

Michael Stavola

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3744042/publications.pdf>

Version: 2024-02-01

54
papers

1,884
citations

304743

22
h-index

254184

43
g-index

55
all docs

55
docs citations

55
times ranked

1118
citing authors

#	ARTICLE	IF	CITATIONS
1	Impurity-hydrogen complexes in $\hat{\Gamma}^2$ -Ga ₂ O ₃ : Hydrogenation of shallow donors vs deep acceptors. Journal of Applied Physics, 2022, 131, .	2.5	11
2	H trapping at the metastable cation vacancy in $\langle b \rangle \hat{\Gamma}^{\pm} \langle /b \rangle$ -Ga ₂ O ₃ and $\langle b \rangle \hat{\Gamma}^{\pm} \langle /b \rangle$ -Al ₂ O ₃ . Applied Physics Letters, 2022, 120, .	3.3	10
3	OH-Si complex in hydrogenated n-type $\langle b \rangle \langle i \rangle \hat{\Gamma}^2 \langle /i \rangle \langle /b \rangle$ -Ga ₂ O ₃ :Si. Applied Physics Letters, 2021, 119, .	3.3	14
4	Trapping of multiple H atoms at the Ga(1) vacancy in $\langle b \rangle \langle i \rangle \hat{\Gamma}^2 \langle /i \rangle \langle /b \rangle$ -Ga ₂ O ₃ . Applied Physics Letters, 2020, 117, .	3.3	14
5	Determination of dielectric axes and transition moment directions in $\hat{\Gamma}^2$ -Ga ₂ O ₃ from the polarization dependence of vibrational spectra. Journal of Applied Physics, 2020, 127, .	2.5	11
6	Editorsâ€™ Choiceâ€™ Vibrational Properties of Oxygen-Hydrogen Centers in H ⁺ - and D ⁺ -Implanted Ga ₂ O ₃ . ECS Journal of Solid State Science and Technology, 2020, 9, 125006.	1.8	11
7	Editors' Choiceâ€™ Hydrogen Centers in $\hat{\Gamma}^2$ -Ga ₂ O ₃ : Infrared Spectroscopy and Density Functional Theory. ECS Journal of Solid State Science and Technology, 2019, 8, Q3103-Q3110.	1.8	55
8	Hydrogen in Ga ₂ O ₃ . , 2019, , 191-210.		6
9	Diffusivity of the interstitial hydrogen shallow donor in In ₂ O ₃ . Journal of Applied Physics, 2018, 123, .	2.5	5
10	Tutorial: Novel properties of defects in semiconductors revealed by their vibrational spectra. Journal of Applied Physics, 2018, 123, .	2.5	41
11	Structure and vibrational properties of the dominant O-H center in $\hat{\Gamma}^2$ -Ga ₂ O ₃ . Applied Physics Letters, 2018, 112, .	3.3	83
12	Symmetry and diffusivity of the interstitial hydrogen shallow-donor center in In ₂ O ₃ . Applied Physics Letters, 2016, 109, .	3.3	12
13	The structures of interstitial hydrogen centers in VO ₂ in the dilute limit from their vibrational properties and theory. Journal of Physics Condensed Matter, 2016, 28, 395401.	1.8	2
14	Hydrogen centers and the conductivity of $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi mathvariant="normal"} \rangle I \langle \text{mml:mi} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi mathvariant="normal"} \rangle n \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi mathvariant="normal"} \rangle O \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 3 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$ single crystals. Physical Review B, 2015, 91, .	3.2	34
15	Contrasting the theoretical properties of hydrogen in SnO ₂ , In ₂ O ₃ , and TiO ₂ . , 2014, , .		4
16	Nitrogen-containing point defects in multi-crystalline Si solar-cell materials. Journal of Applied Physics, 2013, 114, 093707.	2.5	10
17	Light-Element Impurities and their Reactions in Multicrystalline Si. Solid State Phenomena, 2013, 205-206, 201-208.	0.3	0
18	Bond angles for O-H defects in SnO $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:math} \rangle$ from polarization properties of their vibrational modes. Physical Review B, 2012, 85, .	3.2	6

