

# Anupama Kaul

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/9121599/anupama-kaul-publications-by-year.pdf>

**Version:** 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

93  
papers

1,073  
citations

17  
h-index

30  
g-index

119  
ext. papers

1,314  
ext. citations

3.2  
avg, IF

5.1  
L-index

#	Paper	IF	Citations
93	Spectroscopic, structural, and strain-dependent analysis of suspended bulk WSe2 sheets. <i>Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics</i> , <b>2022</b> , 40, 022202	1.3	1
92	Photodetectors with Buckminsterfullerene Decorated WSe2. <i>Journal of the Electrochemical Society</i> , <b>2022</b> , 169, 047503	3.9	2
91	Vibrational spectroscopy on solution-dispersed MoS2 for inkjet-printed photodetectors. <i>Emergent Materials</i> , <b>2022</b> , 5, 477-487	3.5	2
90	Carrier photodynamics in 2D perovskites with solution-processed silver and graphene contacts for bendable optoelectronics. <i>Npj 2D Materials and Applications</i> , <b>2021</b> , 5,	8.8	9
89	Black Phosphorus-Molybdenum Disulfide Hetero-Junctions Formed with Ink-Jet Printing for Potential Solar Cell Applications with Indium-Tin-Oxide. <i>Crystals</i> , <b>2021</b> , 11, 560	2.3	3
88	Photophysical Dynamics in Semiconducting Graphene Quantum Dots Integrated with 2D MoS for Optical Enhancement in the Near UV. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 5379-5389	9.5	23
87	Photocurrent Generation Mechanisms in Molybdenum-Contacted Semiconducting Black Phosphorus and Contributions from the Photobolometric Effect. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2021</b> , 218, 2100196	1.6	
86	Methylammonium Lead Tri-Iodide Perovskite Solar Cells with Varying Equimolar Concentrations of Perovskite Precursors. <i>Applied Sciences (Switzerland)</i> , <b>2021</b> , 11, 11689	2.6	1
85	Light-matter interactions in two-dimensional layered WSe for gauging evolution of phonon dynamics. <i>Beilstein Journal of Nanotechnology</i> , <b>2020</b> , 11, 782-797	3	10
84	Inkjet-Printed Organohalide 2D Layered Perovskites for High-Speed Photodetectors on Flexible Polyimide Substrates. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 10809-10819	9.5	31
83	Many-body Interactions in Halide-assisted CVD Grown WSe2 for High Performance Photodetectors <b>2020</b> ,		1
82	Electrical and Optoelectronic Properties Analysis in Two-dimensional Multilayer WSe2 Phototransistor for High Speed Device Applications <b>2020</b> ,		1
81	A photo-capacitive sensor operational from 6 K to 350 K with a solution printable, thermally-robust hexagonal boron nitride (h-BN) dielectric and conductive graphene electrodes. <i>Applied Materials Today</i> , <b>2020</b> , 20, 100660	6.6	10
80	Role of metal contacts and effect of annealing in high performance 2D WSe2 field-effect transistors. <i>Surface and Coatings Technology</i> , <b>2020</b> , 381, 125084	4.4	10
79	Sc3N@C80 and La@C82 doped graphene for a new class of optoelectronic devices. <i>Journal of Materials Chemistry C</i> , <b>2020</b> , 8, 3970-3981	7.1	15
78	Nanosheets of MoOx crystallites synthesized via chemical vapor deposition and its potential in bolometric applications. <i>Surface and Coatings Technology</i> , <b>2020</b> , 382, 125031	4.4	6
77	Inkjet-printed MoS2-based field-effect transistors with graphene and hexagonal boron nitride inks. <i>Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics</i> , <b>2020</b> , 38, 042206	1.3	4

