

Youngki Yoon

List of Publications by Year in descending order

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42
papers

2,230
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567281

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43
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43
docs citations

43
times ranked

4161
citing authors

#	ARTICLE	IF	CITATIONS
1	How Good Can Monolayer MoS ₂ Transistors Be?. Nano Letters, 2011, 11, 3768-3773.	9.1	1,342
2	Highly Crystalline CVD-grown Multilayer MoSe ₂ Thin Film Transistor for Fast Photodetector. Scientific Reports, 2015, 5, 15313.	3.3	129
3	Giant Photoamplification in Indirect-Bandgap Multilayer MoS ₂ Phototransistors with Local Bottom-Gate Structures. Advanced Materials, 2015, 27, 2224-2230.	21.0	109
4	A highly sensitive chemical gas detecting transistor based on highly crystalline CVD-grown MoSe ₂ films. Nano Research, 2017, 10, 1861-1871.	10.4	102
5	Analysis of InAs vertical and lateral band-to-band tunneling transistors: Leveraging vertical tunneling for improved performance. Applied Physics Letters, 2010, 97, .	3.3	76
6	Label-Free and Recalibrated Multilayer MoS ₂ Biosensor for Point-of-Care Diagnostics. ACS Applied Materials & Interfaces, 2017, 9, 43490-43497.	8.0	62
7	Interstitial Mo-Assisted Photovoltaic Effect in Multilayer MoSe ₂ Phototransistors. Advanced Materials, 2018, 30, e1705542.	21.0	48
8	PtSe ₂ Field-Effect Transistors: New Opportunities for Electronic Devices. IEEE Electron Device Letters, 2018, 39, 151-154.	3.9	38
9	Current-Voltage Model for Negative Capacitance Field-Effect Transistors. IEEE Electron Device Letters, 2017, 38, 669-672.	3.9	36
10	Role of phonon scattering in graphene nanoribbon transistors: Nonequilibrium Green's function method with real space approach. Applied Physics Letters, 2011, 98, 203503.	3.3	34
11	Design strategy of two-dimensional material field-effect transistors: Engineering the number of layers in phosphorene FETs. Journal of Applied Physics, 2016, 119, .	2.5	31
12	On MoS ₂ Thin-Film Transistor Design Consideration for a NO ₂ Gas Sensor. ACS Sensors, 2019, 4, 2930-2936.	7.8	25
13	Ballistic "S" Characteristics of Short-Channel Graphene Field-Effect Transistors: Analysis and Optimization for Analog and RF Applications. IEEE Transactions on Electron Devices, 2013, 60, 958-964.	3.0	19
14	Nano-patterning on multilayer MoS ₂ via block copolymer lithography for highly sensitive and responsive phototransistors. Communications Materials, 2021, 2, .	6.9	19
15	Scaling Limit of Bilayer Phosphorene FETs. IEEE Electron Device Letters, 2015, 36, 978-980.	3.9	17
16	Assessment of High-Frequency Performance Limit of Black Phosphorus Field-Effect Transistors. IEEE Transactions on Electron Devices, 2017, 64, 2984-2991.	3.0	17
17	Ultrasensitive Multilayer MoS ₂ -Based Photodetector with Permanently Grounded Gate Effect. Advanced Electronic Materials, 2020, 6, 1901256.	5.1	14
18	Performance Limit Projection of Germanane Field-Effect Transistors. IEEE Electron Device Letters, 2017, 38, 673-676.	3.9	12

#	ARTICLE	IF	CITATIONS
19	Assessment of Germanane Field-Effect Transistors for CMOS Technology. IEEE Electron Device Letters, 2017, 38, 1743-1746.	3.9	12
20	Monitoring Aging Defects in STT-MRAMs. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2020, 39, 4645-4656.	2.7	10
21	Low-temperature behaviors of multilayer MoS ₂ transistors with ohmic and Schottky contacts. Applied Physics Letters, 2019, 115, .	3.3	9
22	Performance analysis of carbon-based tunnel field-effect transistors for high frequency and ultralow power applications. Applied Physics Letters, 2010, 97, 233504.	3.3	6
23	A Parametric DFT Scheme for STT-MRAMs. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2019, 27, 1685-1696.	3.1	6
24	Photoresponse of MoSe ₂ Transistors: A Fully Numerical Quantum Transport Simulation Study. ACS Applied Electronic Materials, 2020, 2, 3765-3772.	4.3	5
25	Simulation of Negative Capacitance Based on the Miller Model: Beyond the Limitation of the Landau Model. IEEE Transactions on Electron Devices, 2022, 69, 237-241.	3.0	5
26	Phototransistors: Giant Photoamplification in Indirect-Bandgap Multilayer MoS ₂ Phototransistors with Local Bottom-Gate Structures (Adv. Mater. 13/2015). Advanced Materials, 2015, 27, 2126-2126.	21.0	4
27	Device Performance Assessment of Monolayer HfSe ₂ : A New Layered Material Compatible With High- κ Gate Insulators. IEEE Electron Device Letters, 2018, 39, 1772-1775.	3.9	4
28	Intrinsic Performance of Germanane Schottky Barrier Field-Effect Transistors. IEEE Transactions on Electron Devices, 2018, 65, 4188-4195.	3.0	4
29	Strain-tuning PtSe ₂ for high ON-current lateral tunnel field-effect transistors. Applied Physics Letters, 2021, 119, .	3.3	4
30	Assessing the Role of a Semiconductor's Anisotropic Permittivity in Hafnium Disulfide Monolayer Field-Effect Transistors. IEEE Transactions on Electron Devices, 2020, 67, 2607-2613.	3.0	3
31	Using Anisotropic Insulators to Engineer the Electrostatics of Conventional and Tunnel Field-Effect Transistors. IEEE Transactions on Electron Devices, 2021, 68, 865-872.	3.0	3
32	Performance Optimization of Monolayer 1T/1T TM -2H MoX ₂ Lateral Heterojunction Transistors. IEEE Transactions on Electron Devices, 2021, 68, 3649-3657.	3.0	3
33	Can bilayer black phosphorus outperform monolayer in field-effect transistors?. , 2015, , .		2
34	A Multi-Level Simulation Scheme for 2D Material-Based Nanoelectronics. , 2020, , .		2
35	Exploiting Fringing Fields Created by High- κ Gate Insulators to Enhance the Performance of Ultrascaled 2-D-Material-Based Transistors. IEEE Transactions on Electron Devices, 2021, 68, 4618-4624.	3.0	2
36	Guest Editorial Special Issue on 2-D Materials for Electronic, Optoelectronic, and Sensor Devices. IEEE Transactions on Electron Devices, 2018, 65, 4034-4039.	3.0	1

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37	Modeling of Hysteretic Jump Points in Ferroelectric MOS Capacitors. IEEE Transactions on Electron Devices, 2019, 66, 3093-3098.	3.0	1
38	Structure and doping effects in carbon heterojunction FETs towards barrier-free inter-band tunneling. , 2010, , .		0
39	Comparative analysis of the performance of InAs lateral and vertical band-to-band tunneling transistors. , 2010, , .		0
40	Scaling study of graphene transistors. , 2011, , .		0
41	Monolayer MoS ₂ transistors - ballistic performance limit analysis. , 2011, , .		0
42	Mitigating Tunneling Leakage in Ultrascaled HfS ₂ pMOS Devices With Uniaxial Strain. IEEE Electron Device Letters, 2022, 43, 1133-1136.	3.9	0