

Yuchen Du

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/3818434/yuchen-du-publications-by-year.pdf>

Version: 2024-04-26

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.

33
papers

4,323
citations

20
h-index

34
g-index

34
ext. papers

4,887
ext. citations

10.8
avg, IF

5.65
L-index

#	Paper	IF	Citations
33	Electrical Characteristics of LDD and LDD-Free FinFET Devices of Dimension Compatible With 14 nm Technology Node. <i>IEEE Journal of the Electron Devices Society</i> , 2020 , 8, 1039-1042	2.3	0
32	Field-effect transistors made from solution-grown two-dimensional tellurene. <i>Nature Electronics</i> , 2018 , 1, 228-236	28.4	358
31	Steep-Slope WSe Negative Capacitance Field-Effect Transistor. <i>Nano Letters</i> , 2018 , 18, 3682-3687	11.5	66
30	One-Dimensional van der Waals Material Tellurium: Raman Spectroscopy under Strain and Magneto-Transport. <i>Nano Letters</i> , 2017 , 17, 3965-3973	11.5	182
29	Black phosphorus field-effect transistor with record drain current exceeding 1 A/mm 2017 ,		9
28	P-type surface charge transfer doping of black phosphorus field-effect transistors 2016 ,		2
27	Weak localization in few-layer black phosphorus. <i>2D Materials</i> , 2016 , 3, 024003	5.9	15
26	Mechanisms of current fluctuation in ambipolar black phosphorus field-effect transistors. <i>Nanoscale</i> , 2016 , 8, 3572-8	7.7	26
25	Observation of Optical and Electrical In-Plane Anisotropy in High-Mobility Few-Layer ZrTe. <i>Nano Letters</i> , 2016 , 16, 7364-7369	11.5	59
24	Ionic liquid gating on atomic layer deposition passivated GaN: Ultra-high electron density induced high drain current and low contact resistance. <i>Applied Physics Letters</i> , 2016 , 108, 202102	3.4	4
23	Continuous-wave and transient characteristics of phosphorene microwave transistors 2016 ,		4
22	Few-layer black phosphorous PMOSFETs with BN/Al ₂ O ₃ bilayer gate dielectric: Achieving $I_{on}=850A/Vh$, $g_m=340S/Vh$, and $R_c=0.58kVh$ 2016 ,		9
21	Transport studies in 2D transition metal dichalcogenides and black phosphorus. <i>Journal of Physics Condensed Matter</i> , 2016 , 28, 263002	1.8	10
20	Performance Enhancement of Black Phosphorus Field-Effect Transistors by Chemical Doping. <i>IEEE Electron Device Letters</i> , 2016 , 37, 429-432	4.4	49
19	Surface chemistry of black phosphorus under a controlled oxidative environment. <i>Nanotechnology</i> , 2016 , 27, 434002	3.4	90
18	Auxetic Black Phosphorus: A 2D Material with Negative Poisson's Ratio. <i>Nano Letters</i> , 2016 , 16, 6701-6708	11.5	135
17	Anisotropic in-plane thermal conductivity observed in few-layer black phosphorus. <i>Nature Communications</i> , 2015 , 6, 8572	17.4	426

16	Semiconducting black phosphorus: synthesis, transport properties and electronic applications. <i>Chemical Society Reviews</i> , 2015 , 44, 2732-43	58.5	1031
15	Chloride molecular doping technique on 2D materials: WS ₂ and MoS ₂ . <i>Nano Letters</i> , 2014 , 14, 6275-80	11.5	481
14	The Effect of Dielectric Capping on Few-Layer Phosphorene Transistors: Tuning the Schottky Barrier Heights. <i>IEEE Electron Device Letters</i> , 2014 , 35, 795-797	4.4	142
13	Switching mechanism in single-layer molybdenum disulfide transistors: an insight into current flow across Schottky barriers. <i>ACS Nano</i> , 2014 , 8, 1031-8	16.7	202
12	Physical understanding of graphene/metal hetero-contacts to enhance MoS ₂ field-effect transistors performance 2014 ,		5
11	Device perspective for black phosphorus field-effect transistors: contact resistance, ambipolar behavior, and scaling. <i>ACS Nano</i> , 2014 , 8, 10035-42	16.7	358
10	Two-dimensional TaSe ₂ metallic crystals: spin-orbit scattering length and breakdown current density. <i>ACS Nano</i> , 2014 , 8, 9137-42	16.7	40
9	MoS_2 Field-Effect Transistors With Graphene/Metal Heterocontacts. <i>IEEE Electron Device Letters</i> , 2014 , 35, 599-601	4.4	118
8	Temporal and Thermal Stability of Al ₂ O ₃ -Passivated Phosphorene MOSFETs. <i>IEEE Electron Device Letters</i> , 2014 , 35, 1314-1316	4.4	68
7	High-performance MoS ₂ field-effect transistors enabled by chloride doping: Record low contact resistance (0.5 k Ω m) and record high drain current (460 μ A/ μ m) 2014 ,		10
6	Contact research strategy for emerging molybdenum disulfide and other two-dimensional field-effect transistors. <i>APL Materials</i> , 2014 , 2, 092510	5.7	37
5	Molecular Doping of Multilayer MoS_2 Field-Effect Transistors: Reduction in Sheet and Contact Resistances. <i>IEEE Electron Device Letters</i> , 2013 , 34, 1328-1330	4.4	196
4	Statistical study of deep submicron dual-gated field-effect transistors on monolayer chemical vapor deposition molybdenum disulfide films. <i>Nano Letters</i> , 2013 , 13, 2640-6	11.5	168
3	Dual-gate MOSFETs on monolayer CVD MoS ₂ films 2013 ,		2
2	(Invited) Fundamentals in MoS ₂ Transistors: Dielectric, Scaling and Metal Contacts. <i>ECS Transactions</i> , 2013 , 58, 203-208	1	17
1	Anisotropic Properties of Black Phosphorus 2013		3