

# Fatemeh Safari

## List of Publications by Year in descending order

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Version: 2024-02-01

42  
papers

607  
citations

687220

13  
h-index

642610

23  
g-index

42  
all docs

42  
docs citations

42  
times ranked

708  
citing authors

#	ARTICLE	IF	CITATIONS
1	Adsorption of the NH <sub>3</sub> , NO, NO <sub>2</sub> , CO <sub>2</sub> , and CO gas molecules on blue phosphorene: A first-principles study. <i>Applied Surface Science</i> , 2019, 464, 153-161.	3.1	93
2	The transport and optical sensing properties of MoS <sub>2</sub> , MoSe <sub>2</sub> , WS <sub>2</sub> and WSe <sub>2</sub> semiconducting transition metal dichalcogenides. <i>Semiconductor Science and Technology</i> , 2018, 33, 025002.	1.0	56
3	Improvement of electrical performance in junctionless nanowire TFET using hetero-gate-dielectric. <i>Materials Science in Semiconductor Processing</i> , 2017, 63, 142-152.	1.9	52
4	A first-principles study on the effect of biaxial strain on the ultimate performance of monolayer MoS <sub>2</sub> -based double gate field effect transistor. <i>Journal of Applied Physics</i> , 2013, 113, .	1.1	51
5	Tuning electronic, magnetic, and transport properties of blue phosphorene by substitutional doping: a first-principles study. <i>Journal of Computational Electronics</i> , 2018, 17, 499-513.	1.3	37
6	Negative Capacitance Double-Gate Junctionless FETs: A Charge-Based Modeling Investigation of Swing, Overdrive and Short Channel Effect. <i>IEEE Journal of the Electron Devices Society</i> , 2020, 8, 939-947.	1.2	31
7	A computational study of ballistic graphene nanoribbon field effect transistors. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2012, 44, 1780-1786.	1.3	20
8	A single-gate SOI nanosheet junctionless transistor at 10-nm gate length: design guidelines and comparison with the conventional SOI FinFET. <i>Journal of Computational Electronics</i> , 2020, 19, 631-639.	1.3	20
9	Tunable Bandgap in Bilayer Armchair Graphene Nanoribbons: Concurrent Influence of Electric Field and Uniaxial Strain. <i>IEEE Transactions on Electron Devices</i> , 2013, 60, 2464-2470.	1.6	19
10	Adsorption and optical properties of H <sub>2</sub> S, CH <sub>4</sub> , NO, and SO <sub>2</sub> gas molecules on arsenene: a DFT study. <i>Journal of Computational Electronics</i> , 2020, 19, 1373-1379.	1.3	18
11	Numerical Study of Graphene Superlattice-Based Photodetectors. <i>IEEE Transactions on Electron Devices</i> , 2015, 62, 593-600.	1.6	17
12	Modeling Interface Charge Traps in Junctionless FETs, Including Temperature Effects. <i>IEEE Transactions on Electron Devices</i> , 2019, 66, 4653-4659.	1.6	17
13	Dielectrophoresis-based microfluidic platform to sort micro-particles in continuous flow. <i>Microsystem Technologies</i> , 2020, 26, 751-763.	1.2	17
14	Electronic and transport properties of blue phosphorene in presence of point defects: A first-principles study. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2020, 118, 113938.	1.3	16
15	Adsorption characteristics of epigenetically modified DNA nucleobases on single-layer MoS <sub>2</sub> : A first-principles study. <i>Journal of Applied Physics</i> , 2018, 124, 134501.	1.1	14
16	Interaction of DNA nucleobases with boron, nitrogen, and sulfur doped graphene nano-ribbon for sequencing: An Ab initio study. <i>Applied Surface Science</i> , 2019, 492, 634-643.	3.1	13
17	Study of the tip mass and interaction force effects on the frequency response and mode shapes of the AFM cantilever. <i>International Journal of Advanced Manufacturing Technology</i> , 2013, 65, 957-966.	1.5	12
18	Unravelling the physisorption characteristics of H <sub>2</sub> S molecule on biaxially strained single-layer MoS <sub>2</sub> . <i>Nanoscale Advances</i> , 2019, 1, 3452-3462.	2.2	10

