal Growth*, **2013**, 362, 170-173	1.6	11
62	Optical Properties of the Niobium Centre in 4H, 6H, and 15R SiC. *Materials Science Forum*, **2013**, 740-742, 405-408	0.4	1
61	Electron Paramagnetic Resonance Studies of Nb in 6H-SiC. *Materials Science Forum*, **2013**, 740-742, 385-388	0.4	
60	Optical identification and electronic configuration of tungsten in 4H- and 6H-SiC. *Physica B: Condensed Matter*, **2012**, 407, 1462-1466	2.8	12
59	SiC epitaxy growth using chloride-based CVD. *Physica B: Condensed Matter*, **2012**, 407, 1467-1471	2.8	12
58	Gas-Phase Modeling of Chlorine-Based Chemical Vapor Deposition of Silicon Carbide. *Crystal Growth and Design*, **2012**, 12, 1977-1984	3.5	15
57	Chloride-based CVD growth of silicon carbide for electronic applications. *Chemical Reviews*, **2012**, 112, 2434-53	68.1	80
56	Carrot Defect Control in Chloride-Based CVD through Optimized Ramp up Conditions. *Materials Science Forum*, **2012**, 717-720, 109-112	0.4	6
55	Chloride-Based CVD of 4H-SiC at High Growth Rates on Substrates with Different Off-Angles. *Materials Science Forum*, **2012**, 717-720, 113-116	0.4	2
54	CVD Heteroepitaxial Growth of 3C-SiC on 4H-SiC (0001) Substrates. *Materials Science Forum*, **2012**, 717-720, 189-192	0.4	2
53	Electronic Configuration of Tungsten in 4H-, 6H-, and 15R-SiC. *Materials Science Forum*, **2012**, 717-720, 211-216	0.4	
52	Identification of Niobium in 4H-SiC by EPR and Ab Initio Studies. *Materials Science Forum*, **2012**, 717-720, 217-220	0.4	3
51	CVD Growth of 3C-SiC on 4H-SiC Substrate. *Materials Science Forum*, **2012**, 711, 16-21	0.4	2
50	Electron paramagnetic resonance and theoretical studies of Nb in 4H- and 6H-SiC. *Journal of Applied Physics*, **2012**, 112, 083711	2.5	10
49	Chloride-Based CVD at High Rates of 4H-SiC on On-Axis Si-Face Substrates. *Materials Science Forum*, **2011**, 679-680, 59-62	0.4	7

48	Deep levels in tungsten doped n-type 3C-SiC. *Applied Physics Letters*, **2011**, 98, 152104	3.4	15
47	Deep levels in iron doped n- and p-type 4H-SiC. *Journal of Applied Physics*, **2011**, 110, 123701	2.5	17
46	Growth of smooth 4H-SiC epilayers on 4° off-axis substrates with chloride-based CVD at very high growth rate. *Materials Research Bulletin*, **2011**, 46, 1272-1275	5.1	18
45	Nanoscale characterization of electrical transport at metal/3C-SiC interfaces. *Nanoscale Research Letters*, **2011**, 6, 120	5	5
44	Chlorinated precursor study in low temperature chemical vapor deposition of 4H-SiC. *Thin Solid Films*, **2011**, 519, 3074-3080	2.2	15
43	Chloride Based CVD of 3C-SiC on (0001) 6H-SiC Substrates. *Materials Science Forum*, **2011**, 679-680, 75-78	0.4	6
42	Chloride-Based CVD at High Growth Rates on 3° Vicinal Off-Angles SiC Wafers. *Materials Science Forum*, **2010**, 645-648, 107-110	0.4	7
41	Concentrated Chloride-Based Epitaxial Growth of 4H-SiC. *Materials Science Forum*, **2010**, 645-648, 95-98	0.4	3
40	On the Viability of Au/3C-SiC Schottky Barrier Diodes. *Materials Science Forum*, **2010**, 645-648, 677-680	0.4	4
39	Optimization of a Concentrated Chloride-Based CVD Process for 4H-SiC Epilayers. *Journal of the Electrochemical Society*, **2010**, 157, H969	3.9	9
38	Chloride-based CVD of 3C-SiC Epitaxial Layers on On-axis 6H (0001) SiC Substrates **2010**,		2
37	Deep levels in hetero-epitaxial as-grown 3C-SiC **2010**,		1
36	High Growth Rate of 4H-SiC Epilayers on On-Axis Substrates with Different Chlorinated Precursors. *Crystal Growth and Design*, **2010**, 10, 5334-5340	3.5	20
35	Chloride-Based SiC Epitaxial Growth toward Low Temperature Bulk Growth. *Crystal Growth and Design*, **2010**, 10, 3743-3751	3.5	11
34	Chloride-based CVD of 3C-SiC epitaxial layers on 6H(0001) SiC. *Physica Status Solidi - Rapid Research Letters*, **2010**, 4, 305-307	2.5	20
33	Demonstration of Defect-Induced Limitations on the Properties of Au/3C-SiC Schottky Barrier Diodes. *Solid State Phenomena*, **2009**, 156-158, 331-336	0.4	2
32	Toward an ideal Schottky barrier on 3C-SiC. *Applied Physics Letters*, **2009**, 95, 081907	3.4	41
31	Growth of Thick 4H-SiC Epitaxial Layers on On-Axis Si-Face Substrates with HCl Addition. *Materials Science Forum*, **2009**, 615-617, 93-96	0.4	7

