Youngki Yoon

List of Publications by Year
in descending order

42 papers	2,230 citations	566801 15 h-index	344852 36 g-index
43 all docs	43 docs citations	43 times ranked	4161 citing authors

#	Article	IF	Citations
1	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.	1.6	5
2	Mitigating Tunneling Leakage in Ultrascaled HfS₂ pMOS Devices With Uniaxial Strain. IEEE Electron Device Letters, 2022, 43, 1133-1136.	2.2	0
3	Using Anisotropic Insulators to Engineer the Electrostatics of Conventional and Tunnel Field-Effect Transistors. IEEE Transactions on Electron Devices, 2021, 68, 865-872.	1.6	3
4	Performance Optimization of Monolayer 1T/1Tâ€™-2H MoX₂ Lateral Heterojunction Transistors. IEEE Transactions on Electron Devices, 2021, 68, 3649-3657.	1.6	3
5	Strain-tuning PtSe2 for high ON-current lateral tunnel field-effect transistors. Applied Physics Letters, 2021, 119, .	1.5	4
6	Nano-patterning on multilayer MoS2 via block copolymer lithography for highly sensitive and responsive phototransistors. Communications Materials, 2021, 2, .	2.9	19
7	Exploiting Fringing Fields Created by High-<i>Îº</i>Gate Insulators to Enhance the Performance of Ultrascaled 2-D-Material-Based Transistors. IEEE Transactions on Electron Devices, 2021, 68, 4618-4624.	1.6	2
8	A Multi-Level Simulation Scheme for 2D Material-Based Nanoelectronics. , 2020, , .		2
9	Photoresponse of MoSe₂ Transistors: A Fully Numerical Quantum Transport Simulation Study. ACS Applied Electronic Materials, 2020, 2, 3765-3772.	2.0	5
10	Assessing the Role of a Semiconductorâ€™s Anisotropic Permittivity in Hafnium Disulfide Monolayer Field-Effect Transistors. IEEE Transactions on Electron Devices, 2020, 67, 2607-2613.	1.6	3
11	Ultrasensitive Multilayer MoS₂â€Based Photodetector with Permanently Grounded Gate Effect. Advanced Electronic Materials, 2020, 6, 1901256.	2.6	14
12	Monitoring Aging Defects in STT-MRAMs. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2020, 39, 4645-4656.	1.9	10
13	Low-temperature behaviors of multilayer MoS2 transistors with ohmic and Schottky contacts. Applied Physics Letters, 2019, 115, .	1.5	9
14	On MoS₂ Thin-Film Transistor Design Consideration for a NO₂ Gas Sensor. ACS Sensors, 2019, 4, 2930-2936.	4.0	25
15	Modeling of Hysteretic Jump Points in Ferroelectric MOS Capacitors. IEEE Transactions on Electron Devices, 2019, 66, 3093-3098.	1.6	1
16	A Parametric DFT Scheme for STT-MRAMs. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2019, 27, 1685-1696.	2.1	6
17	PtSe₂ Field-Effect Transistors: New Opportunities for Electronic Devices. IEEE Electron Device Letters, 2018, 39, 151-154.	2.2	38
18	Interstitial Moâ€Assisted Photovoltaic Effect in Multilayer MoSe₂ Phototransistors. Advanced Materials, 2018, 30, e1705542.	11.1	48

#	Article	IF	Citations
19	Guest Editorial Special Issue on 2-D Materials for Electronic, Optoelectronic, and Sensor Devices. IEEE Transactions on Electron Devices, 2018, 65, 4034-4039.	1.6	1
20	Device Performance Assessment of Monolayer HfSe₂: A New Layered Material Compatible With High-<inline-formula> <tex-math notation="LaTeX">$kappa$ </tex-math> </inline-formula> HfO₂. IEEE Electron Device Letters, 2018, 39, 1772-1775.	2.2	4
21	Intrinsic Performance of Germanane Schottky Barrier Field-Effect Transistors. IEEE Transactions on Electron Devices, 2018, 65, 4188-4195.	1.6	4
22	Current-Voltage Model for Negative Capacitance Field-Effect Transistors. IEEE Electron Device Letters, 2017, 38, 669-672.	2.2	36
23	Performance Limit Projection of Germanane Field-Effect Transistors. IEEE Electron Device Letters, 2017, 38, 673-676.	2.2	12
24	Label-Free and Recalibrated Multilayer MoS₂ Biosensor for Point-of-Care Diagnostics. ACS Applied Materials & Interfaces, 2017, 9, 43490-43497.	4.0	62
25	Assessment of High-Frequency Performance Limit of Black Phosphorus Field-Effect Transistors. IEEE Transactions on Electron Devices, 2017, 64, 2984-2991.	1.6	17
26	A highly sensitive chemical gas detecting transistor based on highly crystalline CVD-grown MoSe2 films. Nano Research, 2017, 10, 1861-1871.	5.8	102
27	Assessment of Germanane Field-Effect Transistors for CMOS Technology. IEEE Electron Device Letters, 2017, 38, 1743-1746.	2.2	12
28	Design strategy of two-dimensional material field-effect transistors: Engineering the number of layers in phosphorene FETs. Journal of Applied Physics, 2016, 119, .	1.1	31
29	Highly Crystalline CVD-grown Multilayer MoSe2 Thin Film Transistor for Fast Photodetector. Scientific Reports, 2015, 5, 15313.	1.6	129
30	Giant Photoamplification in Indirectâ€Bandgap Multilayer MoS₂ Phototransistors with Local Bottomâ€Gate Structures. Advanced Materials, 2015, 27, 2224-2230.	11.1	109
31	Phototransistors: Giant Photoamplification in Indirectâ€Bandgap Multilayer MoS₂ Phototransistors with Local Bottomâ€Gate Structures (Adv. Mater. 13/2015). Advanced Materials, 2015, 27, 2126-2126.	11.1	4
32	Can bilayer black phosphorus outperform monolayer in field-effect transistors?. , 2015, , .		2
33	Scaling Limit of Bilayer Phosphorene FETs. IEEE Electron Device Letters, 2015, 36, 978-980.	2.2	17
34	Ballistic Iâ€" V 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.	1.6	19
35	Scaling study of graphene transistors. , 2011, , .		0
36	Role of phonon scattering in graphene nanoribbon transistors: Nonequilibrium Greenâ€™s function method with real space approach. Applied Physics Letters, 2011, 98, 203503.	1.5	34

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37	How Good Can Monolayer MoS₂ Transistors Be?. Nano Letters, 2011, 11, 3768-3773.	4.5	1,342
38	Monolayer MoS<inf>2</inf> transistors - ballistic performance limit analysis. , 2011, , .		0
39	Analysis of InAs vertical and lateral band-to-band tunneling transistors: Leveraging vertical tunneling for improved performance. Applied Physics Letters, 2010, 97, .	1.5	76
40	Performance analysis of carbon-based tunnel field-effect transistors for high frequency and ultralow power applications. Applied Physics Letters, 2010, 97, 233504.	1.5	6
41	Structure and doping effects in carbon heterojunction FETs towards barrier-free inter-band tunneling. , 2010, , .		0
42	Comparative analysis of the performance of InAs lateral and vertical band-to-band tunneling transistors. , 2010, , .		0