

Heiko O Jacobs

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7676139/publications.pdf>

Version: 2024-02-01

51
papers

1,922
citations

331670

21
h-index

243625

44
g-index

51
all docs

51
docs citations

51
times ranked

1891
citing authors

#	ARTICLE	IF	CITATIONS
1	Nanoparticle gas phase electrodeposition: Fundamentals, fluid dynamics, and deposition kinetics. <i>Journal of Aerosol Science</i> , 2021, 151, 105652.	3.8	2
2	Three-dimensional platinum nanoparticle-based bridges for ammonia gas sensing. <i>Scientific Reports</i> , 2021, 11, 12551.	3.3	5
3	Localized and Programmable Chemical Vapor Deposition Using an Electrically Charged and Guided Molecular Flux. <i>ACS Nano</i> , 2020, 14, 12885-12894.	14.6	2
4	Combinatorial gas phase electrodeposition for fabrication of three-dimensional multimodal gas sensor array. <i>Materials Today: Proceedings</i> , 2020, 33, 2451-2457.	1.8	3
5	Gas Phase Electrodeposition Enabling the Programmable Three-Dimensional Growth of a Multimodal Room Temperature Nanobridge Gas Sensor Array. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 33497-33504.	8.0	5
6	Integrated multilayer stretchable printed circuit boards paving the way for deformable active matrix. <i>Nature Communications</i> , 2019, 10, 4909.	12.8	59
7	Corona Discharge Assisted Growth Morphology Switching of Tin-Doped Gallium Oxide for Optical Gas Sensing Applications. <i>Crystal Growth and Design</i> , 2019, 19, 6945-6953.	3.0	6
8	Fluidic Self-Assembly on Electroplated Multilayer Solder Bumps with Tailored Transformation Imprinted Melting Points. <i>Scientific Reports</i> , 2019, 9, 11325.	3.3	11
9	Corona assisted gallium oxide nanowire growth on silicon carbide. <i>Journal of Crystal Growth</i> , 2019, 509, 107-111.	1.5	3
10	Metamorphic Stretchable Touchpad. <i>Advanced Materials Technologies</i> , 2019, 4, 1800446.	5.8	4
11	Core-Shell Transformation-Imprinted Solder Bumps Enabling Low-Temperature Fluidic Self-Assembly and Self-Alignment of Chips and High Melting Point Interconnects. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 40608-40613.	8.0	13
12	Localized collection of airborne biological hazards for environmental monitoring. <i>Sensors and Actuators B: Chemical</i> , 2018, 273, 906-915.	7.8	3
13	Stress-adaptive meander track for stretchable electronics. <i>Flexible and Printed Electronics</i> , 2018, 3, 032001.	2.7	11
14	Metamorphic hemispherical microphone array for three-dimensional acoustics. <i>Applied Physics Letters</i> , 2017, 111, .	3.3	4
15	3D Metamorphic Stretchable Microphone Arrays. <i>Advanced Materials Technologies</i> , 2017, 2, 1700131.	5.8	13
16	Surface Tension Directed Fluidic Self-Assembly of Semiconductor Chips across Length Scales and Material Boundaries. <i>Micromachines</i> , 2016, 7, 54.	2.9	21
17	Deformable printed circuit boards that enable metamorphic electronics. <i>NPG Asia Materials</i> , 2016, 8, e336-e336.	7.9	18
18	Approaching Gas Phase Electrodeposition: Process and Optimization to Enable the Self-Aligned Growth of 3D Nanobridge-Based Interconnects. <i>Advanced Materials</i> , 2016, 28, 1770-1779.	21.0	19

