Philipp HÃ¶nicke

List of Publications by Year
in descending order

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55	754	516710 16	642732 23
papers	citations	h-index	g-index

56	56	56	625
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Depth profile characterization of ultra shallow junction implants. Analytical and Bioanalytical Chemistry, 2010, 396, 2825-2832.	3.7	50
2	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>L</mml:mi></mml:math>-subshell fluorescence yields and Coster-Kronig transition probabilities with a reliable uncertainty budget for selected high- and medium-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Z</mml:mi></mml:math>elements. Physical Review A, 2012, 86, .	2.5	49
3	Characterization of High-k Nanolayers by Grazing Incidence X-ray Spectrometry. Materials, 2014, 7, 3147-3159.	2.9	37
4	Characterization of ultra-shallow aluminum implants in silicon by grazing incidence and grazing emission X-ray fluorescence spectroscopy. Journal of Analytical Atomic Spectrometry, 2012, 27, 1432.	3.0	35
5	Multiparameter characterization of subnanometre Cr/Sc multilayers based on complementary measurements. Journal of Applied Crystallography, 2016, 49, 2161-2171.	4.5	33
6	Element sensitive reconstruction of nanostructured surfaces with finite elements and grazing incidence soft X-ray fluorescence. Nanoscale, 2018, 10, 6177-6185.	5.6	29
7	Experimental Verification of the Individual Energy Dependencies of the Partial<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>L</mml:mi></mml:math>-Shell Photoionization Cross Sections of Pd and Mo. Physical Review Letters, 2014, 113, 163001.	7.8	25
8	Fundamental parameters of Zr and Ti for a reliable quantitative Xâ€ray fluorescence analysis. X-Ray Spectrometry, 2015, 44, 217-220.	1.4	22
9	Reference-free grazing incidence x-ray fluorescence and reflectometry as a methodology for independent validation of x-ray reflectometry on ultrathin layer stacks and a depth-dependent characterization. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2019, 37, .	2.1	22
10	Sacrificial Self-Assembled Monolayers for the Passivation of GaAs (100) Surfaces and Interfaces. Chemistry of Materials, 2016, 28, 5689-5701.	6.7	20
11	Accurate experimental determination of gallium K-Âand L3-shell XRF fundamental parameters. Journal of Analytical Atomic Spectrometry, 2018, 33, 1003-1013.	3.0	20
12	Material combination of Tunnel-SiO2 with a (sub-)Monolayer of ALD-AlOx on silicon offering a highly passivating hole selective contact. Solar Energy Materials and Solar Cells, 2020, 215, 110654.	6.2	20
13	Local structural investigation of hafnia-zirconia polymorphs in powders and thin films by X-ray absorption spectroscopy. Acta Materialia, 2019, 180, 158-169.	7.9	19
14	Towards a traceable enhancement factor in surface-enhanced Raman spectroscopy. Journal of Materials Chemistry C, 2020, 8, 16513-16519.	5.5	19
15	Quantitative depth profiling of boron and arsenic ultra low energy implants by pulsed rf-GD-ToFMS. Journal of Analytical Atomic Spectrometry, 2011, 26, 542-549.	3.0	18
16	Grazing angle X-ray fluorescence from periodic structures on silicon and silica surfaces. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2014, 98, 65-75.	2.9	17
17	Reference-free, depth-dependent characterization of nanolayers and gradient systems with advanced grazing incidence X-ray fluorescence analysis. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 523-528.	1.8	16
18	Shape- and Element-Sensitive Reconstruction of Periodic Nanostructures with Grazing Incidence X-ray Fluorescence Analysis and Machine Learning. Nanomaterials, 2021, 11, 1647.	4.1	16

