Sylvie Schamm-Chardon

List of Publications by Year
in descending order

93	1,448	304743 22	377865 34
papers	citations	h-index	g-index

97	97	97	1758
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Nano-composite MOx materials for NVMs. , 2022, , 201-244.		2
2	Reconstruction of depth resolved strain tensor in off-axis single crystals: Application to H+ ions implanted LiTaO3. Applied Physics Letters, 2021, 118, .	3.3	4
3	Nano-analytical investigation of the forming process in an HfO2-based resistive switching memory. Journal of Applied Physics, 2021, 130, .	2.5	5
4	Structural and chemical investigation of interface related magnetoelectric effect in Ni/BiFe0.95Mn0.05O3 heterostructures. Applied Surface Science, 2019, 481, 234-240.	6.1	4
5	Detailed characterisation of focused ion beam induced lateral damage on silicon carbide samples by electrical scanning probe microscopy and transmission electron microscopy. Journal of Applied Physics, 2018, 123, .	2.5	10
6	Nanoscale control of Si nanoparticles within a 2D hexagonal array embedded in SiO2thin films. Nanotechnology, 2017, 28, 014001.	2.6	4
7	Investigation of Switching Mechanism in HfO2-Based Oxide Resistive Memories by In-Situ Transmission Electron Microscopy and Electron Energy Loss Spectroscopy. , 2017, , .		0
8	Decoupling indirect topographic cross-talk in band excitation piezoresponse force microscopy imaging and spectroscopy. Applied Physics Letters, 2016, 108, .	3.3	17
9	Evolution of shape, size, and areal density of a single plane of Si nanocrystals embedded in SiO₂ matrix studied by atom probe tomography. RSC Advances, 2016, 6, 3617-3622.	3.6	14
10	Studying Thin Ge films and Ge/GeO2 interfaces by means of ramanâ€“brillouin scattering. Bulletin of the Russian Academy of Sciences: Physics, 2015, 79, 1397-1401.	0.6	1
11	Backside versus frontside advanced chemical analysis of high-k/metal gate stacks. Journal of Electron Spectroscopy and Related Phenomena, 2015, 203, 1-7.	1.7	0
12	A review of molecular beam epitaxy of ferroelectric BaTiO₃films on Si, Ge and GaAs substrates and their applications. Science and Technology of Advanced Materials, 2015, 16, 036005.	6.1	89
13	Atomic-layer deposited thulium oxide as a passivation layer on germanium. Journal of Applied Physics, 2015, 117, .	2.5	4
14	Atomic scale characterization of SiO2/4H-SiC interfaces in MOSFETs devices. Solid State Communications, 2015, 221, 28-32.	1.9	3
15	Structural study and ferroelectricity of epitaxial BaTiO3 films on silicon grown by molecular beam epitaxy. Journal of Applied Physics, 2014, 116, .	2.5	20
16	Silicon crystallization in nanodot arrays organized by block copolymer lithography. Journal of Nanoparticle Research, 2014, 16, 1.	1.9	3
17	Raman-Brillouin scattering from a thin Ge layer: Acoustic phonons for probing Ge/GeO2 interfaces. Applied Physics Letters, 2014, 104, 061601.	3.3	2
18	Influence of La on the electrical properties of HfSiON: From diffusion to Vth shifts. Microelectronic Engineering, 2013, 109, 200-203.	2.4	2

