Sven Barth

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/7047538/publications.pdf

Version: 2024-02-01

69	2,792	172457	175258
papers	citations	29 h-index	52 g-index

70	70	70	3981
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Vanadium and Manganese Carbonyls as Precursors in Electron-Induced and Thermal Deposition Processes. Nanomaterials, 2022, 12, 1110.	4.1	0
2	Direct Writing of Cobalt Silicide Nanostructures Using Single-Source Precursors. ACS Applied Materials & Interfaces, 2021, 13, 48252-48259.	8.0	6
3	Living up to its potentialâ€"Direct-write nanofabrication with focused electron beams. Journal of Applied Physics, 2021, 130, .	2.5	14
4	Precursors for direct-write nanofabrication with electrons. Journal of Materials Chemistry C, 2020, 8, 15884-15919.	5.5	56
5	Metastable Group IV Allotropes and Solid Solutions: Nanoparticles and Nanowires. Chemistry of Materials, 2020, 32, 2703-2741.	6.7	26
6	Temperature-Dependent Growth Characteristics of Nb- and CoFe-Based Nanostructures by Direct-Write Using Focused Electron Beam-Induced Deposition. Micromachines, 2020, 11, 28.	2.9	7
7	Epitaxial Ge_{0.81}Sn_{0.19} Nanowires for Nanoscale Mid-Infrared Emitters. ACS Nano, 2019, 13, 8047-8054.	14.6	34
8	Drastic Changes in Material Composition and Electrical Properties of Gallium-Seeded Germanium Nanowires. Crystal Growth and Design, 2019, 19, 2531-2536.	3.0	6
9	Crystalline Niobium Carbide Superconducting Nanowires Prepared by Focused Ion Beam Direct Writing. ACS Nano, 2019, 13, 6287-6296.	14.6	37
10	Electron beam lithography for contacting single nanowires on non-flat suspended substrates. Sensors and Actuators B: Chemical, 2019, 286, 616-623.	7.8	7
11	Site-Specific Growth and in Situ Integration of Different Nanowire Material Networks on a Single Chip: Toward a Nanowire-Based Electronic Nose for Gas Detection. ACS Sensors, 2018, 3, 727-734.	7.8	31
12	Direct Synthesis of Hyperdoped Germanium Nanowires. ACS Nano, 2018, 12, 1236-1241.	14.6	30
13	Electron Induced Surface Reactions of HFeCo₃(CO)₁₂, a Bimetallic Precursor for Focused Electron Beam Induced Deposition (FEBID). Journal of Physical Chemistry C, 2018, 122, 2648-2660.	3.1	22
14	Solution-based low-temperature synthesis of germanium nanorods and nanowires. Monatshefte FÃ¼r Chemie, 2018, 149, 1315-1320.	1.8	13
15	Localized and In-Situ Integration of Different Nanowire Materials for Electronic Nose Applications. Proceedings (mdpi), 2018, 2, 957.	0.2	1
16	Magnetic Characterization of Direct-Write Free-Form Building Blocks for Artificial Magnetic 3D Lattices. Materials, 2018, 11, 289.	2.9	40
17	Electron interactions with the heteronuclear carbonyl precursor H₂FeRu₃(CO)₁₃ and comparison with HFeCo₃(CO)₁₂: from fundamental gas phase and surface science studies to focused electron beam induced deposition. Beilstein Journal of Nanotechnology, 2018, 9, 555-579.	2.8	16
18	Magnetoelectrical Transport Improvements of Postgrowth Annealed Ironâ€"Cobalt Nanocomposites: A Possible Route for Future Room-Temperature Spintronics. ACS Applied Nano Materials, 2018, 1, 3364-3374.	5.0	9