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19	Grazing-incidence x-ray fluorescence analysis for non-destructive determination of In and Ga depth profiles in Cu(In,Ga)Se2 absorber films. Applied Physics Letters, 2013, 103, .	3.3	15
20	Depth profiling of low energy ion implantations in Si and Ge by means of micro-focused grazing emission X-ray fluorescence and grazing incidence X-ray fluorescence. Journal of Analytical Atomic Spectrometry, 2015, 30, 1086-1099.	3.0	15
21	Polysulfide driven degradation in lithiumâ€“sulfur batteries during cycling â€“ quantitative and high time-resolution operando X-ray absorption study for dissolved polysulfides probed at both electrode sides. Journal of Materials Chemistry A, 2021, 9, 10231-10239.	10.3	15
22	Impact of ammonium sulfide solution on electronic properties and ambient stability of germanium surfaces: towards Ge-based microelectronic devices. Journal of Materials Chemistry C, 2013, 1, 4105.	5.5	13
23	Preparation and Characterization of Self-Assembled Monolayers on Germanium Surfaces. Solid State Phenomena, 2009, 145-146, 169-172.	0.3	12
24	What are the correct Lâ€subshell photoionization cross sections for quantitative Xâ€ray spectroscopy?. X-Ray Spectrometry, 2016, 45, 207-211.	1.4	12
25	Development and characterization of sub-monolayer coatings as novel calibration samples for X-ray spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2018, 145, 36-42.	2.9	12
26	Development and Synchrotronâ€Based Characterization of Al and Cr Nanostructures as Potential Calibration Samples for 3D Analytical Techniques. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700866.	1.8	12
27	Grazing incidence-x-ray fluorescence for a dimensional and compositional characterization of well-ordered 2D and 3D nanostructures. Nanotechnology, 2020, 31, 505709.	2.6	12
28	Intercalation of Lithium Ions from Gaseous Precursors into Î²-MnO2 Thin Films Deposited by Atomic Layer Deposition. Journal of Physical Chemistry C, 2019, 123, 15802-15814.	3.1	11
29	Depth-profiling of vertical sidewall nanolayers on structured wafers by grazing incidence X-ray flourescence. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2008, 63, 1359-1364.	2.9	10
30	Validation of secondary fluorescence excitation in quantitative X-ray fluorescence analysis of thin alloy films. Journal of Analytical Atomic Spectrometry, 2020, 35, 1664-1670.	3.0	10
31	Complementary Metrology within a European Joint Laboratory. Solid State Phenomena, 0, 145-146, 97-100.	0.3	9
32	Focusing of soft X-ray radiation and characterization of the beam profile enabling X-ray emission spectrometry at nanolayered specimens. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2012, 78, 37-41.	2.9	9
33	Relative L3 transition probabilities of titanium compounds as a function of the oxidation state using high-resolution X-ray emission spectrometry. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2018, 145, 71-78.	2.9	9
34	Interaction of nanoparticle properties and X-ray analytical techniques. Journal of Analytical Atomic Spectrometry, 2020, 35, 1022-1033.	3.0	9
35	Quantitative manganese dissolution investigation in lithium-ion batteries by means of X-ray spectrometry techniques. Journal of Analytical Atomic Spectrometry, 2021, 36, 2056-2062.	3.0	9
36	Reliable compositional analysis of airborne particulate matter beyond the quantification limits of total reflection X-ray fluorescence. Analytica Chimica Acta, 2022, 1192, 339367.	5.4	9

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37	Transfer-Free In Situ CCVD Grown Nanocrystalline Graphene for Sub-PPMV Ammonia Detection. ECS Journal of Solid State Science and Technology, 2018, 7, Q3108-Q3113.	1.8	8
38	Experimental determination of line energies, line widths and relative transition probabilities of the Gadolinium L x-ray emission spectrum. Metrologia, 2019, 56, 065007.	1.2	8
39	Amorphous Gadolinium Aluminate as a Dielectric and Sulfur for Indium Phosphide Passivation. ACS Applied Electronic Materials, 2019, 1, 2190-2201.	4.3	8
40	Speciation of iron sulfide compounds by means of X-ray emission spectroscopy using a compact full-cylinder von Hamos spectrometer. Journal of Analytical Atomic Spectrometry, 2020, 35, 2679-2685.	3.0	8
41	Simultaneous Dimensional and Analytical Characterization of Ordered Nanostructures. Small, 2022, 18, e2105776.	10.0	7
42	Complementary methodologies for thin film characterization in one tool â€“ a novel instrument for 450 mm wafers. Journal of Analytical Atomic Spectrometry, 2013, 28, 549.	3.0	6
43	Determination of SiO₂and C layers on a monocrystalline silicon sphere by reference-free x-ray fluorescence analysis. Metrologia, 2017, 54, 481-486.	1.2	6
44	Towards a calibration of laboratory setups for grazing incidence and total-reflection X-ray fluorescence analysis. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2020, 174, 106009.	2.9	6
45	Function of Hemoglobin-Based Oxygen Carriers: Determination of Methemoglobin Content by Spectral Extinction Measurements. International Journal of Molecular Sciences, 2021, 22, 1753.	4.1	5
46	Grazing incidence x-ray fluorescence based characterization of nanostructures for element sensitive profile reconstruction. , 2019, , .		5
47	Advanced Metrologies for Wafer Contamination and Nanolayer Characterization Using XRF Methods. ECS Transactions, 2007, 11, 273-279.	0.5	4
48	Reliable Quantification of Inorganic Contamination by TXRF. Solid State Phenomena, 0, 187, 291-294.	0.3	4
49	Characterisation of Self-Assembled Monolayers on Germanium Surfaces via NEXAFS. ECS Transactions, 2009, 19, 227-234.	0.5	2
50	Reference Samples for Ultra Trace Analysis of Organic Compounds on Substrate Surfaces. Solid State Phenomena, 0, 187, 295-298.	0.3	2
51	Oxidation and Sulfidation of Germanium Surfaces: A Comparative Atomic Level Study of Different Passivation Schemes. ECS Transactions, 2013, 50, 569-579.	0.5	2
52	X-Ray Induced Depth Profiling of Ion Implantations into Various Semiconductor Materials. Solid State Phenomena, 0, 195, 274-276.	0.3	1
53	Surface characterization of silicon spheres by combined XRF and XPS analysis for determination of the avogadro constant. , 2016, , .		1
54	Laboratory grazing-incidence X-ray fluorescence spectroscopy as an analytical tool for the investigation of sub-nanometer CrSc multilayer water window optics. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2020, 174, 105995.	2.9	1

#	Article	IF	Citations
55	Fundamental parameter determination to improve spectroscopical methods. , 2016, , .		0