76	Inks of dielectric h-BN and semiconducting WS <sub>2</sub> for capacitive structures with graphene. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , <b>2020</b> , 38, 052201	1.3	1
75	3D-printed and injection molded polymer matrix composites with 2D layered materials. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2020</b> , 38, 042201	2.9	2
74	Sol-gel synthesized indium tin oxide as a transparent conducting oxide with solution-processed black phosphorus for its integration into solar-cells. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , <b>2020</b> , 38, 063203	1.3	5
73	Fabrication and characterization of inkjet-printed 2D perovskite optoelectronic devices. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2020</b> , 38, 052202	2.9	2
72	Dramatic Enhancement of Optoelectronic Properties of Electrophoretically Deposited C-Graphene Hybrids. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 24349-24359	9.5	18
71	Inkjet printed graphene as an interconnect for optoelectronic devices. <i>Journal of Materials Science: Materials in Electronics</i> , <b>2019</b> , 30, 12500-12509	2.1	5
70	Optoelectronic properties of graphene quantum dots with molybdenum disulfide. <i>MRS Advances</i> , <b>2019</b> , 4, 615-620	0.7	
69	High-Performance, Flexible, Inkjet Printed Heterostructure Photodetector for Biosensing Applications. <i>MRS Advances</i> , <b>2019</b> , 4, 621-627	0.7	1
68	Chemical exfoliation efficacy of semiconducting WS <sub>2</sub> and its use in an additively manufactured heterostructure graphene-WS <sub>2</sub> -graphene photodiode. <i>RSC Advances</i> , <b>2019</b> , 9, 25805-25816	3.7	16
67	Opto-electro-mechanical percolative composites from 2D layered materials: Properties and applications in strain sensing. <i>Composites Science and Technology</i> , <b>2019</b> , 182, 107687	8.6	10
66	Quantum Multibody Interactions in Halide-Assisted Vapor-Synthesized Monolayer WSe <sub>2</sub> and Its Integration in a High Responsivity Photodetector with Low-Interface Trap Density. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 9861-9874	9.6	21
65	Ultra-high Photoresponsivity in Suspended Metal-Semiconductor-Metal Mesoscopic Multilayer MoS <sub>2</sub> Broadband Detector from UV-to-IR with Low Schottky Barrier Contacts. <i>Scientific Reports</i> , <b>2018</b> , 8, 12764	4.9	30
64	On the chemically-assisted excitonic enhancement in environmentally-friendly solution dispersions of two-dimensional MoS <sub>2</sub> and WS <sub>2</sub> . <i>Journal of Materials Chemistry C</i> , <b>2017</b> , 5, 5323-5333	7.1	28
63	A thermally-invariant, additively manufactured, high-power graphene resistor for flexible electronics. <i>2D Materials</i> , <b>2017</b> , 4, 025076	5.9	23
62	Tungsten Disulfide Nanodispersions for Inkjet Printing and Semiconducting Devices. <i>MRS Advances</i> , <b>2017</b> , 2, 3691-3696	0.7	4
61	Chemical Exfoliation of Black Phosphorus for Nanoelectronics Applications. <i>MRS Advances</i> , <b>2017</b> , 2, 3697-3702	0.7	4
60	Polydimethylsiloxane and polyisoprene-based graphene composites for strain-sensing. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , <b>2017</b> , 35, 03D106	1.3	2
59	Inkjet printing of liquid-exfoliated, highly conducting graphene/poly(3,4 ethylenedioxythiophene):poly(styrenesulfonate) nanosheets for organic electronics. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , <b>2017</b> , 35, 03D112	1.3	6

