Yerassimos Panayiotatos

List of Publications by Year
in descending order

61 papers	1,353 citations	288859 22 h-index	356229 35 g-index
61 all docs	61 docs citations	61 times ranked	1321 citing authors

#	Article	IF	Citations
1	Chalcogen Doping in SnO2: A DFT Investigation of Optical and Electronic Properties for Enhanced Photocatalytic Applications. Materials, 2024, 17, 3910.	3.0	0
2	Magnetic skyrmion manipulation in CrTe2/WTe2 2D van der Waals heterostructure. Applied Physics Letters, 2022, 120, .	3.2	12
3	Modelling the Defect Processes of Materials for Energy Applications. Applied Sciences (Switzerland), 2022, 12, 9872.	2.6	2
4	Type-III Dirac fermions in HfxZr1â^'xTe2 topological semimetal candidate. Journal of Applied Physics, 2021, 129, .	2.3	9
5	Self-Diffusion in Perovskite and Perovskite Related Oxides: Insights from Modelling. Applied Sciences (Switzerland), 2020, 10, 2286.	2.6	4
6	Atomistic Simulations of the Defect Chemistry and Self-Diffusion of Li-ion in LiAlO2. Energies, 2019, 12, 2895.	3.2	9
7	Diffusion and Dopant Activation in Germanium: Insights from Recent Experimental and Theoretical Results. Applied Sciences (Switzerland), 2019, 9, 2454.	2.6	20
8	Defect Process, Dopant Behaviour and Li Ion Mobility in the Li2MnO3 Cathode Material. Energies, 2019, 12, 1329.	3.2	12
9	Tin diffusion in germanium: a thermodynamic approach. Journal of Materials Science: Materials in Electronics, 2017, 28, 9936-9940.	2.2	5
10	Structural and optical properties of the recently synthesized (Zr3â^'x Ti x)AlC2 MAX phases. Journal of Materials Science: Materials in Electronics, 2017, 28, 3386-3393.	2.2	29
11	Gold and silver diffusion in germanium: a thermodynamic approach. Journal of Materials Science: Materials in Electronics, 2017, 28, 1966-1970.	2.2	3
12	Toward Defect Engineering Strategies to Optimize Energy and Electronic Materials. Applied Sciences (Switzerland), 2017, 7, 674.	2.6	16
13	Joining of ceramic matrix composites to high temperature ceramics for thermal protection systems. Journal of the European Ceramic Society, 2016, 36, 443-449.	5.6	55
14	Copper diffusion in germanium: connecting point defect parameters with bulk properties. Journal of Materials Science: Materials in Electronics, 2015, 26, 2693-2696.	2.2	10
15	The effect of Se and Se/Al passivation on the oxidation of Ge. Microelectronic Engineering, 2011, 88, 407-410.	2.5	8
16	(Invited) Ge Surfaces and Its Passivation by Rare Earth Lanthanum Germanate Dielectric. ECS Transactions, 2010, 33, 433-446.	0.6	4
17	Chemical stability of lanthanum germanate passivating layer on Ge upon high-k deposition: A photoemission study on the role of La in the interface chemistry. Journal of Applied Physics, 2010, 108, .	2.3	20
18	The role of La surface chemistry in the passivation of Ge. Applied Physics Letters, 2010, 96, .	3.2	51

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19	Stabilization of very high-k tetragonal phase in Ge-doped ZrO2 films grown by atomic oxygen beam deposition. Journal of Applied Physics, 2009, 106, .	2.3	37
20	Metal-oxide-semiconductor devices on p-type Ge with La[sub 2]O[sub 3] and ZrO[sub 2]/La[sub 2]O[sub 3] as gate dielectric and the effect of postmetallization anneal. Journal of Vacuum Science & Technology B, 2009, 27, 246.	1.3	9
21	Stabilization of a very high-k tetragonal ZrO2 phase by direct doping with germanium. Microelectronic Engineering, 2009, 86, 1626-1628.	2.5	27
22	Lanthanum germanate as dielectric for scaled Germanium metalâ€“oxideâ€“semiconductor devices. Microelectronic Engineering, 2009, 86, 1635-1637.	2.5	12
23	Impact of La<inf>2</inf>O<inf>3</inf> Thickness on HfO<inf>2</inf>/La<inf>2</inf>O<inf>3</inf>/Ge capacitors and p-channel MOSFETs. , 2009, , .		1
24	Different nanostructures identified in boron nitride thin films grown on Si (100) by rf magnetron sputtering. Diamond and Related Materials, 2009, 18, 6-12.	4.0	3
25	Electrical properties of La2O3 and HfO2âˆ•La2O3 gate dielectrics for germanium metal-oxide-semiconductor devices. Journal of Applied Physics, 2008, 103, .	2.3	109
26	Germanium-induced stabilization of a very high-k zirconia phase in ZrO2/GeO2 gate stacks. Applied Physics Letters, 2008, 93, 082904.	3.2	59
27	Very high-Îºâ€ˆZrO2 with La2O3â€ˆ(LaGeOx) passivating interfacial layers on germanium substrates. Applied Physics Letters, 2008, 93, .	3.2	55
28	Gate Dielectrics for High Mobility Semiconductors. ECS Transactions, 2008, 16, 295-306.	0.6	3
29	Very High-k Tetragonal ZrO2 on Ge with GeO2 Passivating Interfacial Layer. ECS Transactions, 2008, 16, 767-772.	0.6	1
30	Total Dose Response of Ge MOS Capacitors With HfO$_{2}$/Dy$_{2}$O$_{3}$ Gate Stacks. IEEE Transactions on Nuclear Science, 2007, 54, 971-974.	2.0	22
31	Germanium FETs and capacitors with rare earth CeO2/HfO2 gates. Solid-State Electronics, 2007, 51, 1508-1514.	1.5	22
32	Epitaxial germanium-on-insulator grown on (001) Si. Microelectronic Engineering, 2007, 84, 2328-2331.	2.5	36
33	Germanium metal-insulator-semiconductor capacitors with rare earth La2O3 gate dielectric. Microelectronic Engineering, 2007, 84, 2324-2327.	2.5	28
34	Germanium MOSFETs With $hbox{CeO}_{2}/hbox{HfO}_{2}/ hbox{TiN}$ Gate Stacks. IEEE Transactions on Electron Devices, 2007, 54, 1425-1430.	3.2	37
35	Interface engineering for Ge metal-oxideâ€“semiconductor devices. Thin Solid Films, 2007, 515, 6337-6343.	1.9	87
36	Post deposition annealing studies of lanthanum aluminate and ceria high-k dielectrics on germanium. Microelectronics Reliability, 2007, 47, 532-535.	1.8	16

