Christian Patzig

List of Publications by Year
in descending order

90	1,919	236612	301761
papers	citations	25 h-index	39 g-index

92	92	92	1908
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Noble metals Pt, Au, and Ag as nucleating agents in BaO/SrO/ZnO/SiO2 glasses: formation of alloys and coreâ€“shell structures. Journal of Materials Science, 2022, 57, 6607-6618.	1.7	5
2	Silver doped glasses from the system BaO/SrO/ZnO/SiO2 â€“ The influence of Sb, Sn, and Ta on the formation of core-shell structures. Ceramics International, 2021, 47, 1126-1132.	2.3	2
3	Plastic strain relaxation and alloy instability in epitaxial corundum-phase (Al,Ga)₂O₃ thin films on r-plane Al₂O₃. Materials Advances, 2021, 2, 4316-4322.	2.6	6
4	Optical bandgap control in Al2O3/TiO2 heterostructures by plasma enhanced atomic layer deposition: Toward quantizing structures and tailored binary oxides. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2021, 252, 119508.	2.0	9
5	Oriented surface nucleation in diopside glass. Journal of Non-Crystalline Solids, 2021, 562, 120661.	1.5	5
6	Microstructure investigation and fluorescence properties of europium-doped scheelite crystals in glass-ceramics made under different synthesis conditions. Journal of Luminescence, 2021, 238, 118244.	1.5	4
7	Sample preparation for analytical scanning electron microscopy using initial notch sectioning. Micron, 2021, 150, 103090.	1.1	6
8	The titanium coordination state and its temporal evolution in Li2Oâ€“Al2O3â€“SiO2 (LAS) glasses with ZrO2 and TiO2 as nucleation agents - A XANES investigation. Ceramics International, 2020, 46, 3498-3501.	2.3	13
9	Magnetoelectric Coupling in Epitaxial Multiferroic BiFeO₃â€“BaTiO₃ Composite Thin Films. Physica Status Solidi (B): Basic Research, 2020, 257, 1900613.	0.7	10
10	Compositional study on the size distribution of nickel nanocrystals in borosilicate glasses. Journal of Non-Crystalline Solids, 2020, 549, 120357.	1.5	2
11	Experimental evidence of wide bandgap in triclinic (001)-oriented Sn5O2(PO4)2 thin films on Y2O3 buffered glass substrates. Journal of Materials Chemistry C, 2020, 8, 14203-14207.	2.7	1
12	Nucleation efficacy and flexural strength of novel leucite glass-ceramics. Dental Materials, 2020, 36, 592-602.	1.6	8
13	Enhanced Magnetoelectric Coupling in BaTiO3-BiFeO3 Multilayersâ€”An Interface Effect. Materials, 2020, 13, 197.	1.3	13
14	Coreâ€“shell structures with metallic silver as nucleation agent of low expansion phases in BaO/SrO/ZnO/SiO₂ glasses. CrystEngComm, 2019, 21, 4373-4386.	1.3	9
15	TiO2(B) nanocrystals in Ti-doped lithium aluminosilicate glasses. Journal of Non-Crystalline Solids: X, 2019, 2, 100025.	0.5	11
16	Depth-profiling of nickel nanocrystal populations in a borosilicate glass â€“ A combined TEM and XRM study. Ultramicroscopy, 2019, 205, 39-48.	0.8	11
17	Sr[Li2Al2O2N2]:Eu2+â€”A high performance red phosphor to brighten the future. Nature Communications, 2019, 10, 1824.	5.8	248
18	The acceleration of crystal growth of gold-doped glasses within the system BaO/SrO/ZnO/SiO2. Journal of the European Ceramic Society, 2019, 39, 554-562.	2.8	6

