

Sivacarendran Balendhran

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4497653/publications.pdf>

Version: 2024-02-01

56
papers

5,255
citations

109137

35
h-index

161609

54
g-index

59
all docs

59
docs citations

59
times ranked

8318
citing authors

#	ARTICLE	IF	CITATIONS
1	Elemental Analogues of Graphene: Silicene, Germanene, Stanene, and Phosphorene. <i>Small</i> , 2015, 11, 640-652.	5.2	725
2	Two-Dimensional Molybdenum Trioxide and Dichalcogenides. <i>Advanced Functional Materials</i> , 2013, 23, 3952-3970.	7.8	443
3	Enhanced Charge Carrier Mobility in Two-Dimensional High Dielectric Molybdenum Oxide. <i>Advanced Materials</i> , 2013, 25, 109-114.	11.1	355
4	Transition metal oxides – Thermoelectric properties. <i>Progress in Materials Science</i> , 2013, 58, 1443-1489.	16.0	302
5	Electrochemical Control of Photoluminescence in Two-Dimensional MoS ₂ Nanoflakes. <i>ACS Nano</i> , 2013, 7, 10083-10093.	7.3	282
6	Atomically thin layers of MoS ₂ via a two step thermal evaporation–exfoliation method. <i>Nanoscale</i> , 2012, 4, 461-466.	2.8	254
7	Two dimensional \pm -MoO ₃ nanoflakes obtained using solvent-assisted grinding and sonication method: Application for H ₂ gas sensing. <i>Sensors and Actuators B: Chemical</i> , 2014, 192, 196-204.	4.0	190
8	The anodized crystalline WO ₃ nanoporous network with enhanced electrochromic properties. <i>Nanoscale</i> , 2012, 4, 5980.	2.8	164
9	High-Performance Field Effect Transistors Using Electronic Inks of 2D Molybdenum Oxide Nanoflakes. <i>Advanced Functional Materials</i> , 2016, 26, 91-100.	7.8	164
10	Field Effect Biosensing Platform Based on 2D \pm -MoO ₃ . <i>ACS Nano</i> , 2013, 7, 9753-9760.	7.3	161
11	Characterization of metal contacts for two-dimensional MoS ₂ nanoflakes. <i>Applied Physics Letters</i> , 2013, 103, .	1.5	144
12	Ambient Protection of Few-Layer Black Phosphorus via Sequestration of Reactive Oxygen Species. <i>Advanced Materials</i> , 2017, 29, 1700152.	11.1	141
13	Actively variable-spectrum optoelectronics with black phosphorus. <i>Nature</i> , 2021, 596, 232-237.	13.7	132
14	Black phosphorus: ambient degradation and strategies for protection. <i>2D Materials</i> , 2018, 5, 032001.	2.0	119
15	Nanostructured copper oxides as ethanol vapour sensors. <i>Sensors and Actuators B: Chemical</i> , 2013, 185, 620-627.	4.0	118
16	Nanoscale Resistive Switching in Amorphous Perovskite Oxide (<i> SrTiO₃</i>) Memristors. <i>Advanced Functional Materials</i> , 2014, 24, 6741-6750.	7.8	111
17	Defining the role of humidity in the ambient degradation of few-layer black phosphorus. <i>2D Materials</i> , 2017, 4, 015025.	2.0	110
18	CNT/PDMS composite membranes for H ₂ and CH ₄ gas separation. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 10494-10501.	3.8	97

#	ARTICLE	IF	CITATIONS
19	Degradation of black phosphorus is contingent on UV-blue light exposure. Npj 2D Materials and Applications, 2017, 1, .	3.9	95
20	ZnO based thermopower wave sources. Chemical Communications, 2012, 48, 7462.	2.2	75
21	Enhancing the current density of electrodeposited ZnO-Cu ₂ O solar cells by engineering their heterointerfaces. Journal of Materials Chemistry, 2012, 22, 21767.	6.7	74
22	MnO ₂ -Based Thermopower Wave Sources with Exceptionally Large Output Voltages. Journal of Physical Chemistry C, 2013, 117, 9137-9142.	1.5	71
23	Donor-Induced Performance Tuning of Amorphous SrTiO ₃ Memristive Nanodevices: Multistate Resistive Switching and Mechanical Tunability. Advanced Functional Materials, 2015, 25, 3172-3182.	7.8	68
24	Edge-oriented and steerable hyperbolic polaritons in anisotropic van der Waals nanocavities. Nature Communications, 2020, 11, 6086.	5.8	67
25	Proton intercalated two-dimensional WO ₃ nano-flakes with enhanced charge-carrier mobility at room temperature. Nanoscale, 2014, 6, 15029-15036.	2.8	66
26	Liquid-Metal Synthesized Ultrathin SnS Layers for High-Performance Broadband Photodetectors. Advanced Materials, 2020, 32, e2004247.	11.1	66
27	Anodic formation of a thick three-dimensional nanoporous WO ₃ film and its photocatalytic property. Electrochemistry Communications, 2013, 27, 128-132.	2.3	58
28	Engineering electrodeposited ZnO films and their memristive switching performance. Physical Chemistry Chemical Physics, 2013, 15, 10376.	1.3	52
29	Low-Temperature Fabrication of Alkali Metal-Organic Charge Transfer Complexes on Cotton Textile for Optoelectronics and Gas Sensing. Langmuir, 2015, 31, 1581-1587.	1.6	51
30	Large-area synthesis of 2D MoO ₃ for enhanced optoelectronic applications. 2D Materials, 2019, 6, 035031.	2.0	48
31	Dual Selective Gas Sensing Characteristics of 2D MoO ₃ via a Facile Transfer Process. ACS Applied Materials & Interfaces, 2019, 11, 40189-40195.	4.0	47
32	Reversible resistive switching behaviour in CVD grown, large area MoO _x . Nanoscale, 2018, 10, 19711-19719.	2.8	46
33	Electrically Activated UV-A Filters Based on Electrochromic MoO ₃ . ACS Applied Materials & Interfaces, 2020, 12, 16997-17003.	4.0	45
34	Spectrally Selective Mid-Wave Infrared Detection Using Fabry-Pérot Cavity Enhanced Black Phosphorus 2D Photodiodes. ACS Nano, 2020, 14, 13645-13651.	7.3	41
35	3-D nanorod arrays of metal-organic KTCNQ semiconductor on textiles for flexible organic electronics. RSC Advances, 2013, 3, 17654.	1.7	40
36	Effects of plasma-treatment on the electrical and optoelectronic properties of layered black phosphorus. Applied Materials Today, 2018, 12, 244-249.	2.3	38

