

# Stefano Leone

## List of Publications by Year in descending order

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84  
papers

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citations

394421

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414414

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84  
all docs

84  
docs citations

84  
times ranked

885  
citing authors

#	ARTICLE	IF	CITATIONS
1	Chloride-Based CVD Growth of Silicon Carbide for Electronic Applications. <i>Chemical Reviews</i> , 2012, 112, 2434-2453.	47.7	99
2	Very high growth rate of 4H-SiC epilayers using the chlorinated precursor methyltrichlorosilane (MTS). <i>Journal of Crystal Growth</i> , 2007, 307, 334-340.	1.5	83
3	4H SiC Epitaxial Growth with Chlorine Addition. <i>Chemical Vapor Deposition</i> , 2006, 12, 509-515.	1.3	82
4	Metal-Organic Chemical Vapor Deposition of Aluminum Scandium Nitride. <i>Physica Status Solidi - Rapid Research Letters</i> , 2020, 14, 1900535.	2.4	54
5	Toward an ideal Schottky barrier on 3C-SiC. <i>Applied Physics Letters</i> , 2009, 95, .	3.3	49
6	New Achievements on CVD Based Methods for SiC Epitaxial Growth. <i>Materials Science Forum</i> , 2005, 483-485, 67-72.	0.3	48
7	Improved morphology for epitaxial growth on 4° off-axis 4H-SiC substrates. <i>Journal of Crystal Growth</i> , 2009, 311, 3265-3272.	1.5	45
8	D-Band and G-Band High-Performance GaN Power Amplifier MMICs. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2019, 67, 5080-5089.	4.6	43
9	Thick homoepitaxial layers grown on on-axis Si-face 6H- and 4H-SiC substrates with HCl addition. <i>Journal of Crystal Growth</i> , 2009, 312, 24-32.	1.5	38
10	Epitaxial growth of GaN/Ga <sub>2</sub> O <sub>3</sub> and Ga <sub>2</sub> O <sub>3</sub> /GaN heterostructures for novel high electron mobility transistors. <i>Journal of Crystal Growth</i> , 2020, 534, 125511.	1.5	35
11	Metalorganic chemical vapor phase deposition of AlScN/GaN heterostructures. <i>Journal of Applied Physics</i> , 2020, 127, .	2.5	34
12	Improved AlScN/GaN heterostructures grown by metal-organic chemical vapor deposition. <i>Semiconductor Science and Technology</i> , 2021, 36, 034003.	2.0	34
13	Growth characteristics of chloride-based SiC epitaxial growth. <i>Physica Status Solidi - Rapid Research Letters</i> , 2008, 2, 278-280.	2.4	32
14	Effect of Different Carbon Doping Techniques on the Dynamic Properties of GaN-on-Si Buffers. <i>IEEE Transactions on Electron Devices</i> , 2017, 64, 991-997.	3.0	31
15	Polarization induced interface and electron sheet charges of pseudomorphic ScAlN/GaN, GaAlN/GaN, InAlN/GaN, and InAlN/InN heterostructures. <i>Journal of Applied Physics</i> , 2021, 129, .	2.5	30
16	SiC-4H Epitaxial Layer Growth Using Trichlorosilane (TCS) as Silicon Precursor. <i>Materials Science Forum</i> , 2006, 527-529, 179-182.	0.3	24
17	Very high crystalline quality of thick 4H-SiC epilayers grown from methyltrichlorosilane (MTS). <i>Physica Status Solidi - Rapid Research Letters</i> , 2008, 2, 188-190.	2.4	24
18	Chloride-based CVD of 3C-SiC epitaxial layers on 6H(0001) SiC. <i>Physica Status Solidi - Rapid Research Letters</i> , 2010, 4, 305-307.	2.4	24

