

# Sylvia Matzen

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4428150/publications.pdf>

Version: 2024-02-01

40  
papers

1,367  
citations

394421

19  
h-index

345221

36  
g-index

40  
all docs

40  
docs citations

40  
times ranked

2229  
citing authors

#	ARTICLE	IF	CITATIONS
1	Heterogeneous Integration of Doped Crystalline Zirconium Oxide for Photonic Applications. IEEE Journal of Selected Topics in Quantum Electronics, 2022, 28, 1-13.	2.9	3
2	Quantitative investigation of polarization-dependent photocurrent in ferroelectric thin films. Journal of Physics Condensed Matter, 2022, 34, 104003.	1.8	5
3	Cantilever magnetoelectric PZT/TbFeCo resonators for magnetic sensing applications. APL Materials, 2021, 9, .	5.1	8
4	Reversible oxygen migration and phase transitions in hafnia-based ferroelectric devices. Science, 2021, 372, 630-635.	12.6	138
5	Erbium-doped yttria-stabilised zirconia thin films grown by pulsed laser deposition for photonic applications. Thin Solid Films, 2020, 693, 137706.	1.8	2
6	Erbium-Doped Yttria-Stabilized Zirconia Thin Layers for Photonic Applications. IEEE Journal of Quantum Electronics, 2020, 56, 1-7.	1.9	7
7	Temperature-independent giant dielectric response in transitional BaTiO <sub>3</sub> thin films. Applied Physics Reviews, 2020, 7, 011402.	11.3	35
8	Ultrafast light-induced shear strain probed by time-resolved x-ray diffraction: Multiferroic BiFeO <sub>3</sub> as a case study. Physical Review B, 2020, 102, .	3.2	9
9	Domain fluctuations in a ferroelectric low-strain BaTiO <sub>3</sub> thin film. Physical Review Materials, 2020, 4, .		
10	Third-order nonlinear optical susceptibility of crystalline oxide yttria-stabilized zirconia. Photonics Research, 2020, 8, 110.	7.0	19
11	Magnetic Tunnel Junctions Based on Ferroelectric Hf <sub>0.5</sub> Zr <sub>0.5</sub> O <sub>2</sub> Tunnel Barriers. Physical Review Applied, 2019, 12, .		
12	Tuning Ultrafast Photoinduced Strain in Ferroelectric-Based Devices. Advanced Electronic Materials, 2019, 5, 1800709.	5.1	26
13	Conduction mechanism and switchable photovoltaic effect in (111) oriented BiFe <sub>0.95</sub> Mn <sub>0.05</sub> O <sub>3</sub> thin film. Journal of Physics Condensed Matter, 2019, 31, 275701.	1.8	4
14	Magneto-ionic control of spin polarization in multiferroic tunnel junctions. Npj Quantum Materials, 2019, 4, .	5.2	34
15	Towards optical amplification in complex functional oxides: exploring optical gain in erbium-doped yttria-stabilized zirconia waveguides. , 2019, .		1
16	Optical gain evaluation on rare-earth doped Yttria-stabilized zirconia for hybrid integration on silicon photonics platforms. , 2019, .		0
17	A rhombohedral ferroelectric phase in epitaxially strained Hf <sub>0.5</sub> Zr <sub>0.5</sub> O <sub>2</sub> thin films. Nature Materials, 2018, 17, 1095-1100.	27.5	324
18	High-quality crystalline yttria-stabilized-zirconia thin layer for photonic applications. Physical Review Materials, 2018, 2, .	2.4	12

#	ARTICLE	IF	CITATIONS
19	Strain induced by functional oxides for silicon photonics applications. Proceedings of SPIE, 2017, .	0.8	0
20	Structural and magnetic properties of [001] $\text{CoC}_2\text{O}_4$ thin films. Physical Review B, 2017, 96, .	3.2	9
21	Tuning the growth and strain relaxation of ferroelectric $\text{BaTiO}_3$ thin films on $\text{SrRuO}_3$ electrode: influence on electrical properties. EPJ Applied Physics, 2017, 80, 30303.	0.7	6
22	Universal Fabrication of 2D Electron Systems in Functional Oxides. Advanced Materials, 2016, 28, 1976-1980.	21.0	129
23	Ferroelectric Domain Structures in Low-strain $\text{BaTiO}_3$ . Advanced Electronic Materials, 2016, 2, 1500214.	5.1	54
24	Strain-induced magnetic anisotropy in epitaxial thin films of the spinel $\text{CoCr}_2\text{O}_4$ . Physical Review B, 2015, 92, .	3.2	9
25	Domains and domain walls in multiferroics. Comptes Rendus Physique, 2015, 16, 227-240.	0.9	22
26	Structure, magnetic ordering, and spin filtering efficiency of $\text{NiFe}_2\text{O}_4(111)$ ultrathin films. Applied Physics Letters, 2014, 104, .	3.3	37
27	Super switching and control of in-plane ferroelectric nanodomains in strained thin films. Nature Communications, 2014, 5, 4415.	12.8	87
28	Magnetism of $\text{CoFe}_2\text{O}_4$ ultrathin films on $\text{MgAl}_2\text{O}_4$ driven by epitaxial strain. Applied Physics Letters, 2013, 103, .	3.3	50
29	Thickness scaling of ferroelastic domains in $\text{PbTiO}_3$ films on $\text{DyScO}_3$ . Applied Physics Letters, 2013, 103, .	3.3	46
30	Direct evidence of spin filtering across $\text{MnFe}_2\text{O}_4$ tunnel barrier by Meservey-Tedrow experiment. Physical Review B, 2013, 87, .	3.2	19
31	X-ray diffraction imaging of metal-oxide epitaxial tunnel junctions made by optical lithography: use of focused and unfocused X-ray beams. Journal of Synchrotron Radiation, 2013, 20, 355-365.	2.4	4
32	Nanomagnetism of cobalt ferrite-based spin filters probed by spin-polarized tunneling. Applied Physics Letters, 2012, 101, 042409.	3.3	39
33	Restoration of bulk magnetic properties by strain engineering in epitaxial $\text{CoFe}_2\text{O}_4(001)$ ultrathin films. Applied Physics Letters, 2011, 99, .	3.2	44
34	Restoration of bulk magnetic properties by strain engineering in epitaxial $\text{CoFe}_2\text{O}_4(001)$ ultrathin films. Applied Physics Letters, 2011, 99, .	3.3	35
35	Organic-inorganic magnetic tunnel heterojunctions based on dithiapyranylidene ultrathin films grown on $\text{Fe}_3\text{O}_4(111)$ . Applied Physics Letters, 2010, 97, 253303.	3.3	12
36	Annealing of ion irradiated high TC Josephson junctions studied by numerical simulations. Journal of Applied Physics, 2009, 105, .	2.5	7

#	ARTICLE	IF	CITATIONS
37	Artificial antiphase boundary at the interface of ferrimagnetic spinel bilayers. <i>Physical Review B</i> , 2009, 79, .	3.2	32
38	Growth and magnetic behavior in hybrid organic–inorganic Ferrite/Alq <sub>3</sub> /Co heterostructures. <i>Journal of Materials Chemistry</i> , 2009, 19, 6973.	6.7	5
39	Annealing effect on the reproducibility of Josephson Junctions made by ion irradiation. <i>Journal of Physics: Conference Series</i> , 2008, 97, 012073.	0.4	0
40	Improving ion irradiated high T <sub>c</sub> Josephson junctions by annealing: The role of vacancy-interstitial annihilation. <i>Applied Physics Letters</i> , 2007, 91, 142506.	3.3	7