#	ARTICLE	IF	CITATIONS
19	Small polaron characteristics of an OD center in TiO ₂ studied by infrared spectroscopy. Physical Review B, 2012, 86, .	3.2	23
20	Microscopic structure of a VH ₄ center trapped by C in Si. Physical Review B, 2011, 84, .	3.2	8
21	Interaction of hydrogen with carbon in multicrystalline Si solar-cell materials. Journal of Applied Physics, 2011, 109, 053517.	2.5	13
22	Hydrogen impurities and shallow donors in SnO ₂ studied by infrared spectroscopy. Physical Review B, 2011, 84, .	3.2	33
23	Reactions of H with C in Multicrystalline Si Solar-cell Materials. Materials Research Society Symposia Proceedings, 2010, 1268, 1.	0.1	0
24	Ortho-para transition of interstitial H ₂ and D ₂ in Si. Physical Review B, 2009, 80, .	3.2	24
25	Hindered rotation of an OH-Li center in MgO: Infrared absorption experiments and theory. Physical Review B, 2007, 75, .	3.2	4
26	Identification of an OH-Li center in ZnO: Infrared absorption spectroscopy and density functional theory. Physical Review B, 2006, 73, .	3.2	46
27	Concentration and penetration depth of H introduced into crystalline Si by hydrogenation methods used to fabricate solar cells. Journal of Applied Physics, 2006, 100, 093517.	2.5	34
28	Temperature dependence of the vibrational spectrum of a Li-OH complex in ZnO: Infrared absorption experiments and theory. Physical Review B, 2006, 73, .	3.2	15
29	Rotational-vibrational transitions of interstitial HD in Si. Physical Review B, 2005, 72, .	3.2	11
30	Structure and vibrational properties of Na ⁺ H ₂ complexes in GaAs:N. Physical Review B, 2005, 72, .	3.2	21
31	Hydrogen local modes and shallow donors in ZnO. Physical Review B, 2005, 72, .	3.2	154
32	Deciphering the Vibrational Spectrum of Interstitial H ₂ in Si. Materials Research Society Symposia Proceedings, 2004, 813, 611.	0.1	0
33	Hidden hydrogen in as-grown ZnO. Applied Physics Letters, 2004, 85, 5601-5603.	3.3	141
34	Interstitial H ₂ in Si: are all problems solved?. Physica B: Condensed Matter, 2003, 340-342, 58-66.	2.7	18
35	Hydrogen in Semiconductors. AIP Conference Proceedings, 2003, , .	0.4	9
36	Key to Understanding Interstitial H ₂ in Si. Physical Review Letters, 2002, 88, 105507.	7.8	53

#	ARTICLE	IF	CITATIONS
37	Rotation of Molecular Hydrogen in Si: Unambiguous Identification of Ortho-H ₂ and Para-D ₂ . Physical Review Letters, 2002, 88, 245503.	7.8	26
38	Dynamics of interstitial H ₂ in crystalline silicon. Physical Review B, 2002, 66, .	3.2	21
39	Ortho and para H ₂ complexes in silicon. Physical Review B, 2002, 65, .	3.2	23
40	Pt-H complexes in Si: Complementary studies by vibrational and capacitance spectroscopies. Physical Review B, 2001, 65, .	3.2	37
41	Zhou et al. Reply. Physical Review Letters, 2000, 84, 4778-4778.	7.8	7
42	Symmetry of Molecular H ₂ in Si from a Uniaxial Stress Study of the 3618.4 cm ⁻¹ Vibrational Line. Physical Review Letters, 1999, 83, 1351-1354.	7.8	28
43	Chapter 3 Vibrational Spectroscopy of Light Element Impurities in Semiconductors. Semiconductors and Semimetals, 1999, 51, 153-224.	0.7	34
44	Hydrogen-decorated lattice defects in proton implanted GaN. Applied Physics Letters, 1998, 72, 1703-1705.	3.3	54
45	Vibrational Spectroscopy Of Gold Hydrogen Complexes In Silicon. Materials Research Society Symposia Proceedings, 1996, 442, 275.	0.1	5
46	Growth Induced Alignment Of The First Neighbor Shell Of CAs In Al _x Ga _{1-x} As. Materials Research Society Symposia Proceedings, 1996, 442, 387.	0.1	1
47	Spectroscopy of Transition-Metal-Hydrogen Complexes in Silicon. Materials Research Society Symposia Proceedings, 1995, 378, 341.	0.1	3
48	Hydrogen in Semiconductors: Crystal growth and device processing. Advanced Materials, 1992, 4, 332-340.	21.0	11
49	Hydrogen in Crystalline Semiconductors. Springer Series in Materials Science, 1992, , .	0.6	552
50	Passivation of shallow impurities in Si by annealing in H ₂ at high temperature. Applied Physics Letters, 1991, 59, 2121-2123.	3.3	44
51	Hydrogen Passivation of GaAs:C Epitaxial Layers Grown from Metalorganic Sources. Materials Research Society Symposia Proceedings, 1991, 240, 75.	0.1	1
52	Structure and dynamics of the Be-H complex in GaAs. Physical Review B, 1989, 39, 8051-8054.	3.2	53
53	Sn-H Complex in Hydrogen Passivated GaAs. Materials Research Society Symposia Proceedings, 1989, 163, 477.	0.1	17
54	The 3942-cm ⁻¹ optical band in irradiated silicon. Physical Review B, 1987, 35, 2755-2766.	3.2	30