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19	Asymmetric junctionless nanowire TFET with built-in $n^+$ + source pocket emphasizing on energy band modification. Journal of Computational Electronics, 2016, 15, 1297-1307.	1.3	9
20	Behavior of the dielectric function of monolayer $\text{MoS}_2$ under Uniaxial Strain. Journal of Computational Electronics, 2016, 15, 1388-1392.	1.3	7
21	A Numerical Analysis of Electronic and Optical Properties of the Zigzag $\text{MoS}_2$ Nanoribbon Under Uniaxial Strain. IEEE Transactions on Electron Devices, 2018, 65, 1988-1994.	1.6	7
22	Efficient paradigm to enhance particle separation in deterministic lateral displacement arrays. SN Applied Sciences, 2019, 1, 1.	1.5	6
23	A novel numerical modeling paradigm for bio particle tracing in non-inertial microfluidics devices. Microsystem Technologies, 2019, 25, 3703-3711.	1.2	6
24	A comparative study on the application of single-layer $\text{MoS}_2$ and $\text{WS}_2$ for probing methylated and mutated nucleobases: a vdW-DFT study. Applied Surface Science, 2020, 501, 143892.	3.1	6
25	A novel power High Electron Mobility Transistor with partial stepped recess in the drain access region for performance improvement. , 2011, , .		5
26	Device simulation of a novel strained silicon channel RF LDMOS. Microelectronic Engineering, 2012, 94, 29-32.	1.1	5
27	An air-breathing microfluidic fuel cell with a finny anode. Russian Journal of Electrochemistry, 2014, 50, 162-169.	0.3	5
28	A first-principles study on DNA sequencing using graphene quantum dot. European Physical Journal B, 2018, 91, 1.	0.6	5
29	The effect of structural defects on the electron transport of $\text{MoS}_2$ nanoribbons based on density functional theory. Journal of Theoretical and Applied Physics, 2019, 13, 55-62.	1.4	5
30	PERFORMANCE EVALUATION OF SOURCE HETEROJUNCTION STRAINED CHANNEL GATE ALL AROUND NANOWIRE TRANSISTOR. Modern Physics Letters B, 2012, 26, 1250076.	1.0	4
31	Modulation of heterogeneous surface charge and flow pattern in electrically gated converging-diverging nanochannel. International Communications in Heat and Mass Transfer, 2018, 91, 103-108.	2.9	4
32	Near-room-temperature spin caloritronics in a magnetized and defective zigzag $\text{MoS}_2$ nanoribbon. Journal of Computational Electronics, 2020, 19, 137-146.	1.3	4
33	Analytical study of the electronic and optical properties of the armchair $\text{MoS}_2$ nanoribbons. Physica B: Condensed Matter, 2020, 594, 412337.	1.3	3
34	Superior Sensitivity and Optical Response of Blue Phosphorene and Its Doped Systems for Gas Sensing Applications. ACS Omega, 2021, 6, 18770-18781.	1.6	3
35	A novel SiGe-On-Insulator IMOS device with reduced bias voltages. , 2007, , .		2
36	Effect of Tip Mass on Modal Flexural Sensitivity of Rectangular AFM Cantilevers to Surface Stiffness Variations. Arabian Journal for Science and Engineering, 2014, 39, 1393-1397.	1.1	2

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37	Multi-objective optimization of microfluidic fuel cell. Russian Journal of Electrochemistry, 2014, 50, 561-568.	0.3	2
38	An investigation of highly scaled III-nitride Gallium-face and Nitrogen-face HEMTs. Superlattices and Microstructures, 2015, 78, 125-133.	1.4	2
39	The effect of GE mole fraction on the electrical characteristics of nanoscale Si/SiGe heterostructure pMOSFET. , 2007, , .		1
40	Effect of electrolyte concentration and symmetry on the heterogeneous surface charge in an electrically gated nanochannel. SN Applied Sciences, 2020, 2, 1.	1.5	1
41	A backstepping controller for piezoelectric actuators with hysteresis in nanopositioning. , 2009, , .		0
42	A numerical study of a new four-layer-substrate closing device. , 2013, , .		0