#	Article	IF	Citations
19	In-plane organization of silicon nanocrystals embedded in SiO2thin films. Nanotechnology, 2013, 24, 075302.	2.6	13
20	Modifications of silicon nitride materials for SONOS memories. , 2013, , .		2
21	Scaling size of the interplay between quantum confinement and surface related effects in nanostructured silicon. Applied Physics Letters, 2013, 103, .	3.3	33
22	Organized Nanostructures and Nano-objects: Fabrication, characterization and applications. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 1476-1476.	1.8	0
23	Quantum dots for memory applications. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 1490-1504.	1.8	24
24	Fabrication of well-ordered arrays of silicon nanocrystals using a block copolymer mask. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 1477-1484.	1.8	4
25	Extraction of the characteristics of Si nanocrystals by the charge pumping technique. Nanotechnology, 2012, 23, 085206.	2.6	3
26	Si and Ge nanocrystals for future memory devices. Materials Science in Semiconductor Processing, 2012, 15, 615-626.	4.0	41
27	Implantation energy effect on photoluminescence spectroscopy of Si nanocrystals locally fabricated by stencil-masked ultra-low-energy ion-beam-synthesis in silica. Nuclear Instruments & Methods in Physics Research B, 2012, 272, 53-56.	1.4	1
28	The energy band alignment of Si nanocrystals in SiO2. Applied Physics Letters, 2011, 99, .	3.3	37
29	Combining HRTEMâ€“EELS nano-analysis with capacitanceâ€“voltage measurements to evaluate high-Î° thin films deposited on Si and Ge as candidate for future gate dielectrics. Microelectronic Engineering, 2011, 88, 419-422.	2.4	6
30	Structural and electrical properties of Er-doped HfO2 and of its interface with Ge (001). Microelectronic Engineering, 2011, 88, 415-418.	2.4	8
31	Nanocrystallized tetragonal metastable ZrO2 thin films deposited by metal-organic chemical vapor deposition for 3D capacitors. Thin Solid Films, 2011, 519, 5638-5644.	1.8	27
32	The fabrication of tunable nanoporous oxide surfaces by block copolymer lithography and atomic layer deposition. Nanotechnology, 2011, 22, 335303.	2.6	23
33	Calculated and experimental electron energy-loss spectra of La2O3, La(OH)3, and LaOF nanophases in high permittivity lanthanum-based oxide layers. Applied Physics Letters, 2011, 98, 243116.	3.3	12
34	Silicon Nanoclusters Embedded into Oxide Host for Non-Volatile Memory Applications. ECS Transactions, 2011, 35, 37-45.	0.5	2
35	Ultra-Low Energy Ion Implantation of Si into HfO2 and HfSiO-based Structures for Non Volatile Memory Applications. Materials Research Society Symposia Proceedings, 2010, 1250, 1.	0.1	0
36	O3-based atomic layer deposition of hexagonal La2O3 films on Si(100) and Ge(100) substrates. Journal of Applied Physics, 2010, 108, 084108.	2.5	30

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37	Dielectric properties of Erâ^'doped HfO2â€^(Erâ^¼15%) grown by atomic layer deposition for high-Î¹ gate stacks. Applied Physics Letters, 2010, 96, .	3.3	37
38	Atomic layer deposition of LaxZr1â^'xO2â^'Î´â€^(x=0.25) high-k dielectrics for advanced gate stacks. Applied Physics Letters, 2009, 94, .	3.3	37
39	ZrO2 Thin Films Grown on 2D and 3D Silicon Surfaces by DLI-MOCVD for Electronic Devices. ECS Transactions, 2009, 25, 1121-1128.	0.5	0
40	Temperature-dependent low electric field charging of Si nanocrystals embedded within oxideâ€"nitrideâ€"oxide dielectric stacks. Nanotechnology, 2009, 20, 305704.	2.6	5
41	Characterization of ZrO2 thin films deposited by MOCVD for high-density 3D capacitors. Microelectronic Engineering, 2009, 86, 2034-2037.	2.4	12
42	Ultra-low-energy ion-beam-synthesis of Ge nanocrystals in thin ALD Al2O3 layers for memory applications. Microelectronic Engineering, 2009, 86, 1838-1841.	2.4	13
43	Structural and optical properties of Si nanocrystals embedded in SiO2/SiNx multilayers. Physica E: Low-Dimensional Systems and Nanostructures, 2009, 41, 994-997.	2.7	15
44	Chemical/Structural Nanocharacterization and Electrical Properties of ALD-Grown La[sub 2]O[sub 3]â^•Si Interfaces for Advanced Gate Stacks. Journal of the Electrochemical Society, 2009, 156, H1.	2.9	29
45	Thermally induced permittivity enhancement in La-doped ZrO2 grown by atomic layer deposition on Ge(100). Applied Physics Letters, 2009, 95, 122902.	3.3	31
46	Imaging Si nanoparticles embedded in SiO2 layers by (S)TEM-EELS. Ultramicroscopy, 2008, 108, 346-357.	1.9	72
47	KFM detection of charges injected by AFM into a thin SiO2 layer containing Si nanocrystals. Microelectronic Engineering, 2008, 85, 2358-2361.	2.4	14
48	Infrared spectroscopy and X-ray diffraction studies on the crystallographic evolution of La2O3 films upon annealing. Microelectronic Engineering, 2008, 85, 2411-2413.	2.4	33
49	Silicon nanoparticles synthesized in SiO2 pockets by stencil-masked low energy ion implantation and thermal annealing. Superlattices and Microstructures, 2008, 44, 395-401.	3.1	4
50	Structural and optical properties of high density Si-ncs synthesized in SiNx:H by remote PECVD and annealing. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2008, 147, 218-221.	3.5	20
51	Oxideâ€"nitrideâ€"oxide dielectric stacks with Si nanoparticles obtained by low-energy ion beam synthesis. Nanotechnology, 2007, 18, 215204.	2.6	14
52	Field effect white and tunable electroluminescence from ion beam synthesized Si- and C-rich SiO2 layers. Applied Physics Letters, 2007, 91, 211105.	3.3	15
53	Wet oxidation of nitride layer implanted with low-energy Si ions for improved oxide-nitride-oxide memory stacks. Applied Physics Letters, 2007, 90, .	3.3	9
54	Preparation and microstructures of BaTi1â^'xZrxO3hetero-epitaxial thin films on SrTiO3substrates. Journal Physics D: Applied Physics, 2007, 40, 4701-4706.	2.8	4