58	Investigation of structural morphology and electrical properties of graphene-C60 hybrids. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , <b>2017</b> , 35, 03D111	1.3	1
57	Single and Few-Layer MoS <sub>2</sub> : CVD Synthesis, Transference, and Photodetection Application. <i>MRS Advances</i> , <b>2017</b> , 2, 3709-3714	0.7	
56	Nanoscale Characterization of WSe <sub>2</sub> for Opto-electronics Applications. <i>MRS Advances</i> , <b>2017</b> , 2, 3715-3720.	0.7	2
55	High-performance ink-jet printed graphene resistors formed with environmentally-friendly surfactant-free inks for extreme thermal environments. <i>Applied Materials Today</i> , <b>2017</b> , 6, 16-21	6.6	22
54	Characterization of Few layer Tungsten diselenide based FET under Thermal Excitation. <i>MRS Advances</i> , <b>2017</b> , 2, 3721-3726	0.7	
53	Hybrid Zero-Dimensional C60 clusters with Graphene [Synthesis, Fabrication and Transport Characteristics. <i>MRS Advances</i> , <b>2017</b> , 2, 3727-3732	0.7	
52	Biocompatible, large-format, inkjet printed heterostructure MoS <sub>2</sub> -graphene photodetectors on conformable substrates. <i>Npj 2D Materials and Applications</i> , <b>2017</b> , 1,	8.8	59
51	Carbon nanofiber high frequency nanomechanical resonators. <i>Nanoscale</i> , <b>2017</b> , 9, 11864-11870	7.7	5
50	Electrical Characterization and Nanoindentation of Opto-electro-mechanical Percolative Composites from 2D Layered Materials. <i>MRS Advances</i> , <b>2017</b> , 2, 3741-3747	0.7	
49	Electronic and Optical Properties Characterization of MoS <sub>2</sub> Two-Dimensional Exfoliated nanomaterials. <i>MRS Advances</i> , <b>2016</b> , 1, 3223-3228	0.7	2
48	Investigation of nonlinear optical properties of exfoliated MoS <sub>2</sub> using Photoacoustic Zscan. <i>MRS Advances</i> , <b>2016</b> , 1, 3215-3221	0.7	7
47	Effects of Synthesis Parameters on CVD Molybdenum Disulfide Growth. <i>MRS Advances</i> , <b>2016</b> , 1, 2291-2296.	0.7	4
46	Engineering chemically exfoliated dispersions of two-dimensional graphite and molybdenum disulphide for ink-jet printing. <i>Nanotechnology</i> , <b>2016</b> , 27, 485602	3.4	25
45	Characterization of 2D MoS <sub>2</sub> and WS <sub>2</sub> Dispersed in Organic Solvents for Composite Applications. <i>MRS Advances</i> , <b>2016</b> , 1, 2303-2308	0.7	6
44	Characterization of Electronic Properties of Two-dimensional Refractory Selenides and Tellurides. <i>MRS Advances</i> , <b>2016</b> , 1, 3229-3234	0.7	
43	Optimization of fluid characteristics of 2D materials for inkjet printing. <i>MRS Advances</i> , <b>2016</b> , 1, 2199-2206.	0.7	4
42	Chemically and mechanically exfoliated MoS <sub>2</sub> for electronic & opto-electronic devices <b>2016</b> ,		1
41	Solution dispersed 2D graphene & MoS <sub>2</sub> for an inkjet printed biocompatible photodetector <b>2016</b> ,		5

40	Solution-based Production of 2D-layered Materials. <i>MRS Advances</i> , <b>2016</b> , 1, 2267-2272	0.7	
39	Two-dimensional layered materials: Structure, properties, and prospects for device applications. <i>Journal of Materials Research</i> , <b>2014</b> , 29, 348-361	2.5	143
38	Two-dimensional atomic crystals beyond graphene <b>2014</b> ,		1
37	Nano Carbon 1D and 2D Nanomechanical Resonators. <i>Materials Research Society Symposia Proceedings</i> , <b>2014</b> , 1693, 37		0
36	Nano-electro-mechanical-systems (NEMS) and energy-efficient electronics and the emergence of two-dimensional layered materials beyond graphene <b>2013</b> ,		5
35	Ultra-high optical absorption efficiency from the ultraviolet to the infrared using multi-walled carbon nanotube ensembles. <i>Small</i> , <b>2013</b> , 9, 1058-65	11	37
34	Graphene and two-dimensional layered materials for device applications <b>2013</b> ,		1
33	Broad-band, High-efficiency Optical Absorbers Derived From Carbon Nanomaterials. <i>Materials Research Society Symposia Proceedings</i> , <b>2013</b> , 1505, 1		
32	Graphene and The Advent of Other Layered-2D Materials for Nanoelectronics, Photonics and Related Applications. <i>Materials Research Society Symposia Proceedings</i> , <b>2013</b> , 1549, 11-16		
31	Carbon Nanomaterials for Energy Efficient Green Electronics. <i>Materials Research Society Symposia Proceedings</i> , <b>2012</b> , 1478, 20		
30	Characterization of Plasma Synthesized Vertical Carbon Nanofibers for Nanoelectronics Applications. <i>Materials Research Society Symposia Proceedings</i> , <b>2012</b> , 1451, 117-122		2
29	In situ characterization of vertically oriented carbon nanofibers for three-dimensional nano-electro-mechanical device applications. <i>Nanotechnology</i> , <b>2010</b> , 21, 315501	3.4	13
28	Modeling and in-situ observation of mechanical resonances in single, vertically-oriented carbon nanofibers. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2010</b> , 10, 6388-94	1.3	
27	Nanopatterning of catalyst by Dip Pen nanolithography (DPN) for synthesis of carbon nanotubes (CNT). <i>Scanning</i> , <b>2010</b> , 32, 42-8	1.6	5
26	Geometrical dependence of the low-frequency noise in superconducting flux qubits. <i>Physical Review B</i> , <b>2009</b> , 79,	3.3	50
25	Interrogating vertically oriented carbon nanofibers with nanomanipulation for nanoelectromechanical switching applications. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 093103	3.4	6
24	Electrostatic Switching in Vertically Oriented Nanotubes for Nonvolatile Memory Applications. <i>Materials Research Society Symposia Proceedings</i> , <b>2009</b> , 1186, 1		
23	Gas sensing with long, diffusively contacted single-walled carbon nanotubes. <i>Nanotechnology</i> , <b>2009</b> , 20, 155501	3.4	6

