

# Jonatan Slotte

## List of Publications by Year in descending order

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papers

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#	ARTICLE	IF	CITATIONS
1	Open volume defects in ultra-thin TiO <sub>2</sub> layers embedded in VMCO-like samples studied with positron annihilation spectroscopy. Journal of Applied Physics, 2022, 131, .	2.5	1
2	In Situ Positron Annihilation Spectroscopy Analysis on Low-Temperature Irradiated Semiconductors, Challenges and Possibilities. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2000232.	1.8	2
3	Source/Drain Materials for Ge nMOS Devices: Phosphorus Activation in Epitaxial Si, Ge, Ge <sub>1-x</sub> Sn <sub>x</sub> and Si <sub>y</sub> Ge <sub>1-x</sub> Sn <sub>x</sub> . ECS Journal of Solid State Science and Technology, 2020, 9, 044010.	1.8	5
4	A demonstration of donor passivation through direct formation of V-As complexes in As-doped Ge <sub>1-x</sub> Sn <sub>x</sub> . Journal of Applied Physics, 2020, 127, .	2.5	2
5	Heavily phosphorus doped germanium: Strong interaction of phosphorus with vacancies and impact of tin alloying on doping activation. Journal of Applied Physics, 2019, 125, .	2.5	6
6	Evolution of phosphorus-vacancy clusters in epitaxial germanium. Journal of Applied Physics, 2019, 125, .	2.5	13
7	On the Evolution of Strain and Electrical Properties in As-Grown and Annealed Si:P Epitaxial Films for Source-Drain Stressor Applications. ECS Journal of Solid State Science and Technology, 2018, 7, P228-P237.	1.8	4
8	Instability of the Sb vacancy in GaSb. Physical Review B, 2017, 95, .	3.2	14
9	Hole density and acceptor-type defects in MBE-grown GaSb <sub>1-x</sub> Bi <sub>x</sub> . Journal Physics D: Applied Physics, 2017, 50, 295102.	2.8	12
10	On the manifestation of phosphorus-vacancy complexes in epitaxial Si:P films. Applied Physics Letters, 2016, 108, .	3.3	15
11	Si nanocrystals and nanocrystal interfaces studied by positron annihilation. Journal of Applied Physics, 2016, 120, 145302.	2.5	1
12	Vacancy-donor complexes in highly n-type Ge doped with As, P and Sb. Journal of Physics Condensed Matter, 2016, 28, 335801.	1.8	13
13	Electrical compensation via vacancy-donor complexes in arsenic-implanted and laser-annealed germanium. Applied Physics Letters, 2016, 109, .	3.3	13
14	Review-Defect Identification with Positron Annihilation Spectroscopy in Narrow Band Gap Semiconductors. ECS Journal of Solid State Science and Technology, 2016, 5, P3166-P3171.	1.8	7
15	Increased p-type conductivity in GaN <sub>1-x</sub> Sb <sub>x</sub> , experimental and theoretical aspects. Journal of Applied Physics, 2015, 118, .	2.5	8
16	Defect studies in MBE grown GaSb <sub>1-x</sub> Bi <sub>x</sub> layers. , 2014, , .		0
17	Native point defects in GaSb. Journal of Applied Physics, 2014, 116, .	2.5	37
18	Charge transition level of GeP <sub>b1</sub> centers at interfaces of SiO <sub>2</sub> /Ge <sub>x</sub> Si <sub>1-x</sub> /SiO <sub>2</sub> heterostructures investigated by positron annihilation spectroscopy. Physica Status Solidi (B): Basic Research, 2014, 251, 2211-2215.	1.5	1

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19	Point defect balance in epitaxial GaSb. Applied Physics Letters, 2014, 105, .	3.3	10
20	Impact of strain on the passivation efficiency of Ge dangling bond interface defects in condensation grown SiO <sub>2</sub> /Ge <sub>x</sub> Si <sub>1-x</sub> /SiO <sub>2</sub> /(100)Si structures with nm-thin Ge <sub>x</sub> Si <sub>1-x</sub> layers. Applied Surface Science, 2014, 291, 11-15.	6.1	4
21	Acceptors in undoped GaSb; the role of vacancy defects. Journal of Physics: Conference Series, 2013, 443, 012042.	0.4	2
22	Si nanoparticle interfaces in Si/SiO <sub>2</sub> solar cell materials. Journal of Applied Physics, 2013, 114, 164316.	2.5	5
23	Advances in positron annihilation spectroscopy of Si, Ge and their alloys. Materials Science in Semiconductor Processing, 2012, 15, 669-674.	4.0	4
24	Direct observations of the vacancy and its annealing in germanium. Physical Review B, 2011, 83, .	3.2	26
25	Evolution of E-centers during the annealing of Sb-doped Si <sub>0.8</sub> Ge <sub>0.2</sub> . Physical Review B, 2011, 83, .	3.2	6
26	Divacancies at room temperature in germanium. Thin Solid Films, 2010, 518, 2314-2316.	1.8	1
27	Stabilization of Ge-rich defect complexes originating from $E$ centers in germanium. Physical Review B, 2010, 81, .	3.2	14
28	Vacancy engineering by He induced nanovoids in crystalline Si. Semiconductor Science and Technology, 2009, 24, 015005.	2.0	5
29	Defect characterization of heavily As and P doped Si epilayers. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 2537-2539.	0.8	1
30	He implantation induced nanovoids in crystalline Si. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2009, 159-160, 164-167.	3.5	3
31	E center annealing in SiGe: Stability and charge states. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2008, 154-155, 141-143.	3.5	0
32	Implantation defects and n-type doping in Ge and Ge rich SiGe. Thin Solid Films, 2008, 517, 152-154.	1.8	17
33	Divacancy clustering in neutron-irradiated and annealed n-type germanium. Physical Review B, 2008, 78, .	3.2	21
34	He implantation to control B diffusion in crystalline and preamorphized Si. Journal of Vacuum Science & Technology B, 2008, 26, 386.	1.3	3
35	Evolution of vacancy-related defects upon annealing of ion-implanted germanium. Physical Review B, 2008, 78, .	3.2	22
36	Vacancy generation in liquid phase epitaxy of Si. Physical Review B, 2007, 75, .	3.2	20