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19	The effect of CeO2 on the crystallization of MgO-Al2O3-SiO2-ZrO2 glass. Materials Chemistry and Physics, 2018, 212, 60-68.	2.0	10
20	Impact of magnetization and hyperfine field distribution on high magnetoelectric coupling strength in BaTiO₃â€“BiFeO₃ multilayers. Nanoscale, 2018, 10, 5574-5580.	2.8	13
21	Redox effects and formation of gold nanoparticles for the nucleation of low thermal expansion phases from BaO/SrO/ZnO/SiO₂ glasses. RSC Advances, 2018, 8, 6267-6277.	1.7	19
22	The effect of TiO2 on nucleation and crystallization of a Li2O-Al2O3-SiO2 glass investigated by XANES and STEM. Scientific Reports, 2018, 8, 2929.	1.6	34
23	The evidence of phase separation droplets in the crystallization process of a Li2O-Al2O3-SiO2 glass with TiO2 as nucleating agent â€“ An X-ray diffraction and (S)TEM-study supported by EDX-analysis. Ceramics International, 2018, 44, 2919-2926.	2.3	52
24	Insight on agglomerates of gold nanoparticles in glass based on surface plasmon resonance spectrum: study by multi-spheres T-matrix method. Journal of Physics Condensed Matter, 2018, 30, 045901.	0.7	12
25	Effect of double layer thickness on magnetoelectric coupling in multiferroic BaTiO₃-Bi_{0.95}Gd_{0.05}FeO₃multilayers. Journal Physics D: Applied Physics, 2018, 51, 184002.	1.3	15
26	Evidence of epitaxial growth of high-quartz solid solution on ZrTiO4 nuclei in a Li2O-Al2O3-SiO2 glass. Journal of Alloys and Compounds, 2018, 748, 73-79.	2.8	19
27	Effect of Al2O3 on phase formation and thermal expansion of a BaO-SrO-ZnO-SiO2 glass ceramic. Ceramics International, 2018, 44, 2098-2108.	2.3	7
28	Formation and implantation of gold nanoparticles by ArF-excimer laser irradiation of gold-coated float glass. Journal of Alloys and Compounds, 2018, 736, 152-162.	2.8	14
29	Stages in the tribologically-induced oxidation of high-purity copper. Scripta Materialia, 2018, 153, 114-117.	2.6	39
30	WO₃ as a nucleating agent for BaO/SrO/ZnO/SiO₂ glasses â€“ experiments and simulations. CrystEngComm, 2018, 20, 4565-4574.	1.3	10
31	Formation of bimetallic gold-silver nanoparticles in glass by UV laser irradiation. Journal of Alloys and Compounds, 2018, 767, 1253-1263.	2.8	27
32	Crystallization and microstructure of a glass seal for rapid laser sealing in the system CaO/Al2O3/SiO2. Journal of Materials Science, 2018, 53, 16207-16219.	1.7	3
33	A modified B2O3 containing Li2O-Al2O3-SiO2 glass with ZrO2 as nucleating agent - Crystallization and microstructure studied by XRD and (S)TEM-EDX. Ceramics International, 2018, 44, 19818-19824.	2.3	27
34	Correlation of Interface Impurities and Chemical Gradients with High Magnetoelectric Coupling Strength in Multiferroic BiFeO₃â€“BaTiO₃ Superlattices. ACS Applied Materials & Interfaces, 2017, 9, 18956-18965.	4.0	19
35	Surface Crystallization of a MgO/Y2O3/SiO2/Al2O3/ZrO2 Glass: Growth of an Oriented Î²-Y2Si2O7 Layer and Epitaxial ZrO2. Scientific Reports, 2017, 7, 44144.	1.6	25
36	Charge transfer-induced magnetic exchange bias and electron localization in (111)- and (001)-oriented LaNiO3/LaMnO3 superlattices. Applied Physics Letters, 2017, 110, 102403.	1.5	24

