

# Hema C P Movva

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8617881/publications.pdf>

Version: 2024-02-01

42  
papers

2,385  
citations

304602

22  
h-index

377752

34  
g-index

42  
all docs

42  
docs citations

42  
times ranked

4741  
citing authors

#	ARTICLE	IF	CITATIONS
1	van der Waals Heterostructures with High Accuracy Rotational Alignment. Nano Letters, 2016, 16, 1989-1995.	4.5	477
2	High-Mobility Holes in Dual-Gated WSe <sub>2</sub> Field-Effect Transistors. ACS Nano, 2015, 9, 10402-10410.	7.3	232
3	Structural and Electrical Properties of MoTe <sub>2</sub> and MoSe <sub>2</sub> Grown by Molecular Beam Epitaxy. ACS Applied Materials & Interfaces, 2016, 8, 7396-7402.	4.0	189
4	Air Stable Doping and Intrinsic Mobility Enhancement in Monolayer Molybdenum Disulfide by Amorphous Titanium Suboxide Encapsulation. Nano Letters, 2015, 15, 4329-4336.	4.5	167
5	Gate-Tunable Resonant Tunneling in Double Bilayer Graphene Heterostructures. Nano Letters, 2015, 15, 428-433.	4.5	166
6	Shubnikov-de Haas Oscillations of High-Mobility Holes in Monolayer and Bilayer $WSe_2$ Landau Level Degeneracy, Effective Mass, and Negative Compressibility. Physical Review Letters, 2016, 116, 086601.	2.9	72
7	CMOS-Compatible Synthesis of Large-Area, High-Mobility Graphene by Chemical Vapor Deposition of Acetylene on Cobalt Thin Films. ACS Nano, 2011, 5, 7198-7204.	7.3	109
8	Reconfigurable Complementary Monolayer MoTe <sub>2</sub> Field-Effect Transistors for Integrated Circuits. ACS Nano, 2017, 11, 4832-4839.	7.3	108
9	Defect passivation of transition metal dichalcogenides via a charge transfer van der Waals interface. Science Advances, 2017, 3, e1701661.	4.7	95
10	Top-gated chemical vapor deposited MoS <sub>2</sub> field-effect transistors on Si <sub>3</sub> N <sub>4</sub> substrates. Applied Physics Letters, 2015, 106, .	1.5	74
11	Two-dimensional weak anti-localization in Bi <sub>2</sub> Te <sub>3</sub> thin film grown on Si(111)-(7 $\times$ 7) surface by molecular beam epitaxy. Applied Physics Letters, 2013, 102, .	1.5	72
12	Density-Dependent Quantum Hall States and Zeeman Splitting in Monolayer and Bilayer $WSe_2$ . Physical Review Letters, 2017, 118, 247701.	2.9	72
13	Three-Gigahertz Graphene Frequency Doubler on Quartz Operating Beyond the Transit Frequency. IEEE Nanotechnology Magazine, 2012, 11, 877-883.	1.1	61
14	Bilayer Graphene-Hexagonal Boron Nitride Heterostructure Negative Differential Resistance Interlayer Tunnel FET. IEEE Electron Device Letters, 2015, 36, 405-407.	2.2	50
15	Visualization of Local Conductance in MoS <sub>2</sub> /WSe <sub>2</sub> Heterostructure Transistors. Nano Letters, 2019, 19, 1976-1981.	4.5	36
16	Strong spin-orbit coupling and Zeeman spin splitting in angle dependent magnetoresistance of Bi <sub>2</sub> Te <sub>3</sub> . Applied Physics Letters, 2014, 104, .	1.5	29
17	Spin-Conserving Resonant Tunneling in Twist-Controlled WSe <sub>2</sub> -hBN-WSe <sub>2</sub> Heterostructures. Nano Letters, 2018, 18, 5967-5973.	4.5	29
18	Effects of Electrode Layer Band Structure on the Performance of Multilayer Graphene-hBN-Graphene Interlayer Tunnel Field Effect Transistors. Nano Letters, 2016, 16, 4975-4981.	4.5	28