#	Article	IF	Citations
19	Direct-write of free-form building blocks for artificial magnetic 3D lattices. Scientific Reports, 2018, 8, 6160.	3.3	87
20	Low temperature humidity sensor based on Ge nanowires selectively grown on suspended microhotplates. Sensors and Actuators B: Chemical, 2017, 243, 669-677.	7.8	23
21	Inducing imperfections in germanium nanowires. Nano Research, 2017, 10, 1510-1523.	10.4	11
22	Formation and decay of negative ion states up to 11ÂeV above the ionization energy of the nanofabrication precursor HFeCo₃(CO)₁₂. Chemical Science, 2017, 8, 5949-5952.	7.4	16
23	Pushing the Composition Limit of Anisotropic Ge_{1â€“x}Sn_x Nanostructures and Determination of Their Thermal Stability. Chemistry of Materials, 2017, 29, 9802-9813.	6.7	33
24	Aerosol-assisted CVD of thioether-functionalised indium aminoalkoxides. Monatshefte FÃ¼r Chemie, 2017, 148, 1385-1392.	1.8	4
25	Gas sensors based on individual indium oxide nanowire. Sensors and Actuators B: Chemical, 2017, 238, 447-454.	7.8	44
26	Gas Sensors Based on Individual (Ga, In)2O3 Nanowires. Proceedings (mdpi), 2017, 1, 321.	0.2	1
27	Individual Gallium Oxide Nanowires for Humidity Sensing at Low Temperature. Proceedings (mdpi), 2017, 1, .	0.2	4
28	Structure and energetics in dissociative electron attachment to HFeCo3(CO)12. European Physical Journal D, 2016, 70, 1.	1.3	17
29	High-k Dielectric Passivation: Novel Considerations Enabling Cell Specific Lysis Induced by Electric Fields. ACS Applied Materials & Interfaces, 2016, 8, 21228-21235.	8.0	9
30	Thioether functionalised gallium and indium alkoxides in materials synthesis. New Journal of Chemistry, 2016, 40, 6962-6969.	2.8	5
31	Site-selectively grown SnO2 NWs networks on micromembranes for efficient ammonia sensing in humid conditions. Sensors and Actuators B: Chemical, 2016, 232, 402-409.	7.8	31
32	Lead-supported germanium nanowire growth. Materials Letters, 2016, 173, 248-251.	2.6	6
33	Monomeric aminoalcoholates of aluminium(III), gallium(III), and indium(III). Monatshefte FÃ¼r Chemie, 2016, 147, 341-348.	1.8	2
34	Gas Nanosensors Based on Individual Indium Oxide Nanostructures. Procedia Engineering, 2015, 120, 795-798.	1.2	6
35	Locally Grown SnO 2 NWs as Low Power Ammonia Sensor. Procedia Engineering, 2015, 120, 215-219.	1.2	4
36	Low-cost Fabrication of Zero-power Metal Oxide Nanowire Gas Sensors: Trends and Challenges. Procedia Engineering, 2015, 120, 488-491.	1.2	2

#	Article	IF	Citations
37	Microwave-assisted solutionâ€“liquidâ€“solid growth of Ge_{1â^'x}Sn_x nanowires with high tin content. Chemical Communications, 2015, 51, 12282-12285.	4.1	42
38	Synthesis and characterisation of thioether functionalised gallium and indium alkoxides. Dalton Transactions, 2015, 44, 16439-16445.	3.3	5
39	Microwave-Assisted Ge_{1â€“x}Sn_x Nanowire Synthesis: Precursor Species and Growth Regimes. Chemistry of Materials, 2015, 27, 6125-6130.	6.7	39
40	Kinetics of the charge ordering in magnetite below the Verwey temperature. Journal of Physics Condensed Matter, 2014, 26, 472202.	1.8	1
41	Size-controlled growth of germanium nanowires from ternary eutectic alloy catalysts. Journal of Materials Chemistry C, 2014, 2, 4597-4605.	5.5	10
42	Growth of monocrystalline In2O3 nanowires by a seed orientation dependent vapourâ€“solidâ€“solid mechanism. Journal of Materials Chemistry C, 2014, 2, 5747.	5.5	17
43	Influence of precursor chemistry on CVD grown TiO2 coatings: differential cell growth and biocompatibility. RSC Advances, 2013, 3, 11234.	3.6	7
44	Gate voltage induced phase transition in magnetite nanowires. Applied Physics Letters, 2013, 102, 073112.	3.3	21
45	Localized growth and in situ integration of nanowires for device applications. Chemical Communications, 2012, 48, 4734.	4.1	32
46	Nanostructured ZrO2 membranes prepared by liquid-injection chemical vapor deposition. Microporous and Mesoporous Materials, 2012, 163, 229-236.	4.4	9
47	Nanoscale Ferroelectric and Piezoelectric Properties of Sb₂S₃ Nanowire Arrays. Nano Letters, 2012, 12, 868-872.	9.1	61
48	Defect Transfer from Nanoparticles to Nanowires. Nano Letters, 2011, 11, 1550-1555.	9.1	52
49	Synthesis and Magnetic Characterization of Coaxial Ge_{1â€“x}Mn_x/a-Si Heterostructures. Crystal Growth and Design, 2011, 11, 5253-5259.	3.0	4
50	Diameter-Controlled Solid-Phase Seeding of Germanium Nanowires: Structural Characterization and Electrical Transport Properties. Chemistry of Materials, 2011, 23, 3335-3340.	6.7	48
51	Synthesis and applications of one-dimensional semiconductors. Progress in Materials Science, 2010, 55, 563-627.	32.8	450
52	Alkane and Alkanethiol Passivation of Halogenated Ge Nanowires. Chemistry of Materials, 2010, 22, 6370-6377.	6.7	42
53	Seedless Growth of Sub-10 nm Germanium Nanowires. Journal of the American Chemical Society, 2010, 132, 13742-13749.	13.7	42
54	The elastic moduli of oriented tin oxide nanowires. Nanotechnology, 2009, 20, 115705.	2.6	44