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37	Ferromagnetic phase transition and single-gap type electrical conductivity of epitaxial LaMnO₃/LaAlO₃superlattices. Journal Physics D: Applied Physics, 2017, 50, 43LT02.	1.3	4
38	X-ray Absorption Spectroscopic Studies of the Penetrability of Hollow Iron Oxide Nanoparticles by Galvanic Exchange Reactions. Journal of Physical Chemistry C, 2017, 121, 19735-19742.	1.5	2
39	Thermal stability of B-based multilayer mirrors for next generation lithography. Thin Solid Films, 2017, 642, 252-257.	0.8	5
40	The formation of nanocrystalline ZrO2 nuclei in a Li2O-Al2O3-SiO2 glass â€“ a combined XANES and TEM study. Scientific Reports, 2017, 7, 10869.	1.6	30
41	Two-dimensional Frankâ€“van-der-Merwe growth of functional oxide and nitride thin film superlattices by pulsed laser deposition. Journal of Materials Research, 2017, 32, 3936-3946.	1.2	9
42	Heterogeneous nucleation of Ba1-xSrxZn2Si2O7 from a BaO/SrO/ZnO/SiO2 glass using platinum as nucleation agent. Journal of the European Ceramic Society, 2017, 37, 4801-4808.	2.8	13
43	Phase formation during crystallization of a Li2O-Al2O3-SiO2 glass with ZrO2 as nucleating agent â€“ An X-ray diffraction and (S)TEM-study. Ceramics International, 2017, 43, 9769-9777.	2.3	51
44	Mechanical, structural, and optical properties of PEALD metallic oxides for optical applications. Applied Optics, 2017, 56, C47.	2.1	42
45	Structural evolution of CaF2 nanoparticles during the photoinduced crystallization of a Na2Oâ€“K2Oâ€“CaOâ€“CaF2â€“Al2O3â€“ZnOâ€“SiO2 glass. Journal of Materials Science, 2017, 52, 13390-13401.	1.7	12
46	Isotropic, high coercive field in melt-spun tetragonal Heusler Mn₃Ge. APL Materials, 2016, 4, 086113.	2.2	8
47	Bulk Crystallization in a SiO2/Al2O3/Y2O3/AlF3/B2O3/Na2O Glass: Fivefold Pseudo Symmetry due to Monoclinic Growth in a Glassy Matrix Containing Growth Barriers. Scientific Reports, 2016, 6, 19645.	1.6	12
48	Effect of the concentrations of nucleating agents ZrO2 and TiO2 on the crystallization of Li2Oâ€“Al2O3â€“SiO2 glass: an X-ray diffraction and TEM investigation. Journal of Materials Science, 2016, 51, 10127-10138.	1.7	40
49	Characterizing the residual glass in a MgO/Al2O3/SiO2/ZrO2/Y2O3 glass-ceramic. Scientific Reports, 2016, 6, 34965.	1.6	18
50	The crystallization of MgOâ€“Al2O3â€“SiO2â€“ZrO2glass-ceramics with and without the addition of Y2O3â€“ a combined STEM/XANES study. RSC Advances, 2016, 6, 62934-62943.	1.7	11
51	Oriented crystallization of a Î²-Quartz Solid Solution from a MgO/Al₂O₃/SiO₂ glass in contact with tetragonal ZrO₂ ceramics. RSC Advances, 2015, 5, 15164-15171.	1.7	24
52	Laser welding of sapphire wafers using a thin-film fresnoite glass solder. Microsystem Technologies, 2015, 21, 1035-1045.	1.2	14
53	Effect of Y2O3 and CeO2 on the crystallisation behaviour and mechanical properties of glassâ€“ceramics in the system MgO/Al2O3/SiO2/ZrO2. Journal of Materials Science, 2015, 50, 1986-1995.	1.7	26
54	Coupling of Metals and Biominerals: Characterizing the Interface between Ferromagnetic Shape-Memory Alloys and Hydroxyapatite. ACS Applied Materials & Interfaces, 2015, 7, 15331-15338.	4.0	9

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55	In Situ X-ray Absorption Spectroscopic Study of Fe@Fe_xO_y/Pd and Fe@Fe_xO_y/Cu Nanoparticle Catalysts Prepared by Galvanic Exchange Reactions. Journal of Physical Chemistry C, 2015, 119, 21209-21218.	1.5	20
56	Determination of the spontaneous polarization of wurtzite (Mg,Zn)O. Applied Physics Letters, 2014, 104, .	1.5	13
57	Zr coordination change during crystallization of MgOâ€“Al2O3â€“SiO2â€“ZrO2 glass ceramics. Journal of Non-Crystalline Solids, 2014, 384, 47-54.	1.5	34
58	Crystallization of ZrO₂-nucleated MgO/Al₂O₃/SiO₂ glasses â€“ a TEM study. CrystEngComm, 2014, 16, 6578-6587.	1.3	35
59	Highly textured fresnoite thin films synthesizedin situby pulsed laser deposition with CO₂laser direct heating. Journal Physics D: Applied Physics, 2014, 47, 034013.	1.3	13
60	Distribution of thulium in Tm3+-doped oxyfluoride glasses and glass-ceramics. CrystEngComm, 2013, 15, 6979.	1.3	39
61	KLaF4 nanocrystallisation in oxyfluoride glass-ceramics. CrystEngComm, 2013, 15, 10323.	1.3	36
62	A normal-incidence PtSi photoemissive detector with black silicon light-trapping. Journal of Applied Physics, 2013, 114, .	1.1	20
63	High-strength glass-ceramics in the system MgO/Al2O3/SiO2/ZrO2/Y2O3 â€“ microstructure and properties. CrystEngComm, 2013, 15, 6165.	1.3	18
64	Variation of Zr-L_{2,3}XANES in tetravalent zirconium oxides. Journal of Physics Condensed Matter, 2013, 25, 165505.	0.7	21
65	Low Temperature Fusion Wafer Bonding Quality Investigation for Failure Mode Analysis. ECS Transactions, 2013, 50, 227-239.	0.3	6
66	Heteroepitaxial Ge-on-Si by DC magnetron sputtering. AIP Advances, 2013, 3, .	0.6	11
67	Temporal Evolution of Diffusion Barriers Surrounding ZrTiO₄ Nuclei in Lithia Aluminosilicate Glass-Ceramics. Crystal Growth and Design, 2012, 12, 1556-1563.	1.4	48
68	Ion beam sputter deposition of epitaxial Ag films on native oxide covered Si(100) substrates. Applied Surface Science, 2012, 258, 9617-9622.	3.1	5
69	Temporal Evolution of Crystallization in MgOâ€“Al₂O₃â€“SiO₂â€“ZrO₂ Glass Ceramics. Crystal Growth and Design, 2012, 12, 2059-2067.	1.4	59
70	Experimental evidence for an angular dependent transition of magnetization reversal modes in magnetic nanotubes. Journal of Applied Physics, 2011, 109, .	1.1	82
71	Microspot surface enhanced fluorescence from sculptured thin films for control of antibody immobilization. Proceedings of SPIE, 2011, , .	0.8	3
72	DÃ¼nne Schichten durch Deposition unter streifenden Einfall. Vakuum in Forschung Und Praxis, 2010, 22, 14-19.	0.0	2