30	Growth of 4H-SiC Epitaxial Layers on 4° Off-Axis Si-Face Substrates. *Materials Science Forum*, **2009**, 615-617, 81-84	0.4	
29	Chloride-Based SiC Epitaxial Growth. *Materials Science Forum*, **2009**, 615-617, 89-92	0.4	2
28	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	1.6	33
27	Improved morphology for epitaxial growth on 4° off-axis 4H-SiC substrates. *Journal of Crystal Growth*, **2009**, 311, 3265-3272	1.6	40
26	Homoepitaxial Growth of 4H-SiC on On-Axis Si-Face Substrates Using Chloride-Based CVD. *Materials Science Forum*, **2008**, 600-603, 107-110	0.4	17
25	Very High Growth Rate of 4H-SiC Using MTS as Chloride-Based Precursor. *Materials Science Forum*, **2008**, 600-603, 115-118	0.4	5
24	Very high crystalline quality of thick 4H-SiC epilayers grown from methyltrichlorosilane (MTS). *Physica Status Solidi - Rapid Research Letters*, **2008**, 2, 188-190	2.5	23
23	Growth characteristics of chloride-based SiC epitaxial growth. *Physica Status Solidi - Rapid Research Letters*, **2008**, 2, 278-280	2.5	29
22	Very high epitaxial growth rate of SiC using MTS as chloride-based precursor. *Surface and Coatings Technology*, **2007**, 201, 8931-8934	4.4	8
21	Very high growth rate of 4H-SiC epilayers using the chlorinated precursor methyltrichlorosilane (MTS). *Journal of Crystal Growth*, **2007**, 307, 334-340	1.6	73
20	Optical and electrical properties of 4H-SiC epitaxial layer grown with HCl addition. *Journal of Applied Physics*, **2007**, 102, 043523	2.5	16
19	Carbonization Study of Different Silicon Orientations. *Materials Science Forum*, **2007**, 556-557, 171-174	0.4	3
18	Very High Growth Rate Epitaxy Processes with Chlorine Addition. *Materials Science Forum*, **2007**, 556-557, 157-160	0.4	15
17	Film Morphology and Process Conditions in Epitaxial Silicon Carbide Growth via Chlorides Route. *Materials Science Forum*, **2007**, 556-557, 93-96	0.4	6
16	Optimisation of Epitaxial Layer Growth with HCl Addition by Optical and Electrical Characterization. *Materials Science Forum*, **2007**, 556-557, 137-140	0.4	3
15	In situ etch treatment of bulk surface for epitaxial layer growth optimization. *Microelectronic Engineering*, **2006**, 83, 82-85	2.5	1
14	4H SiC Epitaxial Growth with Chlorine Addition. *Chemical Vapor Deposition*, **2006**, 12, 509-515		77
13	High Growth Rate Process in a SiC Horizontal Reactor with HCl Addition: Structural and Electrical Characterization. *Materials Research Society Symposia Proceedings*, **2006**, 911, 1		

12	Effect of Dopant Concentration on High Voltage 4H-SiC Schottky Diodes. *Materials Research Society Symposia Proceedings*, **2006**, 911, 2		2
11	Optimisation of Epitaxial Layer Growth by Schottky Diodes Electrical Characterization. *Materials Science Forum*, **2006**, 527-529, 199-202	0.4	0
10	SiC-4H Epitaxial Layer Growth Using Trichlorosilane (TCS) as Silicon Precursor. *Materials Science Forum*, **2006**, 527-529, 179-182	0.4	23
9	Epitaxial Layers Grown with HCl Addition: A Comparison with the Standard Process. *Materials Science Forum*, **2006**, 527-529, 163-166	0.4	13
8	Heteroepitaxial Growth of 3C-SiC on Silicon-Porous Silicon-Silicon (SPS) Substrates. *ECS Transactions*, **2006**, 3, 287-298	1	5
7	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	1.6	
6	High growth rate process in a SiC horizontal CVD reactor using HCl. *Microelectronic Engineering*, **2006**, 83, 48-50	2.5	15
5	Modeling of epitaxial silicon carbide deposition. *Journal of Crystal Growth*, **2005**, 275, e295-e300	1.6	17
4	Horizontal hot wall reactor design for epi-SiC growth. *Crystal Research and Technology*, **2005**, 40, 972-975	1.3	4
3	Epitaxial Deposition of Silicon Carbide Films in a Horizontal Hot-Wall CVD Reactor. *Materials Science Forum*, **2005**, 483-485, 57-60	0.4	7
2	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	0.4	1
1	New Achievements on CVD Based Methods for SiC Epitaxial Growth. *Materials Science Forum*, **2005**, 483-485, 67-72	0.4	46