#	Article	IF	Citations
55	Amplified electrochemical DNA-sensing of nanostructured metal oxide films deposited on disposable graphite electrodes functionalized by chemical vapor deposition. Sensors and Actuators B: Chemical, 2009, 136, 432-437.	7.8	47
56	Studies on Surface Facets and Chemical Composition of Vapor Grown One-Dimensional Magnetite Nanostructures. Crystal Growth and Design, 2009, 9, 1077-1081.	3.0	36
57	Lowâ€temperature solâ€“gel transformation of methyl silicon precursors to silicaâ€based hybrid materials. Applied Organometallic Chemistry, 2008, 22, 629-636.	3.5	4
58	Insight into the Role of Oxygen Diffusion in the Sensing Mechanisms of SnO₂ Nanowires. Advanced Functional Materials, 2008, 18, 2990-2994.	14.9	96
59	Chemical Vapor Growth of Oneâ€dimensional Magnetite Nanostructures. Advanced Materials, 2008, 20, 1550-1554.	21.0	92
60	Glycol modified cis -diisopropoxy- bis (N) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 547 Td (transformation to nanocrystalline zirconia. Journal of Coordination Chemistry, 2008, 61, 2234-2245.	2.2	10
61	Toward a Systematic Understanding of Photodetectors Based on Individual Metal Oxide Nanowires. Journal of Physical Chemistry C, 2008, 112, 14639-14644.	3.1	130
62	Gas Sensing Devices Based on 1D Metal-Oxide Nanostructures: Fabrication, Testing and Device Integration. ECS Transactions, 2008, 13, 57-64.	0.5	0
63	One-Dimensional Semiconductor Nanostructures: Growth, Characterization and Device Applications. Zeitschrift Fur Physikalische Chemie, 2008, 222, 307-317.	2.8	13
64	Ferromagnetic Nanostructures by Atomic Layer Deposition: From Thin Films Towards Core-Shell Nanotubes. ECS Transactions, 2007, 11, 139-148.	0.5	21
65	Ordered Iron Oxide Nanotube Arrays of Controlled Geometry and Tunable Magnetism by Atomic Layer Deposition. Journal of the American Chemical Society, 2007, 129, 9554-9555.	13.7	232
66	Moleculeâ€Based Chemical Vapor Growth of Aligned SnO₂ Nanowires and Branched SnO₂/V₂O₅ Heterostructures. Small, 2007, 3, 2070-2075.	10.0	118
67	Fabrication and electrical characterization of circuits based on individual tin oxide nanowires. Nanotechnology, 2006, 17, 5577-5583.	2.6	135
68	One-dimensional semiconductor nanostructures: growth, characterization and device applications. , 2006, 6340, 45.		1
69	Size-Dependent Photoconductance in SnO2 Nanowires. Small, 2005, 1, 713-717.	10.0	271