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73	Arbitrarily shaped Si nanostructures by glancing angle ion beam sputter deposition. Physica Status Solidi (B): Basic Research, 2010, 247, 1310-1321.	0.7	23
74	Periodically arranged Si nanostructures by glancing angle deposition on patterned substrates. Physica Status Solidi (B): Basic Research, 2010, 247, 1322-1334.	0.7	29
75	Tubular magnetic nanostructures based on glancing angle deposited templates and atomic layer deposition. Physica Status Solidi (B): Basic Research, 2010, 247, 1365-1371.	0.7	25
76	Enhancement of stiffness of vertically standing Si nanosprings by energetic ions. Journal of Applied Physics, 2010, 107, 094315.	1.1	2
77	Mechanical Characteristics of Silicon Nanostructures Using Force Distance Spectroscopy. Journal of Nanoscience and Nanotechnology, 2010, 10, 2994-3000.	0.9	0
78	Influence of substrate temperature on glancing angle deposited Ag nanorods. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2010, 28, 1002-1009.	0.9	30
79	Surface-enhanced fluorescence from metal sculptured thin films with application to biosensing in water. Applied Physics Letters, 2009, 94, 063106.	1.5	65
80	Patterning concept for sculptured nanostructures with arbitrary periods. Applied Physics Letters, 2009, 95, 103107.	1.5	8
81	Ion beam induced anisotropic deformation of Si nanosprings. Journal Physics D: Applied Physics, 2009, 42, 145404.	1.3	7
82	Swift Heavy Ion Irradiation Induced Effects in Si/SiOx Multi-Layered Films and Nanostructures. Materials Research Society Symposia Proceedings, 2009, 1181, 48.	0.1	0
83	Surface plasmon resonance from metallic columnar thin films. Photonics and Nanostructures - Fundamentals and Applications, 2009, 7, 176-185.	1.0	38
84	Silicon Nanocolumns on Nanosphere Lithography Templated Substrates: Effects of Sphere Size and Substrate Temperature. Journal of Nanoscience and Nanotechnology, 2009, 9, 1985-1991.	0.9	10
85	Growth of Si nanorods in honeycomb and hexagonal-closed-packed arrays using glancing angle deposition. Journal of Applied Physics, 2008, 103, .	1.1	23
86	Glancing angle sputter deposited nanostructures on rotating substrates: Experiments and simulations. Journal of Applied Physics, 2008, 104, .	1.1	61
87	Temperature effect on the glancing angle deposition of Si sculptured thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2008, 26, 881-886.	0.9	31
88	Comparative study of enhanced fluorescence from nano sculptured thin films. , 2008, , .		5
89	Periodic nanoscale Si structures by ion beam induced glancing angle deposition. , 2008, , .		1
90	Ordered silicon nanostructures by ion beam induced glancing angle deposition. Journal of Vacuum Science & Technology B, 2007, 25, 833.	1.3	27