Siegfried Hofmann

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5117808/publications.pdf

Version: 2024-02-01

46	2,435	304701	223791
papers	citations	22 h-index	46 g-index

47	47	47	1201
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Quantitative depth profiling in surface analysis: A review. Surface and Interface Analysis, 1980, 2, 148-160.	1.8	292
2	Preferential sputtering of oxides: A comparison of model predictions with experimental data. Applied Surface Science, 1986, 27, 355-365.	6.1	245
3	Thermodynamics and structural aspects of grain boundary segregation. Critical Reviews in Solid State and Materials Sciences, 1995, 20, 1-85.	12.3	226
4	Atomic mixing, surface roughness and information depth in high-resolution AES depth profiling of a GaAs/AlAs superlattice structure. Surface and Interface Analysis, 1994, 21, 673-678.	1.8	170
5	Evaluation of concentration-depth profiles by sputtering in SIMS and AES. Applied Physics Berlin, 1976, 9, 59-66.	1.4	151
6	Practical surface analysis: state of the art and recent developments in AES, XPS, ISS and SIMS. Surface and Interface Analysis, 1986, 9, 3-20.	1.8	106
7	Compositional depth profiling by sputtering. Progress in Surface Science, 1991, 36, 35-87.	8.3	101
8	Depth resolution and surface roughness effects in sputter profiling of NiCr multilayer sandwich samples using Auger electron spectroscopy. Thin Solid Films, 1977, 43, 275-283.	1.8	98
9	Approaching the limits of high resolution depth profiling. Applied Surface Science, 1993, 70-71, 9-19.	6.1	81
10	Ultimate depth resolution and profile reconstruction in sputter profiling with AES and SIMS. Surface and Interface Analysis, 2000, 30, 228-236.	1.8	76
11	The statistical sputtering contribution to resolution in concentration-depth profiles. Thin Solid Films, 1981, 81, 239-246.	1.8	74
12	From depth resolution to depth resolution function: refinement of the concept for delta layers, single layers and multilayers. Surface and Interface Analysis, 1999, 27, 825-834.	1.8	74
13	Thermodynamics of Grain Boundary Segregation and Applications to Anisotropy, Compensation Effect and Prediction. Critical Reviews in Solid State and Materials Sciences, 2008, 33, 133-163.	12.3	64
14	Cascade mixing limitations in sputter profiling. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1992, 10, 316.	1.6	63
15	Interlaboratory comparison of the depth resolution in sputter depth profiling of Ni/Cr multilayers with and without sample rotation using AES, XPS, and SIMS. Surface and Interface Analysis, 1993, 20, 621-626.	1.8	61
16	Characterization of nanolayers by sputter depth profiling. Applied Surface Science, 2005, 241, 113-121.	6.1	42
17	Determination of the atomic mixing layer in sputter profiling of Ta/Si multilayers by TEM and AES. Surface and Interface Analysis, 1990, 15, 794-796.	1.8	40
18	Applied Thermodynamics: Grain Boundary Segregation. Entropy, 2014, 16, 1462-1483.	2.2	38