#	ARTICLE	IF	CITATIONS
19	Localized Collection of Airborne Analytes: A Transport Driven Approach to Improve the Response Time of Existing Gas Sensor Designs including SERS based Detection of Small Molecules. Materials Research Society Symposia Proceedings, 2015, 1746, 1.	0.1	0
20	Millimeter Thin and Rubber-Like Solid-State Lighting Modules Fabricated Using Roll-to-Roll Fluidic Self-Assembly and Lamination. Advanced Materials, 2015, 27, 3661-3668.	21.0	28
21	Approaching Roll-to-Roll Fluidic Self-Assembly: Relevant Parameters, Machine Design, and Applications. Journal of Microelectromechanical Systems, 2015, 24, 1928-1937.	2.5	17
22	Localized Collection of Airborne Analytes: A Transport Driven Approach to Improve the Response Time of Existing Gas Sensor Designs. Advanced Functional Materials, 2014, 24, 3706-3714.	14.9	22
23	A First Implementation of an Automated Reel-to-Reel Fluidic Self-Assembly Machine. Advanced Materials, 2014, 26, 5942-5949.	21.0	97
24	Active Matrix-Based Collection of Airborne Analytes: An Analyte Recording Chip Providing Exposure History and Finger Print. Advanced Materials, 2014, 26, 7600-7607.	21.0	4
25	Effective Collection and Detection of Airborne Species Using SERS-Based Detection and Localized Electrodynamic Precipitation. Advanced Materials, 2013, 25, 3554-3559.	21.0	23
26	Effective localized collection and identification of airborne species through electrodynamic precipitation and SERS-based detection. Nature Communications, 2013, 4, 1636.	12.8	52
27	Gas Phase Electrodeposition: A Programmable Localized Deposition Method for Rapid Combinatorial Investigation of Nanostructured Devices and 3D Bulk Heterojunction Photovoltaic Cells. Materials Research Society Symposia Proceedings, 2012, 1439, 57-62.	0.1	0
28	Self-Tiling Monocrystalline Silicon; a Process to Produce Electrically Connected Domains of Si and Microconcentrator Solar Cell Modules on Plastic Supports. Advanced Materials, 2011, 23, 2727-2733.	21.0	21
29	Mimicking Electrodeposition in the Gas Phase: A Programmable Concept for Selected-Area Fabrication of Multimaterial Nanostructures. Small, 2010, 6, 1117-1124.	10.0	14
30	Self-assembly of microscopic chiplets at a liquid-liquid-solid interface forming a flexible segmented monocrystalline solar cell. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 993-998.	7.1	102
31	Gas Phase Electrodeposition: A Programmable Multimaterial Deposition Method for Combinatorial Nanostructured Device Discovery. Nano Letters, 2010, 10, 4494-4500.	9.1	23
32	Fluidic Surface-Tension-Directed Self-Assembly of Miniaturized Semiconductor Dies Across Length Scales and 3D Topologies. Materials Research Society Symposia Proceedings, 2009, 1179, 8.	0.1	0
33	Continuous nanoparticle generation and assembly by atmospheric pressure arc discharge. Applied Physics Letters, 2009, 95, .	3.3	25
34	Patterned Growth and Transfer of ZnO Micro and Nanocrystals with Size and Location Control. Advanced Materials, 2008, 20, 1474-1478.	21.0	80
35	Inside Front Cover: Patterned Growth and Transfer of ZnO Micro and Nanocrystals with Size and Location Control (Adv. Mater. 8/2008). Advanced Materials, 2008, 20, NA-NA.	21.0	0
36	Integration of ZnO Microcrystals with Tailored Dimensions Forming Light Emitting Diodes and UV Photovoltaic Cells. Nano Letters, 2008, 8, 1477-1481.	9.1	97

#	ARTICLE	IF	CITATIONS
37	Gas Phase Nanoparticle Integration. Materials Research Society Symposia Proceedings, 2007, 1002, 1.	0.1	0
38	Engineered Solder-Directed Self-Assembly Across Length Scales. Materials Research Society Symposia Proceedings, 2007, 990, 1.	0.1	5
39	ZnO Nanowire/p-GaN Heterojunction LEDs. Materials Research Society Symposia Proceedings, 2007, 1018, 1.	0.1	2
40	Fringing Field Directed Assembly of Nanomaterials. Nano Letters, 2006, 6, 2790-2796.	9.1	46
41	Charging Process and Coulomb-Force-Directed Printing of Nanoparticles with Sub-100-nm Lateral Resolution. Nano Letters, 2005, 5, 2078-2084.	9.1	65
42	Printing of organic and inorganic nanomaterials using electrospray ionization and Coulomb-force-directed assembly. Applied Physics Letters, 2005, 87, 263119.	3.3	36
43	Shape-and-solder-directed self-assembly to package semiconductor device segments. Applied Physics Letters, 2004, 85, 3635-3637.	3.3	109
44	Sequential shape-and-solder-directed self-assembly of functional microsystems. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 12814-12817.	7.1	98
45	Printing nanoparticles from the liquid and gas phases using nanoxerography. Nanotechnology, 2003, 14, 1057-1063.	2.6	47
46	Printing nanoparticle building blocks from the gas phase using nanoxerography. Applied Physics Letters, 2003, 83, 5527-5529.	3.3	63
47	Biomimetic self-assembly of a functional asymmetrical electronic device. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 4937-4940.	7.1	88
48	Fabrication of a Cylindrical Display by Patterned Assembly. Science, 2002, 296, 323-325.	12.6	426
49	Microscope Projection Photolithography for Rapid Prototyping of Masters with Micron-Scale Features for Use in Soft Lithography. Langmuir, 2001, 17, 6005-6012.	3.5	128
50	Corona Assisted Ga Based Nanowire Growth on 3C-SiC(111)/Si(111) Pseudosubstrates. Materials Science Forum, 0, 897, 642-645.	0.3	2
51	Corona Assisted Tuning of Gallium Oxide Growth on 3C-SiC(111)/Si(111) Pseudosubstrates. Materials Science Forum, 0, 1004, 102-109.	0.3	0