

Winfried MÃ¶nch

List of Publications by Year in descending order

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45
papers

2,718
citations

257101

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301761

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46
docs citations

46
times ranked

2368
citing authors

#	ARTICLE	IF	CITATIONS
1	Barrier heights of real Schottky contacts explained by metal-induced gap states and lateral inhomogeneities. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1999, 17, 1867.	1.6	400
2	Semiconductor Surfaces and Interfaces. Springer Series in Surface Sciences, 2001, , .	0.3	328
3	Semiconductor Surfaces and Interfaces. Springer Series in Surface Sciences, 1995, , .	0.3	282
4	Metal-semiconductor contacts: electronic properties. <i>Surface Science</i> , 1994, 299-300, 928-944.	0.8	202
5	Electronic Properties of Semiconductor Interfaces. Springer Series in Surface Sciences, 2004, , .	0.3	179
6	Empirical tight-binding calculation of the branch-point energy of the continuum of interface-induced gap states. <i>Journal of Applied Physics</i> , 1996, 80, 5076-5082.	1.1	163
7	Mechanisms of Schottky-barrier formation in metal-semiconductor contacts. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1988, 6, 1270.	1.6	111
8	Chemical trends of barrier heights in metal-semiconductor contacts: on the theory of the slope parameter. <i>Applied Surface Science</i> , 1996, 92, 367-371.	3.1	103
9	Chemical trends in Schottky barriers: Charge transfer into adsorbate-induced gap states and defects. <i>Physical Review B</i> , 1988, 37, 7129-7132.	1.1	74
10	Valence-band offsets and Schottky barrier heights of layered semiconductors explained by interface-induced gap states. <i>Applied Physics Letters</i> , 1998, 72, 1899-1901.	1.5	73
11	Electronic properties of ideal and interface-modified metal-semiconductor interfaces. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1996, 14, 2985.	1.6	70
12	Branch-point energies and the band-structure lineup at Schottky contacts and heterostructures. <i>Journal of Applied Physics</i> , 2011, 109, 113724.	1.1	70
13	Barrier heights of GaN Schottky contacts. <i>Applied Surface Science</i> , 1997, 117-118, 388-393.	3.1	67
14	On the correlation of geometrical structure and electronic properties at clean semiconductor surfaces. <i>Surface Science</i> , 1977, 63, 79-95.	0.8	53
15	On the oxidation of III-V compound semiconductors. <i>Surface Science</i> , 1986, 168, 577-593.	0.8	53
16	On the electric-dipole contribution to the valence-band offsets in semiconductor-oxide heterostructures. <i>Applied Physics Letters</i> , 2007, 91, .	1.5	44
17	On the alleviation of Fermi-level pinning by ultrathin insulator layers in Schottky contacts. <i>Journal of Applied Physics</i> , 2012, 111, .	1.1	44
18	On the band structure lineup of ZnO heterostructures. <i>Applied Physics Letters</i> , 2005, 86, 162101.	1.5	40