#	Article	IF	Citations
19	Determination and application of the depth resolution function in sputter profiling with secondary ion mass spectroscopy and Auger electron spectroscopy. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1998, 16, 1096-1102.	2.1	35
20	Analytical and numerical depth resolution functions in sputter profiling. Applied Surface Science, 2014, 314, 942-955.	6.1	25
21	Redeposition in AES sputter depth profiling of multilayer Cr/Ni thin films. Surface and Interface Analysis, 1988, 12, 83-86.	1.8	24
22	Depth Resolution and Quantitative Evaluation of AES Sputtering Profiles. Topics in Current Physics, 1984, , 141-158.	0.5	24
23	Sputter depth profiling: past, present, and future. Surface and Interface Analysis, 2014, 46, 654-662.	1.8	22
24	Interstitial and substitutional solute segregation at individual grain boundaries ofÎ±-iron: data revisited. Journal of Physics Condensed Matter, 2016, 28, 064001.	1.8	22
25	Determination of the Depth Scale in Sputter Depth Profiling. Journal of Surface Analysis (Online), 2002, 9, 306-309.	0.1	22
26	Depth resolution and preferential sputtering in depth profiling of sharp interfaces. Applied Surface Science, 2017, 410, 354-362.	6.1	21
27	Entropy matters in grain boundary segregation. Acta Materialia, 2021, 206, 116597.	7.9	21
28	Quantitative reconstruction of the GDOES sputter depth profile of a monomolecular layer structure of thiourea on copper. Applied Surface Science, 2015, 331, 140-149.	6.1	19
29	Original and sputtering induced interface roughness in AES sputter depth profiling of SiO 2 /Ta 2 O 5 multilayers. Thin Solid Films, 1999, 355-356, 390-394.	1.8	17
30	Depth resolution in sputter profiling revisited. Surface and Interface Analysis, 2016, 48, 1354-1369.	1.8	17
31	Influence of nonstationary atomic mixing on depth resolution in sputter depth profiling. Surface and Interface Analysis, 2012, 44, 569-572.	1.8	16
32	Influence of non-Gaussian roughness on sputter depth profiles. Applied Surface Science, 2013, 276, 447-453.	6.1	16
33	Quantitative comparison between Auger electron spectroscopy and secondary ion mass spectroscopy depth profiles of a double layer structure of AlAs in GaAs using the mixing-roughness-information depth model. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2001, 19, 1111-1115.	2.1	15
34	Quantitative AES depth profiling of a Ge/Si multilayer structure. Surface and Interface Analysis, 2002, 33, 461-471.	1.8	15
35	Backscattering effect in quantitative AES sputter depth profiling of multilayers. Surface and Interface Analysis, 2007, 39, 787-797.	1.8	15
36	Preferential sputtering effects in depth profiling of multilayers with SIMS, XPS and AES. Applied Surface Science, 2019, 483, 140-155.	6.1	14

#	Article	IF	Citations
37	The Significance of Entropy in Grain Boundary Segregation. Materials, 2019, 12, 492.	2.9	14
38	Ultrahigh Resolution in Sputter Depth Profiling with Auger Electron Spectroscopy Using Ionized SF6 Molecules as Primary Ions. Japanese Journal of Applied Physics, 1998, 37, L758-L760.	1.5	12
39	An analytical depth resolution function for the MRI model. Surface and Interface Analysis, 2013, 45, 1659-1660.	1.8	10
40	Quantitative Compositional Depth Profiling. Springer Series in Surface Sciences, 2013, , 297-408.	0.3	8
41	Quantitative reconstruction of Ta/Si multilayer depth profiles obtained by Time-of-Flight-Secondary-Ion-Mass-Spectrometry (ToF-SIMS) using Cs+ ion sputtering. Thin Solid Films, 2015, 591, 60-65.	1.8	8
42	Depth resolution and preferential sputtering in depth profiling of delta layers. Applied Surface Science, 2018, 455, 1045-1056.	6.1	8
43	Structural surface phase transitions during segregation competition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1995, 13, 1493-1496.	2.1	4
44	Correlation of depth resolution and preferential sputtering in depth profiles of thin layers by Secondary Ion Mass Spectrometry (SIMS). Thin Solid Films, 2018, 662, 165-167.	1.8	3
45	Prediction and experimental determination of the layer thickness in SIMS depth profiling of Ge/Si multilayers: Effect of preferential sputtering and atomic mixing. Applied Surface Science, 2019, 481, 1103-1108.	6.1	3
46	Artifacts in multilayer depth profiling: Origin and quantification of a double peak layer profile of Ag in ToF-SIMS depth profiles of an Ag/Ni multilayer. Materials Characterization, 2021, 171, 110774.	4.4	2