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19	Suppression of Iron Memory Effect in GaN Epitaxial Layers. <i>Physica Status Solidi (B): Basic Research</i> , 2018, 255, 1700377.	1.5	24
20	High Growth Rate of 4H-SiC Epilayers on On-Axis Substrates with Different Chlorinated Precursors. <i>Crystal Growth and Design</i> , 2010, 10, 5334-5340.	3.0	22
21	Deep levels in iron doped n- and p-type 4H-SiC. <i>Journal of Applied Physics</i> , 2011, 110, 123701.	2.5	21
22	Growth of smooth 4H-SiC epilayers on 4Å° off-axis substrates with chloride-based CVD at very high growth rate. <i>Materials Research Bulletin</i> , 2011, 46, 1272-1275.	5.2	20
23	Modeling of epitaxial silicon carbide deposition. <i>Journal of Crystal Growth</i> , 2005, 275, e295-e300.	1.5	19
24	Epitaxial growth of SiC with chlorinated precursors on different off-angle substrates. <i>Journal of Crystal Growth</i> , 2013, 362, 170-173.	1.5	18
25	High growth rate process in a SiC horizontal CVD reactor using HCl. <i>Microelectronic Engineering</i> , 2006, 83, 48-50.	2.4	17
26	Optical and electrical properties of 4H-SiC epitaxial layer grown with HCl addition. <i>Journal of Applied Physics</i> , 2007, 102, 043523.	2.5	17
27	Homoepitaxial Growth of 4H-SiC on On-Axis Si-Face Substrates Using Chloride-Based CVD. <i>Materials Science Forum</i> , 0, 600-603, 107-110.	0.3	17
28	Gas-Phase Modeling of Chlorine-Based Chemical Vapor Deposition of Silicon Carbide. <i>Crystal Growth and Design</i> , 2012, 12, 1977-1984.	3.0	17
29	A Wideband $\epsilon$ -Band Low-Noise Amplifier MMIC in a 70-nm Gate-Length GaN HEMT Technology. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2022, 70, 1367-1376.	4.6	17
30	Deep levels in tungsten doped n-type 3C-SiC. <i>Applied Physics Letters</i> , 2011, 98, 152104.	3.3	16
31	Chlorinated precursor study in low temperature chemical vapor deposition of 4H-SiC. <i>Thin Solid Films</i> , 2011, 519, 3074-3080.	1.8	16
32	Very High Growth Rate Epitaxy Processes with Chlorine Addition. <i>Materials Science Forum</i> , 2007, 556-557, 157-160.	0.3	15
33	Epitaxial growth optimization of AlGaIn/GaN high electron mobility transistor structures on 3C-SiC/Si. <i>Journal of Applied Physics</i> , 2019, 125, .	2.5	15
34	Optical identification and electronic configuration of tungsten in 4H- and 6H-SiC. <i>Physica B: Condensed Matter</i> , 2012, 407, 1462-1466.	2.7	14
35	Control of the Mechanical Adhesion of III-V Materials Grown on Layered h-BN. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 55460-55466.	8.0	14
36	Epitaxial Layers Grown with HCl Addition: A Comparison with the Standard Process. <i>Materials Science Forum</i> , 2006, 527-529, 163-166.	0.3	13

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37	Chloride-Based SiC Epitaxial Growth toward Low Temperature Bulk Growth. <i>Crystal Growth and Design</i> , 2010, 10, 3743-3751.	3.0	13
38	SiC epitaxy growth using chloride-based CVD. <i>Physica B: Condensed Matter</i> , 2012, 407, 1467-1471.	2.7	13
39	Electron paramagnetic resonance and theoretical studies of Nb in 4H- and 6H-SiC. <i>Journal of Applied Physics</i> , 2012, 112, .	2.5	11
40	AlGaN avalanche Schottky diodes with high Al-content. <i>Japanese Journal of Applied Physics</i> , 2019, 58, SCCC11.	1.5	10
41	Very high epitaxial growth rate of SiC using MTS as chloride-based precursor. <i>Surface and Coatings Technology</i> , 2007, 201, 8931-8934.	4.8	9
42	Optimization of a Concentrated Chloride-Based CVD Process for 4H-SiC Epilayers. <i>Journal of the Electrochemical Society</i> , 2010, 157, H969.	2.9	9
43	Growth and Fabrication of Quasivertical Current Aperture Vertical Electron Transistor Structures. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2021, 218, 2000379.	1.8	9
44	First Demonstration of G-Band Broadband GaN Power Amplifier MMICs Operating Beyond 200 GHz. , 2020, , .		8
45	Technology of GaN-Based Large Area CAVETs With Co-Integrated HEMTs. <i>IEEE Transactions on Electron Devices</i> , 2021, 68, 5547-5552.	3.0	8
46	Epitaxial Deposition of Silicon Carbide Films in a Horizontal Hot-Wall CVD Reactor. <i>Materials Science Forum</i> , 2005, 483-485, 57-60.	0.3	7
47	Film Morphology and Process Conditions in Epitaxial Silicon Carbide Growth via Chlorides Route. <i>Materials Science Forum</i> , 2007, 556-557, 93-96.	0.3	7
48	Growth of Thick 4H-SiC Epitaxial Layers on On-Axis Si-Face Substrates with HCl Addition. <i>Materials Science Forum</i> , 2009, 615-617, 93-96.	0.3	7
49	Chloride-Based CVD at High Growth Rates on 3° Vicinal Off-Angles SiC Wafers. <i>Materials Science Forum</i> , 0, 645-648, 107-110.	0.3	7
50	Chloride-Based CVD at High Rates of 4H-SiC on On-Axis Si-Face Substrates. <i>Materials Science Forum</i> , 2011, 679-680, 59-62.	0.3	7
51	Nanoscale characterization of electrical transport at metal/3C-SiC interfaces. <i>Nanoscale Research Letters</i> , 2011, 6, 120.	5.7	7
52	Carrot Defect Control in Chloride-Based CVD through Optimized Ramp up Conditions. <i>Materials Science Forum</i> , 0, 717-720, 109-112.	0.3	7
53	Very High Growth Rate of 4H-SiC Using MTS as Chloride-Based Precursor. <i>Materials Science Forum</i> , 0, 600-603, 115-118.	0.3	6
54	Chloride Based CVD of 3C-SiC on (0001) SiC Substrates. <i>Materials Science Forum</i> , 2011, 679-680, 75-78.	0.3	6