#	ARTICLE	IF	CITATIONS
19	Elementary calculation of the branch-point energy in the continuum of interface-induced gap states. Applied Surface Science, 1997, 117-118, 380-387.	3.1	33
20	Slope parameters of the barrier heights of metal-organic contacts. Applied Physics Letters, 2006, 88, 112116.	1.5	32
21	On the band structure lineup at interfaces of SiO ₂ , Si ₃ N ₄ , and high- $\hat{\epsilon}$ dielectrics. Applied Physics Letters, 2005, 86, 122101.	1.5	30
22	Electronic characterization of compound semiconductor surfaces and interfaces. Thin Solid Films, 1983, 104, 285-299.	0.8	28
23	Oxidation of clean and H-terminated SiC surfaces. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1997, 46, 366-369.	1.7	28
24	Electronic properties and chemical interactions at III-V compound semiconductor surfaces: Germanium and oxygen on GaAs(110) and InP(110) cleaved surfaces. Applications of Surface Science, 1985, 22-23, 705-723.	1.0	25
25	On the explanation of the barrier heights of InP Schottky contacts by metal-induced gap states. Applied Physics Letters, 2008, 93, .	1.5	22
26	On the band-structure lineup at Schottky contacts and semiconductor heterostructures. Materials Science in Semiconductor Processing, 2014, 28, 2-12.	1.9	22
27	On the present understanding of Schottky contacts. Festkörperlprobleme, 1986, , 67-88.	0.7	18
28	Mechanisms of barrier formation in schottky contacts: Metal-induced surface and interface states. Applied Surface Science, 1990, 41-42, 128-138.	3.1	18
29	Messung der Fehlorderungsenergie an abschreckend kondensiertem Kupfer bei tiefer Temperatur. European Physical Journal A, 1959, 157, 149-158.	1.0	17
30	Schottky contacts on ternary compound semiconductors: Compositional variations of barrier heights. Applied Physics Letters, 1995, 67, 2209-2211.	1.5	17
31	Interface-induced gap states and band-structure lineup at TiO ₂ heterostructures and Schottky contacts. Journal of Applied Physics, 2010, 107, 013706.	1.1	13
32	Explanation of the barrier heights of graphene Schottky contacts by the MIGS-and-electronegativity concept. Journal of Applied Physics, 2016, 120, 104501.	1.1	13
33	On the band-structure lineup at Ga ₂ O ₃ , Gd ₂ O ₃ , and Ga ₂ O ₃ (Gd ₂ O ₃) heterostructures and Ga ₂ O ₃ Schottky contacts. Journal of Materials Science: Materials in Electronics, 2016, 27, 1444-1448.	1.1	13
34	Über die charakteristische Temperatur? R abschreckend kondensierter Metallschichten. European Physical Journal A, 1962, 170, 93-104.	1.0	8
35	Mechanisms of Barrier Formation in Schottky Contacts. NATO ASI Series Series B: Physics, 1989, , 11-38.	0.2	6
36	Electronic Properties of Semiconductor Interfaces. Springer Handbooks, 2017, , 1-1.	0.3	5

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37	Calculation of valence-band offsets of lattice-matched GaInTIP/InP heterostructures and of Schottky barrier heights of metal-GaInTIP contacts. Applied Physics Letters, 1997, 71, 1231-1233.	1.5	4
38	Barrier Heights of 3C-SiC and 6H-SiC Schottky Contacts: Explanation by the MIGS and Electronegativity Model. , 1994, , 169-174.		4
39	On the surface physics of III-V compound semiconductors. , 1984, , 229-268.		3
40	Electronic Properties of Semiconductor Interfaces. , 2006, , 147-160.		1
41	On selenium p-n heterojunctions and Schottky contacts. Journal of Materials Science: Materials in Electronics, 2015, 26, 1097-1101.	1.1	1
42	Valence-band offsets of InGaZnO4, LaAlO3, and SrTiO3 heterostructures explained by interface-induced gap states. Journal of Materials Science: Materials in Electronics, 2018, 29, 19607-19613.	1.1	1
43	Comment on "A study on barrier height in Au-AlxGa1-xN Schottky diodes in the range 0 ≤ x ≤ 0.2" by M. R. H. Khan, H. Nakayama, T. Detchprohm, K. Hiramatsu and N. Sawaki in Solid-State Electronics, 1997 41, 287. Solid-State Electronics, 1998, 42, 470-471.	0.8	0
44	Comment on "Band gap and band offset of (GaIn)(PSb) lattice matched to InP" [Appl. Phys. Lett. 87, 032102 (2005)]. Applied Physics Letters, 2006, 89, 126101.	1.5	0
45	Deep Levels at Compound-Semiconductor Interfaces. NATO ASI Series Series B: Physics, 1988, , 253-287.	0.2	0