#	ARTICLE	IF	CITATIONS
19	Self-aligned graphene field-effect transistors with polyethyleneimine doped source/drain access regions. Applied Physics Letters, 2012, 101, .	1.5	25
20	Accelerated carrier recombination by grain boundary/edge defects in MBE grown transition metal dichalcogenides. APL Materials, 2018, 6, .	2.2	25
21	<i>In Situ</i> Observation of Initial Stage in Dielectric Growth and Deposition of Ultrahigh Nucleation Density Dielectric on Two-Dimensional Surfaces. Nano Letters, 2015, 15, 6626-6633.	4.5	24
22	Tunable $\Gamma$ Valley Populations in Hole-Doped Trilayer $WSe_2$ Physical Review Letters, 2018, 120, 107703.	2.9	23
23	Angular dependence of magnetization reversal in epitaxial chromium telluride thin films with perpendicular magnetic anisotropy. Journal of Magnetism and Magnetic Materials, 2017, 437, 72-77.	1.0	21
24	Weak antilocalization and universal conductance fluctuations in bismuth telluro-sulfide topological insulators. Journal of Applied Physics, 2016, 119, .	1.1	17
25	Intra-domain periodic defects in monolayer MoS <sub>2</sub> . Applied Physics Letters, 2017, 110, .	1.5	16
26	Influence of electron-beam lithography exposure current level on the transport characteristics of graphene field effect transistors. Journal of Applied Physics, 2016, 119, .	1.1	14
27	Interfacial-oxygen-vacancy mediated doping of MoS <sub>2</sub> by high- $\kappa$ dielectrics. , 2015, , .		12
28	Interlayer tunnel field-effect transistor (ITFET): physics, fabrication and applications. Journal Physics D: Applied Physics, 2017, 50, 383002.	1.3	11
29	Room temperature gate-tunable negative differential resistance in MoS <sub>2</sub> /hBN/WSe <sub>2</sub> heterostructures. , 2016, , .		10
30	Evidence of Formation of Superdense Nonmagnetic Cobalt. Scientific Reports, 2017, 7, 41856.	1.6	10
31	Poly(methyl methacrylate) as a self-assembled gate dielectric for graphene field-effect transistors. Applied Physics Letters, 2014, 104, .	1.5	8
32	High density nonmagnetic cobalt in thin films. Nanotechnology, 2018, 29, 195703.	1.3	8
33	Theory and synthesis of bilayer graphene intercalated with ICl and IBr for low power device applications. Journal of Applied Physics, 2013, 114, .	1.1	7
34	ReS <sub>2</sub> -based interlayer tunnel field effect transistor. Journal of Applied Physics, 2017, 122, .	1.1	7
35	Versatile Large-Area Custom-Feature van der Waals Epitaxy of Topological Insulators. ACS Nano, 2017, 11, 7457-7467.	7.3	6
36	Impact of contact and access resistances in graphene field-effect transistors on quartz substrates for radio frequency applications. Applied Physics Letters, 2014, 104, .	1.5	4

#	ARTICLE	IF	CITATIONS
37	Graphene field-effect transistors using large-area monolayer graphene grown by chemical vapor deposition on Co thin films. , 2011, , .		2
38	Gate tunable resonant tunneling in graphene-based heterostructures and device applications. , 2015, , .		2
39	Top-gated WSe <sub>2</sub> field-effect transistors with Pt contacts. , 2015, , .		1
40	Insights into interlayer tunnel FET performance improvement: Lessons learned from graphene hexagonal boron nitride heterostructures. , 2016, , .		1
41	Graphene field-effect transistors with self-aligned spin-on-doping of source/drain access regions. , 2012, , .		0
42	(Invited) Novel Graphene Devices. ECS Transactions, 2013, 58, 73-77.	0.3	0