Mohamed M Fadlallah

List of Publications by Year
in descending order

59	1,658	279487 23	329751 37
papers	citations	h-index	g-index

61	61	61	763
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	MoSi₂N₄ single-layer: a novel two-dimensional material with outstanding mechanical, thermal, electronic and optical properties. Journal Physics D: Applied Physics, 2021, 54, 155303.	1.3	160
2	Tunable electronic and magnetic properties of MoSi2N4 monolayer via vacancy defects, atomic adsorption and atomic doping. Applied Surface Science, 2021, 559, 149862.	3.1	81
3	A Dirac-semimetal two-dimensional BeN4: Thickness-dependent electronic and optical properties. Applied Physics Letters, 2021, 118, .	1.5	64
4	A van der Waals heterostructure of MoS₂/MoSi₂N₄: a first-principles study. New Journal of Chemistry, 2021, 45, 8291-8296.	1.4	59
5	Two-dimensional porous graphitic carbon nitride C6N7 monolayer: First-principles calculations. Applied Physics Letters, 2021, 119, .	1.5	57
6	Ab-initio-driven prediction of puckered penta-like PdPSeX (X O, S, Te) Janus monolayers: Study on the electronic, optical, mechanical and photocatalytic properties. Applied Surface Science, 2022, 582, 152356.	3.1	55
7	Two-dimensional penta-like PdPSe with a puckered pentagonal structure: a first-principles study. Physical Chemistry Chemical Physics, 2022, 24, 9990-9997.	1.3	53
8	Two-dimensional XY monolayers (X = Al, Ga, In; Y = N, P, As) with a double layer hexagonal structure: A first-principles perspective. Applied Surface Science, 2022, 590, 152998.	3.1	53
9	Surface modification of titanium carbide MXene monolayers (Ti₂C and) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 42 Chemical Physics, 2021, 23, 15319-15328.	1.3	51
10	Adsorption of habitat and industry-relevant molecules on the MoSi2N4 monolayer. Applied Surface Science, 2021, 564, 150326.	3.1	50
11	Effect of electric field and vertical strain on the electro-optical properties of the MoSi2N4 bilayer: A first-principles calculation. Journal of Applied Physics, 2021, 129, .	1.1	48
12	Biphenylene monolayer as a two-dimensional nonbenzenoid carbon allotrope: a first-principles study. Journal of Physics Condensed Matter, 2022, 34, 015001.	0.7	45
13	Novel two-dimensional AlSb and InSb monolayers with a double-layer honeycomb structure: a first-principles study. Physical Chemistry Chemical Physics, 2021, 23, 18752-18759.	1.3	44
14	Ab initio prediction of semiconductivity in a novel two-dimensional Sb2X3 (X= S, Se, Te) monolayers with orthorhombic structure. Scientific Reports, 2021, 11, 10366.	1.6	44
15	Two-dimensional FeTe₂ and predicted Janus FeXS (X: Te and Se) monolayers with intrinsic half-metallic character: tunable electronic and magnetic properties via strain and electric field. Physical Chemistry Chemical Physics, 2021, 23, 24336-24343.	1.3	44
16	Prediction of two-dimensional bismuth-based chalcogenides Bi₂X₃(X = S, Se,) Tj ETQq0 0 0 rgBT /Overlock 10 Physics, 2021, 54, 395103.	1.3	42
17	Electronic and magnetic properties of two-dimensional of FeX (X = S, Se, Te) monolayers crystallize in the orthorhombic structures. Applied Physics Letters, 2021, 118, .	1.5	39
18	Magnetic, electronic, and vibrational properties of metal and fluorinated metal phthalocyanines. Physical Review B, 2013, 87, .	1.1	37

#	Article	IF	Citations
19	Two-dimensional buckled tetragonal cadmium chalcogenides including CdS, CdSe, and CdTe monolayers as photo-catalysts for water splitting. Physical Chemistry Chemical Physics, 2021, 23, 12226-12232.	1.3	35
20			