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55	Electroluminescence from C- and Si- rich silicon oxides in continuous wave and pulsed excitation. , 2007, , .		0
56	Oxide-nitride-oxide memory stacks formed by low-energy Si ion implantation into nitride and wet oxidation. Microelectronic Engineering, 2007, 84, 1986-1989.	2.4	4
57	Influence of the thickness of the tunnel layer on the charging characteristics of Si nanocrystals embedded in an ultra-thin SiO2 layer. Physica E: Low-Dimensional Systems and Nanostructures, 2007, 38, 80-84.	2.7	3
58	Photoluminescence spectroscopy and transport electrical measurements reveal the quantized features of Si nanocrystals embedded in an ultra thin SiO2 layer. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 311-315.	0.8	0
59	Photoluminescence characterization of few-nanocrystals electronic devices. Journal of Luminescence, 2006, 121, 340-343.	3.1	6
60	Oxidation of Si nanocrystals fabricated by ultralow-energy ion implantation in thin SiO2 layers. Journal of Applied Physics, 2006, 99, 044302.	2.5	47
61	White electroluminescence from C- and Si-rich thin silicon oxides. Applied Physics Letters, 2006, 89, 253124.	3.3	21
62	Oxidation effects on transport characteristics of nanoscale MOS capacitors with an embedded layer of silicon nanocrystals obtained by low energy ion implantation. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2005, 124-125, 494-498.	3.5	2
63	Si nanocrystals by ultra-low-energy ion beam-synthesis for non-volatile memory applications. Solid-State Electronics, 2005, 49, 1734-1744.	1.4	36
64	Si nanocrystals by ultra-low energy ion implantation for non-volatile memory applications. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2005, 124-125, 499-503.	3.5	2
65	Fabrication of nanocrystal memories by ultra low energy ion implantation. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 1907-1911.	0.8	5
66	Elaboration by spray pyrolysis and characterization in the VUV range of phosphor particles with spherical shape and micronic size. Journal Physics D: Applied Physics, 2005, 38, 3261-3268.	2.8	18
67	The effects of oxidation conditions on structural and electrical properties of silicon nanoparticles obtained by ultra-low-energy ion implantation. Nanotechnology, 2005, 16, 2987-2992.	2.6	6
68	Multi-dot floating-gates for nonvolatile semiconductor memories: Their ion beam synthesis and morphology. Applied Physics Letters, 2004, 85, 2373-2375.	3.3	44
69	Study of the chemical and structural organization of SIPOS films at the nanometer scale by TEMâ€“EELS and XPS. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2004, 107, 58-65.	3.5	8
70	Thermodynamic study and characterization of low pressure chemically vapor deposited silicon oxynitride films from tetraethylorthosilicate, dichlorosilane and ammonia gas mixtures. Thin Solid Films, 2003, 429, 77-83.	1.8	0
71	Study of the dielectric properties near the band gap by VEELS: gap measurement in bulk materials. Ultramicroscopy, 2003, 96, 559-564.	1.9	43
72	Multi-scale analysis of the dielectric properties and structure of resin/carbon-black nanocomposites. EPJ Applied Physics, 2003, 21, 17-26.	0.7	14