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37	Tensile strain in arsenic heavily doped Si. Journal of Applied Physics, 2007, 102, . Evidence of a second acceptor state of the $E_c$ center in Si.	2.5	16
38	Influence of substrate doping and point defects on Al and Ga interdiffusion in AlSb/GaSb superlattice structures. Journal of Applied Physics, 2007, 102, 023511.	3.2	16
39	Defect Generation and Evolution in Laser Processing of Si. , 2007, , .	2.5	3
40	Influence of silicon doping on vacancies and optical properties of Al <sub>x</sub> Ga <sub>1-x</sub> N thin films. Applied Physics Letters, 2007, 90, 151908.		1
41	Nitrogen related vacancies in GaAs based quantum well superlattices. Applied Physics Letters, 2006, 89, 061903.	3.3	18
42	Vacancy-impurity pairs in n-type studied by positron spectroscopy. Physica B: Condensed Matter, 2006, 376-377, 208-211.	3.3	7
43	Positron annihilation spectroscopy of vacancy complexes in SiGe. Nuclear Instruments & Methods in Physics Research B, 2006, 253, 130-135.	2.7	0
44	On the optical crystal properties of quantum-well GaIn(N)As/GaAs semiconductors grown by molecular-beam epitaxy. Journal of Crystal Growth, 2006, 297, 33-37.	1.4	8
45	Nitrogen related vacancy formation in annealed GaInNAs quantum well superlattices. Physica B: Condensed Matter, 2006, 376-377, 857-860.	1.5	7
46	Formation of VP <sup>+</sup> Zn complexes in bulk InP(Zn) by migration of P vacancies from the (110) surface. Physical Review B, 2006, 73, .	2.7	2
47	Vacancy-impurity pairs in relaxed Si <sub>1-x</sub> Gex layers studied by positron annihilation spectroscopy. Physical Review B, 2006, 73, .	3.2	3
48	Understanding Ion Implantation Defects in Germanium. ECS Transactions, 2006, 3, 67-76.	3.2	13
49	Fluence, flux, and implantation temperature dependence of ion-implantation-induced defect production in 4H-SiC. Journal of Applied Physics, 2005, 97, 033513.	0.5	7
50	Vacancy-related defect distributions in 11B-, 14N-, and 27Al-implanted 4H-SiC: Role of channeling. Journal of Applied Physics, 2004, 95, 57-63.	2.5	26
51	Identification of vacancy phosphorus complexes in strained Si <sub>1-x</sub> Gex. Physica B: Condensed Matter, 2003, 340-342, 849-853.	2.5	12
52	Vacancy-Type Defect Distributions of <sup>11</sup> B-, <sup>14</sup> N- and <sup>27</sup> Al-Implanted 4H-SiC Studied by Positron Annihilation Spectroscopy. Materials Science Forum, 2003, 433-436, 641-644.	2.7	1
53	Formation of vacancy-impurity complexes in heavily Zn-doped InP. Physical Review B, 2003, 67, .	0.3	2
54	Formation of vacancy-impurity complexes in heavily Zn-doped InP. Physical Review B, 2003, 67, .	3.2	21

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55	Vacancy-phosphorus complexes in strained Si <sub>1-x</sub> Ge <sub>x</sub> : Structure and stability. Physical Review B, 2003, 68, .	3.2	42
56	Observation of Vacancies in Ga <sub>1-x</sub> Mn <sub>x</sub> As with Positron Annihilation Spectroscopy. Acta Physica Polonica A, 2003, 103, 601-606.	0.5	2
57	Vacancy type defects in Al implanted 4H- <sup>6</sup> SiC studied by positron annihilation spectroscopy. Physica B: Condensed Matter, 2001, 308-310, 664-667.	2.7	4
58	Lattice sites of diffused gold and platinum in epitaxial ZnSe layers. Nuclear Instruments & Methods in Physics Research B, 2000, 161-163, 520-523.	1.4	3
59	Influence of surface topography on depth profiles obtained by Rutherford backscattering spectrometry. Journal of Applied Physics, 2000, 87, 140-143.	2.5	11
60	Diffusion of Au in ZnSe and its dependence on crystal quality. Journal of Applied Physics, 1999, 85, 799-802.	2.5	3
61	Diffusion of Pt in molecular beam epitaxy grown ZnSe. Applied Physics Letters, 1998, 72, 2553-2555.	3.3	4
62	Concentration dependent and independent Si diffusion in ion-implanted GaAs. Physical Review B, 1997, 56, 4597-4603.	3.2	51
63	Vacancy Clusters in Germanium. Solid State Phenomena, 0, 131-133, 125-130.	0.3	3