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37	Current Challenges in Ge MOS Technology. ECS Transactions, 2006, 3, 371-384.	0.6	9
38	Electrical Properties of Atomic-Beam Deposited GeO[sub 1âˆ'x]N[sub x]âˆ•HfO[sub 2] Gate Stacks on Ge. Journal of the Electrochemical Society, 2006, 153, G1112.	2.9	15
39	Characterization of Atomic-Beam Deposited GeO1-xNx/HfO2 Stacks on Ge. ECS Transactions, 2006, 1, 9-16.	0.6	3
40	Electron energy band alignment at interfaces of (100)Ge with rare-earth oxide insulators. Applied Physics Letters, 2006, 88, 132111.	3.2	53
41	Subnanometer-equivalent-oxide-thickness germanium p-metal-oxide-semiconductor field effect transistors fabricated using molecular-beam-deposited high-k/metal gate stack. Applied Physics Letters, 2006, 88, 132107.	3.2	71
42	Effects of non-depositing energetic species during the growth of boron nitride and amorphous carbon thin films by sputter deposition. Surface and Coatings Technology, 2004, 180-181, 387-391.	4.9	2
43	Nanoindentation studies of multilayer amorphous carbon films. Carbon, 2004, 42, 1133-1136.	10.7	61
44	X-ray diffuse scattering investigation of thin films. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2003, 102, 25-29.	3.6	3
45	Homogeneous and amorphous sputtered sp3-bonded BN films at RT: a stress, spectroscopic ellipsometry and XPS study. Diamond and Related Materials, 2003, 12, 1151-1156.	4.0	34
46	A quantitative study of the nano-scratch behavior of boron and carbon nitride films. Diamond and Related Materials, 2003, 12, 1088-1092.	4.0	29
47	High-field transport and noise properties of sputter-deposited amorphous carbonÂsilicon heterojunctions. Semiconductor Science and Technology, 2002, 17, 662-667.	2.1	12
48	Variation of nitrogen incorporation and bonding configuration of carbon nitride films studied by X-ray photoelectron spectroscopy (XPS) and Fourier transform infrared (FT-IR) spectroscopic ellipsometry. Diamond and Related Materials, 2002, 11, 1183-1187.	4.0	23
49	Spectroscopic ellipsometry studies on BN films from IR to vacuum UV energy region. Diamond and Related Materials, 2002, 11, 1281-1285.	4.0	14
50	The effects of interface and bulk defects on the electrical performance of amorphous carbon/silicon heterojunctions. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2002, 91-92, 379-383.	3.6	7
51	On the properties and functionality of ultra-thin diamond related protective coatings used in optical systems. Sensors and Actuators A: Physical, 2002, 99, 35-40.	4.2	18
52	Mechanical performance and growth characteristics of boron nitride films with respect to their optical, compositional properties and density. Surface and Coatings Technology, 2002, 151-152, 155-159.	4.9	11
53	Raman and photoluminescence study of magnetron sputtered amorphous carbon films. Thin Solid Films, 2002, 414, 18-24.	1.9	23
54	A study on the bonding structure and mechanical properties of magnetron sputtered CNx thin films. Diamond and Related Materials, 2001, 10, 1179-1184.	4.0	24

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55	Microstructure and its effect on the conductivity of magnetron sputtered carbon thin films. Journal of Applied Physics, 2001, 89, 7954-7959.	2.3	17
56	Electrical properties of magnetron sputtered amorphous carbon films with sequential sp3-rich/sp2-rich layered structure. Applied Physics Letters, 2001, 79, 3269-3271.	3.2	3
57	Electrical characterization of TiN/a-C/Si devices grown by magnetron sputtering at room temperature. Applied Physics Letters, 2001, 78, 1682-1684.	3.2	9
58	Structural, electrical, and low-frequency-noise properties of amorphous-carbonâ€“silicon heterojunctions. Journal of Applied Physics, 2001, 89, 2832-2838.	2.3	18
59	Magnetron sputtered carbon nitride: composition and chemical bonding of as-grown and post-annealed films studied with real-time and in situ diagnostic techniques. Surface and Coatings Technology, 2000, 125, 289-294.	4.9	14
60	Noise characterization of sputtered amorphous carbon films. Journal of Applied Physics, 2000, 88, 5482-5484.	2.3	15
61	Comprehensive study on the properties of multilayered amorphous carbon films. Diamond and Related Materials, 2000, 9, 756-760.	4.0	32