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55	Optical properties and Zeeman spectroscopy of niobium in silicon carbide. <i>Physical Review B</i> , 2015, 92, .	3.2	6
56	Optimization of Metal-Organic Chemical Vapor Deposition Regrown n-GaN. <i>Physica Status Solidi (B): Basic Research</i> , 2020, 257, 1900436.	1.5	6
57	Horizontal hot wall reactor design for epi-SiC growth. <i>Crystal Research and Technology</i> , 2005, 40, 972-975.	1.3	5
58	Heteroepitaxial Growth of 3C-SiC on Silicon-Porous Silicon-Silicon (SPS) Substrates. <i>ECS Transactions</i> , 2006, 3, 287-298.	0.5	5
59	On the Viability of Au/3C-SiC Schottky Barrier Diodes. <i>Materials Science Forum</i> , 2010, 645-648, 677-680.	0.3	4
60	190-GHz G-Band GaN Amplifier MMICs with 40GHz of Bandwidth. , 2019, , .		4
61	Effect of V/III ratio and growth pressure on surface and crystal quality of AlN grown on sapphire by metal-organic chemical vapor deposition. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2022, 40, .	2.1	4
62	Effect of Dopant Concentration on High Voltage 4H-SiC Schottky Diodes. <i>Materials Research Society Symposia Proceedings</i> , 2006, 911, 2.	0.1	3
63	Carbonization Study of Different Silicon Orientations. <i>Materials Science Forum</i> , 2007, 556-557, 171-174.	0.3	3
64	Optimisation of Epitaxial Layer Growth with HCl Addition by Optical and Electrical Characterization. <i>Materials Science Forum</i> , 2007, 556-557, 137-140.	0.3	3
65	Demonstration of Defect-Induced Limitations on the Properties of Au/3C-SiC Schottky Barrier Diodes. <i>Solid State Phenomena</i> , 2009, 156-158, 331-336.	0.3	3
66	Concentrated Chloride-Based Epitaxial Growth of 4H-SiC. <i>Materials Science Forum</i> , 0, 645-648, 95-98.	0.3	3
67	Identification of Niobium in 4H-SiC by EPR and Ab Initio Studies. <i>Materials Science Forum</i> , 0, 717-720, 217-220.	0.3	3
68	On the origin of the turn-on voltage drop of GaN-based current aperture vertical electron transistors. <i>Journal of Applied Physics</i> , 2022, 131, .	2.5	3
69	In situ etch treatment of bulk surface for epitaxial layer growth optimization. <i>Microelectronic Engineering</i> , 2006, 83, 82-85.	2.4	2
70	Chloride-Based SiC Epitaxial Growth. <i>Materials Science Forum</i> , 2009, 615-617, 89-92.	0.3	2
71	Chloride-based CVD of 3C-SiC Epitaxial Layers on On-axis 6H (0001) SiC Substrates. , 2010, , .		2
72	Chloride-Based CVD of 4H-SiC at High Growth Rates on Substrates with Different Off-Angles. <i>Materials Science Forum</i> , 2012, 717-720, 113-116.	0.3	2

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73	CVD Heteroepitaxial Growth of 3C-SiC on 4H-SiC (0001) Substrates. Materials Science Forum, 0, 717-720, 189-192.	0.3	2
74	CVD Growth of 3C-SiC on 4H-SiC Substrate. Materials Science Forum, 2012, 711, 16-21.	0.3	2
75	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
76	Optimisation of Epitaxial Layer Growth by Schottky Diodes Electrical Characterization. Materials Science Forum, 2006, 527-529, 199-202.	0.3	1
77	Deep levels in hetero-epitaxial as-grown 3C-SiC. , 2010, , .		1
78	Optical Properties of the Niobium Centre in 4H, 6H, and 15R SiC. Materials Science Forum, 0, 740-742, 405-408.	0.3	1
79	Leakage mechanism in Al <sub>x</sub> Ga <sub>1-x</sub> N/GaN heterostructures with AlN interlayer. Semiconductor Science and Technology, 2022, 37, 025016.	2.0	1
80	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
81	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
82	Growth of 4H-SiC Epitaxial Layers on 4° Off-Axis Si-Face Substrates. Materials Science Forum, 0, 615-617, 81-84.	0.3	0
83	Electronic Configuration of Tungsten in 4H-, 6H-, and 15R-SiC. Materials Science Forum, 2012, 717-720, 211-216.	0.3	0
84	Electron Paramagnetic Resonance Studies of Nb in 6H-SiC. Materials Science Forum, 2013, 740-742, 385-388.	0.3	0