#	Article	IF	Citations
37	Experimental and theoretical demonstrations of ultraviolet absorption enhancement in porous nano-membrane graphene. Carbon, 2019, 155, 65-70.	5.4	17
38	Electronic, optical and thermoelectric properties of a novel two-dimensional SbXY (X = Se, Te; Y = Br, I) family: ab initio perspective. Physical Chemistry Chemical Physics, 2021, 23, 25866-25876.	1.3	17
39	Vertical two-dimensional layered conjugated porous organic network structures of poly-benzimidazobenzophenanthroline (BBL): A first-principles study. Applied Physics Letters, 2020, 117, .	1.5	16
40	Cation Monoâ€•and Coâ€Doped Anatase TiO₂ Nanotubes: An Ab Initio Investigation of Electronic and Optical Properties. Physica Status Solidi (B): Basic Research, 2020, 257, 1900217.	0.7	15
41	Metal-doped KNbO3 for visible light photocatalytic water splitting: A first principles investigation. Applied Physics Letters, 2021, 119, .	1.5	15
42	Transmission and Temperature Sensing Characteristics of a Binary and Ternary Photonic Band Gap. Journal of Nanoelectronics and Optoelectronics, 2015, 10, 9-14.	0.1	15
43	Evaluation of the effect of V₂O₅on the electrical and thermoelectric properties of poly(vinyl alcohol)/graphene nanoplatelets nanocomposite. Materials Research Express, 2016, 3, 035015.	0.8	11
44	Electronic and optical properties of metal-doped TiO₂ nanotubes: spintronic and photocatalytic applications. New Journal of Physics, 2020, 22, 093028.	1.2	11
45	Graphene and graphene nanomesh supported nickel clusters: electronic, magnetic, and hydrogen storage properties. Nanotechnology, 2019, 30, 085709.	1.3	10
46	Pristine and holey graphene quantum dots: Optical properties using time independent and dependent density functional theory. Physica E: Low-Dimensional Systems and Nanostructures, 2021, 128, 114602.	1.3	10
47	Metal dichalcogenide nanomeshes: structural, electronic and magnetic properties. Physical Chemistry Chemical Physics, 2021, 23, 21183-21195.	1.3	10
48	Substitutional transition metal doping in MoSi₂N₄ monolayer: structural, electronic and magnetic properties. Physical Chemistry Chemical Physics, 2022, 24, 3035-3042.	1.3	10
49	Defect engineering of the electronic transport through cuprous oxide interlayers. Scientific Reports, 2016, 6, 27049.	1.6	7
50	Unravelling the interplay of geometrical, magnetic and electronic properties of metal-doped graphene nanomeshes. Journal of Physics Condensed Matter, 2017, 29, 055301.	0.7	7
51	Boron nitride nanocones template for adsorbing NO2 and SO2: An ab initio investigation. Physica E: Low-Dimensional Systems and Nanostructures, 2019, 113, 188-193.	1.3	7
52	Novel two-dimensional ZnO₂, CdO₂ and HgO₂ monolayers: a first-principles-based prediction. New Journal of Chemistry, 2021, 45, 9368-9374.	1.4	6
53	Electronic transport calculations for rough interfaces in Al, Cu, Ag, and Au. Journal of Physics Condensed Matter, 2009, 21, 315001.	0.7	5
54	Monoelemental two-dimensional iodinene nanosheets: a first-principles study of the electronic and optical properties. Journal Physics D: Applied Physics, 2022, 55, 135104.	1.3	5

#	Article	IF	Citations
55	Theoretical study on electronic, optical, magnetic and photocatalytic properties of codoped SrTiO3 for green energy application. , 2022, 168, 207302.		5
56	Charge transport through O-deficient Au-MgO-Au junctions. Physical Review B, 2009, 80, .	1.1	4
57	Modification of the electronic transport in Au by prototypical impurities and interlayers. Europhysics Letters, 2010, 89, 47003.	0.7	1
58	Effect of pore-size disorder on the electronic properties of semiconducting graphene nanomeshes. Nanotechnology, 2020, 31, 485710.	1.3	1
59	Evaluation the Effect of Graphene Nanoplatelets on the Structure, Electrical and Thermoelectric Properties of Polyvinyl Alcohol. Journal of Advanced Physics, 2017, 6, 177-186.	0.4	1