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73	V.U.V absorption coefficient measurements of borate matrices. Journal of Alloys and Compounds, 2001, 323-324, 816-819.	5.5	27
74	Contamination and the quantitative exploitation of EELS low-loss experiments. Ultramicroscopy, 2001, 88, 211-217.	1.9	11
75	High-resolution electron microscopy investigations of stacking faults in Y₁Ba₂Cu₃O_{7â˜Î´} metalorganic chemical vapor deposited thin films. Journal of Materials Research, 1999, 14, 2732-2738.	2.6	12
76	Element and phase identification via fine structure analysis in EELS: application to MOCVD-Y1Ba2Cu3O7â˜Î´ thin films. Ultramicroscopy, 1998, 74, 159-167.	1.9	9
77	Studies of LPCVD Alâ€“Feâ€“O deposits by XPS, EELS and MÃ¶ssbauer spectroscopies. Surface and Coatings Technology, 1998, 105, 31-37.	4.8	6
78	Structural characterization of amorphous SiCxNy chemical vapor deposited coatings. Journal of Applied Physics, 1997, 81, 6147-6154.	2.5	92
79	Preparation of YBCO on YSZ Layers Deposited on Silicon and Sapphire by MOCVD : Influence of the Intermediate Layer on the Quality of the Superconducting Film. European Physical Journal Special Topics, 1995, 05, C5-439-C5-447.	0.2	1
80	Physicochemical properties of SiC-based ceramics deposited by low pressure chemical vapor deposition from CH3SiCl3H2. Thin Solid Films, 1995, 254, 75-82.	1.8	51
81	Correlations between gas phase supersaturation, nucleation process and physico-chemical characteristics of silicon carbide deposited from Si-C-H-Cl system on silica substrates. Journal of Materials Science, 1995, 30, 1500-1510.	3.7	37
82	Chlorine and oxygen inhibition effects in the deposition of SiC-based ceramics from the Siî—¸Cî—¸Hî—¸Cl system. Journal of the European Ceramic Society, 1995, 15, 81-88.	5.7	17
83	HREM Characterization of Interfaces in Thin MOCVD Superconducting Films. European Physical Journal Special Topics, 1995, 05, C5-927-C5-934.	0.2	0
84	SiCN Amorphous Materials Chemical Vapour Deposited Using the Si(CH3)4-NH3-H2 System. European Physical Journal Special Topics, 1995, 05, C5-793-C5-800.	0.2	9
85	Kinetic Processes in the CVD of SiC from CH₃SiCl₃-H₂ in a Vertical Hot-Wall Reactor. European Physical Journal Special Topics, 1995, 05, C5-105-C5-112.	0.2	5
86	Y2O3 nanoprecipitate/YBaCuO matrix interfaces: HREM study. Physica C: Superconductivity and Its Applications, 1994, 235-240, 617-618.	1.2	5
87	Y2O3 nanoprecipitates in YBCO thin films obtained by thermal- MOCVD. Physica C: Superconductivity and Its Applications, 1994, 235-240, 619-620.	1.2	3
88	Compatibility between SiC filaments and aluminim in the K2ZrF6 wetting process and its effect on filament strength. Composites Science and Technology, 1991, 40, 193-211.	7.8	17
89	The K2ZrF6 wetting process: Effect of surface chemistry on the ability of a SiC-Fiber preform to be impregnated by aluminum. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1991, 22, 2133-2139.	1.4	39
90	HREM identification of "one-dimensionally-disordered" polytypes in the SiC (CVI) matrix of SiC/SiC composites. Microscopy Microanalysis Microstructures, 1991, 2, 59-73.	0.4	14

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91	Partial phase diagram of the ternary reciprocal system KF-AlF3-Al2O3-K2O. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 1990, 14, 385-402.	1.6	4
92	Comparative Study of Electrical and Microstructural Properties of 4H-SiC MOSFETs. Materials Science Forum, 0, 717-720, 437-440.	0.3	11
93	Nano-Analytical and Electrical Characterization of 4H-SiC MOSFETs. Materials Science Forum, 0, 711, 134-138.	0.3	3