#	ARTICLE	IF	CITATIONS
37	Long-Wave Infrared Photodetectors Based on 2D Platinum Diselenide atop Optical Cavity Substrates. ACS Nano, 2021, 15, 6573-6581.	7.3	29
38	Light-Matter Interaction Enhancement in Anisotropic 2D Black Phosphorus via Polarization-Tailoring Nano-Optics. ACS Photonics, 2021, 8, 1120-1128.	3.2	20
39	Compact Chemical Identifier Based on Plasmonic Metasurface Integrated with Microbolometer Array. Laser and Photonics Reviews, 2022, 16, .	4.4	17
40	Mixed Ionic-Electronic Charge Transport in Layered Black Phosphorus for Low-Power Memory. Advanced Functional Materials, 2022, 32, 2107068.	7.8	16
41	Generating strong room-temperature photoluminescence in black phosphorus using organic molecules. 2D Materials, 2019, 6, 015009.	2.0	15
42	Two-dimensional MoO ₃ via a top-down chemical thinning route. 2D Materials, 2017, 4, 035008.	2.0	14
43	Monocrystalline Antimonene Nanosheets via Physical Vapor Deposition. Advanced Materials Interfaces, 2020, 7, 2001678.	1.9	14
44	Mid-Wave Infrared Polarization-Independent Graphene Photoconductor with Integrated Plasmonic Nanoantennas Operating at Room Temperature. Advanced Optical Materials, 2021, 9, 2001854.	3.6	11
45	Copper Tetracyanoquinodimethane (CuTCNQ): A Metal-Organic Semiconductor for Room-Temperature Visible to Long-Wave Infrared Photodetection. ACS Applied Materials & Interfaces, 2021, 13, 38544-38552.	4.0	10
46	Enhanced Charge Carrier Mobility in Two-Dimensional High Dielectric Molybdenum Oxide (Adv. Mater.) Tj ETQq0 0.0 rgBT /Overlock 10	11.1	9
47	Nonvolatile Resistive Switching in Layered InSe via Electrochemical Cation Diffusion. Advanced Electronic Materials, 2022, 8, .	2.6	8
48	Visible to Short-Wave Infrared Photodetectors Based on ZrGeTe ₄ van der Waals Materials. ACS Applied Materials & Interfaces, 2021, 13, 45881-45889.	4.0	7
49	Semiconductors: Two-Dimensional Molybdenum Trioxide and Dichalcogenides (Adv. Funct. Mater.) Tj ETQq1 1 0.784314 rgBT /Overlock 10	7.8	6
50	Helicity-selective Raman scattering from in-plane anisotropic \pm -MoO ₃ . Applied Physics Letters, 2021, 119, .	1.5	6
51	Broadband Photodetectors: Liquid-Metal Synthesized Ultrathin SnS Layers for High-Performance Broadband Photodetectors (Adv. Mater. 45/2020). Advanced Materials, 2020, 32, 2070338.	11.1	2
52	Charge injection in vertically stacked multi-layer black phosphorus. Applied Materials Today, 2020, 18, 100481.	2.3	1
53	Longwave Infrared Photoresponse in Copper 7,7,8,8-tetracyano-2,3,5,6-tetrafluoroquinodimethane (CuTCNQF ₄). , 2021, , .		0
54	Visible to Long-Wave Infrared Photodetectors based on Copper Tetracyanoquinodimethane (CuTCNQ) Crystals. , 2020, , .		0

#	ARTICLE	IF	CITATIONS
55	Compact Chemical Identifier Based on Plasmonic Metasurface Integrated with Microbolometer Array (Laser Photonics Rev. 16(4)/2022). Laser and Photonics Reviews, 2022, 16, 2270016.	4.4	0
56	Experimental and theoretical characterization of x-ray induced excitons, magnons, and transitions in MoO_3 nanosheets. Physical Review Materials, 2022, 6, .	0.9	0