22	Synchronization of multiple coupled rf-SQUID flux qubits. <i>New Journal of Physics</i> , <b>2009</b> , 11, 123022	2.9	11
21	Single, aligned carbon nanotubes in 3D nanoscale architectures enabled by top-down and bottom-up manufacturable processes. <i>Nanotechnology</i> , <b>2009</b> , 20, 075303	3.4	9
20	Switching Voltage in a Carbon Nanotube Memory Device. <i>Materials Research Society Symposia Proceedings</i> , <b>2009</b> , 1186, 13		
19	High-throughput top-down and bottom-up processes for forming single-nanotube based architectures for 3D electronics. <i>Materials Research Society Symposia Proceedings</i> , <b>2009</b> , 1179, 33		
18	Carbon Nanotube Vacuum Gauges With Wide Dynamic Range. <i>IEEE Nanotechnology Magazine</i> , <b>2009</b> , 8, 252-257	2.6	7
17	Submicrometer $\text{Nb}/\text{Al}/\text{AlO}_x/\text{Nb}$ Integrated Circuit Fabrication Process for Quantum Computing Applications. <i>IEEE Transactions on Applied Superconductivity</i> , <b>2009</b> , 19, 226-229	1.8	6
16	Carbon nanotube switches for communication and memory applications <b>2008</b> ,		2
15	Vacuum microelectronics applications using carbon nanotube cathodes <b>2008</b> ,		1
14	Vertically Aligned Carbon Nanotubes Formed Using dc PECVD as Switching Elements for Extreme Environment Space Electronics. <i>Materials Research Society Symposia Proceedings</i> , <b>2008</b> , 1081, 1		1
13	Probing noise in flux qubits via macroscopic resonant tunneling. <i>Physical Review Letters</i> , <b>2008</b> , 101, 117003	9.3	54
12	Application specific electrode-integrated nanotube cathodes (ASINCs) for miniature analytical instruments for space exploration <b>2008</b> ,		3
11	Ion Beam Nitridation of Al for Tunnel Barrier Applications. <i>IEEE Transactions on Applied Superconductivity</i> , <b>2007</b> , 17, 198-201	1.8	1
10	Air Bridge and Vertical Carbon Nanotube Switches for High Performance Switching Applications. <i>Materials Research Society Symposia Proceedings</i> , <b>2006</b> , 924, 1		1
9	Electromechanical carbon nanotube switches for high-frequency applications. <i>Nano Letters</i> , <b>2006</b> , 6, 942-7	11.5	124
8	Aluminum nitride tunnel barrier formation with low-energy nitrogen ion beams. <i>Journal of Materials Research</i> , <b>2005</b> , 20, 3047-3053	2.5	4
7	Fabrication of wide-IF 200B00GHz superconductor/insulator/superconductor mixers with suspended metal beam leads formed on silicon-on-insulator. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>2004</b> , 22, 2417		14
6	High-Tc superconducting NbN films with low particulate density grown at 25 °C using pulsed laser deposition. <i>Journal of Materials Research</i> , <b>2001</b> , 16, 1223-1226	2.5	14
5	Internally shunted sputtered NbN Josephson junctions with a TaNx barrier for nonlatching logic applications. <i>Applied Physics Letters</i> , <b>2001</b> , 78, 99-101	3.4	52

4	NbN/TaN/sub x//NbN SNS Josephson junctions by pulsed laser deposition. <i>IEEE Transactions on Applied Superconductivity</i> , <b>2001</b> , 11, 88-91	1.8	11
3	Superconducting NbN films grown using pulsed laser deposition for potential application in internally shunted Josephson junctions. <i>Superconductor Science and Technology</i> , <b>1999</b> , 12, 1030-1032	3.1	8
2	Very small critical current spreads in Nb/Al-AlO <sub>x</sub> /Nb integrated circuits using low-temperature and low-stress ECR PECVD silicon oxide films. <i>IEEE Transactions on Applied Superconductivity</i> , <b>1999</b> , 9, 3208-3211	1.8	15
1	. <i>IEEE Transactions on Applied Superconductivity</i> , <b>1999</b> , 9, 3232-3235	1.8	18